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November 1, 2010

Catrice C. Williams, Secretary
Department of Telecommunications and Cable
1000 Washington Street, Suite 820
Boston, Massachusetts 02118-6500

***Re: D.T.C. 10-2 – Petition of Choice One Communications of Massachusetts Inc.,
Conversent Communications of Massachusetts Inc., CTC Communications
Corp. and Lightship Telecom LLC for Exemption from Price Cap on Intrastate
Switched Access Rates as Established in D.T.C. 07-9***

Dear Ms. Williams:

Enclosed for filing in the above-referenced matter is the Panel Testimony of Ann Amalia Dean and Paul B. Vasington on behalf of Verizon New England Inc., d/b/a Verizon Massachusetts, MCImetro Access Transmission Services of Massachusetts, Inc., d/b/a Verizon Access Transmission Services, MCI Communications Services, Inc., d/b/a Verizon Business Services, Verizon Long Distance LLC, and Verizon Select Services, Inc. (collectively "Verizon").

Please note that this Panel Testimony has been redacted to protect proprietary information. The unredacted, proprietary version of the Panel Testimony is being filed with the Hearing Officer under separate cover and is being provided to those parties that have entered into Non-Disclosure Agreements with One Communications.

Thank you for your attention to this matter.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard C. Fipphen".

Richard C. Fipphen

Enclosure

cc: Lindsay DeRoche, Hearing Officer (3)
Service List

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND CABLE

**Petition of Choice One Communications
of Massachusetts, Inc., Conversent
Communications of Massachusetts, Inc.,
CTC Communications Corp. and Lightship
Telecom LLC for Exemption from Price
Cap on Intrastate Switched Access Rates as
Established in D.T.C. 07-9**

D.T.C. 10-2

DIRECT TESTIMONY OF
ANN AMALIA DEAN AND PAUL B. VASINGTON
ON BEHALF OF VERIZON

November 1, 2010

PUBLIC VERSION

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1 **I. INTRODUCTION AND SUMMARY**

2 **Q. PLEASE STATE YOUR NAMES, TITLES, AND BUSINESS ADDRESSES.**

3 A. My name is Paul B. Vasington. I am a Director – State Public Policy for Verizon. My
4 business address is 185 Franklin Street, Boston, Massachusetts 02110.

5 My name is Ann Amalia Dean. My address is 13100 Columbia Pike, B30A,
6 Silver Spring, Maryland, 20904. I am a Senior Consultant in Verizon’s Strategic Costs
7 and Analysis organization. The Strategic Costs and Analysis organization is responsible
8 for, among other things, developing recurring and non-recurring cost studies for the retail
9 and wholesale services provided by Verizon and evaluating the cost studies submitted by
10 other carriers in regulatory proceedings.

11 **Q. WHICH CARRIERS ARE YOU TESTIFYING FOR?**

12 A. We are sponsoring this testimony on behalf of Verizon New England Inc. d/b/a Verizon
13 Massachusetts (“Verizon MA”), MCImetro Access Transmission Services of
14 Massachusetts, Inc., d/b/a Verizon Access Transmission Services, MCI Communications
15 Services, Inc., d/b/a Verizon Business Services, Verizon Long Distance LLC, and
16 Verizon Select Services, Inc. (collectively “Verizon”).

17 **Q. MR. VASINGTON, PLEASE DESCRIBE YOUR EDUCATIONAL AND**
18 **PROFESSIONAL BACKGROUND.**

19 A. I have a Bachelor of Arts degree in Political Science from Boston College and a Master’s
20 degree in Public Policy from Harvard University, Kennedy School of Government. I
21 have been employed by Verizon since February 2005. From September 2003 to February

1 2005, I was a Vice President at Analysis Group, Inc. Prior to that, I was Chairman of the
2 Massachusetts Department of Telecommunications and Energy (“D.T.E.”) from May
3 2002 to August 2003, and was a Commissioner at the D.T.E. from March 1998 to May
4 2002. Prior to my term as a Commissioner, I was a Senior Analyst at National Economic
5 Research Associates, Inc. from August 1996 to March 1998. Prior to that, I was in the
6 Telecommunications Division of the D.T.E. (then called the Department of Public
7 Utilities), first as a staff analyst from May 1991 to December 1992, then as division
8 director from December 1992 to July 1996.

9 **Q. MS. DEAN, PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
10 **BACKGROUND.**

11 A. I earned a Master of Arts degree and Bachelor of Arts degree in Economics from the
12 University of Maryland. I am a licensed Certified Public Accountant. From 1987 to
13 2000, I was employed as a Regulatory Economist and the Assistant Director of the
14 Telecommunications Division for the Maryland Public Service Commission. In 2000, I
15 became a Service Costs Manager with Verizon. In my role at Verizon, I support the
16 development of cost studies for retail and wholesale services consistent with current
17 federal and state regulations.

18 **Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.**

19 A. We respond to the respective direct testimony of Messrs. Fisher and Webber and Dr.
20 Ankum, on behalf of Choice One Communications of Massachusetts Inc., Conversent
21 Communications Massachusetts, LLC, CTC Communications Corp., and Lightship
22 Telecom LLC (collectively, “One Comm”). We explain why One Comm has failed to

1 justify its requested exemption from the cap on competitive local exchange carrier
2 (“CLEC”) intrastate switched access rates adopted by the Department of
3 Telecommunications and Cable (the “D.T.C.” or “Department”) in its decision in D.T.C.
4 07-9.

5 **Q. PLEASE SUMMARIZE VERIZON’S POSITION ON ONE COMM’S PETITION**
6 **FOR AN EXEMPTION FROM THE SWITCHED ACCESS RATE CAP.**

7 A. In its petition, One Comm seeks the Department’s approval to exceed the CLEC switched
8 access rate cap by *more than a penny and a half per minute*. In this testimony, we will
9 show that One Comm has failed to justify higher switched access rates. First, One Comm
10 has not filed a cost study that complies with industry standards, as mandated by the
11 Department in its Order in D.T.C. 07-9. Although Dr. Ankum agrees that a forward-
12 looking incremental cost study is the appropriate way to estimate switched access costs,
13 One Comm’s study violates the most basic principles of such a study. The One Comm
14 study does not measure the incremental cost of providing switched access service.
15 Rather, it essentially takes the total costs of voice services and then derives a “per
16 minute” cost by dividing total costs by total usage. One Comm’s study is *not* a total
17 service long run incremental cost study of switched access service — the only
18 appropriate basis, under Department precedent and sound economic principles — for
19 estimating the forward-looking, incremental costs of providing switched access service in
20 the Commonwealth. This failure alone warrants rejection of One Comm’s petition.

21 Second, in addition to its failure to present a proper incremental cost study, the
22 One Comm cost model counts significant costs that are not caused by the provision of

1 switched access service and fails to properly estimate the costs that *are* caused by
2 switched access service. The lion's share of One Comm's estimated costs are attributable
3 to its costs of providing loop facilities connecting its switches to its end users, which
4 costs are not incremental to the provision of switched access. One Comm proposes to
5 assign *all* loop costs to usage services and *none* to local exchange service. One Comm
6 has also failed to break out its loop-related transport costs, which — as loop costs —
7 should be excluded from a switched access cost study. For switching, it has failed to
8 present a demand study that will show the appropriate number and type of switches that
9 should be studied. Moreover, the study fails to exclude retail costs from its allocation of
10 common costs, again forcing wholesale customers to subsidize One Comm's retail
11 business. In addition, the study double-counts a number of costs, thereby driving up the
12 cost estimates. Other errors are identified and explained in our testimony.

13 If the Department elects to consider the One Comm cost study despite its failure
14 to comply with industry standards, the minimum adjustments to the model that must be
15 made to correct the errors we have identified show that the resulting cost per minute is
16 *below* the rate cap that applies to One Comm. Because One Comm has not justified costs
17 above the cap, its petition should be denied, and One Comm should be required to abide
18 by the Department's rate cap, as every other CLEC operating in the Commonwealth is
19 doing.

1 **II. BACKGROUND**

2 **Q. WHAT DID THE DEPARTMENT ORDER IN D.T.C. 07-9?**

3 A. The Department capped CLEC rates at Verizon Massachusetts' ("Verizon MA's") level
4 — a measure the Department found necessary "to correct the market failure regarding
5 CLEC intrastate switched access rates."¹ The Department found a rate cap based on
6 Verizon MA's intrastate switched access rates to be "an appropriate mechanism to ensure
7 that CLEC switched access rates are just and reasonable, in the absence of sufficient
8 competition, because ... Verizon's rates have been found to be just and reasonable."²

9 **Q. WHAT WAS THE DEPARTMENT'S REASONING FOR THE DECISION?**

10 A. The Department recognized that interexchange carriers ("IXCs") cannot decline to
11 terminate calls to CLECs whose access charges they believe are too high.³ It thus found
12 that while effective market-based pricing would otherwise constrain access rates, "there
13 is a market failure in the CLEC switched access market."⁴ It reached this conclusion
14 after finding that the "[e]vidence strongly shows that CLECs have market power in
15 providing intrastate switched access service."⁵

¹ *Petition of Verizon New England Inc. et al. for Investigation Under Chapter 159, Section 14, of the Intrastate Access Rates of Competitive Local Exchange Carriers*, D.T.C. 07-9, Final Order (June 22, 2009) ("*CLEC Cap Order*"), at 23-24.

² *Id.* In December 2009, the Department affirmed its earlier decision. *Petition of Verizon New England Inc. et al. for Investigation Under Chapter 159, Section 14, of the Intrastate Access Rates of Competitive Local Exchange Carriers*, D.T.C. 07-9, Order on Motion for Reconsideration or Clarification (Dec. 7, 2009).

³ *CLEC Cap Order* at 5.

⁴ *Id.* at 6.

⁵ *Id.* at 9.

1 The Department found market failures in both the originating and terminating
2 CLEC switched access markets. It concluded that the market for terminating switched
3 access “is not sufficiently competitive because a carrier’s customers do not have
4 competitive alternatives for terminating their calls,”⁶ leaving IXCs unable to constrain the
5 level of terminating access charges and giving CLECs market power that precludes a
6 sufficiently competitive terminating access market.⁷ This inability results from the fact
7 that the cost causer (the party receiving the call) “is insulated from changes in wholesale
8 access prices because they are not the customer of the IXC paying the terminating access
9 charges,” and thus “cannot be expected to react ‘in response to changes in [wholesale]
10 price.’”⁸

11 The Department concluded that “the originating switched access market also is
12 not sufficiently competitive.”⁹ Although it noted that with originating switched access,
13 the calling party is the cost-causer and “could, theoretically, react in response to high
14 origination rates,” it held that because IXCs cannot geographically deaverage their
15 interstate toll rates, doing so for intrastate toll calls “is not practicable” given the
16 “unnecessarily burdensome and confusing dual charge situation in which IXCs would be
17 required to separately track and bill an individual customer’s calls by LEC.”¹⁰

⁶ As the Department noted, “IXCs do not have the option of purchasing access from another vendor because customers can have only one LEC serving them.” *Id.* at 11.

⁷ *Id.* at 10.

⁸ *Id.* at 13.

⁹ *Id.* at 14.

¹⁰ *Id.* at 15-16.

1 Having found that CLECs possess market power in both the originating and
2 terminating switched access markets, the Department concluded that a rate cap based on
3 Verizon MA's rate, which had been deemed just and reasonable, was the appropriate
4 solution to ensuring just and reasonable CLEC access rates.¹¹ Noting that "every state
5 that has acted on CLEC access rates has implemented a cap, with the majority of those
6 states setting a rate ceiling at the ILEC intrastate rate,"¹² it found that as a result of its
7 newly-ordered rate cap, "a market distortion will be removed, thus furthering competition
8 within the telecommunications industry," which would, in turn, "result in lower long
9 distance rates for consumers in the Commonwealth."¹³

10 However, consistent with its precedent on benchmarking rates to the dominant
11 carrier's rates,¹⁴ the Department allowed CLECs the opportunity to justify a rate greater
12 than the cap: "[T]o the extent a CLEC is able to demonstrate justifiable costs in excess of
13 the proposed rate cap with cost-specific data, the CLEC shall be granted an exemption."¹⁵

14 **Q. IS THERE ANY ECONOMIC JUSTIFICATION FOR ALLOWING ONE COMM**
15 **TO CHARGE INTRASTATE ACCESS RATES HIGHER THAN THE CAP?**

16 **A.** No, and the Department did not cite any such economic rationale. It made the option of a
17 cost presentation available to CLECs only because it had adopted a similar approach in
18 other cap situations in the past. But there is no principled justification for CLECs —

¹¹ *Id.* at 17, 22-24.

¹² *Id.* at 23-24.

¹³ *Id.* at 1.

¹⁴ *Id.* at 27.

¹⁵ *Id.*

1 including One Comm — to continue to charge intrastate switched access rates higher
2 than Verizon MA’s rates; this result is certainly not in the interests of consumers or
3 efficient markets. Newer market entrants such as One Comm have no obligation to serve
4 residential customers, let alone residential customers in rural or other high-cost areas, and
5 nor do they bear an historical legacy of having to maintain low, regulated retail prices for
6 residential consumers throughout their service areas. CLECs also have the opportunity to
7 use the most efficient mix of technologies and network configurations possible, and
8 should be able to operate at least as efficiently as the incumbent LECs with their legacy
9 networks.

10 One Comm has also not shown that its costs are higher than the cap. But even if
11 it had, the effect of allowing One Comm to charge higher rates would be to shield One
12 Comm’s retail customers from appropriate price signals in a competitive marketplace. In
13 fact, when the Federal Communications Commission (“FCC”) adopted the cap on CLEC
14 interstate access rates, the FCC deemed alleged ILEC/CLEC cost differentials irrelevant,
15 noting that “the CLECs retain the option of recovering from their end users any
16 additional costs that they may experience,”¹⁶ and concluding that:

17 [Higher access rates] may allow some CLECs inappropriately
18 to shift onto the long distance market in general a substantial
19 portion of the CLECs’ start-up and network build-out costs

¹⁶ See *In the Matter of Access Charge Reform, Reform of Access Charges Imposed by Competitive Local Exchange Carriers*, CC Docket No. 96-262, Seventh Report and Order and Further Notice of Proposed Rulemaking, FCC 01-146, 16 FCC Rcd 9923 (Apr. 27, 2001) (“*CLEC Access Charge Reform Order*”), ¶ 4.

1 [and such cost shifting] is inconsistent with the competitive
2 market.¹⁷

3 The purpose of regulation is to mimic the effects of competition when needed,
4 and in competitive markets, higher cost firms are typically *not* rewarded for inefficiency
5 with higher prices. Indeed, it would be highly unusual to succeed in a competitive
6 market while charging *several times* the rates of one's biggest competitors, as One Comm
7 is attempting to do here. In this regard, it is important to remember that, under the
8 D.T.C.'s standard, One Comm must show not only that its costs exceed Verizon MA's
9 switched access rates, but that those costs are *justifiable*. Dr. Ankum contends that One
10 Comm's costs are justifiable, because its cost study "follows cost causation (i.e., only
11 costs that are cost causatively related to switched access are included) and identifies
12 forward looking cost (i.e., assumes an efficient technology mix)."¹⁸ As we explain
13 below, One Comm's study actually violates *both* of these principles in a number of ways.
14 One glaring example is that One Comm includes loop costs in its switched access cost
15 study, even though the D.T.C. has already found that doing so violates the bedrock cost
16 causation principle. But even if One Comm had prepared a proper forward-looking study
17 that correctly reflected cost causation (and it did not), costs that produce a rate *several*
18 *times* higher than the Verizon MA rate are plainly *not* justifiable from any perspective —
19 especially the perspective of the IXCs' end users who would ultimately pay to support
20 such an inefficient cost structure.

¹⁷ *Id.* ¶¶ 27, 33.

¹⁸ Ankum Direct at 29.

1 Finally, the Department should keep in mind that One Comm is able to charge
2 rates at or below Verizon's rates for retail services, for which One Comm faces
3 competition, despite One Comm's claims of significant cost disadvantages relative to
4 Verizon MA. This fact alone casts serious doubt on One Comm's claimed need to charge
5 rates well above its competitors' rates for the one service for which it is able to exercise
6 market power: switched access. One Comm's claim that its access costs, but not its costs
7 for competitive services (which use the same network), are higher than Verizon MA's
8 should lead the Department to view skeptically One Comm's arguments.

9 **Q. HAS ANY STATE COMMISSION FOUND THAT A CLEC MADE A SHOWING**
10 **ADEQUATE TO JUSTIFY A RATE HIGHER THAN THE APPLICABLE CAP?**

11 A. Not to our knowledge. In addition to Massachusetts, at least 18 states impose constraints
12 on CLEC switched access rates.¹⁹ In a few cases, CLECs have made cost presentations

¹⁹ See, e.g., *Order Instituting Rulemaking to Review Policies Concerning Intrastate Carrier Access Charges*, **California** D. 07-12-020 in Rulemaking 03-08-018, Final Opinion Modifying Intrastate Access Charges (Dec. 6, 2007) (capping CLEC rates at no higher than Verizon's or SBC's rate, plus 10%); *DPUC Investigation of Intrastate Carrier Access Charges*, **Connecticut** D.P.U.C. Docket No. 02-05-17, Decision (Feb. 18, 2004), 2004 Conn. PUC LEXIS 15, at *45 (capping CLEC rates at SBC's then-current rate); **Delaware** Code, Title 26, § 707(e) (capping all service providers' switched access rates at the level of the largest ILEC in the state); **Indiana** Code § 8-1-2.6-1.5 (a carrier's switched access rates are just and reasonable if they mirror its interstate switched access rates); **Illinois** Code § 220 ILCS 5/13-900.2 (requiring CLECs to reduce their intrastate switched access rates to mirror their interstate rates); 199 **Iowa** Admin. Code 22.14(2)(d)(1)(2) (prohibiting CLECs from charging a carrier common line charge if it would render the CLEC's rate higher than the competing ILEC's rate); **Louisiana** PSC General Order No. U-17949-TT, App. B, Section 301(k)(4) (May 3, 1996) (CLECs must charge non-discriminatory switched access rates that do not exceed the competing ILEC's rates); Code of **Maryland** Regulations § 20.45.09.03(b) (capping all LECs' switched access rates at the level of the largest LEC in Maryland); *Access Rates to Be Charged by Competitive Local Exchange Telecommunications Companies in the State of Missouri*, **Missouri** P.S.C. Case No. TO-99-596, Report and Order, 2000 Mo. PSC LEXIS 996, at *28-31 (June 1, 2001) (capping CLEC access rates at the competing ILEC's level); *In the Matter of the Commission, on Its Own Motion, Seeking to Conduct an Investigation into Intrastate Access Charge Reform and Intrastate Universal Service Fund*, **Nebraska** P.S.C. Application No. C-1628/NUSF, Progression Order #15, ¶ 9 (Feb. 21, 2001) (a CLEC's access charges must be reasonably comparable to the ILEC with which it competes); **New Hampshire** Code § Puc 431.07 (CLECs cannot charge higher rates for access than the ILEC does); *Proceeding on Motion of the Commission to Examine Issues*

(continued . . .)

1 in an attempt to justify a rate higher than the applicable benchmark, but none have
2 resulted in commission approval of higher rates. In most cases, the CLECs themselves
3 withdrew their requests for exemptions or the cases were otherwise aborted before a
4 commission ruling. In New York, for example, XChange filed a cost study after Verizon
5 complained about its rates exceeding the applicable cap, but subsequently agreed to
6 reduce the rates and did not litigate the issue. Also in New York, XO initially responded
7 to a Verizon complaint by filing an answer challenging the existence and application of
8 the rate cap, but also ultimately agreed to reduce its rates to the Verizon level. Merger
9 proceedings prompted CLECs in West Virginia, Missouri and Texas to withdraw requests

(. . . continued)

Related to the Continuing Provision of Universal Service and to Develop a Regulatory Framework for the Transition to Competition in the Local Exchange Market, **New York** P.S.C. Case No. 94-C-0095, Order Instituting Framework for Directory Listings, Carrier Interconnection and Intercarrier Compensation (Sept. 27, 1995), at 16-17; *id.*, Opinion and Order Adopting Regulatory Framework, Opinion No. 96-13 (May 22, 1996), at 26-27; *id.*, Opinion and Order Establishing Access Charges for New York Telephone Company and Instituting a Targeted Accessibility Fund, Opinion No. 98-10 (June 2, 1998), at 26-27 (benchmarking CLEC access charges to the level of the largest carrier in the LATA); *Establishment of Carrier-to-Carrier Rules*, **Ohio** P.U.C. Case No. 06-1344-TP-ORD, Entry on Rehearing (Oct. 17, 2007), at 16-18 (capping CLECs' switched access rates at the level of the competing ILEC); *Investigation into the Modification of Intrastate Switched Access Charges*, **Ohio** P.U.C. Case No. 00-127-TP-COI, Opinion and Order (Jan. 11, 2001) (requiring four ILECs' intrastate switched access rates to mirror their interstate access rates); 66 **Pennsylvania** Consolidated Statutes § 3017(c) (prohibiting CLEC access rates higher than those charged by the incumbent in the same service territory, absent cost justification); **Texas** P.U.C. Subst. Rule § 26.223 (a CLEC may not charge a higher rate for intrastate switched access than the ILEC in the area served or the statewide average composite rates published by the Texas P.U.C. and updated every two years); *Amendment of Rules Governing the Certification and Regulation of CLECs*, **Virginia** S.C.C. Case No. PUC-2007-00033, Final Order (Sept. 28, 2007) (a CLEC's switched access rate cannot exceed the higher of its interstate rate or the rate of the competing ILEC); **Washington** Admin. Code § 480-120-540 (requires CLECs' and ILECs' terminating access rates to be no higher than their local interconnection rate, or depending on their regulatory status, incremental cost); *Petition by Verizon West Virginia Inc. et al. Requesting that Commission Initiate a General Investigation of the Switched Access Charges of Competitive Local Exchange Carriers Operating in WV*, **West Virginia** P.S.C. Case No. 08-0656-T-PC, Order (Nov. 23, 2009) (capping CLEC switched access rates at the competing ILEC's level).

1 to exceed the applicable rate caps.²⁰ In Illinois, three CLECs attempted to defend their
2 switched access rates after the Commission launched investigations of those rates, but the
3 cases were dismissed as moot because state legislation adopted this year requires CLECs
4 to reduce their rates.²¹

5 In Pennsylvania, Verizon filed complaints against several One Comm affiliates
6 and two other CLECs — CTSI, LLC, and Penn Telecom, Inc. — for violating the state
7 statute that caps switched access rates at the competing ILEC's level. The CTSI and
8 Penn Telecom cases eventually went to mediation, after which both companies agreed to
9 reduce their rates to the cap at the competing ILEC level.²² Verizon and One Comm
10 were also ordered into mediation, but it was unsuccessful. The administrative law judge
11 in that case has, therefore, recommended granting Verizon's complaint, ordering refunds
12 and rate reductions to the level of Verizon's rates. Among other things, the judge found
13 that One Comm's cost studies were so "fundamentally flawed and unreliable" that "by

²⁰ *NTELOS, Inc., Conversent Comm., Inc., FiberNet Comm., L.L.C.*, West Virginia P.S.C. Case No. 10-1204-T-PC, Joint Stipulation and Agreement for Settlement (Sept. 30, 2010), at 2; *Application of McLeodUSA Telecomm. Services, Inc., for Approval of Intrastate Switched Access Rates*, Texas P.U.C. Docket No. 33545, Order Dismissing Proceeding (Sept. 17, 2008); *McLeod USA Telecomm. Services, Inc.'s Tariff Filing to Increase Its Missouri Intrastate Access Rates*, Missouri P.S.C. Case No. TT-2006-0474, Order Closing Case (Nov. 13, 2006).

²¹ *Ill. Comm. Comm'n v. Bullseye Telecom, Inc.*, Illinois C.C. Docket No. 09-0303, Notice of Commission Action (Sept. 23 2010) (granting motion to dismiss); *Ill. Comm. Comm'n v. Delta Comm. LLC d/b/a Clearwave Comm.*, Illinois C.C. Docket. No. 09-0303, Notice of Commission Action (Sept. 23, 2010) (granting motion to dismiss). The third proceeding, *Ill. Comm. Comm'n v. McLeodUSA Telecomms. Svcs., Inc. d/b/a PAETEC Business Svcs.*, Illinois C.C. Docket No. 09-0315, will be dismissed once a pending rehearing request relating to an administrative docketing issue has been resolved.

²² *See Verizon Pennsylvania, Inc., et al. v. CTSI LLC*, Pennsylvania P.U.C. Docket No. C-20077332, Report of Mediator (May 21, 2009); *Verizon Pennsylvania Inc., et al. v. Penn Telecom, Inc.*, Pennsylvania P.U.C. Docket No. C-20066987, Report of Mediator (Aug. 25, 2009).

1 the time cross-examination was concluded, the cost studies had been so badly discredited
2 that they should be given no weight.”²³ A Commission decision is pending.

3 **Q. DR. ANKUM SUGGESTS THAT VERIZON NEW JERSEY’S APPEAL OF A**
4 **RECENT BOARD ORDER CAPPING ILEC AND CLEC ACCESS RATES**
5 **SUPPORTS ONE COMM’S CONFISCATION ARGUMENT.²⁴ IS DR. ANKUM**
6 **CORRECT?**

7 A. No. Dr. Ankum did not tell the whole story of the New Jersey case, for which one of us,
8 Mr. Vasington, was a Verizon witness. Dr. Ankum states that “Verizon argued to
9 regulators that switched access rates that are not sufficiently compensatory are
10 confiscatory,” and “setting of switched access charges at a level whereby Verizon would
11 not collect its costs was illegal and confiscatory.”²⁵ This incomplete description is very
12 misleading and not at all fully representative of Verizon’s position in New Jersey.

13 In that case, the New Jersey Board ordered Verizon New Jersey Inc.’s (“Verizon
14 NJ’s”) (and other ILECs’) intrastate access rates to be reduced to interstate levels, just as
15 the Department did seven years ago for Verizon MA,²⁶ and also capped CLEC rates at the
16 corresponding ILEC’s rates, just as the Department did last year. But, unlike the
17 Department when it reduced Verizon MA’s intrastate switched access rates to interstate
18 levels, the New Jersey Board did not allow for recovery of the lost revenues in Verizon
19 NJ’s regulated rates for basic service. Unlike CLECs in both New Jersey and

²³ *Verizon Pennsylvania Inc. et al. v. CTC Comm. Corp., FiberNet Telecomm. of Penn., LLC, and Choice One Communications of Pennsylvania, Inc.*, Pennsylvania P.U.C. Docket No. C-20077672, *et al.*, Recommended Decision (June 3, 2010), at 17.

²⁴ Ankum Direct at 17-18.

²⁵ *Id.* at 17.

²⁶ D.T.E. 01-31-Phase II (2003), at 93.

1 Massachusetts, Verizon NJ is not free to increase its residential basic services rates on its
2 own, and it was the New Jersey Board's failure to ensure that Verizon NJ's revenues for
3 regulated services as a whole were sufficient to recover the forward-looking costs of
4 regulated services as a whole that Verizon appealed. Dr. Ankum makes it sound as if
5 Verizon argued in New Jersey that reducing a carrier's intrastate access rates to interstate
6 levels would be *per se* confiscatory, but that is not the case.

7 Dr. Ankum also omitted another critical fact about the New Jersey access case:
8 Verizon did *not* appeal the Board's decision to cap CLEC access rates, and Verizon's
9 New Jersey CLEC affiliate promptly filed tariffs reducing its switched access rates, in
10 compliance with the order.²⁷ Verizon raised no confiscation argument with respect to its
11 CLEC affiliate because the CLEC affiliate, unlike Verizon's ILEC, is free to recover lost
12 access revenues in its retail rates. So Verizon's position in New Jersey is entirely
13 consistent with its position in this case.

14 **Q. DR. ANKUM ARGUES THAT "IT HAS BEEN WELL ESTABLISHED IN THE**
15 **INDUSTRY THAT CLEC COSTS TEND TO BE HIGHER THAN ILEC**
16 **COSTS."²⁸ IS THAT RIGHT?**

17 A. No. While it is true that economies of scale (what Dr. Ankum refers to as the "Wal-Mart
18 effect") are likely present in telecommunications, scale economies are not the only
19 relevant cost factor, so we do not agree that it has been "well established" at all that
20 CLEC costs tend to be higher than ILEC costs. CLECs have routinely made this

²⁷ In Massachusetts, Verizon's CLEC affiliate filed tariffs reducing its intrastate switched access rates, in compliance with the DTC's *CLEC Cap Order*.

²⁸ Ankum Direct at 8.

1 argument in state commission cases considering access rate caps, but no commission, to
2 our knowledge, has accepted this assumption. Indeed, there are many reasons to
3 conclude that CLECs' costs should be lower than the incumbents' costs. As newer
4 market entrants, CLECs need not contend with maintaining a network that has been
5 constructed incrementally over the course of a century or more or with the outdated
6 legacy technologies associated with such a network. They thus have the opportunity to
7 construct and expand their networks using modern — and generally, cheaper and more
8 efficient — equipment. CLECs tend to be less apt to have large unionized labor forces,
9 and thus often have lower labor costs than ILECs. Nor are CLECs saddled with legacy
10 regulations.

11 A review of One Comm's website (www.onecommunications.com) makes clear
12 that its business model focuses on services to business customers, and that its retail prices
13 are competitive. For example, the "Our Customers" page of One Comm's website
14 contains numerous testimonials where the customer refers to the cost savings and
15 competitive prices provided by One Comm, in some instances directly compared to
16 Verizon.²⁹ If it is so well established that ILECs have lower costs, then how is it that One
17 Comm is able to offer retail customers cost savings and competitive prices?

18 Also, One Comm's network primarily serves business users, which are typically
19 more urban. Thus, it is improper to conclude that One Comm's network architecture
20 results in higher access costs simply because it may differ from an ILEC's network. In

²⁹ See <http://www.onecommunications.com/subpage.aspx?id=1916> (accessed October 8, 2010).

1 fact, a more reasonable conjecture would be that a more urban and business-focused
2 network would have lower costs than an ILEC, which serves a diverse base of customers
3 throughout the Commonwealth. In addition, regardless of the CLEC's market share, the
4 FCC concluded that the fact that a CLEC was starting with small market share was an
5 insufficient policy reason to allow a CLEC to shift its "start up costs" to IXC's.³⁰ Rather,
6 as noted above, the FCC concluded that the superior policy result was to have the
7 CLEC's retail end users receive "proper price signals."³¹

8 Finally, a fundamental aspect of Dr. Ankum's outline of recent industry events is
9 factually incorrect, which alone calls into question the conclusions he draws from this
10 error.

11 **Q. PLEASE EXPLAIN WHAT YOU MEAN.**

12 A. As an example of economies of scale, Dr. Ankum states that the "Wal-Mart effect" is
13 "the underlying motivation for many mergers in the telecom industry, such as the smaller
14 ILECs' (e.g., CenturyTel and Embarq), or AT&T's and Verizon's. Both AT&T and
15 Verizon ... continue to strive to become bigger, *and never smaller* ..."³² This statement
16 is at odds with reality, as even a casual observer would know.

17 Verizon's wireline business in recent years has become considerably smaller, with
18 sales of access lines and service territories in northern New England to Fairpoint,

³⁰ See *CLEC Access Charge Reform Order* ¶ 33.

³¹ *Id.* ¶¶ 39, 43.

³² Ankum Direct at 9 (emphasis added).

1 involving 1.5 million access lines,³³ and in 14 states across the country to Frontier,
2 involving 4.8 million access lines.³⁴ These transactions do not undermine the relevance
3 of economies of scale as one factor among many that affect costs, but they suggest that it
4 is not the all-important factor that Dr. Ankum makes it out to be, and they certainly prove
5 without a doubt that Dr. Ankum is wrong in saying that Verizon “never” becomes
6 smaller.

7 **Q. WHAT IS THE “CAP” FOR CLEC INTRASTATE SWITCHED ACCESS RATES**
8 **IN MASSACHUSETTS?**

9 A. It varies by CLEC because the Department adopted the same rate cap requirement that
10 has been in use for interstate rates at the FCC for almost a decade. The specific language
11 that the Department approved is as follows:

12 No competitive local exchange carrier (“CLEC”) shall charge a
13 rate for intrastate switched access services that is higher than
14 the intrastate switched access rate of the incumbent local
15 exchange carrier in whose area the CLEC operates. The rate
16 for intrastate switched access service shall mean the composite,
17 per-minute rate for the service, including all applicable rate
18 elements for the functions actually performed by the CLEC in
19 providing service.³⁵

20 Because the “functions actually performed by the CLEC in providing service” vary by
21 CLEC, there is no one single cap. For example, Verizon MA offers tandem switching
22 and has rate elements associated with the provision of tandem switching, but not all

³³ <http://investor.verizon.com/news/view.aspx?NewsID=811>.

³⁴ <http://investor.verizon.com/news/view.aspx?NewsID=987>.

³⁵ *CLEC Cap Order* at 24.

1 CLECs offer tandem switching, so those CLECs would not be permitted to charge a rate
2 element for that service under the Department's approved cap.

3 **Q. HAS ONE COMMUNICATIONS CORRECTLY IDENTIFIED THE CAP IN ITS**
4 **PETITION?**

5 A. No. In his direct testimony, Dr. Ankum states that "the rate cap permits recovery of
6 \$0.003752 per minute of use"³⁶ This figure is taken from the Department's Order
7 where it summarized *illustrative* data provided by Verizon as a comparison of usage-
8 based switched access charges for various carriers,³⁷ but Dr. Ankum ignores the language
9 (cited above) where the Department laid out the operation of the cap.

10 Under the Department's order in D.T.C. 07-9, there is not a single rate that
11 constitutes the rate "cap." The rate cap applicable to any given carrier is determined by
12 the type of access rate elements that the carrier *actually* provides and bills, provided, of
13 course, that each tariffed rate element must not exceed the Verizon MA rate for the
14 comparable function (*i.e.*, end office switching, transport, and tandem switching). Thus,
15 to the extent that One Comm bills its tandem switching rate elements or bills for transport
16 for mileage in excess of one mile, its cap would be higher than \$0.003752, because the
17 illustrative composite rate cited by Dr. Ankum excluded tandem switching and assumed
18 transport mileage of only one mile. For example, Choice One has billed the Verizon
19 Business entities in Massachusetts for service provided in August and September 2010 at

³⁶ Ankum Direct at 7 (footnote omitted).

³⁷ The Verizon MA illustrative rate is the sum of the usage-sensitive rate elements (local switching, shared trunk port and local transport facility). One mile of transport is assumed for the transport rate. The composite rate also excludes tandem switching.

1 the effective rate of \$0.0044 per minute, reflecting the access elements that Choice One
2 actually provides. To properly state the rate cap applicable to each One Comm operating
3 company, Verizon requested that One Comm provide its billed revenues and minutes of
4 use since the June 22, 2010 effective date of its compliance tariffs in D.T.C. 07-9, in
5 order to calculate One Comm's average revenue per minute since June 22, 2010, but One
6 Comm has refused to provide the requested information.

7 **Q. WHY IS IT IMPORTANT TO CORRECTLY QUANTIFY THE RATE CAP?**

8 A. It is relevant for this case because it means that, in order for the Department to consider
9 granting its requested exemption, One Comm must demonstrate that its justifiable costs
10 are greater than \$0.0044 (and possibly higher), not \$0.003752, the illustrative "cap" that
11 One Comm uses in its direct case.

12 **III. THE ONE COMM COST STUDY**

13 **Q. WHAT KIND OF EVIDENCE DID ONE COMM PROVIDE IN SUPPORT OF ITS**
14 **EXEMPTION REQUEST?**

15 A. One Comm claims that it has provided a forward-looking incremental cost study showing
16 that its costs of providing switched access service in Massachusetts are greater than the
17 rates it is allowed to charge under the Department's cap. Dr. Ankum stated in response to
18 discovery that the One Comm study also can be characterized as a total-service, long-run,
19 incremental cost or TSLRIC study.³⁸ A forward-looking incremental cost analysis (when
20 properly done) estimates the costs that are incurred due to the provision of a particular

³⁸ See Response to AT&T-One Comm-1-43.

1 service or increment. In other words, it is the difference between the total costs of the
2 firm providing that service and the total costs of the firm not providing that service.
3 Therefore, only costs that are *caused by* the provision of a particular service are
4 incremental to that service. Dr. Ankum appears to agree with this principle by claiming
5 that “a salient feature” of the One Comm cost study is that “[c]osts are calculated by cost
6 causation.”³⁹ But in the very next sentence he undermines that clear statement by
7 equating *causation* with *use*: “The only costs included are those associated with facilities
8 and operations *that are actually used in the provision of switched access*.”⁴⁰ Causation
9 and use are not synonyms — they are two very different words and concepts. If a carrier
10 must incur the cost of a particular function or network element whether or not it offers a
11 given service, then that cost cannot be said to be caused by or incremental to that service,
12 even if the service in question makes use of the particular function or element. We
13 discuss this fundamental flaw in One Comm’s position in more detail below.

14 **Q. DID ONE COMM INCLUDE ANY COSTS IN ADDITION TO THE TSLRIC OF**
15 **SWITCHED ACCESS?**

16 A. Yes. In addition to the long-run incremental costs, One Comm has included (but not
17 correctly identified) a cost factor for shared and common costs, which is appropriate in a
18 TSLRIC study for the purpose of determining whether a rate is reasonable. We agree
19 with One Comm that to determine the total costs to provide a service, shared and
20 common costs need to be added to the direct costs of the service, though, as we will

³⁹ Ankum Direct at 24, lines 6-10.

⁴⁰ *Id.* (emphasis added).

1 discuss later, we do not agree with the particular level or components of One Comm's
2 shared and common cost factor.

3 **Q. PLEASE EXPLAIN THE TERMS "DIRECT COSTS," "SHARED COSTS," AND**
4 **"COMMON COSTS."**

5 A. Direct costs are investment and expense costs that vary directly with the output of the
6 service. Shared costs are investment and expenses required to produce two or more
7 products or services. Shared costs generally do not increase or decrease with the output
8 of the product or services. Examples of shared costs include network infrastructure such
9 as conduit and utility poles.

10 Common costs are the expenses a firm incurs in connection with general and
11 administrative functions of the firm as a whole, including executive, planning, general
12 accounting and finance, external relations, human resources, legal, regulatory, and any
13 associated general support facility costs.

14 Although the direct portion of a service's total cost shows whether the next
15 increment of the service could be sold without requiring a contribution from other
16 services (and thus may be useful for a price floor or subsidy test), a network firm must
17 recover shared and common costs as well, since average cost is likely to be greater than
18 incremental cost. If the prices for a network firm's services were set at direct costs only,
19 the firm could not sustain itself. That is why we agree with One Comm, in principle, that
20 for the purposes of determining whether One Comm's switched access costs are
21 recovered under the Department's cap, it is necessary to account for all of the costs

1 incurred to provide switched access service, plus an appropriate allocation of shared and
2 common costs.

3 **Q. IS FORWARD-LOOKING INCREMENTAL COST THE CORRECT METHOD**
4 **FOR DETERMINING WHETHER OR NOT ONE COMM'S COSTS ARE**
5 **GREATER THAN VERIZON'S RATES?**

6 A. Yes, and One Comm does not debate this principle (although Verizon disagrees about
7 whether One Comm has followed it). There is widespread agreement among economists
8 that a properly executed TSLRIC study is the most appropriate measure of determining
9 costs because it most accurately reflects what a competitive firm would pay for providing
10 services today. As the FCC correctly noted in its *Local Competition Order*, "In
11 competitive markets, the price of a good or service will tend towards its long-run
12 incremental cost."⁴¹

13 The FCC specifically has endorsed the use of TSLRIC for pricing access charges.
14 Indeed, the FCC has stated that, "[t]o fulfill Congress's pro-competitive mandate, access
15 charges should ultimately reflect rates that would exist in a competitive market"⁴² — and
16 that is what TSLRIC approximates. It is therefore not surprising that the use of
17 incremental cost study methods has increased considerably for the regulation of
18 telecommunications services since the passage of the federal Telecommunications Act of
19 1996, with the introduction and expansion of competition throughout most of the industry

⁴¹ *Implementation of the Local Competition Provisions of the Telecom. Act of 1996; Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, First Report and Order, 11 FCC Rcd 15499 (Aug. 8, 1996) ("*Local Competition Order*"), ¶ 675.

⁴² *Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, End User Common Line Charges*, CC Docket Nos. 96-262, 94-1, 91-213, 95-72, First Report and Order, FCC 97-158 (May 16, 1997) ("*First Access Charge Reform Order*"), ¶ 42.

1 (with access charges representing a notable exception to this general trend of
2 competition).

3 **Q. HAS THE DEPARTMENT RELIED ON FORWARD-LOOKING**
4 **INCREMENTAL COST STUDIES IN TELECOMMUNICATIONS?**

5 A. Yes. The Department recognized the value of incremental cost studies when it initially
6 endorsed the move to competitive markets about twenty-five years ago. Before that, state
7 utility commissions, including the Department's predecessor agencies, used fully-
8 allocated cost ("FAC") studies in order to set regulated rates. FAC methods are
9 backward-looking, not forward-looking. Under FAC, the utility would report on its past
10 investments and expenditures in a historic "test year," then it would calculate a "revenue
11 requirement" based on that historical information. Once the revenue requirement was set,
12 a rate structure was developed in order to produce the approved amount of revenues.

13 In contrast to FAC studies, incremental cost studies look at the forward-looking
14 costs attributable to the provision of a particular service. Prior to the introduction of
15 competition in telecommunications, incremental cost studies were not used to set
16 telecommunications rates; rather, rates were purposefully set without regard to
17 underlying cost causation in order to promote the social objective of universal service.
18 Producing efficient, cost-based prices for individual services was not a concern.⁴³ This
19 started to change with the introduction of new technology and competition in the long

⁴³ See, e.g., Brock, Gerald W., *Telecommunication Policy for the Information Age*, Harvard University Press (1994), at 259 ("Rate of return was designed to equate *total* revenue to *total* cost, not to equate revenue for any particular service to the cost of that service.") (emphasis in original).

1 distance and equipment manufacturing segments of the industry, and that change has
2 accelerated since the mid-1990s with the introduction of competition in all industry
3 segments and ever more rapid technological change. With the introduction of
4 competition, efficient service pricing has become more important.

5 In 1985, the Massachusetts Department of Public Utilities (“D.P.U.”), the
6 predecessor of both the D.T.E. and D.T.C., concluded that “there are benefits inherent in
7 a competitive marketplace that encourage greater levels of economic efficiency and
8 fairness than does a regulated monopoly environment,” and authorized intraLATA
9 competition.⁴⁴ However, recognizing that competition was incompatible with the
10 traditional policy of pricing telephone services with little regard for the underlying cost
11 structure, the D.P.U. determined that “properly defined incremental costs should be used
12 as the primary basis for pricing all services, including local exchange service,” and also
13 found that “to the extent that current rates do not reflect an appropriate allocation of
14 costs, the Department will, consistent with the need to avoid major discontinuities in rate
15 levels, move toward that goal.”⁴⁵ In order to accomplish this goal, it was first necessary
16 to calculate incremental costs, so the D.P.U. directed New England Telephone to conduct
17 a long-run incremental cost study, which was approved with some modification in
18 1989.⁴⁶ The results of this incremental cost study were used as a guide for rate design, in
19 order to move telephone rates closer to incremental costs, in the transition rate process

⁴⁴ D.P.U. 1731 (1985), at 25-26, 44.

⁴⁵ *Id.* at 36-38.

⁴⁶ D.P.U. 86-33-G (1989).

1 that the D.P.U. undertook from 1990 to 1994. The 1989 study was labeled as a “marginal
2 cost” study, but in fact it was akin to a TSLRIC study. This study involved demand
3 projections, judgments about technology and replacement in a construction plan,
4 estimated changes in expenses, and capital cost and depreciation assumptions — based
5 on a study period up to 25 years.

6 In D.P.U. 94-185, issued in August 1996, the Department found that TSLRIC is
7 the appropriate costing method for determining the prices of services deemed
8 monopoly/essential, for pricing floors, and for measuring subsidies.⁴⁷

9 With the passage of the Telecommunications Act of 1996, the Department was
10 required to use the FCC’s total-element, long-run incremental cost (“TELRIC”) methods
11 for setting unbundled network element and interconnection rates, and the Department has
12 used TELRIC for these wholesale services in a series of orders since 1996. The TELRIC
13 method is conceptually similar to TSLRIC, except that it measures the costs of network
14 elements and interconnection facilities, instead of services.

15 **IV. ANALYSIS OF THE ONE COMM COST STUDY**

16 **Q. IS THE ONE COMM COST STUDY A PROPER TSLRIC STUDY?**

17 A. No. On the most basic level of assessing whether One Comm is measuring the
18 incremental cost of switched access service, the study fails. The One Comm study in
19 effect takes the total costs of voice services and then derives a “per minute” cost by

⁴⁷ D.P.U. 94-185 (1996), at 15.

1 dividing total costs by total usage (intra- and interstate switched access, retail, and
2 reciprocal compensation minutes).⁴⁸ One Comm does not sell “minutes” to its customers,
3 it sells them services, so conducting a cost study that determines the cost per minute is
4 not a Total *Service* Long Run Incremental Cost study. The use of a proxy measure, such
5 as minutes, to allocate costs is a tool of FAC studies and has no place in a properly
6 conducted incremental cost study for a particular service. Rather than conduct a study of
7 the incremental cost of switched access service as *actually offered* by One Comm, the
8 study presumes (incorrectly) that One Comm only offers usage to its customers, and then
9 divides all costs by usage. This does not show the Department the costs that One Comm
10 incurs specifically because it offers switched access service, and for this reason alone, the
11 Department should disregard the study and find that One Comm has not met its burden of
12 demonstrating costs that are higher than the cap.

13 **Q. PLEASE SUMMARIZE WHY ONE COMM’S COST STUDY IS NOT**
14 **APPROPRIATE FOR ESTIMATING ONE COMM’S FORWARD-LOOKING**
15 **INCREMENTAL COSTS OF SWITCHED ACCESS IN MASSACHUSETTS.**

16 A. One Comm’s cost study does not comply with industry standards, including Department
17 precedent, FCC guidance, and the weight of economic opinions, for a TSLRIC switched
18 access cost study for a number of reasons. The study does not model a forward-looking
19 network, and it does not produce the incremental costs of providing switched access
20 service. Moreover, the model does not use the industry standard methodology for
21 calculating incremental costs.

⁴⁸ Webber Direct at 45-46.

1 **Q. PLEASE EXPLAIN HOW ONE COMM'S COST STUDY DOES NOT MODEL A**
2 **FORWARD-LOOKING NETWORK.**

3 A. An industry standard TSLRIC cost study would produce forward-looking investments
4 based on the construction of a modeled network built to serve the entire current or
5 predicted demand for the specific service being studied. TSLRIC, by definition, requires
6 the modeling of the "long run" and "total service," which means that the direct and
7 shared costs in the cost study should reflect the construction of the modeled network built
8 to serve the predicted demand. In contrast, One Comm's cost study treats all booked
9 investments (with minor adjustments) and booked expenses as shared and then divides
10 those costs by One Comm's historic minutes of use ("MOUs").⁴⁹ Investments are not
11 modeled to meet current and future demand for a particular service — in this case,
12 switched access. While the "marginal cost" study approved by the D.P.U. in D.P.U. 86-
13 33-G included a study period, demand projections and estimated changes in expenses,
14 these components of a forward-looking incremental cost study are missing from the cost
15 study submitted here by One Comm.

16 **Q. PLEASE EXPLAIN HOW ONE COMM'S COST STUDY FAILS TO PRODUCE**
17 **THE INCREMENTAL COSTS CAUSED BY SWITCHED ACCESS SERVICE.**

18 A. A proper TSLRIC study of a service identifies only the forward-looking costs that are
19 *incremental* to providing that service — that is, investments *caused* by the provisioning
20 of that particular service. Costs that the carrier would incur even if it did not provide the
21 service are not incremental to the provisioning of that service and should not be included

⁴⁹ Ankum Direct at 27.

1 in a TSLRIC cost study for that service. Switched access service causes One Comm to
2 incur switching costs, signaling costs and certain transport costs, and it is appropriate to
3 include some shared and common costs, as noted above. Nothing more.

4 The One Comm cost study, however, contains substantial costs that are not caused
5 by the provisioning of switched access services. Chief among these are loop,
6 collocation/aggregation, and transport termination investments, as well as certain
7 transport costs associated with the loop. These costs are caused by One Comm's
8 provisioning of network access to its end users and would be incurred whether One
9 Comm provides switched access service or not.

10 Likewise, because switched access service is a wholesale service, only wholesale
11 costs should be included in the TSLRIC cost study. Retail costs should be excluded. But
12 One Comm's cost study uses a shared and common cost factor that is based on **both**
13 wholesale costs **and** the costs that One Comm incurs in providing its retail services to end
14 users. Yet, the costs that One Comm incurs in conducting its retail business (such as
15 sales, marketing, customer service, billing and collections) are in no way causally related
16 to switched access, and they should not be included in an incremental cost study of
17 switched access service.

18 **Q. PLEASE EXPLAIN FURTHER HOW THE ONE COMM COST STUDY FAILS**
19 **TO FOLLOW THE PROPER METHODOLOGY FOR DETERMINING THE**
20 **COST OF PROVIDING SWITCHED ACCESS SERVICE.**

21 A. One Comm's cost study does not produce incremental costs. In a TSLRIC study for
22 switched access, forward-looking investments caused by the provisioning of switched
23 access service are converted to an incremental, per-unit basis by dividing those

1 investments by the capacity of the equipment being studied, and then applying an average
2 utilization factor to the capacity unit investment for each piece of equipment that makes
3 up the service. The investments are then converted to monthly costs through the use of
4 annual cost factors and loadings. One Comm's NUCA model does not take this
5 approach. Instead, the NUCA model first calculates One Comm's total costs (total
6 investment costs and leases, and total shared and common expenses) and then allocates
7 those costs on a per-minute-of-use basis. Thus, the model does not yield the total service
8 long-run incremental costs of providing switched access service (*i.e.*, the costs One
9 Comm would avoid if it did not offer switched access service) but instead produces a cost
10 per minute of *all* voice services offered by One Comm, not just switched access.

11 **Q. GIVEN THAT ONE COMM'S COST STUDY DOES NOT APPROPRIATELY**
12 **ESTIMATE ONE COMM'S FORWARD-LOOKING INCREMENTAL COSTS**
13 **OF SWITCHED ACCESS IN MASSACHUSETTS, WHAT DO YOU PROPOSE?**

14 A. The fundamental defects in One Comm's cost study methodology identified above would
15 justify a Department finding that the cost study does not comply with industry standards,
16 as mandated by the Department in its Order in D.T.C. 07-9. Therefore, the Department
17 should deny One Comm's petition. If the Department elects to consider One Comm's
18 cost study despite its inherent flaws, it should do so only after making the adjustments we
19 identify on Confidential Attachment A to this testimony and explain below.⁵⁰ These
20 adjustments alone are sufficient to demonstrate that One Comm's cost of switched access

⁵⁰ We have analyzed One Comm's cost study as filed. Confidential Attachment A does not reflect minor adjustments made by One Comm during the course of discovery.

1 service is less than the cap, but other parties may identify additional appropriate
2 adjustments in their testimony. Confidential Attachment A identifies the 13 adjustments
3 described in the testimony and shows, for each adjustment, the specific module affected,
4 and the cell that has been changed to reflect the adjustment. Confidential Attachment A
5 also quantifies the incremental impact and the cumulative impact each adjustment has on
6 One Comm's total switched access cost per minute.

7 **Q. WHAT IS THE OVERALL EFFECT OF YOUR PROPOSED ADJUSTMENTS**
8 **ON ONE COMM'S ESTIMATED COST OF SWITCHED ACCESS?**

9 A. One Comm estimates that its per-minute cost of providing switched access in
10 Massachusetts is **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY.**
11 The adjustments proposed below lower that estimate to \$0.00258, which is well below
12 even the incorrect rate cap used by One Comm in its filing. Accordingly, if the
13 Department considers the model, given these adjustments, the Department should dismiss
14 One Comm's petition for failure to cost justify rates in excess of the Department's cap.

15 **A. Loop and Loop-Related Investments Should Be Eliminated**
16 **from the Cost Study (Adjustment Nos. 1 through 3)**

17 **Q. SHOULD LOCAL LOOP COSTS BE RECOVERED IN SWITCHED ACCESS**
18 **RATES OR INCLUDED IN AN INCREMENTAL COST STUDY FOR**
19 **SWITCHED ACCESS?**

20 A. No. Loop costs should not be recovered in switched access rates, and these costs should not
21 be included in a study that purports to represent the cost of switched access service. The
22 reason for this is derived from the principle of cost causation, which is fundamental to a

1 proper incremental cost study, as Dr. Ankum himself acknowledges.⁵¹ Simply put, switched
2 access does not cause One Comm to incur the cost of the loop, regardless of whether it uses
3 the loop. Usage and causation are not the same thing.

4 The local loop is a non-traffic-sensitive cost that is caused only by a customer's
5 decision to obtain basic network access. Therefore, under the principle of cost causation
6 to which Dr. Ankum purportedly subscribes, the loop is a direct cost of basic network
7 access, regardless of what other services use the loop. ***It is causation, not use, which***
8 ***determines how costs are treated in an incremental cost study.*** In other words,
9 incremental costs include only those costs that a carrier could avoid if it did not offer the
10 service in question. In the case of loop costs, One Comm would continue to incur those
11 costs (to connect its customers to the network and provide local exchange service) even if
12 it did not offer switched access service. Therefore, in conducting a service-specific cost
13 study, the only service that should be assigned the cost of the local loop is basic local
14 exchange service.

15 The cost of the loop is driven solely by the end user purchasing a dial-tone line.
16 The cost of the loop is fixed, regardless of the number of calls made by that end user.
17 Allocating the cost of that loop to something other than basic network access is incorrect
18 because it is not directly related to the manner in which the costs are incurred.

19 Although the loop certainly is being used in connection with switched access, that
20 usage is not the driver for incurring the cost of the loop. The cost of that loop is driven by

⁵¹ Ankum Direct at 24.

1 the end user's local exchange service. Loop cost is a fixed cost that is not affected by
2 switched access. In other words, whether the end user makes a lot of toll calls, a few toll
3 calls or no toll calls, the cost of providing the loop to that end user will remain exactly the
4 same. Dr. Ankum's pivot to equating usage with causation does not overcome the simple
5 fact that the end-user customer remains connected to the network (and will be billed by One
6 Comm or Verizon or any other carrier) regardless of whether he or she uses the network
7 connection. Therefore, there is absolutely no causative link between loop plant and
8 switched access service.

9 **Q. HAS THE FCC ADDRESSED THIS ISSUE?**

10 A. Yes. The FCC explained this economic principle as early as 1983 in its *MTS and WATS*
11 *Market Structure* Order:

12 Thus, one should not ask whether costs are caused by carriers or
13 users. One should ask whether particular costs are caused by a
14 particular user or class of users. The cost of a common line is
15 attributable to the user who has that line, which is dedicated to
16 his use and which remains available for his exclusive use in
17 sending or receiving any telecommunication that can be
18 transmitted through the local dial switch. For this reason the
19 imposition of a flat charge upon a subscriber who has a common
20 line to recover some part of the fixed costs associated with that
21 common line burdens that customer with no costs that the
22 customer did not cause.⁵²

23 **Q. BUT DR. ANKUM QUOTES THE FCC IN SUPPORT OF HIS CONTENTION**
24 **THAT THE LOOP SHOULD BE CONSIDERED A "SHARED NETWORK**
25 **FACILITY" FOR COSTING PURPOSES. DO THE FCC'S REMARKS**

⁵² See *MTS and WATS Market Structure*, 97 F.C.C. 2d 682, 688-689 (1983) (emphasis supplied).

**SUPPORT ONE COMM'S ARGUMENT THAT LOOP COSTS MUST BE
RECOVERED IN PER-MINUTE ACCESS RATES?**

A. Absolutely not. Dr. Ankum's summary of the FCC's remarks is misleading. He says that the FCC recognized that: "*The cost of the local loop is common with respect to access services (and other services).*"⁵³ But that is not what the actual FCC language, cited by Dr. Ankum just above his summary, says. The FCC said, rather, that "[t]he costs of local loops and their associated line cards in local switches, for example, are common with respect to interstate access service *and local exchange service.*"⁵⁴ Dr. Ankum's use of the parenthetical phrase "(and other services)" attempts to draw attention away from the fact that the FCC was referring to sharing loop costs between basic network access and usage — not what One Comm is doing here, assigning all of the costs of the loop to usage and then "sharing" loop costs only among usage-based services.

More importantly, the FCC's statement regarding allocation of loop costs between basic network access and usage was in reference to the results of the federal-state separations process under a FAC model, as that process has been applied for the pricing of interstate switched access, and has no bearing on the Department's consideration of whether One Comm's claimed *TSLRIC study* justifies a rate above the CLEC cap. In the context of an incremental cost study, the cost of the loop must be allocated solely to basic network access, *i.e.*, local exchange service, as the FCC also noted in the same order cited by Dr. Ankum: "The incremental cost of connecting a new residence to its end office,

⁵³ Ankum Direct at 33, lines 7-8 (emphasis in original).

⁵⁴ Ankum Direct at 32 (different emphasis from original).

1 however, is the cost of the loop.”⁵⁵ It is indisputable that even when FAC methods
2 require allocation of loop costs to the interstate jurisdiction, the FCC does not support
3 recovery of those loop costs in per-minute access charges, as proposed here by One
4 Comm. For example, in its 2000 *CALLS* Order, the FCC reaffirmed its findings from the
5 *MTS and WATS Market Structure* order we quoted above:

6 [B]ecause the costs of using the price cap LEC’s common line
7 (or “local loop”) do not increase with usage, the Commission
8 decided that these costs should be recoverable entirely through
9 flat, non-traffic sensitive fees.”⁵⁶

10 Similarly, the FCC noted in a different case:

11 The Commission has recognized in prior rulemaking
12 proceedings that, to the extent possible, costs of interstate
13 access should be recovered in the same way that they are
14 incurred, consistent with principles of cost-causation. Thus,
15 the cost of traffic-sensitive access services should be recovered
16 through corresponding per-minute access rates. Similarly,
17 NTS costs should be recovered through fixed, flat-rated fees.⁵⁷

⁵⁵ *Local Competition Order* ¶ 675.

⁵⁶ *In the Matter of Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Low-Volume Long-Distance Users; Federal-State Joint Board on Universal Service*, CC Docket No. 96-262, *et al.*, Sixth Report and Order, FCC 00-193 (May 31, 2000), ¶ 65.

⁵⁷ *See, In the Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing Usage of the Public Switched Network by Information Service and Internet Access Providers*, CC Docket No. CC Docket No. 96-262, *et al.*, First Report & Order, FCC 97-158 (May 16, 1997), ¶ 24.

1 **Q. GIVEN DR. ANKUM’S CLAIM THAT THE LOOP IS A “SHARED NETWORK**
2 **FACILITY,” DOES ONE COMM’S STUDY TREAT THE LOOP AS A SHARED**
3 **COST?**

4 A. No. One Comm’s characterization of loop costs is as clear as mud, but ultimately One
5 Comm has included *all* loop costs as a direct cost of voice services, which are then
6 divided by usage, with *no* loop costs assigned to basic network access.

7 Dr. Ankum refers to the loop as a “shared resource” and states that “the cost of
8 the local loop is to be shared between switched access services and other services using
9 the local loop.”⁵⁸ He then goes on to argue that it is “wrong, and inconsistent with
10 industry practices, to argue that the local loop is exclusively associated with local
11 service.”⁵⁹ He concludes by saying that the One Comm cost study treats the loop as a
12 shared resource of local and switched access services.⁶⁰ At this point, if you have not
13 read the cost study or the testimony of the other One Comm witnesses, it would be
14 reasonable to conclude that Dr. Ankum is engaging in the historical argument in the
15 context of fully-allocated cost modeling about what portion of loop costs should be
16 recovered in local exchange service charges and what portion should be allocated to and
17 recovered in usage-based charges. But the cost study itself characterizes the loop costs as
18 a “monthly direct cost” of usage and not as “shared and common” costs.⁶¹ Of course, an
19 incremental cost study of switched access cannot properly include *any* portion of the loop

⁵⁸ Ankum Direct at 36, lines 8-15.

⁵⁹ *Id.* at 37, lines 3-6.

⁶⁰ *Id.* at 38, lines 3-5.

⁶¹ *See* One Communications NUCA – Results MA.xlsx, tab “Results,” at 4.

1 costs, because One Comm would incur those costs even if it did not offer switched access
2 service.

3 **Q. IF ONE COMM REFERS TO LOOP COSTS AS A SHARED RESOURCE, BUT**
4 **THEN INCLUDES SUCH COSTS AS DIRECT COSTS IN THE COST STUDY,**
5 **HOW ARE THE LOOP COSTS ALLOCATED?**

6 A. One Comm simply ignores the plain fact that the loop is a necessary and incremental cost
7 solely of providing local exchange service, and instead divides all costs by total switch
8 usage, defined in terms of total minutes of use. In other words, One Comm argues that
9 loop costs are a direct cost of usage, but shared among different types of usage, so the
10 costs are not treated as either “shared or common” in the study, notwithstanding Dr.
11 Ankum’s terminology. This construct is far different from the traditional debate over
12 whether loop costs are a direct cost of basic network access or shared between basic
13 network access and usage.

14 One Comm has taken the historical debate over whether a portion of loop costs
15 should be allocated to usage to an extreme point — now arguing that *all* loop costs
16 should be attributed to usage. The Department should reject this extreme argument,
17 which is patently inconsistent with good policy, good economics, and its own precedent.

18 **Q. PLEASE PROVIDE SOME BACKGROUND ON WHAT YOU REFERRED TO**
19 **AS THE “HISTORICAL DEBATE” OVER ALLOCATING LOOP COSTS.**

20 A. The historical debate has been over whether loop costs are shared by local exchange
21 service and usage of the network, or whether they are caused by local exchange service.
22 This debate manifested itself traditionally in determining what percentage of loop costs to

1 allocate between the intrastate and interstate jurisdictions, in the fully-allocated cost
2 process of jurisdictional separations.

3 It is important to remember, however, that the separations process is a component
4 of fully-allocated cost methods, *not* the incremental cost methods One Comm claims to
5 use here. So the process of assigning loop costs through separations says nothing about
6 the appropriate way to characterize loop costs in an incremental cost study. Dr. Ankum
7 has taken an old debate about a different issue (*i.e.*, the allocation of loop costs between
8 the interstate and intrastate jurisdictions for separations purposes under the FAC model)
9 and applied it to a totally different context (*i.e.*, whether loop costs are caused by
10 switched access service for the purpose of determining the incremental costs of switched
11 access service).

12 Historically, some loop costs were recovered for policy reasons through usage-
13 based access charges, but even that pricing practice has been eliminated or reduced in
14 many jurisdictions, and the Department eliminated it in Massachusetts long ago.

15 **Q. PLEASE EXPLAIN.**

16 A. Approximately 25 percent of loop costs are allocated for recovery in the federal
17 jurisdiction, which essentially means recovery through interstate switched access charges.
18 At the time of the AT&T divestiture in the mid-1980s, the federal share of loop costs was
19 recovered primarily through a per-minute rate element called the Carrier Common Line
20 (“CCL”) charge. The FCC recognized that recovering non-traffic-sensitive (“NTS”) loop
21 charges from usage rates was not economically efficient, so the FCC created the
22 subscriber line charge (“SLC”) to recover the federal share of loop costs. Even though

1 the SLC is technically a federal access charge, it is billed directly to end users — not to
2 carriers. In this way, every customer pays a fixed fee for interstate access, in addition to
3 the dial-tone charge set by state regulators, regardless of the level of their interstate toll
4 usage, if any. With an increasing share of NTS costs recovered in the SLC over time, the
5 FCC has been able to eliminate or significantly reduce the CCL for interstate access rates.
6 In doing so, the FCC identified a number of “important benefits”: “It will reduce the cost
7 of long distance service and encourage a more efficient level of consumption. It will
8 move per-minute switched access rates towards cost-based levels and promote efficient
9 competition in the exchange access market by permitting both incumbent and competitive
10 carriers to compete for all services based on price.”⁶²

11 Similarly, in Massachusetts, the Department eliminated the intrastate CCL from
12 Verizon’s switched access rates more than seven years ago.⁶³

13 **Q. AS A RESULT OF THE FEDERAL POLICIES TO REDUCE IMPLICIT**
14 **SUBSIDIES IN PER-MINUTE ACCESS RATES YOU DESCRIBED, WHAT HAS**
15 **HAPPENED TO PER-MINUTE INTERSTATE ACCESS CHARGES?**

16 A. They have been reduced substantially, particularly for large carriers. According to the
17 FCC’s most recent “Trends in Telephone Service” report (August 2008), the national
18 average total charge per conversation minute for interstate switched access has been

⁶² *Multi-Association (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, Second Report & Order and Further Notice of Proposed Rulemaking in CC Docket No. 00-256, Fifteenth Report & Order in CC Docket No. 96-45, and Report & Order in CC Docket Nos. 98-77 and 98-166, 16 FCC Rcd 19613 (2001), ¶ 63.

⁶³ D.T.E. 01-31-Phase II (2003).

1 reduced from more than 6.5 cents in 1994 to about 1.7 cents as of June 2008, a reduction
2 of 74 percent.⁶⁴

3 **Q. DO MOST ECONOMISTS AGREE WITH DR. ANKUM'S CONTENTION THAT**
4 **THE LOOP IS NOT CAUSED BY BASIC LOCAL EXCHANGE SERVICE?**

5 A. Not in our experience. We know of no other economist who has proposed One Comm's
6 entirely novel treatment of loop costs — that is, as a direct cost of usage. On the other
7 hand, numerous economists have held that loop costs are incremental to local exchange
8 service. Here are just two examples from economists who also have served as chairmen
9 of state utility commissions (one of whom, Dr. Kenneth Gordon, is a former
10 Massachusetts chairman):

11 An obvious fact about telephone service is that to make or
12 receive any calls at all, you must first be connected to the
13 network. There is a real cost to establishing this connection even
14 if you never make a call or receive one. By virtue of merely
15 standing ready to do either, the subscriber imposes an identifiable
16 cost on society. Cost-causative pricing principles, the principles
17 that apply in competitive markets, would require that each
18 subscriber pay the costs—that is, of being hooked up to the
19 network—that he or she has imposed on society.⁶⁵

20 The same point was made even more bluntly (and more colorfully) by Dr. Alfred E.

21 Kahn:

22 [T]o define “basic service” as not essentially equivalent to the
23 loop is to define *Hamlet* without the Prince of Denmark. The
24 loop is not merely an essential part of the basic telephone service
25 that it is our national policy to make universally affordable and

⁶⁴ FCC, “Trends in Telephone Service: August 2008,” Table 1.2.

⁶⁵ Gordon, Kenneth, and Duesterberg, Thomas J., “Competition and Deregulation in Telecommunications,” Hudson Institute Inc. (1997), at 29-30.

1 subscribed to; it is at the heart of that service—the lifeline
2 connection between subscribers and the rest of the society. ... It
3 is the decision of consumers to *subscribe* to telephone service,
4 whether or not they use it to place calls, that is causally
5 responsible for imposing the cost of the loop on society.⁶⁶

6 As noted above, however, One Comm goes well beyond the historical debate and
7 claims that *no* loop costs should be assigned to basic telephone service. To put this extreme
8 argument into Dr. Kahn’s framework, what One Comm is doing is tantamount to defining
9 *Hamlet* without Hamlet.

10 **Q. YOU MENTIONED EARLIER THAT ONE COMM’S ARGUMENT IS**
11 **CONTRARY TO DEPARTMENT PRECEDENT. PLEASE EXPLAIN.**

12 A. As we noted earlier, the Department approved, with some modification, an incremental
13 cost study filed by New England Telephone (predecessor of Verizon MA), in an order
14 issued on March 21, 1989.⁶⁷ In that decision, the Department discussed whether the loop
15 is caused by basic customer access.⁶⁸

16 The access function is essentially customer-related, as
17 contrasted with the central-office switching and transport
18 functions, which we have classified as related to traffic-
19 sensitive need. Access is customer-related because it is the
20 demand for lines connecting the customer’s premises with the
21 central office that causes these costs to be incurred. The plant
22 functionalized as access consists of the loop plant and the

⁶⁶ Kahn, Alfred E., “Letting Go: Deregulating the Process of Deregulation,” MSU Public Utilities Papers (1998), at 74 (emphasis in original; footnotes omitted).

⁶⁷ D.P.U. 86-33-G (1989).

⁶⁸ Note that the term “access” in the Department’s discussion refers to end-user customer access to the telephone network, and not to carrier access. In common industry usage, “access charges” mean switched access charges for carriers associated with non-local traffic.

1 portion of the equipment in the central office associated with
2 terminating the loop at the switch.⁶⁹

3 Contrast the Department's explicit finding that "it is the demand for lines connecting the
4 customer's premises with the central office that causes these costs to be incurred," with
5 Dr. Ankum's contention that it is "wrong, and inconsistent with industry practices, to
6 argue that the local loop is exclusively associated with local service." The only "industry
7 practices" that treat the loop as a common cost are those derived from jurisdictional
8 separations, universal service policies, and fully-allocated cost methods, all legacies from
9 the past having no application here. In terms of how the loop costs are appropriately
10 assigned *in an incremental cost study*, it is Dr. Ankum who is wrong, and whose analysis
11 is inconsistent with Department precedent, FCC findings, most economists, and customer
12 interests.

13 **Q. PLEASE DISCUSS WHAT THE INDUSTRY PRACTICES HAVE BEEN IN**
14 **TERMS OF LOOP COST RECOVERY.**

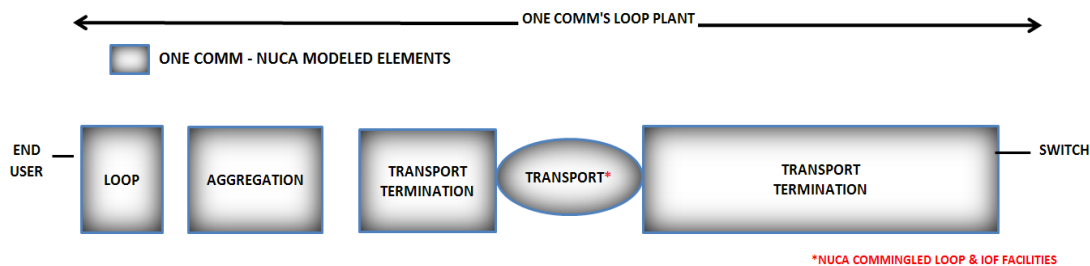
15 A. As we noted above, it was historical pricing practice to recover a portion of loop costs in
16 switched access rates and toll rates. But the concepts of cost *recovery* (*i.e.*, pricing) and
17 cost *causation* are not the same. Setting switched access rates above incremental costs in
18 order to provide a contribution towards the recovery of loop costs was a *policy* decision
19 to *diverge from* cost causation in ratemaking. Loop costs are not properly allocated to the
20 cost of providing switched access service in an incremental cost study, because there is

⁶⁹ D.P.U. 86-33-G (1989), at 455. That finding was reaffirmed by the Department in D.T.E. 01-31-Phase II (2003).

no causative link between providing a loop to a customer and the provision of switched access service to other carriers. One Comm cannot legitimately argue that a proper TSLRIC study of switched access includes any of the costs of the loop.

Q. WHAT PORTIONS OF ONE COMM'S NETWORK ARCHITECTURE CONSTITUTE LOOP FACILITIES AND THUS SHOULD BE EXCLUDED FROM AN INCREMENTAL COST STUDY OF SWITCHED ACCESS?

A. At the most basic level, loop facilities comprise all the network components that connect a carrier's switch to the end user. The following diagram illustrates the several network components, under One Comm's network architecture, that are required for One Comm to establish network access for its end-user customers, *i.e.*, "the loop." These network components should be excluded from a TSLRIC cost study for switched access.



- (a) **Loop** — These leased facilities connect the end user to a collocation arrangement at an ILEC central office;
- (b) **Aggregation** — These facilities (collocation arrangements at ILEC central offices) house the equipment necessary to connect One Comm's end users to the fiber transport equipment and facilities that, in turn, connect those end users to One Comm's network.

1 (c) **Transport Termination** — This network equipment (*e.g.*, multiplexers)
2 is located at the above-mentioned aggregation nodes and takes the traffic
3 originated on One Comm’s leased loop facilities and sends it to the high-
4 capacity fiber facilities that connect the end user and One Comm’s
5 switching center;

6 (d) **Transport** — These facilities carry traffic between One Comm’s transport
7 termination equipment and the buildings that house One Comm’s
8 switching facilities and are thus part of the loop. In the ILEC loop
9 architecture, these facilities would be called the “fiber feeder” portion of
10 the loop.

11 (e) **Transport Termination (Additional)** — Finally, the same type of
12 network equipment that One Comm uses in its aggregation centers is also
13 located at One Comm’s switching centers to disaggregate and terminate
14 traffic from the end users to One Comm’s switch. In the ILEC
15 architecture, this equipment would be called the “Central Office
16 Terminal.” It is part of the carrier’s loop plant, not its switching plant.
17 This equipment is the final physical piece of the “loop” — the connected
18 equipment and facilities that establish a telecommunications link between
19 the end user and One Comm and that enable a One Comm end user to
20 make or receive a call. As the Department noted in D.P.U. 86-33-G, “The
21 plant functionalized as access consists of the loop plant and the portion of

1 the equipment in the central office associated with terminating the loop at
2 the switch.”⁷⁰

3 One Comm needs each of these components to establish network access for its end-user
4 customers and provide local exchange service, regardless of whether it provides switched
5 access service. Thus, the cost of each of these components is *not* incremental to the
6 provision of switched access service.

7 **Q. IN LIGHT OF YOUR TESTIMONY ABOUT LOOP COSTS, WHAT**
8 **ADJUSTMENT MUST BE MADE TO THE LOOP COST MODULE?**

9 A. **Adjustment No. 1 sets the loop costs per MOU to zero.** The results of One Comm’s
10 Loop Cost Analysis Module – MA (“Loop Cost Module”) should be excluded entirely.
11 As explained above, the costs of the loop connecting One Comm’s customers to One
12 Comm’s network are not properly included in a TSLRIC study of switched access. One
13 Comm has included **BEGIN PROPRIETARY** [REDACTED] **END**
14 **PROPRIETARY** in total monthly loop cost expense in its One Comm’s Results - MA
15 Module (“Results Module”). As we have explained, One Comm incurs these costs to
16 provide network access to its end users, regardless of whether it provides switched access
17 service or not, so they do not belong in a TSLRIC study of switched access costs.

18 **Q. WHAT ADJUSTMENT MUST BE MADE TO THE AGGREGATION MODULE?**

19 A. **Adjustment No. 2 sets the aggregation costs per MOU to zero.** As explained above,
20 One Comm’s aggregation costs are a subset of total loop costs, so they too must be

⁷⁰ D.P.U. 86-33-G (1989), at 455.

1 excluded from the switched access study. According to Mr. Webber, One Comm has
2 “deployed numerous aggregation nodes (predominantly located in ILEC central offices
3 within collocation arrangements . . . to aggregate traffic (usually from loops leased from
4 the ILECs and other carriers) and transport that traffic back” to one of One Comm’s local
5 switches.⁷¹ One Comm’s Aggregation Module “captures the investment-related costs and
6 ongoing expenses associated with building and maintaining these aggregation
7 arrangements, comprised largely of collocation build-out and equipment related costs and
8 lease expenses.”⁷²

9 One Comm has included in its Results Module **BEGIN PROPRIETARY**
10 **END PROPRIETARY** in “total monthly aggregation expenses” for
11 loop aggregation arrangements. These monthly costs are incurred by One Comm to
12 connect the leased loop facilities to its network. Like the rest of its loop costs, One
13 Comm incurs these costs even if it does not provide switched access service, so they are
14 not properly included in a TSLRIC study of switched access service. Accordingly, the
15 Aggregation Module’s total monthly aggregation cost expense in the Results Module
16 should be changed to zero.

17 **Q. WHAT ADJUSTMENT MUST BE MADE TO THE TRANSPORT**
18 **TERMINATION MODULE?**

19 A. **Adjustment No. 3 sets the transport termination costs per MOU to zero.** As with the
20 loop and aggregation costs, transport termination costs should be excluded from the

⁷¹ Webber Direct at 26.

⁷² *Id.*

1 switched access cost study because they are not incremental to the provision of switched
2 access, but rather are a subset of One Comm's total loop costs. The transport termination
3 equipment in the cost study (*e.g.*, DSX, DACS, MUX, FDP, OCx) is used to terminate
4 traffic within One Comm's switching centers and/or collocation arrangements.⁷³ Similar
5 to an ILEC Remote Terminal, this equipment is an integral part of the network
6 connection between One Comm's network and its end-user customers. These
7 investments are not incremental to switched access service for the same reason that One
8 Comm's other loop costs are not.

9 One Comm has included in its Results Module **BEGIN PROPRIETARY**
10 **END PROPRIETARY** in "total monthly transport termination
11 expenses." This should be changed to zero.

12 **Q. PLEASE EXPLAIN THE NATURE OF THE COSTS THAT ARE ADDRESSED**
13 **IN ONE COMM'S TRANSPORT MODULE.**

14 A. One Comm's transport facilities that are the subject of the Transport Module perform two
15 different kinds of functions. They: (1) connect One Comm's aggregation nodes (and
16 thus its end users) to its switches, and thus constitute the "feeder" portion of the loop; and
17 (2) establish network connections between One Comm's switches and the networks of
18 other CLECs, long-distance carriers, and wireless carriers. The distinction between these
19 two functions is critical because the costs of the former (the feeder plant) are loop costs
20 and are not properly included in a TSLRIC study for switched access; One Comm would

⁷³ Webber Direct at 41-43.

1 incur these costs to provide network access to its end users even if it did not provide
2 switched access service to carriers. In contrast, One Comm's investment in transport that
3 connects its network to the networks of other carriers is caused by switched access, and
4 would be a legitimate expense to include in a TSLRIC study of that service.

5 One Comm's Results Module, however, includes **BEGIN PROPRIETARY**
6  **END PROPRIETARY** in "total monthly transport expenses,"
7 without attempting to quantify the amount of these expenses that is attributable to inter-
8 carrier transport and the amount associated with transport between One Comm's
9 aggregation nodes and its switches. In theory, if One Comm had provided the
10 appropriate analysis, the Department would be able to calculate the portion of leased
11 transport costs that are properly included in the study and the portion of those costs that
12 must be excluded as part of One Comm's overall loop costs. Since One Comm has the
13 burden of proof in this proceeding and has failed to provide the data that would enable
14 the Department to make a factual determination on this issue, the Department would be
15 justified in excluding *all* of One Comm's leased transport costs from its study unless and
16 until One Comm can provide the appropriate breakdown of its leased transport costs.

17 **B. "Unallocated Costs" Should Be Removed from the Transport Module**
18 **(Adjustment No. 4)**

19 **Q. ASIDE FROM THE EXCLUSION OF LOOP COSTS, DO YOU PROPOSE ANY**
20 **OTHER ADJUSTMENTS TO THE TRANSPORT MODULE?**

21 **A.** Yes. In its calculation of monthly recurring costs, One Comm assigns transport costs to
22 Massachusetts that are not caused by switched access service in Massachusetts.

1 Adjustment No. 4 removes all of these “unallocated” transport costs. Specifically, One
2 Comm’s Transport Module shows that monthly recurring costs for Massachusetts
3 facilities are **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY**. The
4 module also shows that, in addition to the above state-specific costs, One Comm has
5 “unallocated” (*i.e.*, not assigned to any specific state) monthly leased transport costs of
6 **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY**. In order to recover
7 these “unallocated” transport costs, One Comm assigns a portion of those “unallocated”
8 costs — **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** — to
9 Massachusetts, resulting in total monthly leased transport costs for Massachusetts of
10 **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY**.

11 The “unallocated” costs comprise 30% of the transport costs assigned to
12 Massachusetts and comprise 30% of total transport lease costs for One Comm. In
13 addition, the unallocated costs for Massachusetts are, inexplicably, more than any of the
14 direct lease charges made to any of the other states in the One Comm footprint, which
15 should, in itself, cast doubt on the legitimacy of One Comm’s results. These “unallocated
16 costs” are hardcoded (that is, they cannot be changed by a model user) in the Transport
17 Module, and the source document referred to in the Transport Manual (One Comm
18 Leased Transport Expense Data (PROPRIETARY INFORMATION).xls) does not
19 identify the source of these alleged costs. Since One Comm has not shown that these
20 costs were incurred to provide switched access service in Massachusetts, they should be
21 excluded from the study.

1 **C. Retail Costs Should Be Removed from the Cost Study**
2 **(Adjustments Nos. 12 and 13)**

3 **Q. IS ONE COMM'S SHARED AND COMMON COSTS FACTOR BASED IN PART**
4 **ON RETAIL COSTS?**

5 A. Yes. Mr. Fischer stated that the Shared and Common Cost factor used in the study is,
6 “designed to recover expenses common to the overall administration of the firm, costs
7 that are shared by certain sets of services, and the carrying costs and operating expenses
8 of the assets used in the general operation of the firm. The Shared and Common Cost
9 factor is applied to direct annual cost.”⁷⁴ Thus, the Shared and Common Cost factor is
10 based on *both* wholesale and retail costs. The study does not make an adjustment to
11 remove retail costs.

12 **Q. DID ONE COMM ADEQUATELY EXPLAIN WHY IT DID NOT REMOVE**
13 **RETAIL COSTS FROM SHARED AND COMMON COST FACTOR**
14 **CALCULATION?**

15 A. No. One Comm indicated merely that it makes no distinction between retail and
16 wholesale cost factors but gives no reason why it has taken this position.⁷⁵

17 **Q WHY IS IT NECESSARY TO MAKE A DISTINCTION BETWEEN RETAIL**
18 **AND WHOLESALE FACTORS IN A SWITCHED ACCESS COST STUDY?**

19 A. The costs of servicing end users are clearly much different than those of servicing
20 carriers. Mr. Fischer states that “[m]arketing and sales activities are captured in NUCA
21 specifically as shared and/or common costs because they cannot be effectively allocated

⁷⁴ Fischer Direct at 9.

⁷⁵ See Response to VZ-One Comm-1-21.

1 to any one service based upon causality as requested in the question.”⁷⁶ But the
2 allocation of marketing and sales activities is not the issue. Rather, the issue is whether
3 such costs are caused by the particular service in question — in other words whether One
4 Comm would incur such costs even if it did not provide switched access service.

5 **Q. SHOULD RETAIL-RELATED COSTS BE EXCLUDED FROM THE SHARED**
6 **AND COMMON COST FACTOR?**

7 A. Yes. When evaluating the common/shared costs associated with switched access service,
8 the correct starting (and ending) point should be costs caused by *wholesale* operations.
9 Retail costs are incurred to support retail operations and are not caused by the provision
10 of wholesale services such as switched access. Accordingly, retail costs should be
11 removed from the Shared and Common factor used in NUCA.⁷⁷ Adjustment No. 12
12 makes this change.

13 It is undisputed that One Comm provides both retail services and wholesale
14 services in Massachusetts.⁷⁸ One Comm has not provided any evidence, however, that its
15 *retail* expenses are caused by the *wholesale* switched access services One Comm
16 provides to telecommunications carriers operating in Massachusetts. Therefore, retail
17 costs should be excluded from One Comm’s factors.

18 In fact, including retail costs in a TSLRIC study for switched access contradicts
19 one of the “salient features” of TSLRIC costing, as described by Dr. Ankum himself. Dr.

⁷⁶ See Response to ATT-One Comm-2-3.

⁷⁷ The Shared and Common Cost Factor is calculated in the NUCA Factors Module.

⁷⁸ Responses to VZ-One Comm-1-22, 1-23, 1-25 and 1-26.

1 Ankum states that “[c]osts are calculated based on cost causation.”⁷⁹ Retail costs are
2 clearly not caused by the provision of wholesale switched access services, and One
3 Comm does not attempt to explain that they are. Intrastate switched access service is a
4 wholesale service that requires no sales, product management, market management or
5 customer service (collectively “marketing”) activities and other end-user support for
6 retail services because switched access consumers, *i.e.*, other carriers (ILECs, CLECs,
7 IXC, wireless carriers), are captive customers. Carriers have no choice but to use One
8 Comm’s intrastate switched access service when originating and/or terminating calls to
9 One Comm’s local customers, which is the reason for the cap in the first place. The
10 notion that these carriers must be or in fact are serviced in the same manner as retail
11 customers is indefensible.

12 **Q. WHAT TYPES OF RETAIL COSTS SHOULD BE REMOVED FROM ONE**
13 **COMM’S SHARED AND COMMON COST FACTOR CALCULATION?**

14 A. All costs directly associated with functions serving One Comm’s retail customers should
15 be removed. Specifically, costs supporting retail operations associated with the following
16 activities should be removed from One Comm’s shared and common cost factor
17 calculation:

- 18 • **Testing** — Activities relating to receiving, recording and analyzing trouble
19 reports from end users;

⁷⁹ Ankum Direct at 24.

- 1 • **Market Management, Sales** — Activities relating to marketing products and
2 services, performing market competitive analysis, test market planning,
3 identifying distribution channels, determination of individual customer needs,
4 development and presentation of customer proposals, sales order preparation and
5 handling, preparation of sales records;
- 6 • **Customer Service, Billing** — Activities relating to initiating customer service
7 orders, maintaining and billing customer accounts, collecting and investigating
8 customer accounts, collecting revenues, reporting receipts, administering
9 collection treatment, adjusting bills, instructing customers in the use of products
10 and services.

11 **Q. ARE OTHER CHANGES NECESSARY TO REMOVE RETAIL COSTS FROM**
12 **THE ONE COMM COST STUDY?**

13 A. Yes. In determining the TSLRIC for switched access, bad debt expense should be based
14 on the bad debt expense for wholesale services, not retail services. Accordingly, we
15 propose removing retail bad debt expense from the Bad Debt factor in the NUCA Factors
16 Module, leaving only wholesale bad debt expense included in the access cost results.
17 Adjustment No. 13 makes this change.

1 **D. The Cost Allocator for Voice Services Should Be Adjusted**
2 **(Adjustment No. 5)**

3 **Q. PLEASE EXPLAIN ONE COMM'S COST ALLOCATOR FOR VOICE**
4 **SERVICES.**

5 A. One Comm's cost study first totals up One Comm's expenses and then uses an allocator
6 to divide certain expenses between voice and data services. The study claims that fully
7 **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** of such costs should
8 be attributed to voice services.⁸⁰

9 **Q. IS THIS METHODOLOGY APPROPRIATE FOR AN INCREMENTAL COST**
10 **STUDY OF SWITCHED ACCESS SERVICE?**

11 A. No. This is not a proper methodology for an incremental cost study, and it does not yield
12 One Comm's TSLRIC for switched access service. A proper TSLRIC study of switched
13 access service would identify the components for which cost is incurred in order to
14 provide that service, determine the per-unit cost of each component separately and then
15 sum up those costs. One Comm's failure in this regard alone provides grounds to reject
16 the cost study.

17 Moreover, One Comm has not projected the volume of voice services and the
18 volume of data services that the modeled network is designed to carry, so One Comm
19 cannot allocate voice and data costs directly. Rather, Mr. Webber claims that, "proxy
20 information is often the best method by which to estimate the amount of the network's

⁸⁰ Webber Direct at 24.

1 capacity used to support voice, relative to data.”⁸¹ As a proxy for an actual estimate of
2 the relative amount of future data and voice traffic, the One Comm cost study purports to
3 calculate the share of total port capacity of its modeled aggregation equipment
4 (specifically, the **BEGIN PROPRIETARY** [REDACTED]
5 [REDACTED] **END PROPRIETARY** Chassis) that must be attributed to voice
6 service and the share to be attributed to data service.⁸² One Comm then uses that ratio to
7 allocate its switching and transport costs between voice and data services. But One
8 Comm offers no basis for presuming that the ratio of data-to-voice capacity of the
9 **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** is an accurate
10 proxy for the ratio of data-to-voice capacity across the modeled network. For example,
11 voice services represent a relatively small share of the total capacity of fiber transport
12 between One Comm’s switch and other carriers’ networks, because each voice circuit
13 occupies a fraction of the bandwidth of a DS1, DS3 or higher speed data circuit.⁸³ Thus,
14 the overall ratio of data-to-voice capacity of the network may be substantially different
15 than the ratio on the **BEGIN PROPRIETARY** [REDACTED] **END**
16 **PROPRIETARY**.⁸⁴

⁸¹ *Id.* at 23.

⁸² See NUCA Network Element Database.xls file, tab “**BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY**,” section 2, “Capacity analysis,” rows 12 through 31; *id.*, cell G31 (calculating the voice cost allocation factor).

⁸³ For example, once digitized, 24 or more voice circuits can fit into the same bandwidth used by a single DS1 data circuit and 672 or more voice circuits can fit into a DS3 circuit.

⁸⁴ In addition, as *aggregation* equipment, the **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** is part of the loop and is not a component of switching. Thus, it is inappropriate to use this

(continued . . .)

1 **Q. EVEN IF ONE COMM'S GENERAL APPROACH WERE PROPER, DOES IT**
2 **PROPERLY ALLOCATE COSTS TO VOICE SERVICES, AS OPPOSED TO**
3 **DATA SERVICES?**

4 A. No. Even within the context of One Comm's improper methodology, the share of One
5 Comm's expenses allocated to voice services is too high. To understand why, some facts
6 about the basic features of the **BEGIN PROPRIETARY** [REDACTED] **END**
7 **PROPRIETARY** are helpful. The **BEGIN PROPRIETARY** [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED] **END PROPRIETARY.** So even under One Comm's improper
18 methodology of allocating total costs between voice and data services, only **BEGIN**

(. . . continued)

aggregation equipment as a proxy for calculating the share of **switching** and **transport** costs to attribute to voice services.

⁸⁵ See *id.*, row 13.

⁸⁶ *Id.*, row 14.

⁸⁷ *Id.*, rows 17-20.

⁸⁸ See *id.*, cell F31.

1 **PROPRIETARY** [REDACTED] **END PROPRIETARY** of those costs should be
2 allocated to voice services. Adjustment No. 5 makes this correction. *See Confidential*
3 Attachment A.

4 **Q. HOW DOES ONE COMM SUPPORT ITS HIGHER COST ALLOCATION**
5 **FIGURE?**

6 A. In cell F30 of tab “**BEGIN PROPRIETARY** [REDACTED]

7 [REDACTED]
8 [REDACTED]
9 [REDACTED] [REDACTED]
10 [REDACTED]
11 [REDACTED] [REDACTED]
12 [REDACTED] [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]

⁸⁹ *See id.* (allocating **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY**, to voice services).

⁹⁰ *See id.*, row 18.

⁹¹ The response to VZ-One Comm-3-7 states that, **BEGIN PROPRIETARY** [REDACTED]
[REDACTED] **END PROPRIETARY**.

1 [REDACTED]
2 [REDACTED] **END PROPRIETARY** could be attributed to voice service, even under
3 the type of fully-allocated cost model that One Comm is improperly using here.

4 **Q. HOW DOES CORRECTING THE COST ALLOCATOR AFFECT THE NUCA**
5 **RESULTS?**

6 A. Correcting the voice allocator from **BEGIN PROPRIETARY** [REDACTED]
7 [REDACTED] **END PROPRIETARY** reduces the “total direct costs” in the One Comm NUCA
8 Results Module by **BEGIN PROPRIETARY** [REDACTED] **END**
9 **PROPRIETARY**.⁹² The vast bulk of this amount comes from the NUCA modules for
10 loop costs, transport termination costs and aggregation costs, and should be excluded
11 pursuant to Adjustments Nos. 1 through 3, for the reasons discussed above. The net
12 effect of reducing the voice allocator, *i.e.*, after taking Adjustments 1 through 3, is shown
13 in Adjustment No. 5 on Confidential Attachment A.

14 **E. The Model Switching Office Should Be Adjusted to Reflect**
15 **Forward-Looking Investment Costs (Adjustments Nos. 6 and 7)**

16 **Q. HAS ONE COMM PROPERLY CONSTRUCTED ITS SWITCHING MODULE**
17 **TO ESTIMATE THE FORWARD-LOOKING COSTS OF SWITCHING?**

18 A. No, it has not. A properly done cost study would consider multiple inputs to design and
19 size the model switching offices, including the number and type of access lines to be
20 served, the number and type of trunks needed to connect the switch to other switches,

⁹² This correction is made in the Network Elements Database module — **BEGIN PROPRIETARY** [REDACTED]
[REDACTED] **END PROPRIETARY** as indicated in One Comm’s response to VZ-One Comm-3-6.

1 usage during the peak period, etc. These inputs allow the model to develop estimated
2 costs for a switching network that will be able to handle the forecasted demand for the
3 service being studied, *i.e.*, switched access. One Comm's cost study fails to do this. As a
4 result, Verizon cannot determine whether One Comm's cost study has included the
5 correct number or type of switches. Thus, the record is deficient on the issue of whether
6 One Comm's use **BEGIN PROPRIETARY** [REDACTED]
7 [REDACTED] **END PROPRIETARY** switches in its cost study is appropriate.

8 However, given that One Comm today uses only **BEGIN PROPRIETARY**
9 [REDACTED]
10 [REDACTED] **END PROPRIETARY** in its set of model offices
11 improperly inflates its switching investment. The capacity of the MetaSwitch is far larger
12 than the Lucent LCS switches⁹³ that One Comm has chosen to replace with the
13 MetaSwitch for the purpose of modeling its switching network. In addition, the
14 MetaSwitch performs many functions that are unrelated to the provision of switched
15 access, including, for example, vertical features and voice mail. Further, the MetaSwitch
16 is large enough that it could potentially handle all the traffic from the **BEGIN**
17 **PROPRIETARY** [REDACTED] **END PROPRIETARY** Lucent LCS switches.
18 However, without a demand study from One Comm, the record on this point is
19 incomplete and we cannot propose an adjustment to account for this deficiency. The

⁹³ One Comm agrees that the Lucent LCS switch is smaller and less robust than the MetaSwitch. *See* Response to DTC-One Comm-1-38.

1 fundamental failure of the model to consider the necessary inputs to designing a
2 switching network precludes Department reliance on the One Comm cost study.

3 **Q. WHAT ADJUSTMENTS TO THE SWITCHING MODULE MUST BE MADE?**

4 A. Setting aside the hopelessly flawed nature of the switching module, one adjustment must
5 be made. **BEGIN PROPRIETARY** [REDACTED]

6 [REDACTED]

7 [REDACTED] [REDACTED]

8 [REDACTED] [REDACTED]

9 [REDACTED]

10 **END PROPRIETARY.** However, because of the greater capacity of the Worcester
11 5ESS switch, the *per unit* cost of the Worcester switch is lower than the Springfield
12 switch. Therefore, it is reasonable to use the Worcester 5ESS switch as the model 5ESS
13 office. To implement this change, we have adjusted the model to reflect the higher
14 investment associated with the larger switch but also the lower per-unit switching costs
15 that result.⁹⁴

16 **Q. IS AN ADJUSTMENT NECESSARY TO MAKE THE SWITCHING MODULE**
17 **MORE FORWARD-LOOKING?**

18 A. Yes. One Comm has improperly increased its investment costs by applying a Telephone
19 Plant Index ("TPI") factor to many of the switching and signaling investments in the

⁹⁴ See Confidential Attachment A, Adjustment No. 6. Because One Comm did not provide, in response to VZ-One Comm-3-36, the unit detail for each of the components of the Springfield 5E switch, the adjustment estimates the additional investment for the **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** at approximately \$1.2M. But as described in the text, this investment reduces the per-unit switching cost.

1 switching and signaling modules, purportedly to convert One Comm’s booked (*i.e.*,
2 embedded) investments into “forward looking” investments. These adjustments are
3 clearly inappropriate.

4 By way of background, the Telephone Plant Index attempts to capture
5 reproduction costs, not forward-looking costs. On its website, AUS Consultants
6 (“AUS”), the creator of the TPI, states the purpose of the TPI:

7 The AUS Telephone Plant Index (TPI) is a standard index,
8 published for telephone operating companies for use in
9 developing the reproduction cost of the company’s property at
10 a selected test year date. Published on a semiannual basis, the
11 index, used together with a company’s own accounting records,
12 supplies the reproduction cost value of the company’s
13 construction investment.⁹⁵

14 * * *

15 The AUS TPI addresses a very specific function — to enable
16 companies to produce trended original cost values relative to
17 the historical original cost of plant in service on the company’s
18 books and records.

19 Further, AUS acknowledges that “[t]he AUS TPI *does not reflect replacement*
20 *cost* inasmuch as it was designed to produce the reproduction cost (the cost in today’s
21 dollars to reproduce the company’s embedded plant in service).”⁹⁶ In other words, by
22 applying a TPI factor to the company’s investments in various pieces of switching
23 equipment, One Comm is presenting the *reproduction cost* of its switching equipment,
24 *i.e.*, what it would cost One Comm in today’s dollars to recreate its *embedded* switching

⁹⁵ <http://www.ausinc.com/pub-telephone.html>.

⁹⁶ *Id.* (emphasis supplied).

1 network. However, a properly done TSLRIC study is not concerned with embedded
2 costs, only forward-looking costs, *i.e.*, what an efficient firm would pay in the market
3 today for the equipment needed to provide the service in question in the future.

4 Applying TPI factors greater than 1.0 to switching equipment flies in the face of
5 the long-standing market reality that the costs of digital switching are constantly
6 *decreasing* as the cost of computers continues to fall, with the advent of faster
7 microprocessors. Thus, the forward-looking costs of switching should be *less than* One
8 Comm's embedded costs. **BEGIN PROPRIETARY** [REDACTED]

9 [REDACTED] **END PROPRIETARY**, One Comm is essentially
10 arguing that a hypothetical carrier would pay *more* in the future for switching equipment
11 than it did in the past. However, a rational firm purchasing a switch in 2010 to replace a
12 switch purchased in 2005 would purchase a newer model switch at a lower cost. Since
13 digital switching costs are declining and have been declining for many years, the ratio of
14 forward-looking switching costs to embedded costs should be less than one. The ratio
15 should certainly not be set greater than 1.0. Therefore, we propose Adjustment No. 7 to
16 the One Comm cost study to remove the TPI index for both switching and signaling
17 investments.

1 **F. Double Counting of Certain Switching Costs Must Be Eliminated**
2 **(Adjustment Nos. 8 through 10)**

3 **Q. WHAT OTHER ADJUSTMENTS TO THE SWITCHING MODULE ARE**
4 **NECESSARY?**

5 A. Three additional adjustments to the switching module are necessary to eliminate double-
6 counting of costs.

7 **Q. PLEASE DESCRIBE THE FIRST ADJUSTMENT, TO ELIMINATE DOUBLE**
8 **COUNTING OF SOFTWARE COSTS.**

9 A. First, we propose removing capitalized software costs (investments) from One Comm's
10 list of specific switch investments. The reason for this adjustment is that **BEGIN**

11 **PROPRIETARY** [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED] **END PROPRIETARY.** At the same time, however, the
15 cost study also includes specific software expenses, resulting in double counting.
16 Adjustment No. 8 removes the following software expenses from the NUCA study:

- 17 a. Trunk to Trunk Switching Module, Sheet 5E EF&I, line 7: removed
18 **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** for
19 right to use software fees as identified in Attachment to VZ 1-3
20 (PROPRIETARY), Springfield 5ECost Model QSI (PROPRIETARY
21 INFORMATION).xls;

b. Trunk to Trunk Switching Module, Sheet 5E EF&I, line 15: removed

BEGIN PROPRIETARY [REDACTED] **END PROPRIETARY**

for right to use software; and

c. Trunk to Trunk Switching Module, Sheet Meta EF&I, line 8: removed

BEGIN PROPRIETARY [REDACTED]

END PROPRIETARY.

Q. PLEASE DESCRIBE THE SECOND ADJUSTMENT, TO REMOVE CAPITALIZED SWITCHING EF&I COSTS.

A. Specific capitalized engineer, furnish and installation (“EF&I”) costs should be removed from the cost study because they are already accounted for in NUCA’s Telco Installation cost factor. **BEGIN PROPRIETARY** [REDACTED]

END PROPRIETARY. In order to avoid double-counting, the following specifically listed capitalized EF&I costs must be removed from the NUCA study (*see* Adjustment No. 9 on Confidential Attachment A):

a. Trunk to Trunk Switching Module, Sheet 5E EF&I, line 8: removed

BEGIN PROPRIETARY [REDACTED] **END PROPRIETARY** for

5ESS Eng, Install and Transport;

b. Trunk to Trunk Switching Module, Sheet 5E EF&I, line 10: removed

BEGIN PROPRIETARY [REDACTED] **END PROPRIETARY** for

Dist Frame Install and Transport; and

1 c. Trunk to Trunk Switching Module, Sheet Meta EF&I, lines 9 and 12:

2 removed BEGIN PROPRIETARY [REDACTED] END

3 PROPRIETARY for MetaSwitch - Labor.

4 **Q. PLEASE DESCRIBE THE THIRD ADJUSTMENT TO THE SWITCHING**
5 **MODULE TO ADDRESS DOUBLE RECOVERY ISSUES.**

6 A. Adjustment No. 10 removes the application of the BEGIN PROPRIETARY

7 [REDACTED] END PROPRIETARY operating expense factor to the MetaSwitch unit

8 investment. To calculate its monthly MetaSwitch unit costs, One Comm included

9 payments to BEGIN PROPRIETARY [REDACTED]

10 [REDACTED]

11 [REDACTED] END PROPRIETARY. Because

12 actual costs to maintain the MetaSwitch investment are already known and included in

13 unit costs, One Comm cannot also apply an additional cost multiplier for maintenance.

14 Therefore, the actual MetaSwitch maintenance fees One Comm paid to its vendor should

15 be used in lieu of the annual maintenance factor.

16 **G. Switch Feature-Related Software Costs Should Be Eliminated**
17 **(Adjustment No. 11)**

18 **Q. SHOULD SWITCH FEATURE COSTS BE INCLUDED IN A SWITCHED**
19 **ACCESS COST STUDY?**

20 A. No. Switch features, such as call waiting and three-way calling, are retail services

21 provided by the end office switch in addition to its basic function of establishing

22 transmission paths. Switched access services are not retail services and do not require

1 vertical switch features, and, therefore, these costs should not be included in One
2 Comm's switched access cost study.

3 **Q. HAS ONE COM IMPROPERLY INCLUDED SWITCH FEATURE SOFTWARE**
4 **COSTS IN THE SWITCHING MODULE?**

5 A. Yes. In response to AT&T-One Comm-1-17, One Comm states that "the Lucent Feature
6 Activation Counting and Reconciliation ("FACR") enables customers to monitor feature
7 usage in the Lucent 5ESS (5E) switches and it also enables billing of customers for
8 assigned software." FACR is a software package resident on the 5E switch for the
9 purpose of identifying features "in-use" on the switch. These feature-related software
10 costs are caused by the switch features that are offered as part of One Comm's *retail*
11 services, and are not caused by the provisioning of switched access service. Accordingly,
12 the costs of FACR (*see* Switching Module, rows 13-14, 16-19 in "5E EFI" tab) should be
13 removed from the switching module. *See* Adjustment No. 11 (reducing 5E switch
14 investments by **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY.**

15 **V. CONCLUSION**

16 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

17 A. Our testimony shows that One Comm's cost study does not accurately estimate the costs
18 that it incurs to provide switched access services in the Commonwealth of Massachusetts.
19 Despite Dr. Ankum's agreement that TSLRIC is the right measure of switched access
20 costs for purposes of this proceeding, One Comm's study deviates from even the most

1 basic TSLRIC principles. Therefore, the Department should deny One Comm's petition
2 for an exemption from the rate cap.

3 Even if the Department were to elect to review the model, despite its fundamental
4 flaws, our analysis demonstrates that, after making necessary adjustments, One Comm's
5 switched access costs are *substantially* lower than even the incorrect rate cap calculated
6 by One Comm. In either case, the Department should deny One Comm's petition for
7 exemption from the cap on intrastate switched access rates.

8 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

9 A. Yes.

ATTACHMENT A

**MA D.T.C. 10-2 - Attachment A to Verizon Panel Direct Testimony
SCHEDULE OF ADJUSTMENTS TO NUCA COST MODEL (Public Version)**

		One Communications' Cost Study Switched Access Results		Adjusted in NUCA Model			
Adj#	Adjustment Description	Incremental Impact of Adjustment on Total Cost/MOU	Cumulative Total per MOU	Module	Worksheet	Cell(s)	Change Made
	One Comm's estimated cost/MOU as filed						
1	Set loop costs per MOU to zero			Results	Results	D22	
2	Set aggregation costs per MOU to zero			Results	Results	D30	
3	Set transport termination costs per MOU to zero			Results	Results	D28	
4	Remove "unallocated" transport costs			Transport	MRCs	O10	
5	Change voice/data allocator			Network Element Database	MALC	F30	
6	Change model office sizing			Trunk-toTrunk Switching	5E Unit Investment	E7, E8	
				Trunk-toTrunk Switching	5E EF&I	E11	
7	Remove TPIs from switching and signaling investments			Trunk-toTrunk Switching Signaling	TPIs TPIs	D5 through Q14 D6 through Q15	
8	Remove duplicate software investments			Trunk-toTrunk Switching	5E EF&I	E7	
				Trunk-toTrunk Switching	5E EF&I	E15	
				Trunk-toTrunk Switching	Meta EF&I	E8	
9	Remove duplicate capitalized Telco Installation costs			Trunk-toTrunk Switching	5E EF&I	E8, E10	
				Trunk-toTrunk Switching	Meta EF&I	E9, E12	
10	Remove duplicate switch maintenance cost			Trunk-toTrunk Switching	Meta Monthly	E9	
11	Remove Feature Activation Counting & Reconciliation (FACR) costs			Trunk-toTrunk Switching	5E EF&I	E13, E14, E16, E17, E18, E19	
12	Remove retail costs from the shared/common factor			Factors	Shared & Common Cost Factor	D32, D33, D38	
13	Remove retail bad debt expense			Factors	Bad Debt Factor	D7	
	<u>ADJUSTED COST PER MOU</u>		0.00258				