WUTC DOCKET: 181051 EXHIBIT: JHJ-14 ADMIT ☑ W/D REJECT 

Exh. JHJ-14 Docket UT-181051 Witness: Jacque Hawkins-Jones

### BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

## WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

CENTURYLINK COMMUNICATIONS, LLC.,

**Respondent.** 

## **DOCKET UT-181051**

### EXHIBIT TO TESTIMONY OF

### **JACQUE HAWKINS-JONES**

## STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Wash. Utils. & Transp. Comm'n v. Centurytel of Inter Island, Inc. d/b/a CenturyLink, Docket UT-190209, Order 03 (June 25, 2020)

December 15, 2021

Exh. JHJ-14 Docket UT-181051 Page 1 of 16 Service Date: June 25, 2020

### BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

# WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

DOCKET UT-190209

ORDER 03

v.

QWEST CORPORATION, d/b/a CENTURYLINK QC,

INITIAL ORDER DISMISSING COMPLAINT

Respondent.

# BACKGROUND

- I On April 24, 2019, the Washington Utilities and Transportation Commission (Commission) issued a Complaint and Notice of Prehearing Conference (Complaint) concerning Qwest Corporation, d/b/a CenturyLink QC (CenturyLink or Company). The Complaint alleges violations of a state statute and Commission rule arising from a 911 service outage affecting Washington residents in July 2017.
- On May 24, 2019, the Commission entered Order 02, Prehearing Conference Order, establishing a procedural schedule, including an evidentiary hearing on September 24, 2019. The Commission suspended the procedural schedule by notice on August 23, 2019, to enable the parties to engage in settlement negotiations. Those negotiations did not result in a settlement, and the Commission adopted a new procedural schedule on September 25, 2019.
- Pursuant to the revised schedule, Commission regulatory staff (Staff)<sup>1</sup> filed testimony in support of the allegations in the Complaint on October 25, 2019. The Commission issued a notice on November 14, 2019, revising the procedural schedule to accommodate a party's personal conflict. The Company and the Public Counsel Unit of the Washington Attorney General's Office (Public Counsel) filed response testimony on January 9, 2020,

<sup>&</sup>lt;sup>1</sup> In formal proceedings such as this, the Commission's regulatory staff participates like any other party, while the Commissioners make the decision. To assure fairness, the Commissioners, the presiding administrative law judge, and the Commissioners' policy and accounting advisors do not discuss the merits of this proceeding with regulatory staff, or any other party, without giving notice and opportunity for all parties to participate. *See* RCW 34.05.455.

PAGE 2

consistent with the second revised procedural schedule. The parties filed rebuttal testimony on February 13, 2020. Due to the state's response to the COVID-19 pandemic, the parties agreed to stipulate to the admission of the prefiled testimony and exhibits and waive the evidentiary hearing.<sup>2</sup> The Commission canceled the hearing by notice issued on March 20, 2020, and the parties filed briefs in support of their respective positions on April 30, 2020.

4 Jennifer Cameron-Rulkowski, Assistant Attorney General, Lacey, Washington, represents Staff. Lisa Anderl, in house counsel, Seattle, Washington, represents CenturyLink. Lisa W. Gafken and Nina Suetake, Assistant Attorneys General, Seattle, Washington, represent Public Counsel.

# TESTIMONY

- 5 Turcott Direct. Michael L. Turcott, Transportation Planning Specialist in the Commission's Transportation Safety Division, provided direct testimony for Staff. Turcott testifies that on July 12, 2017, the 911 system in Washington partially failed at 5:52 a.m. and was restored at 8:39 a.m., during which time 222 calls to 911 were not completed. The Washington State Military Department (WMD) notified Staff of the outage at 4:31 p.m. that afternoon. CenturyLink, the 911 service provider at the time under contract with WMD, sent a "courtesy notification of non-major outage" to Staff on July 14, 2017.<sup>3</sup>
- Turcott explains that Staff conducted an investigation of the outage and learned that the 222 failed calls originated from eight unique wireline telephone numbers and 140 unique mobile numbers. These calls represented 16 percent of the total number of 911 calls placed during the outage period and affected 29 public service answering points, *i.e.*, 911 call centers (PSAPs). According to Turcott, the outage resulted from a failed software upgrade in the CenturyLink vendor's Emergency Communications Management Center (ECMC) in Englewood, Colorado. The event was not a "major outage" as defined in WAC 480-120-021 because no PSAP suffered a total loss of service and the outage did not affect more than 1,000 customers. Staff nevertheless is concerned with the Company's continued pattern of system failures and lack of timely reporting and

<sup>&</sup>lt;sup>2</sup> The Commission admits into the evidentiary record the exhibits listed in the Exhibit List attached to this Order as Appendix A.

<sup>&</sup>lt;sup>3</sup> Turcott, Exh. MLT-1T.

#### Exh. JHJ-14 Docket UT-181051 Page 3 of 16

### PAGE 3

recommends that the Commission penalize CenturyLink up to \$222,000 for 222 violations of RCW 80.36.080 and WAC 480-120-450(1).<sup>4</sup>

- 7 Baldwin Response. Susan M. Baldwin, an independent consultant, testified on behalf of Public Counsel. Baldwin describes the partial outage and provides confidential information elaborating on the cause of the switch upgrade failure that resulted in the event. She also discusses the Network Outage Reporting System (NORS) report that CenturyLink filed with the Federal Communications Commission (FCC) concerning the incident and summarizes prior CenturyLink service outages, particularly the 911 outage in April 2014 for which the Commission penalized the Company \$2,854,750 in Docket UT-140597. She explains her view that the outage at issue in this proceeding exemplifies the importance of a reliable, robust 911 system.<sup>5</sup>
- <sup>8</sup> Baldwin agrees with Staff that the Commission should find CenturyLink liable for 222 violations of RCW 80.36.080 and WAC 480-120-450(1). She analyzes the factors the Commission considers when determining the type of action to take or level of penalty to impose when enforcing statutes and rules within its jurisdiction, and she recommends that the Commission impose the maximum penalty of \$222,000. She further recommends that the Commission require providers to submit to the Commission the NORS reports they file with the FCC.<sup>6</sup>
- *Grate Response*. Philip E. Grate, CenturyLink Government Affairs Director for Washington, testified for the Company. Grate describes the incident and opines that the failed calls do not constitute violations of RCW 80.36.080 or WAC 480-120-450(1). He summarizes the evolution of 911 service and contends that the Commission rule is specific to enhanced 911 (E911) and thus does not apply to the next generation 911 (NG911) that is currently being provided in Washington or to the statewide 911 call routing and data management service that CenturyLink provided under contract with WMD. He also argues that the rule is inapplicable because it requires LECs to transport 911 calls to the selective router, and the 222 calls were delivered to that point but failed due to a maintenance problem further into the network.<sup>7</sup>

<sup>6</sup> Id.

<sup>&</sup>lt;sup>4</sup> Id.; Exh. MLT-2 (Staff Investigation Report).

<sup>&</sup>lt;sup>5</sup> Baldwin, Exh. SMB-1CT.

<sup>&</sup>lt;sup>7</sup> Grate, Exh. PEG-1T.

- Nor does Grate believe that CenturyLink violated RCW 80.36.080. He claims that Staff has not identified any Company equipment or facilities that are not in good condition and repair, as the statute requires, or offer any evidence that the appliances, instrumentalities, or services of CenturyLink or its vendor are not modern or efficient. Grate asserts that the contract between CenturyLink and WMD governed the service at issue in this proceeding, and even if CenturyLink had violated the statute or the rule, the incident represents only a single violation for the event itself, not 222 violations calculated on a per call basis. Finally, Grate questions why Staff would even bring the complaint when the incident occurred while the vendor was upgrading its facilities and service and CenturyLink is no longer the statewide 911 provider.<sup>8</sup>
- Mills Response. Random Mills, Senior Voice Engineer for Intrado Life & Safety, Inc. 11 (fka West Safety Services, Inc.) (Intrado), also testified on behalf of CenturyLink. Mills was the engineer who noticed the partial outage, undertook remedial action, and worked with the switch vendor to find a solution. He explains that the incident occurred during a maintenance window that was part of a larger project to upgrade Intrado's redundant emergency voice switches that began in late 2016 after a year of planning. The upgraded switches, he testified, enhanced the reliability and resiliency of CenturyLink's 911 service via Intrado's 911 network, and the upgrade was a network necessity because the legacy switches were at the end of their useful life and needed to be replaced to ensure continued and prompt support and repair. Mills' team implemented the switch upgrade project in incremental stages to minimize and isolate potential network impact. Because of the large quantity of 911 calls in Washington, they intentionally planned the Washington migration at the end of the project timeline after full development of their procedures. They had not experienced any service interruptions in the eight months prior to the migration of Washington traffic on July 12, 2017, and did not have any other issues in Washington thereafter.<sup>9</sup>
- 12 Mills describes the partial outage at issue in this proceeding as follows:

On the day of the interruption, Intrado was in the process of migrating a portion of the Washington 911 traffic to the new switch in Englewood, Colorado. Part of this migration process involved exporting the database with all trunk group information from our legacy switch to our new switch, which includes Ingress Trunk Group (ITG) flag information. During the insertion phase of the database transfer, a machine error resulted in ITG flags not uploading correctly to the provisioning database for the new Englewood

<sup>&</sup>lt;sup>8</sup> Id.

<sup>&</sup>lt;sup>9</sup> Mills, Exh. RM-1CT.

Exh. JHJ-14 Docket UT-181051 Page 5 of 16

#### DOCKET UT-190209 ORDER 03

#### PAGE 5

switch for a small portion of the migrating trunk groups. The ITG flag is responsible for informing the Intrado Emergency Call Management Center (ECMC) where the 911 call originated and what default PSAP is associated with the connected trunk group. Without the ITG tag, the ECMC in Englewood, Colorado rejected certain 911 calls from affected trunk groups during the interruption on July 12, 2017, because the ECMC did not have the necessary routing information for delivery to the appropriate PSAPs. The affected 911 calls were returned to the originating service providers (OSPs) with a cause code 34, which translates to "no circuits available." At that point, the OSPs should have attempted to redirect the call to Intrado's alternate switch and ECMC in Miami, which was processing calls without issue during the 911 interruption. Our records indicate that over a thousand calls successfully re-routed to the Miami ECMC during the interruption.<sup>10</sup>

13 Mills testified that the loss of ITG flags he describes resulted because of configuration errors on the server that maintains the trunk provisioning database. He claims that once Intrado discovered those errors, it immediately corrected the issue, and the migration proceeded without further 911 interruption.<sup>11</sup> "Based on all available information and experience, Intrado had no way to know that the provisioning server would fail to transmit all ITG tag data during the Washington migration on July 12, 2017."<sup>12</sup> He describes the precautions Intrado took to ensure that a database error did not occur:

Traffic was selectively migrated in small segments during short, off-hour maintenance windows in the middle of the night in order to minimize and isolate potential network issues. As a result, the interruption was both relatively short in duration and scope, with prompt root cause identification and only a small number [of] migrated trunks affected by the incident. I believe it is important to note that 911 service in Washington was never "hard down" during this partial interruption, meaning 911 calls continued to process during the incident. Intrado's alternate switch in Miami was also fully operational and capable of receiving re-routed calls by OSPs during the interruption, and did in fact successfully receive over a thousand such re-routed calls.

<sup>&</sup>lt;sup>10</sup> *Id.* at 2-3.

<sup>&</sup>lt;sup>11</sup> *Id.* at 7:12-15.

<sup>&</sup>lt;sup>12</sup> *Id.* at 9:8-10.

PAGE 6

Additionally, we applied two-stage data validation prior to all traffic migration, which included a check of all trunk data from the legacy . . . switch and a check of all data after database conversion. We also deployed network alarms during the switch project, which worked as designed by identifying the lack of ITG tags for the affected 911 calls during the interruption on July 12, 2017.<sup>13</sup>

14 Mills also describes Intrado's and CenturyLink's response to the outage:

[O]ur call failure alarms worked as designed and identified the lack of ITG tags on certain trunk groups during the interruption. Intrado responded promptly and internal fault management protocols were triggered. Intrado engaged in direct communication with CenturyLink – each company has a network operations center (NOC) and NOC-to-NOC communication was set up immediately. Intrado then forced a busy condition on the affected trunks, which in turn forced 911 calls to automatically alternate route to our switch in Miami.<sup>14</sup>

• • • •

[A]fter the service interruption, Intrado added a third validation check to the database migration process requiring our technicians to manually inspect all trunk group data after transfer completion by the provisioning server. Additionally, we implemented a policy of pre-notification of all maintenance events to CenturyLink regardless of severity level or disruption potential. We also upgraded the physical resources of our provisioning server and restricted user access to reduce the potential for unforeseen resource absorption.<sup>15</sup>

15 Mills believes that Intrado methodically and responsibly performed the switch upgrade project and that the partial outage was the result of unforeseeable machine error that occurred despite two years of planning and mitigation measures. He also contends that Intrado's network and fault management process worked as designed, minimizing the impact of the incident, and that Intrado implemented remedial measures immediately after the

<sup>&</sup>lt;sup>13</sup> *Id.* at 8:5-19.

<sup>&</sup>lt;sup>14</sup> *Id.* at 9:12-18.

<sup>&</sup>lt;sup>15</sup> *Id.* at 10:6-12.

PAGE 7

interruption to prevent any recurrence. Under these circumstances, he opines, penalties are not warranted.<sup>16</sup>

- *Turcott Rebuttal.* Turcott responded to Mills by summarizing provisions in Order 03 in Docket UT-140597 related to the issues in this proceeding. Turcott contends that the year of planning that Mills described was sufficient time to address all potential 911 issues, including the malfunction that resulted in the partial outage, and that machine error is the result of human error and is no less significant. Turcott also is not comforted by the relatively short duration and scope of the outage, which he believes is of little consolation to the 148 affected customers who needed emergency assistance.<sup>17</sup> He is similarly unimpressed with the remedial measures the companies took after the outage because "[a]s a lay-person I would expect that Intrado or CenturyLink would have taken these steps before."<sup>18</sup> In sum, Turcott thinks "Mills did the best he could to provide an explanation for the inexcusable, that is, a failure of the system which is expected to provide reliable 911 service to Washington consumers."<sup>19</sup>
- 17 Turcott points out that Grate concedes that 222 calls to 911 were not completed. Turcott claims that the customers who placed those calls would not be satisfied that the calls reached the selective router, nor would they be interested in which generation of 911 the Company was providing. Rather, lives depend on whatever technology is used to provide 911 service resulting in every call being completed every time, and he interprets WAC 480-120-450 to establish that requirement. Turcott also adheres to his position that CenturyLink's facilities, through its contractor Intrado, were not adequate or sufficient and failed to provide reliable 911 service to Washington consumers in violation of RCW 80.36.080. He observes that assessing penalties on a per call basis is consistent with Commission practice and settlement agreements to which CenturyLink has been a party and that Staff appropriately recommends a penalty amount that is substantially less than the maximum Staff could have requested and that the Commission could impose.<sup>20</sup>
- 18 Baldwin Rebuttal. Baldwin observes that she and the Company's witnesses agree on the general facts of the outage but diverge on whether the outage violated the applicable statute and rule. She believes that by focusing on the technology and technical

<sup>20</sup> *Id*. at 6-8.

<sup>&</sup>lt;sup>16</sup> *Id.* at 11-12.

<sup>&</sup>lt;sup>17</sup> Turcott, Exh. MLT-3T at 2-4.

<sup>&</sup>lt;sup>18</sup> *Id*. at 5:6-7.

<sup>&</sup>lt;sup>19</sup> *Id.* at 5:15-17.

#### PAGE 8

configuration of CenturyLink's provisioning of 911 service, "CenturyLink is 'splitting hairs' and in so doing, ignores the seemingly clear intent of the Commission to ensure that consumers have safe, adequate and reliable 911 service."<sup>21</sup> She also does not consider the need to upgrade the 911 switches as a justification for the outage. Rather, she concludes that "even if the decision to upgrade 911 technology is completely prudent and necessary to maintain adequate service, the adverse consequences of failing to implement the change without disruption to the 911 system remains CenturyLink's responsibility."<sup>22</sup> She continues to assert that the Company violated its legal obligations and does not alter her recommendation that the Commission impose a penalty of \$220,000.

- 19 Grate Rebuttal. Grate responds to Baldwin's response testimony. He claims that, contrary to her assertions, CenturyLink had adequate management and oversight systems in place at the time of the incident and continues to use the processes it adopted to implement measures to minimize 911 service disruptions the Company adopted in the wake of the Commission decision in Docket UT-140597. He also disputes Baldwin's analysis of the Commission enforcement factors, as well as their applicability, and provides his own assessment of those factors. He further observes that CenturyLink has been providing NORS reports to the Commission for the past two years. Grate continues to contend that WAC 480-120-450(1) does not apply to the incident and that there is no proper basis for a complaint or fine against CenturyLink as a result of the incident.<sup>23</sup>
- 20 *Mills Rebuttal.* Mills also responds to Baldwin. He explains that "the partial interruption on July 12, 2017, resulted from a failed data import from the trunk provisioning server that maintained the trunk provisioning database for the Englewood, CO switch," not a failed software update as Baldwin states.<sup>24</sup> He distinguishes the incident at issue in this docket from the outage the Commission addressed in Docket UT-140597:

[T]he 2014 and 2017 outages were very different in cause, duration, scope and impact. The 2014 outage lasted more than six hours, impeded over 6,600 calls to 911 across multiple states with 5,684 of those calls in Washington, resulted from a trunk assignment counter exceeding its configured threshold, and was accompanied by deficient alarming and delayed root cause identification and service restoration. After the 2014 outage, Intrado implemented a multi-year project plan to improve process planning and

<sup>23</sup> Grate, Exh. PEG-2T.

<sup>&</sup>lt;sup>21</sup> Baldwin, Exh. SMB-11T at 3:12-14.

<sup>&</sup>lt;sup>22</sup> *Id.* at 7:19-22.

<sup>&</sup>lt;sup>24</sup> Mills, Exh. RM-3TC at 3:6-9.

PAGE 9

incident response, change event management, methods of procedure, outage alarming, identification, response and recovery, network and hardware improvement, testing and probing, and repair. These steps vastly improved Intrado's management and oversight of its network and processes to both reduce the risk of error occurrence and advance outage awareness and rapid service restoration. I firmly believe that these improvements directly contributed to Intrado's detailed project planning and oversight of the switch upgrade event in 2017, which significantly reduced the duration and scope of the partial July 12, 2017, service interruption. These process and oversight improvements also directly contributed to Intrado's swift identification and service restoration for the July 12, 2017, interruption.

Unfortunately, as the Commission acknowledged in its 2016 statement quoted by Ms. Baldwin, no 911 system is foolproof and errors do occur like the unforeseeable server error that caused the 2017 interruption. What matters most is operator oversight and management of their systems to reduce the risks of errors and to provide rapid outage awareness and service restoration. By fulfilling these objectives in the 2017 switch upgrade and interruption, Intrado was able to limit the scope of the July 2017 interruption to a partial outage with limited call impact compared to major, multi-state outages like the 2014 event. The July 2017 incident was the only service interruption during our entire year-long project implementation to upgrade our end-of-life voice switches.<sup>25</sup>

21 Finally, Mills elaborates on the switch upgrade project during which the partial outage occurred. He concludes that "the relevant facts and circumstances demonstrate the switch upgrade project was implemented so as to ensure adequate management and oversight systems were in place to reduce the risks of errors and to provide rapid awareness and restoral of the 2017 partial 911 interruption."<sup>26</sup>

## **DISCUSSION AND DECISION**

22 The Commission has previously recognized that "[t]he citizens of this state reasonably rely on their ability to access emergency services by dialing 911. Their inability to do so for even a brief period of time poses a serious threat to public health, safety, and welfare,

 $<sup>^{25}</sup>$  Id. at 4:3 – 5:4.

<sup>&</sup>lt;sup>26</sup> *Id.* at 7:3-6.

not just a violation of statute and Commission rules."<sup>27</sup> Accordingly, we share Staff's and Public Counsel's concerns with the negative impacts on the 148 customers who placed 222 uncompleted calls to 911 during a three hour period on July 12, 2017. We nevertheless find, based on the record evidence, that the lack of completion of these calls does not rise to the level of violations of RCW 80.36.080 and WAC 480-120-450(1).

- 23 The statute states, in relevant part, that service provided "by any telecommunications company shall be rendered and performed in a prompt, expeditious and efficient manner and the facilities, instrumentalities and equipment furnished by it shall be safe, kept in good condition and repair, and its appliances, instrumentalities and service shall be modern, adequate, sufficient and efficient."<sup>28</sup> CenturyLink is a telecommunications company, and no party disputes that the 911 service the Company provided under contract to WMD is a telecommunications service. CenturyLink and that service, therefore, must comply with the statutory mandate.
- 24 Staff and Public Counsel contend that CenturyLink violated the statute 222 times one violation for each of the calls to 911 that were not completed. CenturyLink maintains that if the Commission were to find the Company failed to comply with the statute, CenturyLink could only be liable for one violation for the entire outage. Neither argument is fully consistent with the Commission's prior decisions. The statute is framed in terms of system integrity: telecommunications company services must be rendered promptly, expeditiously, and efficiently; company facilities and equipment must be safe and in good condition and repair; and service must be modern, adequate, sufficient, and efficient. A deficiency on any of these grounds often will impact the completion or quality of customers' calls. Call incompletions, in and of themselves, are not necessarily statutory violations. But if a systemic company, service, or network deficiency results in uncompleted calls, each such call is a separate violation of applicable law.
- 25 Accordingly, we must determine whether the 911 calls at issue in this proceeding failed as a result of CenturyLink's noncompliance with the systemic requirements in RCW 80.36.080. Only if we find such noncompliance could the Commission hold CenturyLink liable for 222 statutory violations. The Commission provided guidance on making this determination in its order approving the settlement agreement in Docket UT-140597:

<sup>&</sup>lt;sup>27</sup> *WUTC v. CenturyLink*, Docket UT-140597, Order 03, Final Order Approving Settlement Agreement ¶ 9 (Feb. 22, 2016) (UT-140597 Order 03).

<sup>&</sup>lt;sup>28</sup> RCW 80.36.080.

#### PAGE 11

#### DOCKET UT-190209 ORDER 03

No system is foolproof, whether it depends on computers, people, or a combination of both. Errors will inevitably occur in software coding, for example, both in its development and in its deployment in actual 911 operating systems. What is important for our review is to ensure that CenturyLink has adequate management and oversight systems in place to both reduce the risks of such errors occurring and also to have systems in place to provide awareness of outages and to restore 911 service as rapidly as possible.<sup>29</sup>

The Commission thus requires the Company to take all reasonable steps to reduce the foreseeable risks of a 911 outage and to deploy systems that will limit, detect, and immediately remedy whatever service interruptions occur.

- The evidence presented here supports a finding that the failed data import that caused the partial outage was not reasonably foreseeable and that CenturyLink, in conjunction with its vendor Intrado, took reasonable steps in planning and implementing the switch upgrade to reduce the risk of error, provide prompt awareness of the outage, and restore 911 service as rapidly as possible. Intrado planned the switch upgrade for a year before beginning implementation and selectively migrated traffic in small segments during short, off-hour maintenance windows in the middle of the night in order to minimize and isolate potential network issues. The migration had been ongoing for eight months before the data import failed, and when it did, the call failure alarms worked as designed and identified the issue. Intrado then coordinated with CenturyLink to promptly resolve the problem and to put additional safety measures in place to prevent a recurrence.
- 27 Neither Staff nor Public Counsel identify anything CenturyLink or Intrado did improperly or could have done differently to further minimize the risk of an outage other than Turcott's admittedly lay opinion that the companies should have previously taken the remedial measures they put in place after the outage.<sup>30</sup> Turcott, however, offers no explanation for how Intrado should have known in advance that such measures would be necessary or how the planning and implementation process could have been revised to incorporate them. General opinion that is not based on experience or expertise in technical 911 provisioning

<sup>&</sup>lt;sup>29</sup> UT-140597 Order 03 ¶ 25.

<sup>&</sup>lt;sup>30</sup> Turcott, Exh. MLT-3T at 5:6-7.

does not outweigh the specific testimony of an engineer with 20 years of experience in the telecommunications industry who actively participated in the switch upgrade process.<sup>31</sup>

- 28 Staff and Public Counsel essentially argue that the mere existence of the outage is sufficient to prove the alleged violations and supports up to the maximum statutory penalty for each of the uncompleted calls. The Commission, however, has never interpreted the statute to impose strict liability for 911 call incompletion.<sup>32</sup> Companies must adequately maintain their networks and make all reasonable efforts to provide safe, modern, and efficient service, minimize the risk of disruptions, and quickly detect and remedy any outages. Failure to comply with those requirements results in liability. Meeting those obligations does not.
- 29 Commission rules are not to the contrary. WAC 480-120-450(1) requires that "[l]ocal exchange companies (LECs) must provide enhanced 9-1-1 (E911) services."<sup>33</sup> That requirement, like the statute, is a general obligation that does not expressly require the LEC to complete each and every call.<sup>34</sup> That certainly is the goal. A single 911 call that is

<sup>&</sup>lt;sup>31</sup> See UT-140597 Order 03 ¶ 13 (finding that the views of a witness with "no particular technical expertise in the provision of 911 service . . . are not entitled to greater weight than those of other witnesses" on that subject).

<sup>&</sup>lt;sup>32</sup> Strict liability, *i.e.*, responsibility without fault or intent, is a doctrine in tort law that most often requires compensation for an innocent person who suffers injury through the nonculpable but abnormally dangerous activities of another. *E.g.*, *Klein v. Pyrodyne Corp.*, 117 Wn.2d 1, 817 P.2d 1359 (1991). The Commission has no authority to award such compensation, nor is the provisioning of 911 service an abnormally dangerous activity. The doctrine also applies in criminal law to preclude mistakes of fact as a defense to certain crimes such as possession offenses or selling alcohol to minors. The Complaint does not allege that CenturyLink violated any criminal statutes, nor are any mistakes of fact at issue in this proceeding.

<sup>&</sup>lt;sup>33</sup> We reject CenturyLink's contention that by using the term "enhanced 9-1-1 (E911)," the rule does not apply to the NG911 service CenturyLink provided. Such an interpretation, at best, would render the entire rule moot, and at worst could result in LECs adhering to the type of 911 provisioning in existence when the Commission promulgated the rule, rather than upgrade their networks to provide the latest technology. The rule does not define "enhanced 9-1-1," and we interpret that term to include all 911 emergency calling service. As Shakespeare observed, "That which we call a rose by any other name would smell as sweet," *Romeo and Juliet*, Act II, Scene 2, and the rule regulates service accessed through dialing 9-1-1 by whatever name that service is called.

<sup>&</sup>lt;sup>34</sup> CenturyLink argues that the rule also does not apply in this case because all of the calls reached the selective router, and the rule provides that the required services include "the ability for customers to dial 911 with the call and caller's [Emergency Location Identification Number] transmitted to the E911 selective router serving the location associated with the [Emergency Response Location] for that line." WAC 480-120-450(1)(a). Staff correctly counters that the 911 services that LECs must provide are not limited to call delivery to the selective router but include all aspects of delivering a call from the customer to the PSAP, including the portion of the call routing and information CenturyLink provided under contract with WMD.

PAGE 13

not completed is one call too many. The Commission, however, has never required perfection for a service provider to be in compliance with Commission rules. Rather, a company is responsible for call failures only to the extent that it has not taken all reasonable measures to prevent, limit, and remedy them. Based on the evidence presented, CenturyLink took such measures in this case.

- 30 Even if we were to conclude that the outage violated RCW 80.36.080 and WAC 480-120-450(1), we would not assess a penalty for the violations. "The Commission's ultimate objective in any enforcement action is to obtain compliance with applicable law."<sup>35</sup> Penalties primarily provide an incentive to comply with legal requirements. For such an incentive to be effective, the Commission should inform the transgressor of the actions it needs to take to bring its services, network, or operations into line with its obligations. The record in this proceeding is devoid of any such changes CenturyLink or Intrado should have made or need to make. CenturyLink no longer even provides 911 service under contract with WMD. Assessing penalties under these circumstances would provide no incentive whatsoever for CenturyLink to comply with applicable law.
- 31 Penalties also punish unlawful behavior. Again, however, Staff and Public Counsel complain only about the results of the malfunction that occurred during CenturyLink's switch migration project in Washington, not any particular aspects of the project planning or implementation. Punishment is not appropriate for an unforeseeable event that the Company took all reasonable measures to minimize, detect, and quickly remedy.
- 32 We find that the partial 911 outage on July 12, 2017, was not the result of a violation of RCW 80.36.080 or WAC 480-120-450(1). Rather, the incident was caused by an unforeseeable network malfunction that occurred during a well-planned switch upgrade that CenturyLink and Intrado promptly detected and remedied. The Commission, therefore, dismisses the complaint against CenturyLink.

## FINDINGS OF FACT

- 33 (1) The Commission is an agency of the State of Washington, vested by statute with authority to regulate rates, rules, regulations, practices, and accounts of public service companies, including telecommunications companies.
- *34* (2) CenturyLink is a public service company regulated by the Commission, providing service as a telecommunications company.

<sup>&</sup>lt;sup>35</sup> UT-140597 Order 03 ¶ 10.

- 35 (3) On July 12, 2017, the 911 system in Washington partially failed at 5:52 a.m. and was restored at 8:39 a.m., during which time 222 calls to 911 were not completed.
- (4) The 222 failed calls originated from eight unique wireline telephone numbers and
  140 unique mobile numbers. These calls represented 16 percent of the total
  number of 911 calls placed during the outage period and affected 29 PSAPs.
- 37 (5) At the time of the incident, CenturyLink was the statewide 911 service provider under a contract with WMD, and Intrado was CenturyLink's vendor provisioning the service.
- (6) WMD notified Staff of the call failures at 4:31 p.m. on July 12, 2017.
  CenturyLink sent a courtesy notification of non-major outage to Staff on July 14, 2017.
- 39 (7) The call failures occurred during a maintenance window that was part of a larger project to upgrade Intrado's redundant emergency voice switches that began in late 2016 after a year of planning. The legacy switches were at the end of their useful life and needed to be replaced to ensure continued and prompt support and repair.
- 40 (8) During the switch replacement project, Intrado selectively migrated voice traffic according to a detailed project plan in small segments during short, off-hour maintenance windows in the middle of the night to minimize and isolate potential network issues. Intrado applied two-stage data validation and deployed network alarms prior to all traffic migration, which included a check of all trunk data from the legacy switch and a check of all data after database conversion.
- (9) Intrado planned the Washington traffic migration at the end of the project timeline, after full development of the procedures, because of the large quantity of 911 calls in this state. Intrado did not experience any service interruptions in the eight months of implementing the switch upgrade that preceded the migration of Washington traffic on July 12, 2017, and did not have any other issues in Washington thereafter.
- 42 (10) The call failures resulted from a failed data import from the trunk provisioning server that maintained the trunk provisioning database for Intrado's Englewood, Colorado switch.
- (11) Intrado's call failure alarms identified the failed data import on certain trunk groups during the interruption, triggering internal fault management protocols. Intrado engaged in direct communication with CenturyLink and forced a busy condition on

Exh. JHJ-14 Docket UT-181051 Page 15 of 16

#### DOCKET UT-190209 ORDER 03

PAGE 15

the affected trunks, which in turn forced 911 calls to automatically re-route to Intrado's switch in Miami.

44 (12) After remedying the call failures, Intrado (1) added a third validation check to the database migration process requiring its technicians to manually inspect all trunk group data after transfer completion by the provisioning server; (2) implemented a policy of pre-notification of all maintenance events to CenturyLink regardless of severity level or disruption potential; and (3) upgraded the physical resources of its provisioning server and restricted user access to reduce the potential for unforeseen resource absorption.

# CONCLUSIONS OF LAW

- 45 (1) The Commission has jurisdiction over the subject matter of, and parties to, this proceeding.
- 46 (2) The statewide 911 service CenturyLink was providing under contract with WMD on July 12, 2017, is a telecommunications service subject to the requirements in RCW 80.36.080 and WAC 480-120-450(1).
- 47 (3) On July 12, 2017, CenturyLink had adequate management and oversight systems in place in its provisioning of 911 service to reduce the risks of errors, to provide awareness of outages, and to restore service as rapidly as possible.
- (4) The partial 911 outage on July 12, 2017, was not due to any violation of applicable law but was the result of a network malfunction that was not reasonably foreseeable, that occurred during a well-planned switch upgrade, and that CenturyLink and Intrado promptly detected and remedied.
- 49 (5) CenturyLink did not violate RCW 80.36.080.
- 50 (6) CenturyLink did not violate WAC 480-120-450(1).
- 51 (7) The Commission should dismiss the complaint against CenturyLink.

Exh. JHJ-14 Docket UT-181051 Page 16 of 16

PAGE 16

DOCKET UT-190209 ORDER 03

## ORDER

52 THE COMMISSION ORDERS that the complaint against Qwest Corporation, d/b/a CenturyLink QC, is DISMISSED.

Dated at Olympia, Washington, and effective June 25, 2020.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

/s/ Gregory J. Kopta GREGORY J. KOPTA Administrative Law Judge

## NOTICE TO PARTIES

This is an Initial Order. The action proposed in this Initial Order is not yet effective. If you disagree with this Initial Order and want the Commission to consider your comments, you must take specific action within the time limits outlined below. If you agree with this Initial Order, and you would like the Order to become final before the time limits expire, you may send a letter to the Commission, waiving your right to petition for administrative review.

WAC 480-07-825(2)(a) provides that any party to this proceeding has twenty (20) days after the entry of this Initial Order to file a *Petition for Review*. What must be included in any Petition and other requirements for a Petition are stated in WAC 480-07-825(2)(b). WAC 480-07-825(2)(c) states that any party may file and serve an *Answer* to a Petition for Review within ten (10) days after the Petition is filed.

WAC 480-07-830 provides that before entry of a Final Order any party may file a Petition to Reopen a contested proceeding to permit receipt of evidence essential to a decision, but unavailable and not reasonably discoverable at the time of hearing, or for other good and sufficient cause. No Answer to a Petition to Reopen will be accepted for filing absent express notice by the Commission calling for such answer.

RCW 80.01.060(3) provides that an Initial Order will become final without further Commission action if no party seeks administrative review of the Initial Order and if the Commission fails to exercise administrative review on its own motion.

Any Petition or Response must be electronically filed through the Commission's web portal as required by WAC 480-07-140(5). Any Petition or Response filed must also be electronically served on each party of record as required by WAC 480-07-140(1)(b).