

Docket:	<u>A.15-03-005</u>
Exhibit Number	: <u>ORA-</u>
Commissioner	: <u>C. Sandoval</u>
Admin. Law Judge	: <u>K. Bemesderfer</u>
ORA Project Mgr.	: <u>Ana Maria Johnson</u>
ORA Expert	: <u>Lee Selwyn</u>
Witnesses	: <u>Ayat Osman</u> <u>Adam Clark</u> <u>Enrique Gallardo</u> <u>Ana Maria Johnson</u>



**Office of Ratepayer Advocates  
California Public Utilities Commission**

**ORA's Executive Summary**

**Application of Frontier Communications, Frontier Communications of America, Inc. (U5429C), Verizon California, Inc. (U1002C), Verizon Long Distance LLC (U5732C), and Newco West Holdings LL for Approval of Transfer of Control Over Verizon California, Inc. and Related Approval of Transfer of Assets and Certifications**

**-PUBLIC-**

San Francisco, California  
July 28, 2015

1 **MEMORANDUM**

2 Staff of the Communications & Water Policy Branch of the Office of Ratepayer  
3 Advocates (ORA) of the California Public Utilities Commission (Commission) and  
4 ORA’s consultant, Lee L. Selwyn, prepared testimony on Application (A.)15-03-005  
5 under the general supervision of Program & Project Supervisor, Ana Maria Johnson.  
6 ORA is represented in this proceeding by legal counsel Lindsay Brown.

7 The table below identifies the ORA witnesses and the topics of their testimony.  
8 Statements of qualifications for ORA witnesses are presented as an attachment to each  
9 testimony.

<b>Testimony Topic</b>	<b>ORA Witness</b>
Executive Summary	Ana Maria Johnson
Assessment of Economic Impact and Impact on Competition for Voice and Broadband Services	Lee Selwyn
Service Quality Assessment for Voice and VoIP	Ayat Osman
Service Quality Assessment for Broadband	Adam Clark
Impact Assessment on Employees and Management and Impact on 911 Service and Battery Backup for VoIP Service-	Enrique Gallardo

10 In preparing testimony, ORA prioritized analysis and recommendations given the  
11 expedited schedule of the proceeding. Additional analysis or recommendations on any  
12 particular item contained within the Application, the proceeding’s Scoping Memo, and/or  
13 data request responses, may be addressed during Joint Supplemental Testimony currently  
14 scheduled for September 1, 2015 and reply testimony on September 8, 2015.

**TABLE OF CONTENTS**

1

2

3 **EXECUTIVE SUMMARY ..... 1**

4     **RATEPAYERS ALLOCATION OF ECONOMIC BENEFITS .....3**

5     **RECOMMENDED CONDITIONS .....5**

6     **KEY FINDINGS .....17**

7 **ATTACHMENT A – STATEMENT OF QUALIFICATIONS OF ANA**

8     **MARIA JOHNSON ..... 24**

9

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## EXECUTIVE SUMMARY

On March 18, 2015, Frontier Communications Corporation (Frontier), Frontier Communications of America, Inc. (U 5429 C) (“Frontier America”), Verizon California Inc. (U 1002 C) (Verizon California), Verizon Long Distance, LLC (U 5732 C) (Verizon LD), and Newco West Holdings LLC (collectively, Joint Applicants) filed an application seeking approval from California Public Utilities Commission (“CPUC” or “Commission”) for the sale and transfer of Verizon California, and Verizon LD’s customer accounts in Verizon California’s service territory to Frontier. Frontier is acquiring Verizon’s operations in California, Texas, and Florida for a total purchase price of \$10.5 billion. If the transaction is approved, Verizon California’s physical assets will be transferred to Frontier and approximately 2.2 million customers of Verizon California will become customers of Frontier.

In accordance with the July 02, 2015 Assigned Commissioner’s Amended Scoping Ruling (“Scoping Ruling”), the Office of Ratepayer Advocates (“ORA”) conducted a review and analysis of the issues set forth in the Scoping Ruling. ORA examined the Joint Applicant’s Application, their May 11, 2015 Testimony, and responses to a number data requests to help determine if the proposed transaction is in the public interest.

The proposed Transaction should be approved, but only if the conditions outlined below are adopted. These conditions are necessary to ensure the public interest benefits of the proposed transaction are in fact realized. These conditions, on the whole, provide a pragmatic, performance-based approach toward addressing significant concerns about: (1) the deteriorated condition of Verizon’s network; (2) the sub-par level of service quality and reliability provided by Frontier and Verizon; (3) the uncertainty over Frontier’s ability and resources to simultaneously absorb Verizon’s wireline assets, operations, and customers in California, Texas and Florida; and (4) the unsatisfactory advancement of wireline broadband Internet access across the combined service territories of Frontier and Verizon, along with the absence of a commitment and plan to meet the minimum broadband speeds (currently 25 Mbps download and 3 Mbps upload) established by the Federal Communications Commission (FCC). These conditions can and should be met and paid for with the equitable allocation ratepayers are required to

1 receive as a result of the proposed transaction (\$927.750 million<sup>1</sup> from Frontier and  
2 <<BEGIN CONFIDENTIAL>> [REDACTED] <<END CONFIDENTIAL>> from  
3 Verizon) in accordance with Public Utilities (P.U.) Code § 854 (b)(2).

4 If the proposed transaction is not approved or if either Verizon or Frontier  
5 terminates the transaction, the Commission should begin an investigation of Verizon and  
6 order the company to make immediate investments to bring its network up to the  
7 Commission's quality of service and basic service standards and ensure that the Verizon  
8 California network is providing safe and reliable service. It is critical that the  
9 Commission address this problem comprehensively and in a timely fashion. California  
10 has been in a serious drought for four years,<sup>2</sup> which has been the subject of several  
11 proclamations and Executive Orders by Governor Brown.<sup>3</sup> It is predicted that California  
12 will face a very harsh and wet winter in 2015-2016.<sup>4</sup> That coming on the heels of a severe  
13 drought will likely lead to a significant increase in problems with the Joint Applicants'  
14 network infrastructure and trouble reports, including more frequent and severe outages.

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<sup>1</sup> This amount includes the total FCC CAF funding in Frontier and Verizon's territories over six years.

<sup>2</sup> As of July 23, 2015, 96% of California is in a severe drought and 46% of the State is in exceptional drought, the worst category on the U.S. Drought Monitor scale.  
<http://www.washingtonpost.com/blogs/capital-weather-gang/wp/2015/07/27/why-a-super-el-nino-could-still-be-a-bust-for-california-drought-relief/>

Four year drought reference : <http://ca.gov/drought/> &  
<http://www.water.ca.gov/waterconditions/waterconditions.cfm>

<sup>3</sup> The governor on January 17, 2014 proclaimed a State of Emergency and directed state officials to take all necessary actions to make water immediately available: <http://gov.ca.gov/news.php?id=18368>. On April 25, 2014, the governor issued an executive order to speed up actions necessary to reduce harmful effects of the drought, and he called on all Californians to redouble their efforts to conserve water: <http://ca.gov/Drought/topstory/top-story-6.html>. On December 22, 2014 Governor Brown issued Executive Order B-28-14. This new Executive Order cites to paragraph 9 of the January 17, 2014 Proclamation and paragraph 19 of the April 25, 2014 Proclamation and extends the operation of the provisions in these paragraphs through May 31, 2016: <http://www.gov.ca.gov/news.php?id=18815>. On April 1, 2015, the governor issued Executive Order B-29-15 to further address the harmful effects of the drought: <http://gov.ca.gov/news.php?id=18910>.

<sup>4</sup> The National Oceanic and Atmospheric Administration (NOAA) predicts that there is an 80% chance that this El Niño will last until the spring of 2016. <http://www.washingtonpost.com/blogs/capital-weather-gang/wp/2015/07/27/why-a-super-el-nino-could-still-be-a-bust-for-california-drought-relief/>

1 The last time California faced an El Niño winter (as is predicted for the coming  
2 2015-2016 winter) was in 2010-2011, and there were lengthy and severe telephone  
3 outages in Southern California during that time.<sup>5</sup> Because of the significant impact of  
4 these outages on Californians – over 250,000 Verizon and AT&T customers lost  
5 telecommunications services – the Senate Energy, Utilities and Commerce Committee  
6 chaired by Senator Padilla held a hearing in Los Angeles on February 4, 2011 on  
7 “Telephone Service Outages and Infrastructure Needs”<sup>6</sup> The outages in December, 2010  
8 also drove this Commission to open a rulemaking to address telecommunications service  
9 quality.<sup>7</sup>

10 It is important to note that the outage and trouble reports in the data ORA has  
11 reviewed to date, which, in the testimony of Dr. Ayat Osman and Adam Clark, in the  
12 Motion of the Communications Workers of America (CWA) to Enter Photos into the  
13 Record, and at the PPH in Agua Caliente, clearly indicate that there are problems with  
14 Verizon’s landline network,<sup>8</sup> mostly occurred in ideal “dry” years. There would have  
15 likely been more outage and trouble reports if California had experienced normal weather  
16 patterns. If California experiences a harsh winter in 2015-2016 as predicted, there is little  
17 doubt that the number of outages and trouble reports will dramatically increase.

### 19 **Ratepayers Allocation of Economic Benefits**

20 A number of the recommended conditions discussed below can and should be met  
21 and paid for with the equitable allocation ratepayers are required to receive as a result of  
22 the proposed transaction and in accordance with P.U. Code § 854 (b)(2). More  
23 specifically, ratepayers shall receive not less than 50% of the total short-term and long-  
24 term forecasted shareholder economic benefits. The data suggests that Frontier should be  
25 required to commit no less than **\$927.750 million** (representing the 50% ratepayer benefit

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<sup>5</sup> <http://www.sopr.org/news/2011/02/03/23686/state-committee-probes-december-storm-phone-outage/>

<sup>6</sup> <http://seuc.senate.ca.gov/informationalhearings>

<sup>7</sup> R.11-12-001 at 7-8.

<sup>8</sup> Dr. Ayat Osman Testimony, Executive Summary Section at 19 (referencing Motion of CWA to Enter Photos into the Record, July 23, 2015).

1 allocation) to California ratepayers.<sup>2</sup> Additionally, Verizon will be realizing shareholder  
2 benefits due to the company's projected capital gain from the sale. As such, Verizon  
3 should be required to commit no less than <<BEGIN CONFIDENTIAL>> [REDACTED]  
4 [REDACTED] <<END  
5 CONFIDENTIAL>>ratepayer benefit should be used to pay for the maintenance  
6 upgrades needed for its California network that has been neglected and left to deteriorate  
7 by Verizon. Verizon should earmark this amount and set aside the funds for Frontier to  
8 use to improve the network. Other states have adopted a similar condition. In 2010, the  
9 West Virginia Public Service Commission required Verizon to pay for maintenance  
10 upgrades as a condition of approving Verizon's sale of its ILEC to Frontier. Verizon was  
11 required to put \$72.4 million in an escrow account to fund network repairs. In  
12 California, Verizon should set aside no less than <<BEGIN  
13 CONFIDENTIAL>> [REDACTED] <<END CONFIDENTIAL>>in an escrow  
14 account to fund for network repairs.

15 In accordance with testimony of Dr. Lee Selwyn, any tax benefit gained by  
16 Frontier and Verizon as a consequence of the proposed transaction provide additional  
17 short-term and long-term economic benefits to ratepayers and therefore qualify as  
18 benefits subject to allocation to ratepayers as required by P.U. Code §854(b)(2). ORA  
19 currently does not have sufficient information to account for tax effects in the calculation  
20 of ratepayer benefits but continues to work on this item and reserves the right to address  
21 in Supplemental Testimony.<sup>11</sup>

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<sup>2</sup> Dr. Lee Selwyn's Testimony at pg.119

<sup>10</sup> Dr. Lee Selwyn's Testimony at pg.130

<sup>11</sup> Dr. Lee Selwyn's Testimony at pgs.133-134

1 **Recommended Conditions:**

- 2
- 3 1. Verizon should be held financially accountable for repairs to any of their network  
4 assets that are not operational for the functions for which they were designed for.  
5 This includes, but is not limited to, the Commission holding Verizon accountable  
6 to and financially responsible for repairing all company related facilities that were  
7 the subject to complaints reported during the proceeding’s Public Participation  
8 Hearings (PPHs) and Workshops prior to the closing of the transaction.<sup>12</sup>  
9
- 10 2. Prior to approving the Transaction, the Commission should require Verizon to be  
11 accountable to warrant that the network assets transferred to Frontier satisfy all  
12 minimum CPUC service quality and basic service standards.<sup>13</sup>  
13
- 14 3. Frontier’s right-to-use license(s) with respect to any Verizon owned FiOS  
15 software, including but not limited to the Interactive Media Guide (“IMG”),  
16 should be extended indefinitely.<sup>14</sup>  
17
- 18 4. Verizon should be required indefinitely to provide Frontier with software support  
19 and maintenance comparable to what it provides to its remaining ILECs, at a  
20 reasonable cost-based price, provided that Verizon shall not be required to  
21 provide ongoing support and maintenance with respect to any software that has  
22 been significantly modified and/or expanded by Frontier. Verizon should also be  
23 required to provide any upgrades or major releases to such Verizon owned  
24 software, except to the extent that such upgrades or major releases pertain to

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<sup>12</sup> Dr. Lee Selwyn’s Testimony at pg.135

<sup>13</sup> Dr. Lee Selwyn’s Testimony at pg.135

<sup>14</sup> Dr. Lee Selwyn’s Testimony at pg.136

1 Verizon proprietary products or services to which Frontier access would  
2 compromise Verizon's competitive interests.<sup>15</sup>

- 3
- 4 5. The Commission should disallow provisions in the Securities Purchase  
5 Agreement for purposes of the California Transaction which currently requires  
6 Frontier to pay 100% of any costs imposed by regulators as a condition for  
7 approval, and/or should require Verizon to accept such disallowance as a  
8 condition of approval.
- 9
- 10 6. Frontier should expand broadband services at speeds of no less than the FCC's  
11 minimum definition of broadband speeds, currently 25 Mbps download and 3  
12 Mbps upload, to 98% of households in its new service territory (Frontier and  
13 Verizon wireline service areas combined) by no later than December 31, 2020<sup>16</sup>.  
14 In efforts to avoid a focus of deployment only in affluent and/or highly dense  
15 areas, as a condition of approving the transaction, the Commission should require  
16 that 98% of households in rural areas, tribal lands and low income areas have  
17 access to the FCC's minimum definition of broadband speeds, currently 25 Mbps  
18 download and 3 Mbps upload, by no later than December 31, 2020.<sup>17</sup> The  
19 following deployment milestones should be met:

<b>Year</b>	<b>% of Households with Broadband Availability of at least 25 Mbps download and 3 Mbps upload</b>
Dec. 31, 2016	-
Dec. 31, 2017	-
Dec. 31, 2018	78%

<sup>15</sup> Dr. Lee Selwyn's Testimony at pg.136

<sup>16</sup> If the FCC increases its definition of broadband to higher broadband speeds, which is likely given the importance and necessity for fast speeds to consumers, then this requirement should shift accordingly to be consistent with the FCC's standard.

<sup>17</sup> *Id.*

Dec. 31, 2019	88%
Dec. 31, 2020	98%

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Reporting Requirements: On July 1, 2016, and every year thereafter until July 1, 2020, a progress report shall be submitted to the Commission and ORA identifying the progress made for deployment of broadband and the work completed to meet the interim deployment milestones set forth above. The report shall identify the number of households with access to the FCC’s minimum broadband speeds (currently 25 Mbps download and 3 Mbps upload), including a list of census blocks where the households are located.

On December 31, 2018, and every year thereafter until December 31, 2020, Frontier shall submit a progress report certifying that it is meeting the percentage of households identified in the deployment milestones set forth above.<sup>18</sup>

- 7. Frontier should provide an unredacted copy of the FCC 477 data for Internet Access Services and Local Telephone Services to the CPUC and the ORA concurrent with such filings with the FCC.<sup>19</sup>
- 8. Frontier should pay for the cost of an independent consultant, selected, directed, and managed by ORA, to design and conduct a multi-lingual customer satisfaction survey. The survey would be conducted over a 36 month period, and designed to measure customer satisfaction for broadband and voices services (including VoIP), and to measure the effectiveness of efforts to educate customers on the limitations of VoIP during power outages and the necessity for maintaining battery back-up. Over the 36 month period, the independent consultant (with ORA) would then issue quarterly reports to the CPUC detailing the results of the

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<sup>18</sup> Dr. Lee Selwyn’s Testimony at pgs.136-137

<sup>19</sup> Dr. Lee Selwyn’s Testimony at pg.138

1 survey. These quarterly reports would provide Frontier and the CPUC with the  
2 ability to detect trends and identify and address problems early.<sup>20</sup>

3  
4 9. Frontier should submit to the Commission and the ORA a multi-year Strategic  
5 Plan<sup>21</sup> by no later than October 31, 2015 with the specific plans for improving  
6 voice and broadband service quality, reliability, and availability throughout its  
7 new California service area. More specifically, the Strategic Plan is to include the  
8 following:

9 a. Specific plans, including the specific types of network upgrades needed, to  
10 improve reliable and safe voice services in the following counties:

- 11 • Los Angeles County
- 12 • San Bernardino County
- 13 • Riverside County

14 b. Specific plans, including the specific types of network upgrades needed, to  
15 improve broadband services in the following counties<sup>22</sup>:

- 16 • Los Angeles County
- 17 • San Bernardino County
- 18 • Riverside County

19 c. The Strategic Plan shall include at minimum the following components:

- 20 • Goals: general goal articulating the desired outcome.
- 21 • Objectives: for each goal identify specific objectives that meet the  
22 S.M.A.R.T criteria: Specific, Measurable, Achievable, Realistic and  
23 Time-bound.<sup>23</sup>

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<sup>20</sup> Dr. Ayat Osman Testimony Executive Summary section at10, Adam Clark Testimony at V-4

<sup>21</sup> Dr. Ayat Osman Testimony at 1-33, 1-34

<sup>22</sup> Adam Clark Testimony at V-1, V-2

<sup>23</sup> Dr. Ayat Osman Testimony 1-34

- 1 d. Specific goals and objectives to address outages (including, impacts-user-  
2 minutes/DS3-minutes, durations, and affected users) pertaining to wireline  
3 and VoIP services in California on the following FCC's categories:  
4 • 1350 DS3-minutes outages  
5 • E-911 outage  
6 • 900,000 user-minutes/VoIP-minute outages  
7 • Blocked Calls  
8 e. Specific goals and objectives to improve and meet on G.O. 133-C  
9 standards of 90% of Out of Service Trouble Reports to be restored within  
10 24 hours.

11  
12 10. For a period of five years, with year one due one year from the date of CPUC  
13 approval of the Transaction, Frontier should provide the Commission and ORA  
14 with an annual report detailing:

- 15 a. Frontier's capital expenditures related to planned actions on condition  
16 number 9 above. Frontier should include in the report a comparison of the  
17 amount of planned California capital expenditures as a percentage of total  
18 system expenditures and a comparison of the amount of capital  
19 expenditures per California access line.  
20 b. Performance metrics quantifying the desired outcome of each objective  
21 identified in condition number 9(c).<sup>24</sup>

22  
23 11. For a period of five years, Frontier should provide to the Commission and ORA,  
24 on a quarterly basis the following service quality metrics for voice services:

- 25 a. Traditional Voice Copper Service and FiOS voice (non-VoIP):  
26 i. Installation Interval  
27 ii. Installation Commitments  
28 b. VoIP services:

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<sup>24</sup> Dr. Ayat Osman Testimony at 1-35

- 1 i. Installation Intervals
- 2 ii. Installation Commitment Met
- 3 iii. Customer Trouble Reports
- 4 iv. Out of Service Repair Intervals
- 5 v. Answer-time for Trouble Reports
- 6 vi. Billing and Non-Billing Inquiries
- 7 vii. Report Trouble Reports by the same customer after closing
- 8 of an initial trouble report<sup>25</sup>

9

10 12. For a period of five years, Frontier should meet the following complaint  
11 performance metric and provide to the Commission and ORA, on a quarterly  
12 basis customer complaints for voice services including traditional copper voice,  
13 and FiOS voice (non-VoIP and VoIP):

14 a. Performance Metric: The number of complaints should not exceed 1.75  
15 complaints per 1,000 lines.

16 b. Reporting Requirement:

- 17 i. Type of Customer: residential/business
- 18 ii. Type of Service: copper voice, FTTP voice and VoIP
- 19 iii. Type of Complaint Categories: billing (identify type of
- 20 billing complaints, such as unauthorized charges,
- 21 disconnection, rate protest), access to 911/emergency
- 22 services, delayed orders/missed appointments, number
- 23 portability, operator service, refusal to service, service
- 24 outages, call quality (i.e. service conditions that affect or
- 25 prevent the quality of service provided such as static and
- 26 noise)
- 27 iv. Resolution time for a complaint
- 28 v. Date of Complaint

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<sup>25</sup> Dr. Ayat Osman Testimony at 2-8, 2-9

- 1 vi. Location
- 2 vii. Recurring complaints by the same customer after closing of
- 3 an initial complaint<sup>26</sup>
- 4

5 13. Frontier should provide a copy of FCC Network Outage Reporting System  
6 (NORS) reports for VoIP services to the Commission and ORA concurrent with  
7 such filing with the FCC.<sup>27</sup>

8

9 14. For a period of five years, Frontier should meet the following voice services  
10 outage performance metric and report to the Commission and ORA, outages that  
11 do not meet the FCC NORS outage reporting requirement for voice services  
12 (traditional copper voice, FiOS voice (non-VoIP and VoIP)):

13 a. Performance Metric: The number of non-FCC outages should not  
14 exceed 0.5 outages per 1,000 lines per year

15 b. Reporting Requirement:

- 16 i. Type of service: Type of service: copper voice, FiOS
- 17 voice (non-VoIP), and/or VoIP
- 18 ii. Number of customers affected
- 19 iii. Type of customers affected: residential/business
- 20 iv. Incident Date
- 21 v. Incident Time
- 22 vi. Duration of outage in hours and minutes
- 23 vii. Outage restoration time
- 24 viii. Whether the outage was due to failure in Frontier's
- 25 network or other companies' network

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<sup>26</sup> Dr. Ayat Osman Testimony at 3-9

<sup>27</sup> Dr. Ayat Osman Testimony at 1-35

- 1 ix. Whether the outage occurred inside Frontier's  
2 buildings (owned, leased, or otherwise controlled by  
3 Frontier) or outside plant  
4 x. Location of outage  
5 xi. Equipment failed  
6 xii. Network involved  
7 xiii. Affected E911/911  
8 xiv. Description of the Cause  
9 xv. Description of the Root cause  
10 xvi. Description of the incident  
11 xvii. Methods used to restore the outage  
12 xviii. Steps taken to prevent the outage from re-occurring<sup>28</sup>  
13

14 15. For a period of five years, Frontier should report to the Commission and ORA the  
15 below voice service metrics, as well as improve on Verizon's current voice  
16 service performance metrics as follows:

- 17 a. At a minimum, track the 39 different metrics that Verizon currently uses to  
18 assess the quality of its voice services. See Attachment B of Dr. Ayat  
19 Osman's testimony for a list and description of these metrics.  
20 b. Frontier should improve performance on the following voice services metrics  
21 for traditional copper voice, FTTP voice (non-VoIP) and VoIP services:  
22 i. Out of Service Repair Tickets (OOS) cleared within 24-  
23 hours  
24 ii. Service Affecting (but Not Out of Service (NOOS)),  
25 cleared within 24-hours.

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<sup>28</sup> Dr. Ayat Osman Testimony at 1-35, 1-36

- 1                                   iii.     Percentage Repeats < 7 days: Percentage of customer who
- 2   report a 2nd problem within 7-days of a prior cleared
- 3   trouble report.
- 4                                   iv.     Mean Time to Repair (MTTR)
- 5                                   v.     Percentage Commitment Met: the percentage of
- 6   installations that were cleared on or before the date/time
- 7   promised.
- 8                                   vi.     Percentage Repair Commitment: the percentage of trouble
- 9   reports that were cleared on or before the date/time
- 10    promised.<sup>29</sup>

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16. For a period of five years, Frontier should provide an annual report, with year one due on one year from the date of CPUC approval of the Transaction, on broadband performance metrics that includes:

- a. Customer-initiated complaints on Frontier’s broadband service in California. This data should include:
  - i.     Type of complaint: billing (identify type of billing complaints, such as unauthorized charges, disconnection, rate protest), delayed orders/missed appointments, customer service, refusal to service, availability/service outages, equipment, interference, privacy, speed.
  - ii.    Type of customer: residential, small or large sized business.
  - iii.   Date of complaint
  - iv.    Resolution time for a complaint
  - v.     Customer Location: County, City and Census Block
  - vi.    Frequency of complaint by the same customer
- b. Annual data on broadband service outages. For each service outage, the data should include:
  - i.     Number of customers affected

- 1                   ii.     Type of customers affected: residential, small business, or  
2                             large business  
3                   iii.    Incident Date  
4                   iv.    Incident Time  
5                   v.     Duration of outage in total minutes  
6                   vi.    Outage restoration time  
7                   vii.   Location of outage: County, City and Census Block(s)  
8                   viii.   Equipment failed  
9                   ix.    Network involved  
10                  x.     Description of the Cause  
11                  xi.    Description of the Root cause  
12                  xii.   Description of the incident  
13                  xiii.   Methods used to restore the outage  
14                  xiv.   Steps taken to prevent the outage from re-occurring<sup>30</sup>  
15           c.    Service installation intervals (per month) for orders for new broadband  
16                    service installations received during the previous 12 months. This data  
17                    should be inclusive of all wireline, fiber-optic, and fixed wireless  
18                    broadband services. Service installation intervals should be expressed in  
19                    business days, between the date the service order was placed and the date  
20                    the service becomes operational. This data should exclude all orders  
21                    having customer requested appointments later than the provider’s  
22                    commitment dates.  
23           d.    Provide the total number of broadband service orders received and the  
24                    number of those orders completed, per month, during the previous 12  
25                    months. This data should be inclusive of all wireline, fiber-optic, and fixed  
26                    wireless broadband services.<sup>31</sup>

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(continued from previous page)

<sup>29</sup> Dr. Ayat Osman Testimony at 2-9

<sup>30</sup> Adam Clark Testimony at V-2, V-3

<sup>31</sup> Adam Clark Testimony at V-2, V-3

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17. Frontier should adopt the following broadband performance metrics and practices:
- a. At a minimum, track the 25 different metrics that Verizon currently uses to assess the quality of its broadband services. Frontier should track these metrics for DSL services apart from Fiber to the Home (FTTH) services. See Attachment L of Adam Clark’s testimony for a list and description of these metrics.
  - b. Maintain a ratio of no less than one employee for every 255 broadband lines in service.
  - c. Adopt Verizon’s practice of hiring independent contractors to conduct random inspections and assess technicians’ work performance.<sup>32</sup>

18. Frontier should report to the Commission any layoffs or facility closings resulting from the transaction for three years after closing of the transaction within one month of the effective date of the layoffs or closings, stating why it was necessary to do so and what efforts Frontier made or is making to re-deploy those individuals elsewhere within Frontier. This report shall also state whether any savings associated with facility closings have been re-invested in Frontier's California operations, and, if not, why not.<sup>33</sup>

19. Frontier should report, on an annual basis for three years post transaction, the placement of local general managers and the locations they serve.<sup>34</sup>

20. Frontier and Verizon will work cooperatively in accordance with standard industry practices to coordinate any transition of 911 functionality or database systems. Both parties will represent and warrant that 911 functionality will not be

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<sup>32</sup> Adam Clark’s Testimony at V-3, V-4  
<sup>33</sup> Enrique Gallardo’s Testimony at 1-7  
<sup>34</sup> Enrique Gallardo’s Testimony at 2-5

1           impaired by the acquisition. No later than 30 days after the transaction is  
2           completed, both parties will submit a compliance letter to the Commission  
3           representing and warranting that 911 functionality was not impaired and remains  
4           fully operational. The compliance letter will provide the results of any validity  
5           testing conducted.<sup>35</sup>

6

7           21. Within 30 days post-transaction, Frontier will conduct tests to measure the proper  
8           functioning of the Automatic Number Identification (ANI) and Automatic  
9           Location Identification (ALI) systems in various locations throughout its territory  
10          in California and will report on the results of the tests to the Commission.<sup>36</sup>

11

12          22. Starting no later than 180 days following the effective date of the transaction,  
13          Frontier shall (a) supply backup batteries with minimum standby times of 8 hours  
14          at no cost as part of any new installation of VoIP telephones, (b) fully implement  
15          the guidelines for customer education programs regarding backup power systems  
16          adopted by this Commission in Decision (D.) 10-01-026, and (c) offer to sell  
17          backup batteries at cost to any present or future customer of the new company.<sup>37</sup>

18

19          23. Frontier shall advise all customers of the merged companies of the necessity for  
20          using backup batteries in connection with a VoIP-based telephone system and the  
21          risks associated with power outages. Such information shall be made available in  
22          Chinese, Japanese, Korean, Spanish, Tagalog and Vietnamese language versions,  
23          as well as large print and Braille versions for visually impaired customers, and  
24          shall be communicated to all customers of the company no later than 180 days  
25          following the effective date of the transaction. Frontier shall work with staff of the

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<sup>35</sup> Enrique Gallardo's Testimony at 3-4

<sup>36</sup> Enrique Gallardo's Testimony at 3-4

<sup>37</sup> Enrique Gallardo's Testimony at 3-12

1 Commission’s Communications Division to develop the form and language of  
2 such notices.<sup>38</sup>

3

4 24. Frontier should provide the Commission and ORA an annual report detailing  
5 Frontier’s compliance with all conditions the Commission imposes upon the  
6 company in its approval of the Application.

7

8 25. Frontier will be subject to a performance and financial audit by the Commission  
9 within 3 years and 5 years from approval of the Transaction to ensure that the  
10 ratepayer allocation from Frontier and Verizon are being spent as intended and in  
11 a reasonable fashion.

12

### 13 **Key Findings**

#### 14 **Competition Analysis and Economic Impact**

15 The Expert Report and Testimony of Dr. Lee L. Selwyn (Selwyn Testimony)  
16 discusses the effects of the proposed transaction on competition for voice and broadband  
17 services and the short-term and long-term economic benefits to Ratepayers in accordance  
18 with P.U. Code §854(b)(2).<sup>39</sup>

19 Even though the proposed transaction does not appear to present an adverse  
20 impact to competition, the level of competition for broadband service post-transaction is  
21 inadequate and unlikely to be materially improved as a result of the transaction.<sup>40</sup>

22 Specifically for broadband availability of 25 Mbps download, Frontier does not currently  
23 offer high-speed broadband Internet access at download speeds in excess of 25 Mbps  
24 where Verizon offers speed in excess of 25 Mbps to approximately 58% of the 2.628

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<sup>38</sup> Enrique Gallardo’s Testimony at 3-12

<sup>39</sup> P.U. Code §854(b)(2) requires that, “where the commission has ratemaking authority,” an equitable allocation be made of “the total short-term and long-term forecasted economic benefits... of the proposed merger, acquisition, or control, between shareholders and ratepayers. Ratepayers shall receive not less than 50 percent of those benefits.”

<sup>40</sup> Dr. Selwyn Testimony at pg. 64-65

1 million households located in census block where Verizon offers services.<sup>41</sup> There are an  
2 estimated 1 million households in the service territory of Verizon/Frontier that are unable  
3 to get high-speed broadband from the company itself but can get it from their cable  
4 provider or other provider.<sup>42</sup> The data reveals a lack of competition for broadband access  
5 at speeds of 25 Mbps download or higher. As FCC Chairman Wheeler has noted in the  
6 past:

7  
8 [a] 25 Mbps connection is fast becoming “table stakes” in  
9 21st century communications. . . . At 25 Mbps, there is  
10 simply no competitive choice for most Americans. Stop and  
11 let that sink in...three-quarters of American homes have no  
12 competitive choice for the essential infrastructure for 21st  
13 century economics and democracy.<sup>43</sup>

14  
15 The data also reveals that Verizon has disinvested and abandoned its interest in its  
16 wireline services.<sup>44</sup> According to Dr. Selwyn, “[a] review of all of the available Verizon  
17 financial data over the past 15 years confirms the persistent shift in investment away from  
18 wireline and over to wireless and other non-local wireline operations.”<sup>45</sup> The  
19 disinvestment in wireline operations is further supported by the service quality analysis  
20 on outages and trouble tickets conducted by Dr. Ayat Osman and Adam Clark in their  
21 testimony and highlighted below.

22

### 23 **Voice and VoIP Service Quality**

24 The testimony of Dr. Ayat Osman discusses the analysis of voice and VoIP  
25 (Voice over Internet Protocol) service quality for Frontier and Verizon. The analysis  
26 reports on a number of critical performance metrics, including Frontier’s and Verizon’s

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<sup>41</sup> Dr. Selwyn Testimony at pg. 45

<sup>42</sup> Dr. Selwyn Testimony at pg. 53-54

<sup>43</sup> Prepared Remarks of Chairman Wheeler, “Facts and Future of Broadband Competition”  
presented at the 1776 Headquarters, Washington, D.C., September 4, 2014, at 3, 4.  
<http://www.fcc.gov/document/chairman-remarks-facts-and-future-broadband-competition>

<sup>44</sup> Dr. Selwyn Testimony at pgs. –67-73

<sup>45</sup> Dr. Selwyn Testimony at pg.72

1 services outages in year 2014, compliance with G.O. 133-C Out of Service repair  
2 intervals, installation interval and commitment met metrics, and the number and type of  
3 complaints each company received.

4 Both companies fall short of meeting the CPUC's G.O. 133-C service quality  
5 standards for 2014 including out of service repair interval and answer time. Verizon  
6 identified multiple service quality metrics that it tracks on core voice services (copper  
7 voice), and FiOS service (FTTP voice and/or VoIP).<sup>46</sup> Data reveals that fewer copper  
8 voice service customers trouble reports are cleared on or before the date/time promised  
9 by the company compared to FiOS customers where a higher percentage of the repair  
10 commitment is met.<sup>47</sup>

11 Most striking is the analysis conducted on Verizon outages revealing a  
12 considerably higher number of Major Service Outages in Southern California specifically  
13 in <<BEGIN CONFIDENTIAL>> [REDACTED] <<END  
14 CONFIDENTIAL>> counties.<sup>48</sup> The data correlates to the locations where Verizon has  
15 most of its Voice Link customers in California.<sup>49</sup> Verizon has stated that Voice Link  
16 provides service to customers that have "experienced problems with their copper  
17 service."<sup>50</sup> Most of the outages reported in Southern California are largely caused as a  
18 result of problems with Verizon's <<BEGIN CONFIDENTIAL>> [REDACTED]  
19 [REDACTED]  
20 [REDACTED] <<END CONFIDENTIAL>> was the second main root cause  
21 of outages in Verizon's network, which occurred mostly in outside plant.<sup>51</sup>

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<sup>46</sup> Dr. Ayat Osman Testimony Executive Summary Section at 4

<sup>47</sup> Dr. Ayat Osman Testimony at F-5

<sup>48</sup> Dr. Ayat Osman Testimony at 1-9

<sup>49</sup> Verizon Response to ORA data request #009, Question No.1, Attachment name: *N\_VZ4.38\_Attachment 1\_A1503005VZ80002\_CONFIDENTIAL.xlsx*

<sup>50</sup> Verizon Response to ORA data request #002, Question No.8

<sup>51</sup> Dr. Ayat Osman Testimony at 1-15

1 Verizon’s consumer complaints between years 2010 and 2014 show that Voice  
2 related complaints make up the highest number of complaints the company received.<sup>52</sup>  
3 VoIP related complaints, however, have increased in numbers between 2013 and 2014.<sup>53</sup>  
4 In 2014, Southern California counties continue to be the locations with the highest  
5 number of “voice” customer complaints<sup>54</sup>

### 7 **Broadband Service Quality**

8 The testimony Adam J. Clark discusses the analysis of broadband service quality  
9 for Frontier and Verizon. The proposed Transaction will increase Frontier’s broadband  
10 footprint and customer base by over 2,000%.<sup>55</sup> Compared to Frontier, Verizon has a  
11 robust number of protocols in place to properly monitor and track broadband  
12 performance metrics.<sup>56</sup> However, Verizon performed poorly in regards to certain aspects  
13 of broadband service quality, reliability and availability. The data reveals evidence of  
14 poor service quality and the suspect condition of networks deterioration. In all, the data  
15 strongly suggests that Verizon California has not adequately maintained its copper  
16 networks in California.<sup>57</sup>

17 Verizon’s performance on fulfilling broadband service orders is worrisome  
18 because the company “does not maintain in the ordinary course of business information  
19 to exclude all the service orders not completed.”<sup>58</sup> Frontier, on the other hand, fell short  
20 of meeting service order installation intervals compared to the Commission’s GO 133 C  
21 standards. When it comes to broadband outages, most revealing is that customers of  
22 Verizon’s DSL services (copper) experienced more outages, with greater severity, than

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<sup>52</sup> Dr. Ayat Osman Testimony at 3-3

<sup>53</sup> Dr. Ayat Osman Testimony at 3-3, 3-4

<sup>54</sup> Dr. Ayat Osman Testimony at 3-4, 3-5

<sup>55</sup> Adam Clark Testimony at II-4

<sup>56</sup> Adam Clark Testimony at IV-2

<sup>57</sup> Adam Clark Testimony at III-2

<sup>58</sup> Adam Clark Testimony at III-13

1 did customers of Verizon’s FiOS services (fiber).<sup>59</sup> During 2013 and 2014, most  
2 broadband outages occurred in Southern California <<BEGIN  
3 CONFIDENTIAL>> [REDACTED]  
4 [REDACTED] <<END CONFIDENTIAL>>. The top three counties with most outages  
5 include: <<BEGIN CONFIDENTIAL>> [REDACTED]  
6 [REDACTED] <<END CONFIDENTIAL>>. The Joint Applicant’s  
7 effort to address concerns regarding broadband service quality is lackluster.

8 Both Frontier and Verizon provided ORA with customer complaints on  
9 broadband services. Frontier broadband complaints fluctuated between years 2011 and  
10 2014; with an increase in complaints occurring between years 2013 and 2014. The top  
11 category of consumer complaints related to <<BEGIN CONFIDENTIAL>> [REDACTED]  
12 [REDACTED] <<END CONFIDENTIAL>>.<sup>60</sup> In 2014, <<BEGIN  
13 CONFIDENTIAL>> [REDACTED] <<END CONFIDENTIAL>> in Southern  
14 California received the most Frontier complaints per number of lines compared to other  
15 counties.<sup>61</sup> Verizon broadband complaints between years 2010 and 2013 <<BEGIN  
16 CONFIDENTIAL>> [REDACTED] [REDACTED] [REDACTED]  
17 [REDACTED]  
18 [REDACTED] <<END  
19 CONFIDENTIAL>>. As with Frontier, Southern California counties reported the  
20 highest number of complaints in 2014.

## 22 Employee and Management Impact

23 The testimony of Enrique Gallardo conducted an analysis of the impact of the  
24 proposed Transaction on employees and management. Mr. Gallardo examined the  
25 customer to employee ratios of Verizon and Frontier and notes that Verizon has

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<sup>59</sup> Adam Clark Testimony at III-21

<sup>60</sup> Adam Clark Testimony at III-35 & III-36

<sup>61</sup> Adam Clark Testimony at III-38

<sup>62</sup> Adam Clark Testimony at III-41

1 historically had a relatively smaller workforce per customer compared to Frontier. Post-  
2 Transaction, the ratio of voice customers to employees nationwide for Frontier would be  
3 267:1, while the ratio of all customer connections (voice, broadband and video) would be  
4 491:1. In order to maintain Frontier’s customer-oriented approach and lower ratio of  
5 customers to employees, Frontier should at least maintain, if not increase, its workforce  
6 post-transaction. Frontier makes a number of commitments regarding the management of  
7 the post-Transaction company in California including implementing their Local  
8 Engagement Model in Verizon’s service area. However, data reveal that Frontier is not  
9 retaining many Verizon management level positions overseeing VoIP functionalities. As  
10 such, ORA recommends that the CPUC monitor and measure Frontier’s post-transaction  
11 management of the VoIP operations through the customer satisfaction survey  
12 recommended in the conditions spreadsheet.

13 In regards to customer service centers located in California, Verizon has identified  
14 a total of <<BEGIN CONFIDENTIAL>> [REDACTED] <<END CONFIDENTIAL>> locations  
15 as of 2014.<sup>63</sup> However, Mr. Gallardo notes that Frontier’s response to ORA data requests  
16 only discussed its plan to integrate 6 customer service centers in California. Frontier  
17 clarified its response stating that <<BEGIN CONFIDENTIAL>> [REDACTED]  
18 [REDACTED]  
19 [REDACTED] <<END CONFIDENTIAL>>.<sup>64</sup> Statements by Frontier,  
20 however, note that the company does not plan to eliminate or reduce Verizon employee’s  
21 in California.<sup>65</sup> Frontier should clarify its plans to operate all California customer service  
22 centers transferred from Verizon and explain why not all Verizon customer service  
23 centers will be transferred.

24  
25 **Safety Implications - 911 and Back-Up Battery**

26 The Testimony of Enrique Gallardo also includes an examination of the policies  
27 and practices of Frontier and Verizon regarding 911 service and the provision of backup

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<sup>63</sup> Enrique Gallardo Testimony at 1-2

<sup>64</sup> Enrique Gallardo Testimony at 1-2

<sup>65</sup> Enrique Gallardo Testimony at 1-1

1 power for VoIP service. The Transaction’s Cutover Plan has a number of sections  
2 discussing the methods the two companies will utilize to effect the transition of  
3 Verizon’s 911 system to Frontier’s control.<sup>66</sup> In order to ensure that consumers are not  
4 adversely impacted with the transition of 911 systems, ORA recommends that Frontier  
5 provide results of the transition showing that 911 functionality was not impaired and  
6 remains fully operational.<sup>67</sup>

7 Backup batteries to network equipment as well as to consumer premise equipment  
8 are critical components to providing safe and reliable service in situations of power  
9 failure. ORA continues to conduct its analysis on backup batteries to remote terminals  
10 and reserves its right to address during Supplemental Testimony.<sup>68</sup>

11 With regard to backup batteries for customer premise equipment for VoIP  
12 services, Frontier currently does not offer residential VoIP service in California and as  
13 such, it does not have in place policies regarding the provision of backup power for  
14 VoIP customers.<sup>69</sup> Frontier may adopt Verizon’s practices and policies regarding  
15 backup power for VoIP. However, in some instances, Verizon’s practices and policies  
16 may not be sufficient in ensuring public safety. For example, Verizon’s battery backup  
17 for FiOS Digital Voice does not meet the FCC’s and the Commission’s recommended  
18 standard that installation of the backup battery for VoIP services be at no cost to  
19 customers. At minimum, the Commission should require Frontier to provide backup  
20 batteries with minimum standby times of eight hours at no cost as part of any new  
21 installation of VoIP telephones, (b) fully implement the guidelines for customer  
22 education programs regarding backup power systems adopted by this Commission in D.  
23 10-01-026, and (c) offer to sell backup batteries at cost to any present or future customer  
24 of the new company.<sup>70</sup>

25  

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<sup>66</sup> Enrique Gallardo Testimony at 3-2

<sup>67</sup> Enrique Gallardo Testimony at 3-4

<sup>68</sup> Enrique Gallardo Testimony at 3-11

<sup>69</sup> Enrique Gallardo Testimony at 3-6

<sup>70</sup> Enrique Gallardo Testimony at 3-12

1    **ATTACHMENT A – STATEMENT OF QUALIFICATIONS OF ANA MARIA JOHNSON**

2

3    Ana Maria Johnson received a Bachelor’s of Science in Managerial Economics in 2000  
4    from the University of California at Davis and a Master’s of Science in Information  
5    Systems in 2004 from the University of San Francisco. From 2000 to 2010, Mrs.  
6    Johnson worked in the private sector in the telecommunications industry as a Quality  
7    Control Manager and Team Lead overseeing and conducting quality control management  
8    for large, enterprise-wide wireline telecom projects. In 2011, Mrs. Johnson joined the  
9    California Public Utilities Commission (CPUC) as a regulatory analyst working on the  
10    California Advanced Services Fund (CASF); a \$315 million broadband infrastructure and  
11    adoption-funding program. Mrs. Johnson coordinated and lead a team of analysts in the  
12    management and day to day operations of the CASF program that included the  
13    Infrastructure Grant, Loan, and Regional Consortia accounts. In 2014, Mrs. Johnson  
14    joined the CPUC’s Office of Ratepayer Advocates (ORA) Communications & Water  
15    Policy Branch as Program & Project Supervisor. Mrs. Johnson has supervised ORA’s  
16    work on a number of proceedings related to telecommunication’s policy, public purpose  
17    programs, mergers and acquisitions.