

Exhibit No. \_\_\_ CT (JL-1CT)  
Docket UT-121994  
Witness: Jing Liu  
REDACTED VERSION

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**In the Matter of Frontier  
Communications Northwest, Inc.'s  
Petition to be Regulated as a Competitive  
Telecommunications Company Pursuant  
to RCW 80.36.320**

**DOCKET UT-121994**

**TESTIMONY OF**

**Jing Liu**

**STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

*Evaluation of Competition in Retail Residential Voice Service*

**April 25, 2013**

**CONFIDENTIAL PER PROTECTIVE ORDER**

## EXHIBITS

- Exhibit No. \_\_\_ (JL-2) “Local Telephone Competition: Status as of December 31, 2011” (January 2013), Federal Communications Commission Wireline Competition Bureau, Tables 9, 10 and 15
- Exhibit No. \_\_\_ (JL-3) Integra Network Map, screen print from <http://www.integratelecom.com/pages/network-map.aspx>, on April 22, 2013
- Exhibit No. \_\_\_ (JL-4C) Integra Telecom of WA, Inc.’s Response to Frontier Data Request No. 5, Confidential Attachment 5A: Services Integra Offers by Frontier Wire Center
- Exhibit No. \_\_\_ (JL-5) Integra Telecom of WA, Inc.’s Response to Frontier Data Request Nos. 26 and 27: Residential Customer Information
- Exhibit No. \_\_\_ (JL-6) Level 3 Communications’ Response to Staff Data Request Nos. 1 and 2: Retail Services – Residential and Small Business
- Exhibit No. \_\_\_ (JL-7) tw telecom’s Response to Frontier Data Request Nos. 26 and 27: Residential Customer Information
- Exhibit No. \_\_\_ (JL-8) Cbeyond, Inc.’s. Response to Staff Data Request Nos. 1 and 2: Retail Services – Residential and Small Business
- Exhibit No. \_\_\_ (JL-9) Charter Fiberlink’s Response to Frontier Data Request No. 12: Geographic Scope of Services Provided
- Exhibit No. \_\_\_ (JL-10) Charter Fiberlink’s Response to Staff Data Request Nos. 1 and 2: Retail Services – Residential and Small Business
- Exhibit No. \_\_\_ (JL-11) Charter Fiberlink’s Response to Frontier Data Request No. 16 and Excerpt from the Service Guide Attached to Response
- Exhibit No. \_\_\_ (JL-12) Frontier’s Responses to Public Counsel Data Request Nos. 7 and 8: Impediments for Broadband Performance and Deployment
- Exhibit No. \_\_\_ (JL-13) Price Quote from AT&T Wireless Website <http://www.att.com/shop/wireless/plansnew.html#fbid=GFVXQbvn7h>, on April 22, 2013
- Exhibit No. \_\_\_ (JL-14) Price Quote from Verizon Wireless Website <http://www.verizonwireless.com/wcms/consumer/shop/share-everything.html>, on April 22, 2013

- Exhibit No. \_\_\_\_ (JL-15) Price Quote from Sprint Nextel Website [http://shop.sprint.com/mysprint/shop/plan/plan\\_wall.jsp?tabId=pt\\_individual\\_tab&INTNAV=ATG:HE:IndPlans](http://shop.sprint.com/mysprint/shop/plan/plan_wall.jsp?tabId=pt_individual_tab&INTNAV=ATG:HE:IndPlans), on April 22, 2013
- Exhibit No. \_\_\_\_ (JL-16) Price Quote from T-Mobile Website <http://www.t-mobile.com/shop/plans/individual-plans.aspx>, on April 22, 2013
- Exhibit No. \_\_\_\_ (JL-17) Price Quote from Inland Cellular Website <http://www.inlandcellular.com/individual-calling-plans/>, on April 22, 2013
- Exhibit No. \_\_\_\_ (JL-18) Price Quote from U.S. Cellular Website <http://www.uscellular.com/uscellular/plans/showPlans.jsp?type=plans&plan-selector-type=individual>, on April 22, 2013
- Exhibit No. \_\_\_\_ (JL-19) Frontier Customer Comments Received by the Commission Alleging a Lack of Alternatives
- Exhibit No. \_\_\_\_ (JL-20C) Frontier's Response to Staff Data Request No. 87: Telephone Number Port Outs by Exchange and Carrier
- Exhibit No. \_\_\_\_ (JL-21) Frontier's Response to Public Counsel Data Request No. 13: Frontier Access Line Counts by Wire Center as of March 1, 2012
- Exhibit No. \_\_\_\_ (JL-22) Frontier's Response to Integra Data Request No. 15: Telephone Number Port Ins by Exchange
- Exhibit No. \_\_\_\_ (JL-23) Frontier's Response to Staff Data Request No. 81: Frontier's Receipt of Federal High Cost Fund Support 2000-2012
- Exhibit No. \_\_\_\_ (JL-24) Frontier's Response to Staff Data Request No. 91: Access Line Counts by Wire Center

1 I. INTRODUCTION

2  
3 Q. Please state your name and business address.

4 A. My name is Jing Liu. My business address is 1300 S. Evergreen Park Drive S.W.,  
5 P.O. Box 47250, Olympia, WA 98504.  
6

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

8 A. I am employed by the Washington Utilities and Transportation Commission  
9 (Commission) as a Telecommunications Regulatory Analyst.  
10

11 Q. How long have you been employed by the Commission?

12 A. I have been employed by the Commission since July 1, 2008.  
13

14 Q. Would you please state your educational and professional background?

15 A. I hold a Master of Arts degree in organizational communication and a Master of  
16 Science degree in communication technology and policy from Ohio University. I  
17 also completed four years of doctoral study in public policy at Ohio State University.  
18 I worked as a graduate research associate at the National Regulatory Research  
19 Institute (NRRI) from 2005 to 2007. During that period, I authored and co-authored  
20 five papers published by the NRRI on universal service and inter-carrier  
21 compensation issues. I also co-authored a research paper on state high cost funds  
22 published by the NRRI in January 2010. At the Commission, I have primarily  
23 worked on universal service and designation and recertification of Eligible

1 Telecommunications Carriers in Washington. I provided testimony to the  
2 Commission in the proceedings addressing United Telephone Company of the  
3 Northwest Inc.'s intrastate access charges (UT-081393), the acquisition of Verizon  
4 Northwest, Inc. by Frontier Communications Corporation (UT-090842) and the  
5 acquisition of Qwest Corporation by CenturyLink, Inc. (UT-100820).

6  
7 **II. SCOPE AND SUMMARY OF TESTIMONY**

8  
9 **Q. What is the scope of your testimony?**

10 **A.** My testimony focuses on the evaluation of whether Frontier Northwest Inc. (Frontier  
11 or the Company) meets the standard of competitive classification with regard to its  
12 residential voice service. I first examine the relevant market and the availability of  
13 functionally equivalent or substitute services to Frontier's basic local telephone  
14 service. I also explain the connection between Frontier's status as an Incumbent  
15 Local Exchange Carrier (ILEC), an Eligible Telecommunications Carrier (ETC) and  
16 a Carrier of Last Resort (COLR). I find that, based on the available information,  
17 Frontier has not demonstrated that the market for stand-alone basic local telephone  
18 service for residential customers is subject to effective competition. Granting  
19 competitive classification to the Company may lead to an increase in price for basic  
20 telephone service and a decrease in service quality standards, jeopardizing the policy  
21 goal of preserving universal service.

1 **Q. What standard do you apply in your analysis?**

2 A. My analysis follows the standards set forth in RCW 80.36.330, which authorizes the  
3 Commission to classify a telecommunications service provided by a  
4 telecommunications company as a competitive telecommunications service if the  
5 service is subject to effective competition. "Effective competition" is defined by the  
6 statute to mean that "the company's customers have reasonably available alternatives  
7 and that the company does not have a significant captive customer base." Although  
8 Staff has concluded that Frontier has not met its burden under RCW 80.36.320 to  
9 show that the services the Company offers are subject to effective competition, Staff  
10 recognizes that fewer than all of Frontier's services could be competitively classified  
11 under RCW 80.36.330. Therefore, I consider the factors specified in RCW  
12 80.36.330 in evaluating competition:

- 13 (a) The number and sizes of alternative providers of services, including those  
14 not subject to commission jurisdiction;  
15  
16 (b) The extent to which services are available from alternative providers in the  
17 relevant market;  
18  
19 (c) The ability of alternative providers to make functionally equivalent or  
20 substitute services readily available at competitive rates, terms, and  
21 conditions; and  
22  
23 (d) Other indicators of market power which may include market share, growth  
24 in market share, ease of entry, and the affiliation of providers of services.  
25

26 **Q. Frontier states in its Petition that "the number of competitive local exchange**  
27 **carriers (CLECs) subject to the Commission's regulation, as well as numerous**  
28 **alternative service providers outside Commission regulation such as cable,**  
29 **wireless and Voice over Internet Protocol (VoIP) providers, and their provision**  
30 **of business and residential services as described in this Petition, have**

1           **irreversibly created an environment in Frontier's service area where customers**  
2           **have reasonable service alternatives and Frontier does not have a significant**  
3           **captive customer base."**<sup>1</sup> **Do you agree with this statement?**

4    A.    No. Whereas Frontier demonstrated that the overall telecommunications market in  
5           Washington has become more competitive with a steady number of competitive  
6           providers taking over an increasing market share over the years, the competitive  
7           scenario does not apply to all services that Frontier offers now, nor does it apply to  
8           all geographical areas. My assessment shows that, in particular, alternative services  
9           that are functionally equivalent to Frontier's stand-alone residential voice service are  
10          not readily available; to the extent they are available, they are not offered by  
11          competitors at competitive rates, terms and conditions; and Frontier still has a  
12          captive customer base in at least some geographical areas for basic telephone service,  
13          which is essential to maintaining the availability of affordable, ubiquitous and  
14          reliable voice service.

15  
16    **Q.    The Petition and Mr. Phillips's direct testimony mentioned that CLECs are one**  
17          **category of the alternative providers of business and residential telephony**  
18          **services in Frontier's Washington service area. Do CLECs present effective**  
19          **competition for basic residential telephone service?**

20    A.    No. I agree that CLECs have gained market share over the last decade. However, in  
21          general, their competition is limited to the business market segment, bundled  
22          services, data services and urban markets.

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<sup>1</sup> Frontier Petition, ¶ 7.

1 Q. In his direct testimony, Mr. Phillips presents a chart to demonstrate that  
 2 CLECs “have consistently expanded their market share of subscriber lines in  
 3 Washington.”<sup>2</sup> Have CLECs achieved a significant market share?

4 A. According to the data from the Federal Communications Commission’s (FCC) Local  
 5 Telephone Competition Status Report, as of December 31, 2011, CLECs had a 13  
 6 percent market share. However, we should be mindful that most of the CLECs’  
 7 access lines are not provided by their own loops. The following table shows the  
 8 composition of the CLECs’ market share from the same data source.

9 **Table 1: Wireline Telephony Market Share – Washington State**  
 10 **As of December 31, 2011<sup>3</sup>**  
 11

	Resold LEC service	ILEC UNEs	CLEC- owned local loops	VoIP Subscrip- tions	Total Non-ILEC End-User Switched Access Lines and VoIP Subscriptions
<b>Lines (in thousands)</b>	120	176	78	883	1,257
<b>As Percentage of Non-ILEC Switched Access and VoIP Lines</b>	10%	14%	6%	70%	100%
<b>As Percentage of Total Non-ILEC and ILEC Access and VoIP Lines (about 2.9 million)</b>	4%	6%	3%	31%	44%

12  
 13 As shown in Table 1, as of the end of 2011, facility-based CLECs had only a  
 14 three percent share of the whole wireline market. The rest of the wireline  
 15 competition comes from CLECs that purchase wholesale or Unbundled Network  
 16 Element (UNE) services from the ILECs or VoIP service providers (41 percent

<sup>2</sup> Phillips, Exhibit No. \_\_\_ (JP-1T) 19:5-6. This is an update to Chart 1 in Frontier’s Petition at ¶ 8.

<sup>3</sup> Exhibit No. \_\_\_ (JL-2), Local Telephone Competition: Status as of December 31, 2011 (January 2013), Federal Communications Commission Wireline Competition Bureau, Table 9 and Table 15.

1 combined). To evaluate ILECs' market share in traditional telephone lines, we  
2 should consider, in addition to 56 percent of access line counts, ILECs' UNE-loops  
3 and wholesale lines provided to CLECs.

4  
5 **Q. How is the facility-based CLEC market share relevant to competition in**  
6 **residential voice service?**

7 A. Table 1 indicates that although CLECs have a competitive presence in Washington,  
8 only six percent of the CLEC access lines are facility-based. CLECs that rely on  
9 ILECs' wholesale and UNEs are unlikely to compete with incumbents for low-value  
10 communication services or low-volume customers because the profit margin for  
11 doing so is very low, given the small difference between the wholesale/combined  
12 UNE rate and the price CLECs can charge their customers for such services.

13  
14 **Q. Is residential service available from CLECs throughout Frontier's service**  
15 **territory in Washington?**

16 A. No. Based on the information we received from relatively large CLECs, they offer  
17 services only in limited areas, usually in urban areas, and many of them do not offer  
18 services to residential customers at all. For example, Integra Telecom's network is  
19 concentrated along the Interstate 5 corridor.<sup>4</sup> It offers business-oriented services  
20 such as T1, cloud services, and virtual private network in ■■■ out of 102 of Frontier's

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<sup>4</sup> Exhibit No. \_\_\_ (JL-3), Integra Network Map, screen print from <http://www.integratelecom.com/pages/network-map.aspx>, on April 22, 2013.

1 wire centers, all of which are relatively densely populated compared to the rest.<sup>5</sup> It  
2 does not provide services to residential customers in Washington.<sup>6</sup> Level 3  
3 Communications only offers service in urban areas such as Bellevue, Bothell,  
4 Everett, Kirkland, Marysville and Seattle, but not to residential customers.<sup>7</sup>  
5 Likewise, neither tw telecom nor Cbeyond, Inc. serves residential customers.<sup>8</sup>  
6 Charter Fiberlink WA-CCVII, LLC (Charter Fiberlink) provides residential services  
7 but the service area is limited to Benton City, Kennewick, Richland and Wenatchee.<sup>9</sup>  
8 Overall, a review of the above-mentioned CLECs' corporate websites indicates that  
9 most focus on mid- or large-size business network and data services rather than  
10 residential voice services.<sup>10</sup> Their geographical footprint is limited to urban areas  
11 with a concentrated business customer base.

12  
13 **Q. Do CLECs offer residential telephone service at competitive rates, terms and**  
14 **conditions compared to Frontier?**

15 A. As I mentioned above, most CLECs focus on business customers for their corporate  
16 network and data services. Staff believes that to the extent that CLECs offer services

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<sup>5</sup> Exhibit No. \_\_\_ (JL-4C), Integra Telecom of WA, Inc.'s Response to Frontier Data Request No. 5, Confidential Attachment 5A: Services Integra Offers by Frontier Wire Center.

<sup>6</sup> Exhibit No. \_\_\_ (JL-5), Integra Telecom of WA, Inc.'s Response to Frontier Data Request Nos. 26 and 27: Residential Customer Information.

<sup>7</sup> Exhibit No. \_\_\_ (JL-6), Level 3 Communications' Response to Staff Data Request Nos. 1 and 2: Retail Services – Residential and Small Business.

<sup>8</sup> Exhibit No. \_\_\_ (JL-7), tw telecom's Response to Frontier Data Request Nos. 26 and 27: Residential Customer Information; Exhibit No. \_\_\_ (JL-8), Cbeyond, Inc.'s. Response to Staff Data Request Nos. 1 and 2: Retail Services – Residential and Small Business.

<sup>9</sup> Exhibit No. \_\_\_ (JL-9), Charter Fiberlink's Response to Frontier Data Request No. 12: Geographic Scope of Services Provided.

<sup>10</sup> Staff reviewed the following CLECs' websites: Integra Telecom, <http://www.integratelecom.com/Pages/default.aspx>; Cbeyond, <http://cbeyond.com/>; tw telecom, <http://www.twtelecom.com/>; Level 3 Communications, <http://www.level3.com>; World Communications, Inc., <http://www.wci.com/new/products-services/voice/>.

1 to residential customers, they offer competitive rates, terms and conditions for  
2 bundled or packaged services, but not for stand-alone local telephone services. For  
3 example, Charter Fiberlink does not offer the basic voice line as a stand-alone  
4 service.<sup>11</sup> Basic service is only available as a part of its Unlimited Service  
5 Packages.<sup>12</sup>

6  
7 **Q. The Petition mentioned that cable companies offer competitive residential**  
8 **telephone services. Is cable telephone service available for residential customers**  
9 **throughout Frontier's service territory in Washington?**

10 No. The networks of cable companies, such as Comcast, do not completely overlap  
11 with Frontier's service territory in Washington. As Mr. Phillips revealed in his  
12 testimony, there is no cable competition in 11 out of the 102 exchanges in which  
13 Frontier operates.<sup>13</sup> Not surprisingly, the 11 exchanges with no cable competition  
14 are all rural and high-cost areas. Even if a cable company does offer services in an  
15 exchange, it does not mean that service is available in the whole exchange. Unlike a  
16 regulated utility, a cable company does not have the obligation to serve customers  
17 who live outside its existing network. It may serve the densely populated town  
18 center ("donut hole") but not the remote area further away from the center ("donut").  
19 This phenomenon is especially evident in less economically developed areas.  
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<sup>11</sup> Exhibit No. \_\_\_ (JL-10), Charter Fiberlink's Response to Staff Data Request Nos. 1 and 2: Retail Services – Residential and Small Business.

<sup>12</sup> Exhibit No. \_\_\_ (JL-11), Charter Fiberlink's Response to Frontier Data Request No. 16 and Excerpt from the Service Guide Attached to Response.

<sup>13</sup> Phillips, Exhibit No. \_\_\_ (JP-1T) 32:18-20.

1 **Q. Do cable companies offer residential telephone service at competitive rates,**  
2 **terms and conditions compared to Frontier?**

3 A. No. Cable companies' cable telephone service is not priced at the same level as  
4 Frontier's local telephone service. The Petition mentioned that Comcast offers  
5 XFINITY Voice Home Phone Service with calling features for \$29.99 per month on a  
6 stand-alone basis.<sup>14</sup> However, Comcast's \$29.99 offer is only for customers who  
7 currently do not subscribe to other XFINITY services, including Comcast TV  
8 services. The price is attractive, but it only lasts for the first six months for a new  
9 customer. After the promotion period, Comcast charges \$39.95 to \$44.95 (plus taxes  
10 and fees) monthly for XFINITY Voice Unlimited and the price is subject to increase  
11 at Comcast's will. If a customer wants only an unlimited local calling plan,  
12 Comcast's rate is not comparable to what Frontier offers by tariff (\$16.90 plus taxes  
13 and fees).

14  
15 **Q. The Petition mentioned VoIP service as another service offering competitive to**  
16 **Frontier's products. Is VoIP service available for residential customers**  
17 **throughout Frontier's service territory in Washington?**

18 A. VoIP is a viable substitute for voice only if the customer already subscribes to  
19 broadband Internet access, whether the broadband is provided by the VoIP service  
20 provider or by a different provider. Without broadband access, VoIP by itself has no  
21 value. In fact, the FCC data show that 82 percent of non-ILEC customers purchase

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<sup>14</sup> Petition at p.14.

1 VoIP bundled with high-speed Internet access.<sup>15</sup> Broadband is not yet ubiquitous  
2 throughout Frontier's service area. Frontier cited the two impediments to extending  
3 broadband to rural unserved areas as long loops and necessary augmentation of the  
4 transport backbone facilities.<sup>16</sup> Similar impediments exist for other types of  
5 terrestrial broadband providers. A rural area with underdeveloped broadband  
6 infrastructure will not enjoy as much benefit from VoIP as an urban area.

7  
8 **Q. Do you think VoIP is an alternative service at comparable rates, terms and**  
9 **conditions?**

10 A. It is misleading to quote the price of stand-alone VoIP service such as Magic Jack as  
11 evidence for available low-cost voice without adding the cost of broadband access,  
12 which usually is at least \$50 a month. In addition, some VoIP service may have  
13 limitations in call quality. Its service quality also is constrained by the reliability of  
14 the underlying broadband.

15  
16 **Q. The Petition and Mr. Phillips's direct testimony mentioned wireless voice**  
17 **service as a competitive service offering to Frontier's products. Is wireless**  
18 **cellular service available for residential customers throughout Frontier's**  
19 **service territory in Washington?**

20 A. The maps in Mr. Phillip's Exhibit 13 show that there is wireless coverage in each  
21 Frontier wire center, and many wire centers have coverage from more than one

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<sup>15</sup> Exhibit No. \_\_\_ (JL-2), "Local Telephone Competition: Status as of December 31, 2011" (January 2013), Federal Communications Commission Wireline Competition Bureau, Table 10.

<sup>16</sup> Exhibit No. \_\_\_ (JL-12), Frontier's Responses to Public Counsel Data Request Nos. 7 and 8: Impediments for Broadband Performance and Deployment.

1 wireless provider. Based on what I have learned from my annual meetings with  
 2 wireless ETCs, however, these maps are marked with coverage on a relatively large  
 3 scale. It may appear from the screen or a letter-size printout that an area receives  
 4 complete coverage. In reality, in some neighborhoods or blocks within the area  
 5 marked as “covered,” there could be white spots where wireless signals are not  
 6 available. In some cases, wireless subscribers can get some signal but the signal  
 7 strength is too unreliable for a conversation. It is especially true in sparsely  
 8 populated and less-traveled areas.

9

10 **Q. Do you think wireless voice service can be a substitute for Frontier’s residential**  
 11 **voice service at comparable rates, terms and conditions?**

12 A. I agree that wireless telephone service has gained substantial subscribership in the  
 13 last decade. Many people have “cut the cord” to rely on wireless as their primary  
 14 means of voice communication. But when I try to locate a wireless plan that is  
 15 comparable to Frontier’s residential local telephone service, it is hard to find a  
 16 similar product. The following list contains examples of the plans I have located.

17 **Table 2. Examples of Wireless Cellular Calling Plan Comparable to Frontier’s**  
 18 **Residential Local Telephone Service<sup>17</sup>**  
 19

Wireless Provider	Price
AT&T Wireless <sup>18</sup>	\$39.99 (450 anytime minutes, 5000 nights & weekend minutes, \$0.45 per additional minute, 2-year contract) \$59.99 (900 anytime minutes, unlimited nights & weekend minutes, \$0.40 per additional minute, 2-year

<sup>17</sup> The prices are based on quotes from the companies’ official websites using Everett zip code 98208 or Kennewick zip code 99336 when a zip code is required. Price may vary across regions and among individual subscribers. All prices do not include taxes, surcharges and fees.

<sup>18</sup> Exhibit No. \_\_\_ (JL-13), Price Quote from AT&T Wireless Website <http://www.att.com/shop/wireless/plansnew.html#fbid=GFVXQbvfn7h>, on April 22, 2013.

Wireless Provider	Price
	contract) \$69.99 (unlimited voice plan)
Verizon Wireless <sup>19</sup>	Starting from \$50 (unlimited talk and text messaging and 1 GB data)
Sprint Nextel <sup>20</sup>	Starting from \$59.99 (900 anytime minutes, \$0.40 per additional minute, 2-year contract) \$109.99 (unlimited voice, messaging and data)
T-Mobile <sup>21</sup>	Starting from \$50.00 (unlimited voice, unlimited domestic messaging and 500 MB data)
Inland Cellular <sup>22</sup>	\$59.99 (800 minutes, unlimited text messaging) \$69.99 (1200 minutes, unlimited text messaging) \$99.00 (unlimited voice, text messaging)
US Cellular <sup>23</sup>	\$39.00 (450 voice minutes) \$49.99 (1000 voice minutes) \$69.99 (unlimited voice)

1

2

3

4

5

6

7

8

9

These plans are not directly comparable to Frontier's local telephone service because they offer mobility, a number of calling features and various allowances for text messaging and data; some of them also include free minutes between users of the same network. However, it is obvious that wireless companies do not offer low-cost calling plans for high-usage customers. Customers who prefer to have an unlimited local calling plan will not be able to find a wireless substitute at a price level close to Frontier's tariffed rate.

<sup>19</sup> Exhibit No. \_\_\_ (JL-14), Price Quote from Verizon Wireless Website <http://www.verizonwireless.com/wcms/consumer/shop/share-everything.html>, on April 22, 2013.

<sup>20</sup> Exhibit No. \_\_\_ (JL-15), Price Quote from Sprint Nextel Website [http://shop.sprint.com/mysprint/shop/plan/plan\\_wall.jsp?tabId=pt\\_individual\\_tab&INTNAV=ATG:HE:IndPlans](http://shop.sprint.com/mysprint/shop/plan/plan_wall.jsp?tabId=pt_individual_tab&INTNAV=ATG:HE:IndPlans), on April 22, 2013.

<sup>21</sup> Exhibit No. \_\_\_ (JL-16), Price Quote from T-Mobile Website <http://www.t-mobile.com/shop/plans/individual-plans.aspx>, on April 22, 2013.

<sup>22</sup> Exhibit No. \_\_\_ (JL-17), Price Quote from Inland Cellular Website <http://www.inlandcellular.com/individual-calling-plans/>, on April 22, 2013.

<sup>23</sup> Exhibit No. \_\_\_ (JL-18), Price Quote from U.S. Cellular Website <http://www.uscellular.com/uscellular/plans/showPlans.jsp?type=plans&plan-selector-type=individual>, on April 22, 2013.

1 **Q. Overall, do you think Frontier's Petition and the accompanying testimonies**  
2 **demonstrate that effective competition exists in the residential voice telephone**  
3 **service market?**

4 A. No. I believe competition exists and can be fierce in some market segments such as  
5 urban markets, service bundles, or services for mid-size or large business customers.  
6 However, competition is not adequate for residential customers who want only a  
7 plain old unlimited local calling plan. In fact, the Commission has received a  
8 number of comments from consumers that voice their concerns with Frontier's  
9 Petition. Some customers stated that Frontier is their only landline voice provider  
10 and that they do not consider wireless or VoIP an adequate substitute.<sup>24</sup>

11  
12 **Q. Mr. Phillips showed in his direct testimony that in a ten month period from**  
13 **March 1, 2012, through December, 2012, Frontier ported out more than 26,000**  
14 **access lines to a combination of more than 30 different competitors in Frontier's**  
15 **Washington service territory. Does it prove that the residential telephone**  
16 **service market is subject to effective competition?**

17 A. Not exactly. The data indicate that Frontier lost a lot of customers during that  
18 period, but not all are residential customers who subscribe to stand-alone voice  
19 services. Frontier ported out 26,496 telephone numbers to competitors from March  
20 through December, 2012. Table 3 is a breakdown of the port outs by types of  
21 competitors. It shows that 55 percent of Frontier's lost access lines were lost to  
22 CLECs. Since most CLECs focus on business customers, as discussed earlier,

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<sup>24</sup> Exhibit No. \_\_\_ (JL-19), Frontier Customer Comments Received by the Commission Alleging a Lack of Alternatives.

1 Frontier's line loss is, to a large extent, due to its failure to compete in the business  
 2 service market. Frontier also lost lines to Charter Fiberlink and Comcast, indicating  
 3 that it is losing market share to cable companies in the service bundles market.  
 4 Frontier's bundled telecommunications services are subject to minimal regulation.<sup>25</sup>  
 5 Therefore, the playing field is level in this regard.

6 **Table 3. Frontier's Port Outs During March - December, 2012**  
 7 **By Types of Competitors<sup>26</sup>**  
 8

Type of Competitor	Number of Port Outs	Percentage
CLECs		
Cable		
Wireless		
VoIP		
<b>Total</b>		

9  
 10  
 11 **Q. Do the port out data prove that residential telephone service market is subject**  
 12 **to effective competition in all geographical areas?**

13 **A.** No. I believe that effective competition in residential local voice service is more  
 14 available in low-cost urban areas, but less so in high-cost rural areas. As shown in  
 15 Table 4, Frontier is losing access lines mainly in low-cost zones.<sup>27</sup>  
 16

<sup>25</sup> *In the Matter of the Petition of Verizon Northwest Inc. for Minimal Regulation of Bundled Telecommunications Services*, Docket UT-071574, Order 01 (September 18, 2007).

<sup>26</sup> Exhibit No. \_\_\_ (JL-20C), Frontier's Response to Staff Data Request No. 87: Telephone Number Port Outs by Exchange and Carrier.

<sup>27</sup> Here, UNE-Zone classification, the original purpose of which is to determine UNE rates, is used to indicate whether certain wire centers are relatively low-cost or high-cost.

1 **Table 4. Frontier's Net Port Outs During March - December, 2012**  
 2 **By UNE-Zones<sup>28</sup>**  
 3

		Number of Net Port Outs March - December 2012		Access Lines March 2012		Net Port Out as a Percentage of Total Access Lines	
Low-Cost  ↓  High Cost	Zone 1						
	Zone 2						
	Zone 3						
	Zone 4						
	Zone 5						
	<b>Total</b>						

4

5 **Q. The Petition and Mr. Gregg's direct testimony state that Frontier will continue**  
 6 **to serve as an ETC and that classification as a competitive telecommunications**  
 7 **company will not impact its obligation as an ETC and as a COLR. Do you**  
 8 **agree?**

9 **A.** I agree that Frontier can continue to be an ETC even if it becomes a competitive  
 10 local exchange carrier. But I am concerned that the competitive classification of  
 11 Frontier and its local voice service would result in a rate surge for the Company's  
 12 captive customers or even elimination of stand-alone residential voice service,  
 13 rendering its carrier of last resort duty meaningless. Even though more advanced  
 14 communications technologies have become available in the market, traditional  
 15 landline telephone service is still valued for its affordability, reliability and home

<sup>28</sup> The number of net port outs is equal to the number of port outs minus number of port ins. Data source: Exhibit No. \_\_\_ (JL-20C), Frontier's Response to Staff Data Request No. 87: Telephone Number Port Outs by Exchange and Carrier; Exhibit No. \_\_\_ (JL-21), Frontier's Response to Public Counsel Data Request No.13: Frontier Access Line Counts by Wire Center as of March 1, 2012; and Exhibit No. \_\_\_ (JL-22), Frontier's Response to Integra Data Request No. 15: Telephone Number Port Ins by Exchange.

1 security needs, at least by over 200,000 Frontier customers who currently subscribe  
2 to residential service.<sup>29</sup>

3  
4 **Q. What is an ETC? What obligations does an ETC have?**

5 A. An ETC is a telecommunications provider designated by a state utilities commission  
6 or by the FCC to provide services that are supported by the federal Universal Service  
7 Fund (USF). Essentially, the FCC makes competitive providers as well as ILECs  
8 eligible for federal USF as long as the provider is willing and capable of assuming  
9 COLR obligations for a particular service area. A state commission shall upon its  
10 own motion or upon request designate a common carrier that meets the requirements  
11 of 47 U.S.C. § 214 (e)(1) as an ETC.<sup>30</sup> The Commission granted ETC designation to  
12 Frontier's predecessor in 1997 based on its ILEC status.<sup>31</sup> Frontier is eligible to  
13 receive both High Cost Fund and Low Income Support from the USF. High Cost  
14 Fund support is intended to support ETCs serving areas with very high costs and to  
15 ensure that local rates are reasonably comparable to rates in lower-cost areas.

16  
17 **Q. Is voice service supported by the federal USF?**

18 A. Voice telephony service is the core of universal service policy. It has always been an  
19 essential service supported by the federal USF. 47 C.F.R. § 54.101 specifies that the  
20 functionalities of eligible voice telephony services include voice grade access to the  
21 public switched network or its functional equivalent; minutes of use for local service

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<sup>29</sup> Staff inquired about the number of customers who only subscribe to Frontier's stand-alone residential voice service without calling features in Staff Data Request No. 77. However, Frontier provided the number of voice service customers including those who subscribe to calling features.

<sup>30</sup> 47 U.S.C. § 214 (e)(1).

<sup>31</sup> GTE Northwest, Inc. was designated as an ETC in Docket UT-970348.

1 provided at no additional charge to end users; access to emergency services such as  
2 911 and enhanced 911; and toll limitation for qualifying low-income consumers. An  
3 ETC must offer voice telephony service in order to receive federal USF.

4  
5 **Q. How much High Cost Fund support have Frontier and its predecessors received**  
6 **since 2000?**

7 A. Since 2000, the Company and its predecessors have received \$188,041,737 from the  
8 High Cost Fund.<sup>32</sup>

9  
10 **Q. Will Frontier continue to receive Universal Service Fund in the next few years?**

11 A. On October 27, 2011, the FCC adopted an order that reformed and modernized the  
12 universal service and intercarrier compensation systems.<sup>33</sup> The reform will convert  
13 the traditional High Cost Fund to the Connect America Fund (CAF) in two phases to  
14 promote broadband infrastructure build-out. During CAF Phase I, Frontier received  
15 and will continue to receive frozen high cost fund support as well as Incremental  
16 Support (additional broadband fund) and CAF-Inter-carrier Compensation (support  
17 for reduction in interstate access rates). Frontier will also be eligible to participate in  
18 CAF phase II. Associated with the receipt of support from the High Cost Fund and  
19 CAF, Frontier is obligated to continue to serve as a carrier of last resort to customers  
20 in its ETC service area.

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<sup>32</sup> Exhibit No. \_\_\_\_ (JL-23), Frontier's Response to Staff Data Request No. 81: Frontier's Receipt of Federal High Cost Fund Support 2000-2012.

<sup>33</sup> See *Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing a Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform-Mobility Fund*, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51, WT Docket No.10-208, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 (rel. Nov.18, 2011).

1 **Q. What obligations does a COLR have?**

2 A. Washington statutes do not define COLR obligations. RCW 80.36.090 provides a  
3 general principle, as follows:

4 Every telecommunications company shall, upon reasonable notice, furnish to  
5 all persons and corporations who may apply therefor and be reasonably  
6 entitled thereto suitable and proper facilities and connections for telephonic  
7 communication and furnish telephone service as demanded.

8  
9 In Staff's view, the COLR obligations go hand in hand with ILEC and ETC  
10 status, including providing service on demand, meeting service quality standards and  
11 providing service in each of its exchanges at a fair, just and reasonable price.

12

13 **Q. If the Commission grants Frontier's Petition, can we expect market**  
14 **competition, as it exists today, to discipline Frontier to comply with its ETC and**  
15 **COLR obligations?**

16 A. No. Once competitively classified, Frontier will not be subject to service extension  
17 and service quality rules now applicable due to its ILEC status. In relatively urban  
18 areas and for lucrative services, there will be market competition and market  
19 competition will pressure all providers to deliver quality service to customers at  
20 competitive rates. However, rural, high-cost areas and low-profit market segments  
21 are less likely to attract competition. As I demonstrated earlier, CLECs, cable  
22 companies, VoIP and wireless providers do not constitute effective competition for  
23 stand-alone residential voice service.

24

25 **Q. Do you think competitive classification will negatively impact Frontier's**  
26 **compliance with COLR and ETC obligations?**

1 A. Yes. If stand-alone basic telephone service is de-regulated and its rates, terms and  
2 conditions become subject to change at the Company's will, Frontier essentially will  
3 be freed from its universal service obligation, which currently is tied to ILEC  
4 regulation as described below. WAC 480-120-020 requires an LEC to offer, at a  
5 minimum, flat-rate local exchange service to residential and business customers; but  
6 a competitively classified company is exempt from the rule. As a competitive  
7 service provider, Frontier is likely to exercise its monopoly power over its captive  
8 customers, i.e., those who only want to subscribe to stand-alone residential voice  
9 service and do not have access to an alternative provider offering comparable rates  
10 and quality. Frontier would have an incentive to raise the price for stand-alone voice  
11 service, or even eliminate such a low-profit product. It may also discontinue service  
12 to high-cost areas. The Company may also let service quality decline in areas where  
13 competition is ineffective. In those scenarios, Frontier's carrier of last resort  
14 obligations would be coterminous with the obligations of any firm enjoying the  
15 status of an unregulated monopoly. Should the Commission grant Frontier's Petition  
16 as a competitive provider, the Commission also should re-evaluate Frontier's  
17 qualification as an ETC because there will not be a guarantee that Frontier will  
18 continue to meet its ETC obligations on the ongoing basis.

19

20 **Q. Will other ETCs step in and assume COLR duties in Frontier's service**  
21 **territory?**

1 A. Most likely, no. Currently, there are five competitive ETCs in Frontier's service  
2 territory in Washington, all of which are wireless providers.<sup>34</sup> The FCC's 2011  
3 Universal Service reform has implemented a phase-out of the Competitive ETCs'  
4 High Cost Fund support. These carriers will only be eligible for the Mobility Fund  
5 part of the CAF if they choose to participate in reverse auctions. They are not likely  
6 to replace Frontier as a COLR on a large scale.  
7

8 **Q. To sum up, what are your main findings?**

9 A. Based on my analysis, I conclude that competition in the provision of residential  
10 services exists in urban areas and in the market for advanced telecommunications  
11 and data services (broadband access, data management, etc.) and service bundles;  
12 however, less or no effective competition exists in the market for stand-alone  
13 residential local telephone service. In at least some geographical locations,  
14 customers do not have access to functionally equivalent or substitute services to  
15 Frontier's stand-alone residential voice services at competitive rates, terms and  
16 conditions. Even though voice service can be included in a bundle or a package,  
17 customers may not want to pay for the add-on features due to budget constraints or  
18 other considerations. In this regard, Frontier's stand-alone residential voice service  
19 does not meet the statutory standard for competitive classification under RCW  
20 80.36.330.  
21

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<sup>34</sup> The five wireless ETCs are AT&T Mobility, T-Mobile West Corporation, U.S. Cellular Corporation, Eastern Sub-RSA Limited Partnership (d/b/a Inland Cellular), and Washington RSA No. 8 Limited Partnership (d/b/a Inland Cellular).

1 Before the Commission decides to grant competitive classification to Frontier, the  
2 Commission must have full faith in market competition to compel Frontier to deliver  
3 quality service at just and reasonable prices to Washington customers regardless of  
4 geographical location. At this point, Staff does not have such confidence. As of  
5 December 31, 2012, the Company had 207,657 residential access lines.<sup>35</sup>

6 Classifying Frontier's stand-alone residential voice service as competitive may lead  
7 to rate increases, deteriorating service quality, and even the elimination of the stand-  
8 alone local calling plan.

9  
10 **Q. What is your recommendation?**

11 A. I recommend that the Commission deny competitive classification to Frontier's  
12 stand-alone residential voice service. Frontier should continue to offer a stand-alone  
13 local unlimited calling plan to residential customers throughout its service territory in  
14 Washington at the current rate, terms and conditions until revised in a separate  
15 appropriate proceeding. The Commission should continue to apply all regulations  
16 relevant to provision of stand-alone residential voice service, including service  
17 quality standards and line extension requirements, to Frontier.

18  
19 **Q. Does this conclude your testimony?**

20 A. Yes.

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<sup>35</sup> Exhibit No. \_\_\_ (JL-24), Frontier's Response to Staff Data Request No. 91: Access Line Counts by Wire Center.