

1 proposed access to OSS cost study, Mr. Minion,¹³¹ has not reviewed the proposed
2 costs for reasonableness. Mr. Minion recently filed similar testimony on Access
3 to OSS costs¹³² in Public Service Commission of Maryland Case 8879 as part of a
4 two-witness panel. In that case, Verizon admitted “[n]either Mr. Minion nor Ms.
5 Prosini reviewed any documents that were specific to the reasonableness of the
6 costs associated with capabilities of individual systems.”¹³³

7 Apparently, Verizon would have this Commission rely, as its own witness
8 did, “upon Verizon’s accounting processes, wage/bill/and voucher verification
9 and approval processes and internal project controls to ensure the accuracy and
10 reasonableness of the expenditures.”¹³⁴ We are less convinced in infallibility of
11 Verizon accounting processes in evaluating the appropriateness of costs. These
12 same accounting processes seem to have failed Verizon even on the level of
13 compiling the costs for this study. While some of dollar values presented by
14 Verizon in the access to OSS cost study (Verizon Exhibit Part F-5) claim to be
15 based on “company records,” others are based on “company estimates.” Verizon
16 was forced to “estimate” many costs, apparently because Verizon does not or did
17 not track the relevant information. For example, when asked for a breakdown of
18 costs by its own “access to OSS” tracking codes, Verizon replied:

¹³¹ Verizon Cost Panel Direct at 3.

¹³² Because Verizon has developed these costs on a regional basis, the cost filed in Maryland is fundamentally the same as Verizon has presented here.

¹³³ See Verizon Maryland’s Responses to AT&T 7-18, 7-24, 7-27, 7-30, 7-33, and 7-37.

¹³⁴ See *id.*

1 In conducting its study, the company relied upon a
2 different categorization of expenditures. As such,
3 historical information is not readily available by
4 [Keep Cost Orders] before 1999.¹³⁵

5 Finally, Verizon has provided no evidence that the costs it reports were
6 tracked properly to “access to OSS” projects. As we have already explained,
7 Verizon has every incentive to load as many costs into accounts that it believes it
8 might ultimately be able to recover solely from competitors. A careful review of
9 detailed cost break-out might reveal costs that were not prudently incurred or were
10 not relevant to OSS access or perhaps were even related to gathering information
11 for regulatory filing in which Verizon resisted implementation of non-
12 discriminatory OSS. Unfortunately, Verizon does not seem to have made such a
13 review. Nor does Verizon seem to have educated its employees on the importance
14 of tracking these costs properly. Verizon was unable to produce instructions to
15 the employees responsible for logging charges to the Access to OSS accounts.¹³⁶

16 **Q. HAS VERIZON SHOWN ITS CLAIMED ACCESS TO OSS COSTS TO BE**
17 **APPROPRIATE FOR RECOVERY?**

18 A. No. Verizon’s presentation here fails to address key issues related to the
19 appropriateness of recovering these costs from new entrants. Verizon’s
20 determination to recover already-incurred costs precludes its study from being

¹³⁵ Verizon Maryland’s Responses to AT&T 6-30 and 6-31, Public Service Commission of Maryland Case 8879. *See also*, Verizon Exhibit Part F-5, Tab WP4 PG1 and Tab WP4 PG6, OngInv for further examples.

¹³⁶ *See* Verizon Maryland’s Responses to AT&T 6-30 and 6-31, PSC of Maryland Case 8879, in which Verizon stated that “[n]o such explicit instructions exist.”

1 forward-looking, as we have already discussed. But Verizon has also not shown,
2 for example, that the costs were efficiently and prudently incurred and that they
3 benefit new entrants exclusively. Nor has Verizon shown that the costs reflect no
4 duplication of effort across projects or that there was no duplication of
5 functionality amongst the interfaces. Verizon has not even established that all of
6 its claimed costs were incurred to provide functionality that ultimately became or
7 will become available to competitors; Verizon may have included cost for projects
8 that did not come to fruition. Similarly, some of the multiple interfaces and
9 gateway systems developed by Verizon may have been interim solutions that have
10 been, or soon will be, replaced.

11 In particular, Verizon has made no attempt to prove that none of the costs
12 were incurred as a result of the merger between NYNEX and Bell Atlantic.
13 Verizon is required to provide uniform OSS interfaces pursuant to the
14 Commission's merger conditions. Competitors should not be made to pay for any
15 costs of comportsing legacy or gateway systems between the companies, which
16 were imposed by Commission mandate as a price that Verizon had to pay to
17 complete its merger. Yet Verizon's approach may very well include such costs in
18 its Access to OSS charge. At any event, Verizon has not given any reason to
19 believe they are not. Furthermore, Verizon has supplied no evidence that the
20 systems it developed in the East - South region were not replaced (or will soon be
21 replaced) by systems developed in the East - North region, or vice versa.

22 Verizon has not demonstrated that these so-called access to OSS costs
23 have not already been recovered, in whole or in part, through previously adopted

1 recurring prices. For example, Verizon has not shown that it had backed any such
2 costs out of its expense factors for previously adopted recurring prices. If those
3 prices were based on expenses for 1996 or later and the costs of OSS development
4 were not excluded from the calculation of expense factors, then Verizon has been
5 recovering the costs of OSS access through UNEs in the meantime. And, despite
6 its claims to the contrary, Verizon has failed to ensure that its current submission
7 represents no potential double-recovery of OSS costs. (We discuss this point in
8 more detail below.)

9 Finally, Verizon has not shown that the OSS projects for which it seeks
10 special cost recovery placed an unusual burden on its Information Management
11 organization, i.e., that it was in any way out of the ordinary course of business.
12 For example, Verizon does not plan to reduce the number of employees in its
13 Information Management and Network organizations once significant one-time
14 development of OSS for UNE services is complete.¹³⁷

15 For all of these reasons, if the Commission were – inappropriately – to
16 allow Verizon to impose its initial development cost for OSS access solely on new
17 entrants, it should not rely on Verizon’s cost estimates.

18 The difficult task of determining the extent of imprudent or non-forward-
19 looking costs exists only if the Commission chooses to authorize an explicit
20 “access to OSS” charge to new entrants or to create a surcharge on all Virginia

¹³⁷ Verizon Maryland’s Response to AT&T 7-43, Public Service Commission of Maryland Case 8879.

1 telecommunications users to recover Verizon's asserted costs. If, instead, the
2 Commission adopts our primary recommendation to have each competitor bear its
3 own costs for access to OSS, Verizon will have the correct incentive to minimize
4 or eliminate inefficient costs and the Commission will not be placed in the
5 unenviable position of having to determine Verizon's prudently incurred costs for
6 its gateway systems, a task made more difficult by virtue of Verizon's failure to
7 meet its burden of establishing which of its costs were prudently incurred.

8 **2. VERIZON PROPOSES EXCESSIVE AND IMPROPER**
9 **RECOVERY OF ITS ONGOING OSS MAINTENANCE AND**
10 **CAPITAL COSTS.**

11 **Q. WHAT ONGOING COSTS HAS VERIZON INCLUDED IN ITS**
12 **PROPOSED ACCESS TO OSS CHARGE?**

13 A. Verizon has included \$50 million in ongoing costs per year for its entire Verizon-
14 East footprint.¹³⁸ These ongoing costs account for 56% of Verizon's proposed
15 Access to OSS charge. Verizon's estimate of ongoing costs includes costs of
16 software maintenance, as well as capital and maintenance costs associated with
17 the computer hardware.¹³⁹

18 **Q. HOW HAS VERIZON ESTIMATED ONGOING SOFTWARE**
19 **MAINTENANCE EXPENSES ASSOCIATED WITH ACCESS TO OSS?**

20 A. Verizon did not estimate ongoing costs directly, but instead Verizon assumed that
21 annual software maintenance costs associated with "work done to improve

¹³⁸ *Id.* at 245.

¹³⁹ Verizon Cost Panel Direct at 284.

1 software performance, adapting software to changes in its environment, and
2 correcting operational faults”¹⁴⁰ would be 15% of the initial development costs.
3 Verizon does not track costs for the initial development separately from these
4 supposed maintenance costs;¹⁴¹ to compensate for this omission, Verizon has
5 assumed a portion of its 1998 incurred access to OSS costs were in fact the costs
6 of upgrading and maintaining the systems built in 1996 and 1997, and that a
7 portion of its 1999 incurred access to OSS costs were in fact the costs of
8 upgrading and maintaining the systems built in 1996, 1997 and 1998. Verizon
9 used the assumed 15% maintenance factor to approximate these “ongoing”
10 expenses. Verizon classified the remainder of the expenditures for those years as
11 one-time development costs.

12 **Q. DOES IT MAKE SENSE TO RECOVER SOFTWARE MAINTENANCE**
13 **EXPENSES THROUGH AN EXPLICIT OSS SURCHARGE?**

14 **A.** No. Once again, Verizon is attempting to impose the costs of a multi-provider
15 environment solely on the end user of new entrants. Software maintenance is a
16 normal part of Verizon’s business and should be treated as such.¹⁴² Indeed, given
17 the manner in which Verizon has calculated the costs of ongoing maintenance, as

¹⁴⁰ *Id.* at 288.

¹⁴¹ *Id.* at 276.

¹⁴² As another incumbent, Pacific Bell (a subsidiary of SBC), explained when discussing similar costs: “[u]pgrades or enhancements to capabilities were not included in Pacific’s implementation cost filing.... These upgrades and enhancements would be part of the normal course of business.” Pacific Bell Response to AT&T Set 5, No. 88, Implementation Cost Phase of California Public Utilities Commission’s Local Competition Docket R. 95-04-043, I. 95-04-044.

1 a fixed amount keyed to already-incurred development costs, implies that those
2 costs will not vary with competitive local exchange carrier demand. Furthermore,
3 Verizon does not track these maintenance costs separately from other OSS
4 expenditures. In many cases, Verizon modified its existing systems to
5 accommodate multiple providers. Work on the core systems accounts for a
6 substantial portion of Verizon's initial development costs, approximately 78%. It
7 is entirely unclear how Verizon can now reasonably segregate some portion of the
8 cost of maintaining its core systems and assign it solely to competitors.

9 Even assuming that Verizon's approach had appropriately identified the
10 causers of the costs it is intended to recover – which it has not – Verizon's
11 proposed mechanism to recover those costs is clumsy and inappropriate at best.
12 Verizon asks this Commission to fix an Access to OSS charge for ten years into
13 the future and beyond, based on a speculative approximation of costs it does not
14 (and perhaps cannot) track separately, without any regard for changing
15 circumstances over that time period such as efficiency or productivity gains.
16 Verizon has not even, as far as we are aware, proposed any mechanism to true-up
17 recovery based on actual recovery.

1 **Q. HOW HAS VERIZON ESTIMATED ONGOING CAPITAL COSTS**
2 **ASSOCIATED WITH ACCESS TO OSS?**

3 A. Verizon based its capital investment on actual purchases for 1996 and 1997, and
4 budget estimates for 1998 and 1999 expenditures that were made in late 1998.¹⁴³

5 **Q. IN WHAT WAYS DO VERIZON’S REPORTED ONGOING CAPITAL**
6 **COSTS FOR ACCESS TO OSS EXCEED EFFICIENT, FORWARD-**
7 **LOOKING COSTS?**

8 A. As we note above, Verizon has based its “forward-looking” costs on actual
9 purchases (that is, its embedded network) and forecasts estimates that were made
10 in late 1998. These estimates have nothing to do with the forward-looking
11 investment that access to OSS might require. Moreover, forward-looking costs
12 are the costs that an efficient provider would incur to meet the total demand for a
13 product, service or function using the best available technology *costed out at the*
14 *cost for the pricing period*, not some vintaged cost. Where prices are either rising
15 or falling significantly over time, use of vintaged cost estimates will dramatically
16 misstate forward-looking costs. Verizon’s own testimony quantifies a substantial
17 decrease in OSS computer costs from 1996 through 1999 (from \$3,000 per GIG to
18 \$600 per GIG and from \$25,000 per MIPS to \$10,000 per MIPS, for 1996 and
19 1999 respectively).¹⁴⁴ These reductions apply to mainframe equipment; similar
20 reductions have occurred for mid-range equipment such as that included in the
21 OSS interface or gateway. According to Verizon’s cost panel, Verizon did at least

¹⁴³ Verizon Maryland’s Response to AT&T 6-45, Public Service Commission of Maryland Case 8879.

¹⁴⁴ Verizon Cost Panel Direct. at 286.

1 cost some of the hardware at 1999 prices.¹⁴⁵ However, applying the forward-
2 looking methodology, Verizon should have costed out computer equipment at
3 2002 prices (or, at the very least, the best prices of 2001), rather than reflecting the
4 actual prices paid for equipment purchased in earlier years.

5 Furthermore, Verizon's study fails to demonstrate that the costs identified
6 are necessary to serve actual and reasonably expected demand.

7 **Q. DOES IT MAKE SENSE TO RECOVER VERIZON'S ESTIMATED**
8 **CAPITAL EXPENSES THROUGH AN EXPLICIT OSS SURCHARGE?**

9 A. No. It is difficult to isolate the computer investment that is used exclusively to
10 meet competitor demand, and Verizon has not provided enough information to
11 really do so. Verizon acknowledges, for example, that "[s]ince mainframe
12 equipment is purchased in bulk, it is not always possible to correlate actual
13 purchases with the demand that caused the purchase."¹⁴⁶

14 **Q. HOW SHOULD VERIZON RECOVER ITS ONGOING OSS COSTS?**

15 A. For all of the reasons we have enumerated, the ongoing costs of the systems
16 developed to allow access to Verizon's OSS should not be handled as a part of
17 Verizon's competition-onset costs or through a separate OSS surcharge. Verizon
18 should capture these expenses in the same way it captures all normal forward-
19 looking recurring OSS expenses, through its annual cost factors.

¹⁴⁵ *Id.*

¹⁴⁶ Verizon Maryland's Response to AT&T 6-45, Public Service Commission of Maryland Case 8879.

1 Verizon has adjusted its “other support” factor to account for these
2 ongoing costs. Therefore, in our restatement of the “other support” factor,
3 presented elsewhere in this testimony, we have reversed Verizon’s proposed
4 adjustment to that factor, which has the effect of increasing the factor. We
5 recommend that the Commission remove the “ongoing” portion of Verizon’s
6 proposed Access to OSS charge entirely and adopt an “other support” factor of
7 **[BEGIN VERIZON PROPRIETARY] *** [END VERIZON**
8 **PROPRIETARY]** All of the restatements presented in this testimony are
9 calculated using that “other support” factor.¹⁴⁷

10 **Q. SHOULD THE COMMISSION RELY ON VERIZON’S ESTIMATES OF**
11 **ONGOING ACCESS TO OSS COSTS?**

12 **A.** No. If the Commission were – inappropriately – to allow Verizon to impose its
13 ongoing development cost for OSS access solely on new entrants, it cannot rely on
14 Verizon’s cost estimates. Verizon’s estimate of the ongoing software costs suffers
15 from the same deficiencies as its estimate of one-time development costs, in
16 particular because the maintenance costs are merely calculated as a percentage of
17 the initial development costs. To the extent that Verizon has included
18 inappropriate costs in its estimates of one-time costs, they would inflate the
19 purported ongoing maintenance costs. Verizon has also not attempted to identify

¹⁴⁷ Consequently, if the Commission were to reject our recommendation regarding the ongoing costs of OSS access, then it must also re-adjust the “other support” factor to avoid double recovery of those costs and recalculate all of the UNE prices. In that case, the “other support” factor would be **[BEGIN VERIZON PROPRIETARY] *** [END VERIZON PROPRIETARY]**

1 which systems might reasonably be expected to need continuing updating and/or
2 maintaining. For example, systems that have become obsolete since their
3 development as a result of either one of Verizon's mergers or the evolution of the
4 market will presumably not need to be maintained in the future.

5 **Q. YOU INDICATED ABOVE THAT VERIZON HAS NOT ELIMINATED**
6 **THE POSSIBILITY OF DOUBLE-RECOVERY THROUGH ITS "ACCESS**
7 **TO OSS" CHARGE. WHY IS VERIZON'S EXCLUSION OF "ONGOING**
8 **MAINTENANCE" COSTS FROM THE "OTHER SUPPORT" FACTOR**
9 **INSUFFICIENT TO PRECLUDE DOUBLE-RECOVERY OF "ACCESS**
10 **TO OSS" COSTS?**

11 A. Verizon has estimated that a portion of the OSS costs incurred in 1999 (the year
12 on which the other support calculation was based) were actually costs necessary to
13 maintaining the systems that were developed in earlier years (*i.e.*, 1996, 1997 and
14 1998). The remaining costs Verizon attributes to "one-time development."
15 Verizon has excluded the ongoing maintenance portion of the OSS costs from
16 Information Management expenses that are included in the other support factor
17 calculation. Verizon was forced to estimate the portion of the costs that were
18 ongoing maintenance expenses, because, as the Verizon's cost panel indicated,
19 "[t]he mechanisms Verizon VA used to track the expenses associated with access
20 to OSS do not differentiate between development and maintenance."¹⁴⁸ How is it,
21 then, that the maintenance costs could have been in the expenses used to calculate
22 the other support factor, *if the one-time development expenses were not included*
23 *as well?*

¹⁴⁸ Verizon Cost Panel Direct at 276.

1 We believe that Verizon's cost panel is admitting, here, that the one-time
2 and ongoing costs are tracked in the same accounts, and as such would have both
3 been captured in the same information management expenses that Verizon used to
4 develop its other support factor. Verizon is therefore attempting to double-
5 recover its costs of Access to OSS development. At a minimum, the Commission
6 must direct Verizon to remove the one-time OSS development costs from the
7 information management costs used in its factor development. Removal of the
8 ***** VERIZON PROPRIETARY \$80.5 Million ***END PROPRIETARY** in
9 one-time OSS development costs that Verizon has estimated it incurred in 1999¹⁴⁹
10 from the Information Management component would lower Verizon's "other
11 support" factor (with no other changes) from **[BEGIN VERIZON**
12 **PROPRIETARY] *** [END VERIZON PROPRIETARY]**

13 **Q. WHAT IS YOUR RECOMMENDATION REGARDING VERIZON'S**
14 **PROPOSED ACCESS TO OSS COST STUDY?**

15 A. Any costs that Verizon expects to apply only to its competitors must be
16 scrutinized particularly carefully. Therefore, if the Commission were to reject our
17 proposal of competitively neutral recovery and consider allowing Verizon to
18 impose an Access to OSS charge, the Commission should hold Verizon to a strict
19 burden of proof in justifying recovery claims for modifications to Verizon's OSS

¹⁴⁹ These costs need to be removed from the factor development, regardless of whether the Commission adopts our recommendation of competitively neutral recovery of competition-onset charges. If the Commission allows the OSS charge, then this is double-recovery; if the Commission accepts the idea of competitively neutral recovery, then these costs must be removed in order to achieve it.

1 in connection with UNEs. Verizon has not met this burden. Therefore, we
2 recommend that Commission reject Verizon’s proposed charge unless and until it
3 has provided the necessary documentation.

4 **VII. VERIZON’S PROPOSED DAILY USAGE FILE MESSAGE RECORDING**
5 **CHARGE FAR OVER-RECOVERS ITS COSTS.**

6 **Q. WHAT IS THE DAILY USAGE FILE?**

7 A. The Daily Usage File (“DUF”) provides competitors with records of their
8 customers’ intraLATA local and toll usage detail for billing purposes. Each call is
9 recorded as a “message.” Verizon has proposed several DUF charges for
10 recording and transmitting the DUF messages, the most significant of which is a
11 per-message “Message Recording” charge.

12 **Q. IS VERIZON’S PROPOSED DUF “MESSAGE RECORDING” CHARGE**
13 **REASONABLE?**

14 A. No. Verizon’s proposed charge of \$0.0015 per message represents a huge
15 increase over the current price in Virginia of \$.000246 per message (which is
16 itself inflated). Verizon’s proposed price here is six times higher than the current
17 price. It is also well out of proportion with the adopted prices in other states,
18 calling its reasonableness into question.¹⁵⁰ If one assumes approximately 200

¹⁵⁰ The current price that Verizon charges in Maryland is \$0.000267 per message and in Pennsylvania is \$.000261 per message, respectively only 17.8% and 17.4% of the charge proposed for Virginia.

1 messages per line per month, this charge would add \$0.30 per line per month to
2 the cost of a loop.

3 **Q. WHAT DRIVES THE INCREASE IN VERIZON’S PROPOSED DUF**
4 **“MESSAGE RECORDING” CHARGE?**

5 A. Verizon has assumed over *****VERIZON PROPRIETARY \$1.1 million END**
6 **PROPRIETARY***** in purported “CLEC support labor” charges.¹⁵¹ Verizon
7 attributes this cost to almost 15 support employees who monitor and manage the
8 product, as well as manually handle errors in the automated processes.¹⁵² These
9 unsubstantiated costs account for 99% of the costs that Verizon seeks to recover
10 in its per-message recording charge.

11 **Q. IS THIS LEVEL OF CLEC SUPPORT COSTS APPROPRIATE?**

12 A. No. Verizon has certainly miscalculated the “support” costs associated with each
13 DUF message. Moreover, including these supposed labor costs in the per-
14 message DUF charge would likely double-recover Verizon’s costs. The types of
15 costs Verizon has included here are the same types of costs it claims to be
16 recovering through its proposed annual cost factors.¹⁵³ As far as we can tell,

¹⁵¹ Verizon VA Exhibit Part F-3, Tab 4.3.

¹⁵² Verizon MD Response to AT&T 6-10 in Public Service Commission of Maryland Case 8879. Verizon has not supplied sufficient data to enable us to determine why so many employees are required for this process, if those employees are actually dealing primarily with data errors in some manner, running some sort of programs, *etc.* In other words, Verizon has made no effort to establish that this level of manual effort, which it would impose as a cost on competitors but would not incur as part of its own cost for retail operations, is necessary, efficient or reasonable.

¹⁵³ See, e.g., Verizon Cost Panel Direct at 64 for a discussion of “customer care” expenses.

1 Verizon has made no attempt to remove such costs from the expenses it uses to
2 develop its recurring cost factors, so these costs may be recovered twice under
3 VZ's cost construct.

4 **Q. HOW HAS VERIZON MISCALCULATED THE "CLEC SUPPORT"**
5 **COSTS ASSOCIATED WITH EACH DUF MESSAGE?**

6 A. Verizon intends to apply the DUF Message Recording for each exchange message
7 interface record (*i.e.*, each message). However, when calculating the per-message
8 charge, Verizon did not use the total message demand to which its charge would
9 be applied. Verizon spread the support costs over its projected Customer Billing
10 Organization ("CBO") message demand.¹⁵⁴ Verizon has described this demand as
11 representing the "annual number of errors/messages the [CLEC Support]
12 employees handle."¹⁵⁵ Thus, this demand seems to represent only the messages
13 that require manual handling. Verizon should have spread the support costs, if
14 indeed they were appropriate at all, over the entire universe of messages,
15 including those that did not require manual intervention. This error results in
16 extremely inflated costs per message.

17 Verizon assumed a CBO annual message demand of [**BEGIN VERIZON**
18 **PROPRIETARY]** *** [**END VERIZON PROPRIETARY]** However, Verizon
19 records many times that number of messages in a year. For example, Verizon

¹⁵⁴ Verizon VA Exhibit Part F-3, Tab 4.3.

¹⁵⁵ Verizon Maryland Response to AT&T 6-12, Public Service Commission of Maryland Case 8879. *See also* Verizon Maryland Response to AT&T 6-15, in which Verizon (footnote continued)

1 assumed that [BEGIN VERIZON PROPRIETARY] *** [END VERIZON
2 PROPRIETARY] messages will be transmitted using the Network Data Mover
3 per year. This is over twenty times the number of “CBO messages.” Using
4 Verizon’s projected resale and UNE platform/combination demand¹⁵⁶ and
5 assuming that each resale loop and UNE platform has approximately 200
6 messages per line per month, the levelized total annual number of messages
7 recorded would be something like [BEGIN VERIZON PROPRIETARY] ***
8 [END VERIZON PROPRIETARY] If Verizon applied its proposed Message
9 Recording to each, it would recover over twenty-five times its estimated support
10 costs, turning this function into a profit center and creating hurdles for its
11 competitors at the same time.

12 Correcting Verizon’s proposed Message Recording charge for this error,
13 along with corrections to Verizon’s factors discussed elsewhere in this testimony,
14 results in a per-message charge of \$0.00007.

15 **Q. SHOULD THE COMMISSION ALLOW RECOVERY OF EVEN A**
16 **PROPERLY ADJUSTED LEVEL OF VERIZON’S CLAIMED DUF COST**
17 **PER MESSAGE?**

18 A. No. Even adjusted so that it would properly reflect Verizon’s proposed per
19 message application, any level of DUF per message charge will probably result in
20 discriminatory, above-cost prices for all UNE and resale usage. As we noted

states that the “CBO annual messages represents the work handled by the CBO work group that support (sic) the DUF product.”

¹⁵⁶ Verizon Exhibit Part F-5, WKP II.

1 above, there is no reason to believe that employee expenses for routine business
2 operations such as usage data processing are not already included in the expense
3 loading factors that Verizon applied to the switching UNE and other elements.
4 Unless Verizon *demonstrates* otherwise, the Commission should therefore assume
5 that this cost is already recovered in the switching UNE calculation. Moreover,
6 the Commission should not allow Verizon to impose any extra cost on
7 competitors simply to hand over usage data unless Verizon can show that the
8 process it is using is as efficient as the process that it uses and considered in
9 developing its retail service.

10 **Q. DOES THAT CONCLUDE YOUR TESTIMONY AT THIS TIME?**

11 **A. Yes.**

I, MICHAEL R. BARANOWSKI hereby swear and affirm that the foregoing rebuttal testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

Michael R. Baranowski

I, Terry L. Murray, hereby swear and affirm that the foregoing rebuttal testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

Terry L. Murray

I, Catherine E. Pitts, hereby swear and affirm that the foregoing rebuttal testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

Catherine E. Pitts

I, Joseph P. Riolo, hereby swear and affirm that the foregoing rebuttal testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

A handwritten signature in black ink, appearing to read "Joseph P. Riolo". The signature is written in a cursive style with a large, looping initial "J" and "R".

I, Steven E. Turner hereby swear and affirm that the foregoing rebuttal testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

Steven E. Turner

Unbundled Loop			
2 Wire Basic Unbundled Loop Density Cell 1	\$	19.49	\$ 5.13
2 Wire Basic Unbundled Loop Density Cell 2	\$	29.69	\$ 7.54
2 Wire Basic Unbundled Loop Density Cell 3	\$	48.93	\$ 12.07
2 Wire Basic Unbundled Loop - State Average	\$	25.12	\$ 6.46
4 Wire & 4Wire Customized Specified Signalling Loop Density Cell 1	\$	59.94	\$ 20.12
4 Wire & 4Wire Customized Specified Signalling Loop Density Cell 2	\$	80.95	\$ 25.35
4 Wire & 4Wire Customized Specified Signalling Loop Density Cell 3	\$	117.87	\$ 33.68
4 Wire Wire Customized Specified Signalling Loop - Statewide Average	\$	71.12	\$ 22.77
2 Wire Customer Specified Signalling Density Cell 1	\$	27.45	\$ 7.16
2 Wire Customer Specified Signalling Density Cell 2	\$	37.89	\$ 9.69
2 Wire Customer Specified Signalling Density Cell 3	\$	56.60	\$ 14.07
2 Wire Customer Specified Signalling Statewide Average	\$	33.06	\$ 8.49
ISDN BRI Density Cell 1	\$	24.83	\$ 6.10
ISDN BRI Density Cell 2	\$	35.31	\$ 8.49
ISDN BRI Density Cell 3	\$	54.51	\$ 13.06
ISDN BRI Statewide Average	\$	30.53	\$ 7.42
Digital 4 Wire (56&64 Kbps) Density Cell 1	\$	63.58	\$ 22.31
Digital 4 Wire (56&64 Kbps) Density Cell 2	\$	85.93	\$ 28.21
Digital 4 Wire (56&64 Kbps) Density Cell 3	\$	124.71	\$ 37.43
Digital 4 Wire (56&64 Kbps) Statewide Average	\$	75.40	\$ 25.27
DS1/ISDN PRI Loop - Density Cell 1	\$	134.88	\$ 68.38
DS1/ISDN PRI Loop - Density Cell 2	\$	166.61	\$ 78.74
DS1/ISDN PRI Loop - Density Cell 3	\$	184.04	\$ 84.42
DS1/ISDN PRI Loop Statewide Average	\$	142.22	\$ 70.77
DS3 Loop - Statewide Average	\$	1,404.10	\$ 860.49
Unbundled Sub-Loop Arrangements			
Sub Loop Distribution - 2 Wire - Density Cell 1	\$	9.36	\$ 2.17
Sub Loop Distribution - 2 Wire - Density Cell 2	\$	17.37	\$ 3.76
Sub Loop Distribution - 2 Wire - Density Cell 3	\$	31.07	\$ 6.63
Sub Loop Distribution - 4 Wire - Density Cell 1	\$	18.45	\$ 4.16
Sub Loop Distribution - 4 Wire - Density Cell 2	\$	34.51	\$ 7.36
Sub Loop Distribution - 4 Wire - Density Cell 3	\$	61.91	\$ 13.12
Sub Loop Feeder - DS1 - Density Cell 1	\$	118.45	\$ 64.91
Sub Loop Feeder - DS1 - Density Cell 2	\$	132.40	\$ 71.56
Sub Loop Feeder - DS1 - Density Cell 3	\$	135.75	\$ 73.40
Subloop Feeder - DS3 Density Cell Statewide Average	\$	1,350.60	\$ 847.14
Off Premise Extension Unbundled Loop Density Cell 1	\$	19.49	\$ 5.13
Off Premise Extension Unbundled Loop Density Cell 2	\$	29.69	\$ 7.54
Off Premise Extension Unbundled Loop Density Cell 3	\$	48.93	\$ 12.07
Off Premise Extension Unbundled Loop Statewide Average	\$	25.12	\$ 6.46
Unbundled Network Interface Device (NID)			
NID to NID Connection 2 Wire (per NID)	\$	1.16	\$ 0.59
NID to NID Connection 4 Wire (per NID)	\$	1.23	\$ 0.63
Standalone NID - 2 Wire (Per NID)	\$	1.16	\$ 0.59
Standalone NID - 4 Wire (Per NID)	\$	1.23	\$ 0.63
Standalone NID - DS1(Per NID)	\$	5.39	\$ 3.77
UNE Shared NID (Per Line)	\$	0.36	\$ 0.18
Unbundled xDSL Conditioning & Qualification			
Mechanized Loop Qualification	\$	0.26	\$ 0.00
Wideband Test Access (** OPTIONAL CHARGE**)	\$	2.19	\$ 0.55
Addition of Loop Electronics - Normal - NRC	\$	1,118.11	\$ 1,064.97
Addition of Loop Electronics - Expedite - NRC	\$	1,126.34	\$ 1,072.92
Unbundled EEL Testing			

2 Wire Analog Test Charge	\$	0.62	\$	0.34
2 Wire Digital Test Charge	\$	0.77	\$	0.42
4 Wire Analog Test Charge	\$	1.85	\$	1.01
1.544 Mbps (DS1) Digital Test Charge	\$	3.95	\$	2.16
Digital 4 Wire (56 or 64 kbps) Test Charge	\$	2.00	\$	1.09
Line Sharing/Line Splitting				
Admin & Support				
Option A	\$	27.69		\$0.00
Option C	\$	34.89	\$	4.05
Splitter Equipment Only -Option C	\$	4.28	\$	3.77
Nonrecurring				
Splitter Installation	\$	1,487.52		\$1,447.16
Unbundled OSS Costs for Line Sharing and Splitting				
OSS for Line Sharing	\$	0.84	\$	0.54
Unbundled Line Ports				
POTS/PBX/CTX	\$	3.1538	\$	1.1925
ISDN BRI or Ctx Port	\$	16.0505	\$	6.1636
ISDN PRI Port	\$	122.0454	\$	47.8970
Unbundled Public Access Line Port (UPALP)	\$	3.1538	\$	1.1925
Unbundled Coin Port (UCP)	\$	4.0093	\$	2.0481
SMDI II (Simplified Message Desk Interface) Port	\$	299.4771	\$	178.0938
Switched DS1 Port (DS1 Port with Line Treatment)	\$	81.96	\$	34.68
Automatic Identified Outward Dialing (AIOD)	\$	0.6732	\$	0.2201
Direct Inward Dialing and Outward (DID/DOD)	\$	8.4407	\$	1.7425
IDLC Port per Interface Group (TR008/GR303)	\$	377.92	\$	119.61
Unbundled Dedicated Trunk Ports				
Dedicated Trunk Port - End Office	\$	88.88	\$	34.59
Dedicated Trunk Port - Tandem	\$	90.51	\$	20.09
Dedicated Trunk Port - TOPS	\$	77.56	\$	46.12
Unbundled Individual Line Port Features				
Res/Bus Features				
Call Waiting Display Number	\$	0.0186	\$	0.0110
Call Waiting Display Name	\$	0.0186	\$	0.0110
Three Way Calling	\$	0.3506	\$	0.0704
Remote Call Forwarding	\$	2.2487	\$	0.5004
Calling Number Delivery	\$	0.0182	\$	0.0101
Calling Number & Name Delivery	\$	0.6033	\$	0.5794
Anonymous Call Rejection	\$	0.0351	\$	0.0075
Automatic Recall (Return Call)	\$	0.2758	\$	0.0567
Call Waiting	\$	0.0001	\$	0.0001
Automatic Callback (Repeat Call)	\$	0.2731	\$	0.0561
Unbundled CENTREX Features				
CTX Intercom	\$	0.4871	\$	0.0213
CTX Announcement	\$	0.7253	\$	0.1483
Cbx 3-Way Conference	\$	0.3506	\$	0.1126
Cbx Automatic Recall (Return Call)	\$	0.1379	\$	0.0034
Cbx Distinctive ringing	\$	0.0044	\$	0.0008
Cbx Loudspeaker Paging	\$	8.4525	\$	1.7495
Cbx Meet-Me Conference	\$	0.1302	\$	0.0636
Cbx Selective Call Acceptance	\$	0.0339	\$	0.0070
Cbx Selective Call Forwarding	\$	0.0078	\$	0.0010
Cbx Selective Call Rejection	\$	0.0433	\$	0.0057
Cbx 6-Way Conference	\$	1.2848	\$	0.2584
Cbx Station Message Detail Record (SMDR)	\$	12.9835	\$	7.7210
Cbx Repeat Call	\$	0.2731	\$	0.0561
Cbx Call Transfer - All Calls	\$	0.0156	\$	0.0031
Cbx Call Waiting Terminating (All Calls)	\$	-	\$	0.0002
Cbx Directed Call Pick-up with Barge-In (Originating)	\$	0.0020	\$	0.0004
Cbx Executive Busy Override	\$	0.0003	\$	0.0002
Unbundled ISDN Features				
ISDN Intercom	\$	0.4871	\$	0.0213
ISDN Announcement	\$	9.0728	\$	1.8549
ISDN 3-Way Calling	\$	0.3506	\$	0.0704
ISDN 6-Way Conference	\$	0.8063	\$	0.1622
ISDN Call Pickup	\$	0.0003	\$	0.0001

ISDN Selective Call Rejection	\$	0.0650	\$	0.0135
ISDN Call Transfer Individual - All Calls (Ftr. 578)	\$	0.0487	\$	0.0098
Calling Number Delivery	\$	0.5185	\$	0.5044
Calling Name Delivery	\$	0.5185	\$	0.5044
Unbundled Switching- Per MOU				
Originating EO Local Switching per MOU	\$	0.002703	\$	0.000111
Termination EO Local Switching per MOU	\$	0.002374	\$	0.000099
Unbundled Tandem Switching				
Tandem Switching MOU	\$	0.000785	\$	0.000229
Unbundled Common Trunk Ports				
Common Trunk Port - End Office (per mou)	\$	0.000397	\$	0.000155
Common Trunk Port - Tandem (per mou)	\$	0.000710	\$	0.000158
Common Trunk Port - TOPS (per mou)	\$	0.000339	\$	0.000202
Unbundled Common Transport				
Fixed - Common	\$	0.000099	\$	0.000055
Per Mile	\$	0.000002	\$	0.000001
Unbundled Reciprocal Compensation				
Meet Point A End Office (per mou)	\$	0.001036	\$	0.000269
Meet Point B End Office (per mou)	\$	0.001880		**
Unbundled Dedicated Transport				
Entrance Facilities				
DS-1 Entrance Facility	\$	142.22	\$	70.77
DS-3 Entrance Facility	\$	498.73	\$	334.43
STS-1 Entrance Facility - Per Facility	\$	501.30	\$	336.25
OC-3 Entrance Facility - Per Facility	\$	1,155.06	\$	730.29
OC-12 Entrance Facility - Per Facility	\$	3,659.12	\$	2,429.56
IOF				
DS-1 Fixed includes both ends	\$	54.76	\$	43.66
DS-1 per Mile	\$	3.91	\$	2.46
DS-3 Fixed includes both ends	\$	499.44	\$	198.88
DS-3 per Mile	\$	59.11	\$	33.53
STS-1 - Fixed includes both ends	\$	502.99	\$	200.24
STS-1 - per mile	\$	59.31	\$	33.61
OC-3 - Fixed includes both ends	\$	1,441.40	\$	584.64
OC-3 - per mile	\$	178.07	\$	102.95
OC-12 - Fixed includes both ends	\$	4,113.45	\$	2,578.58
OC-12 - per mile	\$	390.84	\$	255.04
Unbundled Signaling Databases				
800 Database				
Basic Per Query	\$	0.000221	\$	0.000127
Vertical Query	\$	0.000221	\$	0.000127
LIDB				
Calling Card per query	\$	0.018594	\$	0.017766
Billed Number Screening per query	\$	0.018594	\$	0.017766
Unbundled Dark Fiber - IOF				
Verizon C.O. to Verizon C.O.				
Serving Wire Center ("SWC") Charge / SWC / Pair	\$	16.23	\$	4.77
Inter Office ("IWC") Charge/IWC/Pair	\$	173.22	\$	52.29
Verizon C.O. to CLEC C.O.				
Serving Wire Center ("SWC") Charge / SWC / Pair	\$	16.23	\$	4.77
Channel Termination Charge/CLEC CO	\$	201.16	\$	60.73
Unbundled Dark Fiber - Loop				
Serving Wire Center Charge / SWC / Pair	\$	16.23	\$	4.77
Loop Charge/Pair per Rate Group				
Loop Charge/Pair per Density Cell 1	\$	228.98	\$	113.81
Loop Charge/Pair per Density Cell 2	\$	339.99	\$	173.10
Loop Charge/Pair per Density Cell 3	\$	442.86	\$	225.68
Customized Routing per line per month	\$	0.001400	\$	0.001318
Daily Usage File (DUF)				
Per Record Recording	\$	0.001500	\$	0.000066
Per Record Transmitted	\$	0.000379	\$	0.000368
Per Media (Tape or Cartridge)	\$	20.31	\$	19.75
SMS (AIN Service Creation)				
Service Creation Usage				

Remote Access per 24 Hr. day	\$	3,278.31	\$	1,927.44
On Premise per 24 Hr. day	\$	3,278.31	\$	1,927.44
Certification and Testing per Hour	\$	64.84	\$	58.36
Help Desk Support per Hour	\$	69.36	\$	62.44
Service Charges				
Subscription Charges	\$	4.02	\$	3.91
Database Queries				
Network Query	\$	0.00045	\$	0.00044
CLEC Network Query	\$	0.00045	\$	0.00044
CLEC Switch Query	\$	0.00045	\$	0.00044
Utilization Element	\$	0.00009	\$	0.00008
Service Modification				
DTMF Update Per Change	\$	0.02207	\$	0.02049
Switched Based Announcement	\$	0.00258	\$	0.00154
Developmental Charges				
Service Creation Access Ports per month, per Logon ID	\$	1,502.82	\$	1,139.07
Operations Support Systems (per UNE Loop/Platform/Combination or resold line)				
Ongoing and Recovery of one time (during 10 yr.Period)*	\$	0.84	\$	0.08
Ongoing only (after 10 yr. Period)	\$	0.47	\$	-
Resale Discount Study		NA		

* The primary recommendation for OSS costs is that each party bears their own development costs and the OSS charge is \$0

** Unable to restate due to a lack of necessary documentation