

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant,

v.

CENTURYLINK COMMUNICATIONS, LLC

Respondent.

DOCKET UT-181051

**DIRECT TESTIMONY OF STEPHANIE K. CHASE
ON BEHALF OF
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT**

Exhibit SKC-1T

December 15, 2021

**DIRECT TESTIMONY OF STEPHANIE K. CHASE
EXHIBIT SKC-1T
DOCKET UT-181051**

EXHIBIT LIST

Exhibit SKC-2 CenturyLink's Response to Public Counsel Data Request No. 2

1 **Q. Please state your name and business address.**

2 A. My name is Stephanie K. Chase and my business address is 800 Fifth Avenue,
3 Suite 2000, Seattle, Washington 98104.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am a Regulatory Analyst with the Public Counsel Unit of the Washington State
6 Attorney General’s Office (“Public Counsel”). Public Counsel is a statutory party
7 to proceedings before the Washington Utilities and Transportation Commission
8 (“UTC” or “the Commission”) under RCW 80.01.100, RCW 80.04.510, and
9 RCW 81.04.500.

10 **Q. On whose behalf are you testifying?**

11 A. I am testifying on behalf of the Public Counsel Unit.

12 **Q. What is the role of the Public Counsel Unit in these proceedings?**

13 A. Public Counsel is a statutory party, meaning we “represent and appear for the
14 people of the state of Washington”¹ in Commission proceedings. In this case,
15 Public Counsel does not bear the burden of proof. However, Public Counsel
16 presents evidence based on our analysis of the circumstances of this matter
17 through my testimony and the testimony of our expert and customer witnesses.

18 **Q. Please describe your professional qualifications.**

19 A. I have a J.D. from the University of Wisconsin Law School and a Master of
20 Public Affairs degree from the La Follette School of Public Affairs at the
21 University of Wisconsin-Madison, with a concentration in energy and

¹ RCW 80.01.100.

1 environmental policy. I also have a B.S. in Political Science from South Dakota
2 State University in Brookings, South Dakota.

3 Prior to joining Public Counsel, I worked as an associate attorney at the
4 Environmental Law & Policy Center (ELPC) in their Madison, Wisconsin office.
5 As an associate attorney, I worked on a variety of legal and policy matters related
6 to energy and environmental issues in Wisconsin, South Dakota, and North
7 Dakota.

8 Since joining Public Counsel in January 2020, I have worked on a variety
9 of utility and transportation matters, including the 2020 Puget Sound Energy
10 (PSE) water heater rental service sale case (Docket UG-200112), the Cascade
11 Natural Gas general rate case (Docket UG-200568), PSE's Power Cost Only Rate
12 Case (Docket UE-200980), the Super Friends Moving Company complaint case
13 (Docket TV-190835), the Clutter, Inc. complaint case (Docket TV-200432), the
14 Washington Water Service Corporation general rate case (Docket UW-210560),
15 and several smaller water rate cases. I also have worked on several rulemakings
16 related to the Clean Energy Transformation Act (Dockets UE-190698,
17 UE-190837, UE-191023, and UE-210183) and the advanced metering
18 infrastructure rulemaking (Docket U-180525). I represent Public Counsel on
19 PSE's Conservation Resource Advisory Group, PSE's Integrated Resource Plan
20 (IRP) technical advisory group, and PacifiCorp's Demand Side Management
21 advisory group, IRP group, low-income advisory group, and equity advisory
22 group. I also represent Public Counsel on the Commission's electric vehicle
23 stakeholder group. Additionally, I completed the Public Utilities Reports

1 Principles of Public Utilities Operations and Management Guide Course in May
2 2020 and the Michigan State University Institute for Public Utilities Ratemaking
3 Training in September 2020.

4 **Q. Please describe the purpose of your testimony.**

5 A. My testimony briefly describes the events surrounding the December 2018 outage
6 on CenturyLink Communications LLC’s (“CenturyLink” or “Company”) national
7 network and how the effects of that outage were felt in Washington’s 9-1-1
8 system. I discuss CenturyLink’s history of outages and the importance of the 9-1-
9 1 system. Then, I discuss UTC Staff’s recommendations in this case and analyze
10 the Commission’s criteria for enforcement actions and determining penalties. I
11 conclude with a summary of Public Counsel’s position in this case, which is that
12 Public Counsel recommends that the Commission impose the full penalty
13 proposed in the Complaint.

14 **Q. Please describe the events surrounding the December 2018 9-1-1 outage.**

15 A. On December 27, 2018, Washingtonians experienced an outage impacting a
16 variety of telecommunications services, including the 9-1-1 system, which caused
17 a disruption to emergency and public safety communications across the state.²
18 Because of a failure on CenturyLink’s nationwide fiber optic network, some 9-1-1
19 calls placed by Washingtonians could not reach 9-1-1 call centers. The Federal
20 Communications Commission (FCC) found that equipment on CenturyLink’s

² Investigation Report, CenturyLink Communications, LLC, UT-181051, Staff Investigation, Consumer Protection and Regulatory Services at 3 (Dec. 2020) [henceforth “Staff Investigation Report”].

1 nationwide fiber optic network generated “malformed packets”³ that were
2 transmitted continuously “in a never-ending feedback loop,”⁴ or packet flooding.⁵
3 According to the UTC Staff’s Investigation Report, the packet flooding resulted in
4 equipment failing to appropriately route and transmit data across CenturyLink’s
5 national network.⁶ The outage lasted 49 hours and 32 minutes.⁷

6 At the time of the outage, the Washington Military Department (WMD)
7 was in the process of transitioning their 9-1-1 service provider from CenturyLink
8 to TeleCommunication Systems, Inc. (“Comtech”).⁸ Each company was
9 responsible for providing services to certain Primary Public Safety Answering
10 Points (PSAP), which are 9-1-1 call centers.⁹ During the transition of 9-1-1
11 service from CenturyLink to Comtech, the two company networks were
12 interconnected.¹⁰ This interconnection was impacted by the packet flooding and
13 failure of CenturyLink’s fiber optic network.¹¹ CenturyLink insisted on using
14 particular technology, over the objection of Comtech, and designed the

³ Packets are units of data routed between an origin and a destination on a network. The packets in this instance included instructions on how to route the information contained in the packet. Because those instructions were flawed, it caused the packets to be sent repeatedly, overwhelming the system.

⁴ Pub. Safety and Homeland Sec. Bureau, DECEMBER 27, 2018 CENTURYLINK NETWORK OUTAGE REPORT, 6–8 (Fed. Comm’n Comm’n, Aug. 19 2019) [henceforth “FCC Report”], <https://docs.fcc.gov/public/attachments/DOC-359134A1.pdf>.

⁵ Staff Investigation Report at 4.

⁶ *Id.*

⁷ *Id.*

⁸ *Id.* at 8–9.

⁹ *Id.*

¹⁰ *Id.*

¹¹ Direct Testimony of Brian Rosen, Exh. BR-1CT at 19–20.

1 interconnection in such a way that made the consequences of the Washington
2 9-1-1 outage more severe.¹²

3 **Q. What steps did CenturyLink take to notify PSAPs of the outage?**

4 A. None. CenturyLink claims that it had no reason to believe the outage was
5 impacting the PSAPs that had not transitioned to Comtech, and so it did not notify
6 any PSAPs.¹³

7 **Q. Please discuss CenturyLink's past 9-1-1 outages.**

8 A. As described in Staff's Investigation Report,¹⁴ CenturyLink has a history of
9 significant outages in Washington and of difficulty following the notification
10 requirements of WAC 480-120-412. In Docket UT-132234, the Commission
11 assessed a \$173,210 penalty against the Company for a 10-day interruption of
12 long distance and 9-1-1 services in San Juan County, suspending all but \$50,000
13 for violations related to the notice requirements of WAC 480-120-412.¹⁵

14 In Docket UT-140597, CenturyLink was penalized for a six-hour
15 statewide outage caused by a switch failure in Colorado.¹⁶ The Commission
16 approved a settlement, over Public Counsel's objection, in which CenturyLink

¹² Rosen, Exh. BR-1CT at 21–22.

¹³ Stephanie K. Chase, Exh. SKC-2 at 1 (CenturyLink's Response to Public Counsel Data Request No. 2, subpart (a)).

¹⁴ Staff Investigation Report at 6–7.

¹⁵ *Id.* at 6.

¹⁶ *Id.* at 6–7.

1 admitted to violations, including violations of WAC 480-120-412(2), and paid
2 penalties of \$2,854,750.¹⁷

3 In 2016, CenturyLink experienced a switch failure in Oregon, which
4 caused a 9-1-1 outage in Klickitat and Skamania counties, and again violated
5 WAC 480-120-412 by failing to timely notify the Commission or the State E911
6 Coordinator's office.¹⁸ As a result, the Commission imposed the \$123,210
7 suspended penalties from the prior San Juan outage in Docket UT-132234.¹⁹

8 In 2017, a software update to one of CenturyLink's vendors interrupted
9 the delivery of 222 calls to 9-1-1 and not until days later did the Company notify
10 UTC Staff.²⁰

11 **Q. Please discuss the importance of the 9-1-1 system.**

12 A. In 1967, the President's Commission on Law Enforcement and Administration of
13 Justice recommended the establishment of a single national telephone number for
14 reporting emergencies.²¹ In 1968, AT&T in consultation with the FCC chose 9-1-
15 1 as the national emergency number²² because it was easy to remember and dial,
16 and not previously in use as an area code or service code.²³ 9-1-1 service covers

¹⁷ *Id.* at 7. Public Counsel opposed the settlement, advocating that the Commission impose the maximum penalties of \$11.5 million.

¹⁸ *Id.* at 7.

¹⁹ *Id.* at 7.

²⁰ Staff Investigation Report at 7. The Commission later issued an order dismissing the complaint in that case. *See Wash. Utils. & Transp. Comm'n v. Qwest Corp.*, Docket UT-190209, Order 03: Initial Order Dismissing Complaint (June 25, 2020).

²¹ Nat'l Emergency No. Ass'n (NENA), 9-1-1 Origin & History, NENA.org, available at <https://www.nena.org/page/911overviewfacts> (last accessed July 21, 2021).

²² *Id.*

²³ *Id.*

1 approximately 96 percent of the geographic boundaries of the United States.²⁴
2 Americans, including Washingtonians, have relied on 9-1-1 as the number to dial
3 in an emergency for over 50 years. Dialing 9-1-1 is supposed to deliver aid easily
4 and promptly to those in need.

5 When 9-1-1 service is not available, it can make emergencies or crises
6 worse by delaying a person’s ability to receive prompt assistance for themselves
7 or a loved one. This could result in a more severe injury or death. Further, when
8 9-1-1 has frequent outages or is perceived to be unreliable, confidence is
9 undermined in an essential government service. The Commission recognized the
10 importance of 9-1-1, stating, “[t]he citizens of this state reasonably rely on their
11 ability to access emergency services by dialing 9-1-1. Their inability to do so for
12 even a brief period of time poses a serious threat to public health, safety, and
13 welfare, not just a violation of statute and Commission rules.”²⁵

14 **Q. What does the Complaint in this case allege?**

15 A. The Complaint is based on UTC Staff’s investigation of the outage. The
16 Complaint alleges that CenturyLink violated the following state statutes and
17 administrative rules:

18 (1) RCW 80.36.080 (addressing rates, services, and facilities);

19 (2) RCW 80.36.220 (addressing the duty to transmit messages and penalties);

²⁴ *Id.*

²⁵ *Wash. Utils. & Transp. Comm’n v. Qwest Corp.*, Docket UT-140597, Order 03: Final Order Approving Settlement Agreement, ¶ 9 (Feb. 22, 2016).

1 (3) WAC 480-120-450(1) (addressing the obligations of local exchange

2 companies); and

3 (4) WAC 480-120-412(2) (addressing major outages and requirements for

4 notification of public safety answering points).²⁶

5 Staff tallied 72,015 violations, which forms the basis for the recommended total

6 penalty of \$7,215,000 in the Complaint.²⁷

7 **Q. Has the Commission established criteria for enforcement actions and**
8 **determining penalties?**

9 A. Yes, the Commission has stated that it will consider the following factors in
10 determining if an enforcement action is appropriate, and if so which action it
11 should take:

12 (1) how serious or harmful the violation is to the public;

13 (2) whether the violation is intentional;

14 (3) whether the company self-reported the violation;

15 (4) whether the company was cooperative and responsive;

16 (5) whether the company promptly corrected the violations and remedied
17 the impacts;

18 (6) the number of violations;

19 (7) the number of customers affected;

20 (8) the likelihood of recurrence;

²⁶ Staff Investigation Report at 5.

²⁷ *Wash. Utils. & Transp. Comm'n v. CenturyLink Commc'ns*, Docket UT-181051, Complaint, ¶ 36 (Dec. 22, 2020).

- 1 (9) the company's past performance regarding compliance, violations, and
2 penalties;
3 (10) the company's existing compliance program; and
4 (11) the size of the company.²⁸

5 **Q. How does Public Counsel recommend applying the Commission's**
6 **enforcement criteria in this case?**

7 A. Public Counsel believes that CenturyLink should be held accountable for its
8 involvement in the 9-1-1 outage and recommends that the Commission impose
9 the \$7.2 million penalty identified in the Complaint. Below, I address each of the
10 Commission's enforcement factors.

11 *(1) How serious or harmful the violation is to the public.*

12 Regarding how serious or harmful the violation was to the public, a 9-1-1
13 system outage lasting more than 49 hours is extremely serious and harmful to the
14 public. Public Counsel witnesses who attempted to call 9-1-1 during the outage
15 illustrate the harm:

- 16 • Victor Barajas rolled his car in the early morning hours of December
17 28, 2018.²⁹ Barajas reached help by calling his employer and father
18 after repeatedly trying to contact 9-1-1.³⁰

²⁸ *In re: the Enf't Pol'y of the Wash. Utils. & Transp. Comm'n*, Docket A-120061, Enforcement Policy for the Washington Utilities and Transportation Commission, ¶ 15 (Jan. 7, 2013).

²⁹ Direct Testimony of Victor Barajas, Exh. VB-1T at 1.

³⁰ *Id.* at 1–2.

- 1 • Samantha Hovey and her husband arrived home late in the evening of
2 December 27, 2018, to find a prowler.³¹ After repeatedly trying to
3 reach police via 9-1-1, Hovey called her mother in a neighboring
4 county, who was able to alert police.³²
- 5 • David White experienced a medical emergency the morning of
6 December 27, 2018.³³ His wife, Angela White, transported White to
7 the hospital herself after she was unable to reach 9-1-1.³⁴ White
8 continues to experience complications from his medical emergency.³⁵

9 We can never know the complete impact of this outage on all
10 Washingtonians, but we have clear examples of what happens when 9-1-1
11 services are unreliable. This factor supports imposing the full penalty on
12 CenturyLink.

13 (2) *Whether the violation is intentional.*

14 Regarding the intentionality of the violation, though the 9-1-1 outage was
15 unintentional, Public Counsel’s technical expert, Brian Rosen, has reviewed
16 evidence showing that CenturyLink’s system was designed in a way that allowed
17 for a single point of failure.³⁶ Designing a 9-1-1 system with a single point of
18 failure is an irresponsible way to configure such an important piece of

³¹ Direct Testimony of Samantha Hovey, Exh. SH-1T at 1.

³² *Id.* at 2.

³³ Direct Testimony of David White, Exh. DW-1T at 1.

³⁴ Direct Testimony of Angela White, Exh. AW-1T at 1–2.

³⁵ David White, Exh. DW-1T at 3.

³⁶ Rosen, Exh. BR-1CT at 19.

1 infrastructure. This factor supports imposing a significant penalty on CenturyLink
2 up to the full amount.

3 *(3) Whether the company self-reported the violation.*

4 As to whether the Company self-reported the violation to the UTC,
5 WMD—not CenturyLink—notified Commission Staff about the 9-1-1
6 interruption.³⁷ CenturyLink did not communicate that there was an ongoing
7 outage until more than 24 hours after the outage began.³⁸ In a communication on
8 December 29, 2018, CenturyLink told Staff that the outage had ended and that it
9 had not been a “reportable E911 outage.”³⁹ CenturyLink was aware that there
10 were failures, even if the Company was not initially sure what the failures were or
11 the extent of the impact.⁴⁰ As Rosen testifies, even though CenturyLink was no
12 longer the “Covered 9-1-1 Service Provider” under FCC regulation for certain
13 PSAPs, CenturyLink should have notified all PSAPs and the UTC because it
14 continued to be responsible for components of all 9-1-1 calls.⁴¹

15 This outage appears to be another instance of CenturyLink’s historical
16 failures to comply with WAC 480-120-412(2). The Company has sustained
17 several previous fines related in part to their failure to notify the appropriate
18 parties. In this case, CenturyLink again failed to comply with notice requirements

³⁷ Staff Investigation Report at 23.

³⁸ Staff Investigation Report at 24.

³⁹ Staff Investigation Report at 24.

⁴⁰ Rosen, Exh. BR-1CT at 16.

⁴¹ Rosen, Exh. BR-1CT at 16–17.

1 and failed to timely notify the Commission. This factor weighs in favor of
2 imposing the full penalty on CenturyLink.

3 *(4) Whether the company was cooperative and responsive.*

4 Regarding the cooperation and responsiveness of CenturyLink, Staff
5 reports that the Company was generally responsive during the investigation, but
6 has not provided the call detail records to show how many calls failed during the
7 outage.⁴² Public Counsel believes that the Company's failure to provide important
8 details about 9-1-1 calls during the Commission's investigation shows that they
9 failed to fully cooperate with UTC Staff. This factor supports imposing a
10 significant penalty on CenturyLink up to the full amount.

11 *(5) Whether the company promptly corrected the violations and remedied*
12 *the impacts.*

13 Regarding the Company's efforts to correct the violations and remedy the
14 impact of the outage, Staff reports that CenturyLink worked with its vendor,
15 Infinera, to identify and correct the cause.⁴³ The Company also updated other
16 policies and procedures to increase monitoring for issues similar to the one that
17 caused the outage here.⁴⁴ Public Counsel believes that the Company has taken
18 some measures to correct the violations and remedy the impacts of the outage, but
19 it is important to note how long the Company took—over 49 hours—to get the 9-
20 1-1 system back online. While CenturyLink and its vendor were able to correct

⁴² Staff Investigation Report at 24.

⁴³ *Id.* at 24.

⁴⁴ *Id.* at 24.

1 the malfunction, 49 hours is a significant amount of time for 9-1-1 to be impacted.
2 Moreover, CenturyLink deployed only a single person to attend WMD's
3 conference call line addressing the outage and did not mobilize its 9-1-1 Network
4 and Center Operations team.⁴⁵ Because CenturyLink did not use the "all hands on
5 deck" approach that is industry practice, resolution was likely delayed.⁴⁶ This
6 factor supports imposing the full penalty.

7 *(6) The number of violations and the number of customers affected.*

8 As to the number of violations and customers impacted, Public Counsel
9 has no way to know how many unique numbers were impacted during the outage
10 because CenturyLink did not provide the actual phone numbers and call detail
11 records of the callers who attempted to call 9-1-1.⁴⁷ Public Counsel's expert
12 witness, Brian Rosen, conducted an analysis of average call tallies based on data
13 from CenturyLink and Comtech.⁴⁸ Rosen's analysis shows a reduction in call
14 volume during the outage of at least 10,752 calls, or 34 percent, versus the
15 historical average.⁴⁹ The outage was intermittent, lasting over 49 hours, and was
16 widespread across the state. At various points during the outage, each
17 Washingtonian may have been impacted. This factor weighs in favor of imposing
18 the full penalty on CenturyLink.

⁴⁵ Rosen, Exh. BR-1CT at 17–18.

⁴⁶ Rosen, Exh. BR-1CT at 17–18.

⁴⁷ Staff Investigation Report at 24. *See also* Rosen, Exh. BR-1CT at 13.

⁴⁸ Rosen, Exh. BR-1CT at 14–15.

⁴⁹ Rosen, Exh. BR-1CT at 15.

1 (7) *The likelihood of recurrence.*

2 Regarding the likelihood of recurrence, CenturyLink is no longer
3 responsible for the state's 9-1-1 call processing. However, because the
4 Company's underlying network supports emergency services in Washington,
5 another outage remains possible.⁵⁰ Public Counsel is very concerned about the
6 likelihood of recurrence because of CenturyLink's underlying network and their
7 past performance. This factor also weighs in favor of imposing a significant
8 penalty on CenturyLink up to the full amount.

9 (8) *The company's past performance regarding compliance, violations,*
10 *and penalties.*

11 With regard to CenturyLink's past performance regarding compliance,
12 violations, and penalties, CenturyLink has had a number of 9-1-1 failures.⁵¹ The
13 Company has struggled to timely notify the Commission, WMD, and PSAPs of
14 outages,⁵² and it has sustained significant outages.⁵³ In one instance, 9-1-1 was
15 unavailable across the entire state for approximately six hours.⁵⁴ In each instance,
16 Washingtonians were left without access to vital 9-1-1 service.

⁵⁰ Staff Investigation Report at 24.

⁵¹ *Id.* at 25.

⁵² *Wash. Utils. & Transp. Comm'n v. CenturyLink of Inter Island*, Docket UT-132234, Complaint (Nov. 5, 2014); *Wash. Utils. & Transp. Comm'n v. CenturyLink of Inter Island*, Docket UT-132234, Order 06 Order Imposing Suspended Penalties (June 1, 2017); *Wash. Utils. & Transp. Comm'n v. Qwest Corp.*, Docket UT-140597, Complaint (Feb. 19, 2015); *Wash. Utils. & Transp. Comm'n v. Qwest Corp.*, Docket UT-140597, Final Order 03 Approving Settlement Agreement (Feb. 22, 2016); *Wash. Utils. & Transp. Comm'n v. Qwest Corp.*, Docket UT-190209, Complaint and Notice of Pre-hearing Conference (Apr. 24, 2019).

⁵³ Docket UT-132234, Complaint; Docket UT-132234, Order 06 Order Imposing Suspended Penalties; Docket UT-140597, Complaint; Docket UT-140597, Final Order 03 Approving Settlement Agreement.

⁵⁴ Docket UT-140597, Complaint; Docket UT-140596, Final Order 03 Approving Settlement Agreement.

1 The Commission has responded to CenturyLink’s violations. In an earlier
2 case, the Commission adopted an all-party settlement with conditions. In that
3 case, the Commission suspended penalties and required CenturyLink to pay
4 \$50,000, less than half of the penalty.⁵⁵ The remaining penalty in that case,
5 \$123,210, was imposed upon CenturyLink when the Company violated the Final
6 Order Accepting and Adopting Settlement Agreement with Conditions during the
7 suspension period.⁵⁶

8 In response to the six-hour statewide 9-1-1 outage, Public Counsel argued
9 that CenturyLink was a repeat offender and urged the Commission to impose the
10 \$11.5 million maximum penalties.⁵⁷ The Commission in that case adopted a
11 multiparty settlement that provided for a lower penalty of \$2.8 million.⁵⁸

12 CenturyLink is a serious repeat offender. Public Counsel is concerned
13 about CenturyLink’s compliance history, specifically related to the Company’s
14 failure to provide notice of 9-1-1 outages. CenturyLink has again failed to provide
15 appropriate notice here. This factor weighs strongly in favor of imposing the full
16 penalty on CenturyLink.

17 *(9) The company’s existing compliance program.*

18 Regarding the existence of a compliance program, Staff cites no existing
19 program.⁵⁹ This factor supports imposing the full penalty on CenturyLink.

⁵⁵ *Wash. Utils. & Transp. Comm’n v. CenturyLink of Inter Island*, Docket UT-132234, Order 03, Final Order Accepting and Adopting Settlement Agreement with Conditions, ¶ 33 (Oct. 20, 2015).

⁵⁶ Docket UT-132234, Order 06 Order Imposing Suspended Penalties.

⁵⁷ Docket UT-140597, Final Order 03, ¶ 12.

⁵⁸ Docket UT-140597, Final Order 03, ¶¶ 3, 11.

⁵⁹ Staff Investigation Report at 25.

1 (10) *The size of the company.*

2 As to the size of the Company, CenturyLink reported to the UTC a 2019
3 total Washington operating revenue of \$245,079,768.⁶⁰ Public Counsel believes
4 that given the size of the Company and the nature and extent of the violations, the
5 proposed penalty is appropriate.

6 **Q. Please summarize Public Counsel’s position in this case.**

7 A. Public Counsel believes that the penalty proposed in the Complaint is appropriate
8 in this case because of CenturyLink’s role and culpability. A number of facts have
9 been established in this case through the UTC Staff investigations, FCC
10 investigation, and the data requests submitted by parties to determine the impact
11 of CenturyLink’s national outage on Washington’s 9-1-1 system. Testimony from
12 Public Counsel’s witness, Brian Rosen, a nationally renowned 9-1-1 expert,
13 shows that CenturyLink insisted on deploying outdated Signaling System 7 (SS7)
14 technology and designed an unnecessarily complex interconnection between itself
15 and Comtech. CenturyLink’s design required at least three conversions between
16 SS7 and Internet Protocol (IP) from a call’s origination to completion.⁶¹
17 Additionally, CenturyLink created this network without vendor diversity where a
18 single software error could take down an entire system.⁶² According to Rosen,
19 CenturyLink made “a series of decisions and deliberately carried out a sequence
20 of actions” it should not have, resulting in a severe network failure of the

⁶⁰ *Id.* at 25.

⁶¹ Rosen, Exh. BR-1CT at 21.

⁶² Rosen, Exh. BR-1CT at 19.

1 Washington 9-1-1 system.⁶³ And, when the system failed, CenturyLink failed its
2 duty to notify PSAPs of the outage.⁶⁴

3 Public Counsel’s analysis, supported by the contracts between the
4 Company and WMD, shows that CenturyLink was responsible for the design of
5 the system and obligated as a covered service provider at the point where the
6 failure occurred.⁶⁵ CenturyLink was not “relieved of its obligation as a Covered
7 Service Provider at the point where the outage impacted the network.”⁶⁶
8 Furthermore, even if CenturyLink had been relieved of its responsibilities as a
9 Covered Service Provider due to the location of the failure, CenturyLink was not
10 relieved of any of its other responsibilities in the provision of 9-1-1 services to the
11 state.⁶⁷ Indeed, WMD believes that

12 CenturyLink retained a role, and thus an obligation under [its
13 contract with WMD] until no parts of the originating network nor
14 the terminating network connected to the CenturyLink/Intrado
15 ESInet. Generally speaking, WMD believes that the citizens of
16 Washington expect that any entity involved in the process of
17 completing a 911 call, from a “call-maker” (the citizen) to a “call-
18 taker” (the PSAP), has an obligation to ensure the call is successfully
19 completed.⁶⁸

20 CenturyLink remained responsible for the call failures in this outage and should
21 be held appropriately accountable.

⁶³ Rosen, Exh. BR-1CT at 30.

⁶⁴ Chase, Exh. SKC-2 at 1 (CenturyLink’s Response to Public Counsel Data Request No. 2, subpart (a)).

⁶⁵ Rosen, Exh. BR-1CT at 33.

⁶⁶ Rosen, Exh. BR-1CT at 33.

⁶⁷ Rosen, Exh. BR-1CT at 33.

⁶⁸ Rosen, Exh. BR-27 (WMD Supplemental Response to Public Counsel Data Request No. 7).

1 Based on the facts in this case and our analysis of the Commission's
2 enforcement criteria above, Public Counsel recommends that the Commission
3 impose the full \$7.2 million penalty proposed in the Complaint.

4 **Q. Does this conclude your testimony?**

5 A. Yes, it does.