

BEFORE THE ILLINOIS COMMERCE COMMISSION

Docket No. 02-0864

**Rebuttal Testimony of Dr. Debra J. Aron
On Behalf of SBC Illinois**

SBC Illinois Exhibit 2.1

January 20, 2004

PUBLIC VERSION

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1 **REBUTTAL TESTIMONY OF DR. DEBRA ARON**
2 **ON BEHALF OF AMERITECH ILLINOIS**

3 **I. PURPOSE AND ORGANIZATION OF TESTIMONY**
4

5 **Q1. PLEASE STATE YOUR NAME AND POSITION.**

6 A1. My name is Debra J. Aron. I am the Director of the Evanston office of LECG and
7 Adjunct Associate Professor at Northwestern University. My business address is 1603
8 Orrington Avenue, Suite 1500, Evanston, IL 60201.
9

10 **Q2. ARE YOU THE SAME DEBRA J. ARON WHO SUBMITTED DIRECT**
11 **TESTIMONY IN THIS PROCEEDING?**

12 A2. Yes.¹

13 **Q3. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

14 A3. My testimony responds to the economic and policy issues raised in the direct testimony
15 of AT&T witness Mr. Joseph Gillan,² the joint direct testimony of AT&T witnesses
16 Messrs. Brian Pitkin and Steven E. Turner,³ the joint direct testimony of WorldCom *et al.*
17 witnesses Messrs. Michael Starkey and John Balke,⁴ (collectively, “Joint CLEC”

¹ Direct Testimony of Dr. Debra J. Aron on Behalf of SBC Illinois, Illinois Commerce Commission, Docket No. 02-0864, December 23, 2003. (Hereafter *Aron Direct Testimony*.)

² Direct Testimony of Joseph Gillan on Behalf of AT&T Communications of Illinois, Inc., Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003. (Hereafter *Gillan Direct*.)

³ Direct Testimony of Brian F. Pitkin and Steven E. Turner on Behalf of AT&T Communications of Illinois, Inc., Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003. (Hereafter *Pitkin and Turner Direct*.)

⁴ Direct Testimony of Michael Starkey [and] John Balke on Behalf of WorldCom, Inc. (“MCI”), McLeodUSA Telecommunications Services, Inc., Covad Communications Company, TDS Metrocom, LLC, Allegiance Telecom of Illinois, LLC, Globalcom, Inc., Z-Tel Communications, Inc., XO Illinois, Inc.,

1 witnesses), and the direct testimony of Staff witnesses Mr. Jeffrey H. Hoagg⁵ and Mr.
2 Genio Staranczak.⁶ I also respond to some issues addressed by the People of the State of
3 Illinois witness Mr. William Dunkel,⁷ and the Citizen’s Utility Board (“CUB”) witness
4 Ms. Susan M. Baldwin.⁸

5 **Q4. PLEASE PROVIDE AN OVERVIEW OF YOUR REPLY TESTIMONY.**

6 A4. All of these witnesses and I agree that prices for unbundled network elements (“UNEs”)
7 must be based on forward-looking costs. However, the Joint CLEC and other intervenor
8 witnesses are loath to admit what should be obvious: no one can possibly know with 100
9 percent accuracy the forward-looking costs of a hypothetical firm that provides only
10 UNEs because such a firm (by definition) does not exist. As a result, the Commission
11 must engage in a fact-finding investigation such as this one, and may indulge in the use
12 of computer models whose goal is to estimate the costs of a firm that does not (and may
13 never) exist and that has never deployed a single network element in the real world.
14 While the use of these models and estimates is probably necessary, it is also necessary to
15 approach them with respectful skepticism. Their results should be compared to real-
16 world information to ascertain whether the results are reasonable.

Forte Communications, Inc., and Forte Communications, Inc., Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003. (Hereafter *Starkey and Balke Direct.*)

⁵ Direct Testimony of Jeffrey H. Hoagg, Principal Policy Advisor, Telecommunications Division, Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003. (Hereafter *Hoagg Direct.*)

⁶ Direct Testimony of Genio Staranczak, Principal Economist, Telecommunications Division, Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003. (Hereafter *Staranczak Direct.*)

⁷ Direct Testimony of William Dunkel on Behalf of The People of the State of Illinois, By the Illinois Attorney General’s Office, Illinois Commerce Commission, May 2003. (Hereafter *Dunkel Direct.*)

⁸ Direct Testimony of Susan M. Baldwin on Behalf of the Citizens Utility Board, Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003. (Hereafter *Baldwin Direct.*)

1 This is where I part company from the CLEC witnesses and Staff. One cannot
2 draw reasoned inferences from models of non-existent firms unless the models are
3 benchmarked against reality. I have performed such a benchmark analysis in my direct
4 testimony and have found that the divergence between actual cost and the other parties'
5 estimated costs is huge. The AT&T cost models produce cost results that are mere
6 fractions of the costs actually incurred by SBC Illinois. AT&T requests unbundled loop
7 prices between \$1.24 and \$4.56 per month.⁹ In contrast, I estimate that it cost SBC
8 Illinois on the order of \$14.91 to provide a loop in 2001.¹⁰ As I will discuss, a deviation
9 of this same magnitude from actual cost, as computed from ARMIS data, caused the New
10 Jersey Board of Utilities to reject a cost model proffered by AT&T as being out of
11 compliance with TELRIC.¹¹ Similarly, such a shortfall should strongly suggest to this
12 Commission that the recommendations of AT&T are not based on any genuine forward-
13 looking cost model, but instead represent rank fantasy, and, like the New Jersey Board of
14 Public Utilities, the Illinois Commerce Commission should reject the AT&T model
15 results. On the other hand, Staff's proposed rates of between \$4.23 and \$9.39,¹² though
16 less extreme than the prices proposed by AT&T, are also well below the costs incurred by
17 SBC Illinois' costs of providing UNEs. The Commission should recognize that

⁹ *Pitkin and Turner Direct*, p. 167.

¹⁰ *Aron Direct Testimony*, p. 8.

¹¹ Decision and Order, *In the Matter of the Board's Review of Unbundled Network Elements Rates, Terms and Conditions of Bell Atlantic-New Jersey, Inc.*, Before the New Jersey Board of Public Utilities, Docket No. TO00060356, (March 6, 2002). (Hereafter *New Jersey Decision*.)

¹² Direct Testimony of Peter Lazare, Senior Economic Analyst, Rates Department, Financial Analysis Division, Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003, Schedule 1.

1 deviations of this magnitude require meaningful scrutiny and cannot be justified on
2 principle alone by appeal to the hypothetical network standard of TELRIC.

3 **II. RESPONSE TO THE TESTIMONY OF MR. GILLAN**

4
5 **Q5. DR. ARON, DO YOU HAVE ANY GENERAL COMMENTS REGARDING MR.**
6 **GILLAN'S TESTIMONY?**

7 A5. Yes. In at least four instances Mr. Gillan's written testimony contains quotation marks
8 that are placed around phrases that are either cited to my testimony or which appear to be
9 taken from my testimony, but which I never said (e.g., pages 6, 26, and 31 of Mr. Gillan's
10 testimony), and words with quotation marks that I never used in the context cited (e.g.,
11 page 22 of Mr. Gillan's testimony). I would like the Commission to be aware of these
12 instances because they in no way represent my words or the gist of my testimony. The
13 quotations may be intended by Mr. Gillan to highlight his own locutions, rather than cite
14 to my actual statements, but he does not indicate so, and instead leaves the ambiguities
15 for the reader to uncover. Such misleading statements exemplify a careless approach to
16 facts. Moreover, the specific inaccuracies coincide with a generally inaccurate
17 characterization of my testimony. The characterizations may reflect Mr. Gillan's own
18 opinions, but they do not reflect the words or arguments of my testimony, or indeed, any
19 impartial reading of my testimony.

20
21 **Q6. MR. GILLAN CLAIMS THAT COMPARING ACTUAL, BOOKED COSTS TO**
22 **THE RESULTS PRODUCED BY A FORWARD-LOOKING TELRIC STUDY IS**

1 **“SOMETHING OF A SIDESHOW” AND “WOULD NOT PRODUCE**
2 **MEANINGFUL RESULTS.”¹³ PLEASE COMMENT.**

3 A6. It is understandable that the UNE-P-based CLECs would like to relegate my testimony to
4 “a sideshow,” but in fact a comparison of purported TELRIC cost estimates to actual,
5 incurred costs, when performed as a validity check, should be highly relevant to the
6 Commission’s investigation. Such a comparison produces useful and analytically
7 meaningful insights, Mr. Gillan’s unfounded conclusory comments notwithstanding. It is
8 a well-established principle in economic and financial modeling that projections and
9 forecasts should be benchmarked to reality to help guard against unreasonable results.

10 For example, the use of actual results as a starting point for forward-looking
11 revenues and costs is well accepted by investment analysts, who, by the nature of their
12 profession (determining a firm’s value and stock price), are more interested in forward-
13 looking costs and revenues than what has occurred in the past. My direct testimony cites
14 literature by eminent financial scholars and experts that specifically describes why a
15 firm’s financial statements provide a logical point of departure for any future
16 projection.¹⁴

¹³ *Gillan Direct*, pp. 2-3.

¹⁴ The particular passage I quoted in my testimony is from the text written in 1934 by Graham, Dodd, (and now Cottle), and which is still esteemed today by investment professionals. Dr. Charles D. Ellis, PhD, CFA, the 2003 winner of the Award for Professional Excellence of the Association of Investment Management and Research (“AIMR”), (this is AIMR’s highest top honor) acknowledged the debt owed by the investment analyst profession to Graham and Dodd, and in particular, to the very textbook that I cited. Dr. Ellis begins an introduction to one of his own books by noting, “The foundation for our profession was set more than 50 years ago by David Dodd and Benjamin Graham through their splendid textbook on investment analysis and decision-making formally titled *Security Analysis*, but widely admired as ‘Graham and Dodd.’ *Security Analysis* has been the most useful and influential book ever written in the field of investments, and the student (of whatever age) who returns to it is always rewarded.” *Classics: An Investor’s Anthology*, Charles D. Ellis, ed. (Homewood, Illinois: Dow Jones-Irwin, 1989.) (Note: Sydney Cottle collaborated on later versions of *Graham and Dodd*).

1 As I noted, the investment perspective is precisely applicable here, because
2 investors begin with existing data and try to determine the (forward-looking) costs and
3 revenues of a firm in order to value it. Investment professionals would not dream of
4 failing to consider real-world evidence as the basis of forward-looking cost estimates, and
5 similarly, the Commission should avail itself of such evidence as well. Forecasts of
6 technology and business practices of the sort used to structure putatively TELRIC-based
7 models are, in the words of economists Lehman and Weisman, “notoriously unreliable.”¹⁵
8 A reality check, therefore, is a prudent way to determine whether the results are fairly
9 indicative of the true, forward-looking costs.

10
11 **Q7. DR. ARON, IN YOUR DIRECT TESTIMONY YOU PRESENT A CHART**
12 **(UPDATED IN THIS TESTIMONY) THAT SHOWS UNE-P PRICES ACROSS**
13 **THE COUNTRY, AND SHOWS THAT SBC ILLINOIS’ PRICES ARE AMONG**
14 **THE LOWEST IN THE COUNTRY. MR. GILLAN CLAIMS THAT “NOTHING**
15 **CAN BE GLEANED ON THIS QUESTION [OF TELRIC COSTS] FROM A**
16 **REVIEW OF UNE RATES IN OTHER (MOSTLY DISSIMILAR) STATES.”¹⁶**
17 **PLEASE COMMENT.**

18 A7. Among the Joint CLEC witnesses, Mr. Gillan is not alone in his observation. Messrs.
19 Starkey and Balke make a similar argument,¹⁷ as do Mr. Dunkel,¹⁸ Ms. Baldwin,¹⁹ and
20 Dr. Staranczak.²⁰ I will address the issue here by noting that each of these witnesses may

¹⁵ Dale E. Lehman and Dennis L. Weisman, *The Telecommunications Act of 1996: The “Costs” of Managed Competition* (Massachusetts: Kluwer Academic Publishers, 2000), p. 66. (Hereafter *Lehman and Weisman*.)

¹⁶ *Gillan Direct*, p. 5.

¹⁷ *Starkey and Balke Direct*, p. 13.

¹⁸ *Dunkel Direct*, pp. 4-6.

¹⁹ *Baldwin Direct*, pp. 9-10.

²⁰ *Staranczak Direct*, p. 8.

1 wish to consult the text of my direct testimony where I discuss the issue of comparing
2 prices across states and note that the price charts, while suggestive of a problem in
3 Illinois, are not conclusive and are, therefore, merely a prelude to my Illinois-specific
4 cost analysis. I then devote some 30 pages to that analysis and discussion. The
5 undisputed (and explicitly discussed) fact that these charts are not conclusive in and of
6 themselves does not diminish the un rebutted fact that as of (about) November 2002,²¹
7 SBC Illinois had one of the lowest UNE-P prices in the country.

8
9 **Q8. MR. GILLAN CLAIMS THAT THE “ONLY CORRECT MEASURE OF**
10 **WHETHER A PARTICULAR UNE PRICE IS ECONOMIC (AND**
11 **COMPENSATORY) IS THROUGH A COMPARISON TO ITS FORWARD-**
12 **LOOKING ECONOMIC COST.”²² PLEASE COMMENT.**

13 A8. This statement engages in convenient circular reasoning. The question is not whether, in
14 principle, prices are to be based on forward-looking costs. There is no dispute from me
15 about this requirement of the 1996 Telecommunications Act under existing FCC rules.
16 The real question before the Commission in this proceeding is whether specific cost
17 estimates put forth by the parties, which are developed from computer models of a
18 hypothetical firm, are reasonable renderings of true forward-looking costs of an efficient
19 carrier using currently available technology or whether these estimates are instead fantasy
20 costs that merely reflect the biases and prejudices of the modelers.

²¹ Based on Anna-Maria Kovacs et al., “The Status of 271 and UNE-Platform in the Regional Bells’ Territories,” Commerce Capital Markets Equity Research, November 8, 2002, p. 1. (Hereafter *CCM November 2002*).

²² *Gillan Direct*, p. 5.

1 If forward-looking costs were known with 100 percent accuracy, one could use
2 these known costs as the basis for determining UNE prices. However, the true forward-
3 looking costs that are at issue in this proceeding are unknown. My analysis of actual,
4 verifiable costs serves as a reality check to test the putatively forward-looking costs.
5

6 **Q9. MR. GILLAN CLAIMS THAT “SBC’S BACKWARD-LOOKING, EMBEDDED**
7 **COSTS SHOULD NEVER BE USED TO JUDGE THE REASONABLENESS OF**
8 **UNE RATES.”²³ PLEASE COMMENT.**

9 A9. Mr. Gillan is incorrect. Indeed, as *Lehman and Weisman* note (and I concur), it is not
10 only appropriate; it is “essential” to evaluate putatively TELRIC-based cost studies by
11 testing them against actual financial data.²⁴ The vigor with which Mr. Gillan makes such
12 assertions does not overcome the fact that in doing so he ignores the research and
13 literature regarding the verification of UNE cost models; he turns a blind eye to (at least)
14 50 years of accepted financial principles supporting the use of booked data for the
15 purpose of assessing forward-looking revenues and costs; and he ignores common sense.
16

17 **Q10. DOES THE SUPREME COURT SUPPORT THE BENCHMARKING OF TELRIC**
18 **MODELS AGAINST ACTUAL COSTS?**

19 A10. Yes, it appears to. In its *Verizon* opinion, the Court concluded that proper application of
20 the FCC’s TELRIC-based pricing methodology may require an assessment of actual
21 costs. The Supreme Court specifically rejected the ILEC’s argument that TELRIC is, in

²³ *Gillan Direct*, p. 7.

²⁴ *Lehman and Weisman*, p. 66.

1 principle, confiscatory.²⁵ The Court rejected this argument *not* on the grounds that
2 confiscation is irrelevant (which would tend to support the view that comparison to actual
3 cost is likewise irrelevant), but rather on the grounds that confiscation must be
4 demonstrated in a specific case, empirically, and not in principle, generally.²⁶ Because
5 the determination of whether prices are in fact confiscatory in any given case requires
6 comparison to actual costs, the Court's decision invites the sort of benchmarking that I
7 perform in this proceeding.

8
9 **Q11. IS THE USE OF ACTUAL COST EXPERIENCE EQUIVALENT TO USING A**
10 **TRADITIONAL COST-OF-SERVICE APPROACH TO ESTABLISH UNE**
11 **RATES, AS CLAIMED BY MR. GILLAN?**²⁷

12 A11. No, it is not the same. One can use actual results as a benchmark to test the
13 reasonableness of proposed prices without adhering to those results as price proposals. If
14 the benchmarking reveals a significant difference between the purported TELRIC and the
15 actual costs, one should be able to specifically and credibly explain the difference. For
16 example, can anyone seriously believe that a hypothetically efficient firm can place and
17 operate a loop for about \$4.00 per month when the latest available information shows that
18 it cost the ILEC in this case, SBC Illinois, about \$14.91 to do so in 2001?²⁸ An
19 investigation of recently available actual costs can prevent the inadvertent acceptance of

²⁵ Verizon Communications, Inc., et al. v. Federal Communications Commission, et al., 2002 U. S. LEXIS 3559 (U. S. May 13, 2002), at *98-101. (Hereafter *Verizon*.)

²⁶ *Verizon*, at *98-101.

²⁷ *Gillan Direct*, pp. 8-9.

²⁸ My direct testimony reported costs based on 2001 ARMIS data. The 2002 ARMIS reports have since been released, and the corresponding loop cost is \$15.19, according to my analysis based on 2002 data.

1 results such as these. An advocate of such an extreme proposal ought to be called upon
2 to provide a specific and credible explanation of the difference (not merely a vague
3 appeal to obscure “inefficiencies” or other generalities).

4
5
6 **Q12. MR. GILLAN CLAIMS THAT YOU DO NOT PLAUSIBLY ESTIMATE THE**
7 **ACTUAL COSTS ASSOCIATED WITH UNES, EVEN ACCEPTING THAT**
8 **SUCH AN EXERCISE IS MEANINGFUL.²⁹ PLEASE DESCRIBE YOUR**
9 **UNDERSTANDING OF MR. GILLAN’S ARGUMENTS.**

10 A12. Mr. Gillan essentially argues that my cost analysis is invalid because it uses data from the
11 FCC’s ARMIS³⁰ data retrieval system.³¹ He argues that such data rely on “legacy cost-
12 allocation rules (Parts 36 and 69) leftover (sic) from the days when interstate carrier
13 access service was regulated by rate-of-return [regulation]” and that such data contain
14 “each flaw and deficiency associated with rate-of-return regulation [. . .].”³² Mr. Gillan
15 argues that my analysis is “premised from” the rate-of-return scheme.³³ Mr. Gillan
16 further argues that not even the FCC uses Part 36 and 69 rules for the purposes for which
17 they were intended, so that they cannot properly be used to estimate the costs of network
18 elements.³⁴

19

²⁹ *Gillan Direct*, pp. 10-11.

³⁰ “ARMIS” refers to the FCC’s Automated Reporting Management Information System, which collects and publishes ILEC financial and operating data.

³¹ *Gillan Direct*, pp. 7-8.

³² *Gillan Direct*, p. 8.

³³ *Gillan Direct*, p. 9.

³⁴ *Gillan Direct*, p. 10.

1 **Q13. IS MR. GILLAN'S ASSESSMENT OF ARMIS CORRECT?**

2 A13. No.

3

4 **Q14. PLEASE EXPLAIN WHY THE ARMIS DATA ARE SUITED FOR ANALYZING**
5 **ACTUAL UNE-L AND UNE-P COSTS.**

6 A14. The ARMIS data are well suited to determining actual costs associated with UNE-L and
7 UNE-P for two main reasons. First, unlike data typically found in financial filings (such
8 as SEC filings) the revenue, expense, and investment data that are contained in ARMIS
9 are disaggregated from the corporate level to the level of the entity involved in this case,
10 SBC Illinois. Second, the accounts in the ARMIS report 43-01 (which I used for my
11 computations) align with the UNE-L, and with the switching and transport components
12 that, along with the loop, constitute virtually all of the costs for the UNE-P.

13 For example, the "common line" category of ARMIS contains all of the
14 investment and expenses associated with a voice grade loop.³⁵ Costs associated with the
15 common line include all of direct and support investment and expenses associated with
16 providing the transmission path from the central office to the customers' premises for
17 providing switched telephone services from a Class 5 (i.e., local, "voice") switch.³⁶ The
18 common line category includes the costs associated with the cables, conduits, cross-
19 connect boxes, and telephone poles (or shares thereof, if these are shared-use facilities),
20 as well as labor costs that have been incurred for digging trenches to place cable or to

³⁵ 47 CFR 69.304 and 306. ARMIS requires that the Common Line be defined as in 47 CFR 69 of the FCC's rules. (www.fcc.gov/wcb/armis/instructions/2002/definitions01.htm#T1C.)

³⁶ 47 CFR 69.2(gg).

1 repair facilities, some supervisory and other overhead costs, and non-traffic sensitive
2 costs such as the main distribution frame.³⁷ Costs associated with non-switched services,
3 data services, switching, and so forth are not included in the common line category.³⁸

4 Similarly, the UNE-L includes direct investment (e.g., the loop itself) and support
5 assets (e.g., poles and conduits or a portion thereof, if these are shared-use facilities) as
6 well as the labor and materials used to install, operate, maintain, and repair the loop. The
7 price of an unbundled loop also includes an allocation of supervisory and other overhead
8 costs such as corporate overheads. Thus, the UNE-L contains the same cost elements that
9 appear in the common line, although the allocations associated with shared or common
10 costs may not be identical.³⁹

11 The local switching category in ARMIS includes the facilities from the connector
12 on the main distribution frame on the line side, to the line card, to the switching fabric,
13 and to the connector and trunk card on the trunk side of the switch, and all of the
14 functions therein. Similarly, the local switching UNE contains all of these items as
15 well.⁴⁰ Both unbundled switching and the local switching category in ARMIS also

³⁷ To the extent that labor and other costs are capitalized, these costs would appear in the associated investment accounts, and we would assign only a portion of them (via depreciation expense and return on capital) to our UNE cost analysis.

³⁸ 47 CFR 69.304 requires carriers to assign investment in local exchange lines to the common line element, and investment in interstate and foreign private lines to the Special Access element. Moreover, because we begin the analysis with the interstate portion of investment, that investment associated with intrastate private line has been directly assigned to the intrastate jurisdiction and is not included in our computations. (See 47 CFR 36.3(a).) See also 47 CFR 36.154(a) defining subscriber line or common line as those that are jointly used for local exchange service and exchange access for state and interstate interexchange services, i.e., a POTS line. In other words, investment and expenses associated with lines that fully or substantially are used for data services should not be reported in the common line element on which we base our analysis.

³⁹ Moreover, the allocations associated with TELRIC have no economic claim of superiority.

⁴⁰ 47 CFR 51.319(c).

1 include a portion of all of the relevant support assets, shared and common costs (such as
2 power, land and buildings), and corporate overheads. As I noted with respect to the
3 common line, the specific method of assigning costs associated with support assets and
4 other shared and common costs may be different between the local switching category in
5 ARMIS and unbundled switching.

6 Transport UNEs are defined as the facilities related to interoffice transmission
7 facilities and functionalities to connect local ILEC switching centers to one another and
8 also to connect to CLECs for purposes of transmitting local traffic. The unbundled
9 element prices include the costs associated with these assets, and with supporting assets
10 and other functionalities.⁴¹

11 Switched transport costs in ARMIS arise somewhat differently than do unbundled
12 transport costs. Switched transport provides a link from the ILEC to the interexchange
13 carrier (“IXC”) for long-distance traffic. Unbundled transport, on the other hand,
14 provides a link between ILEC central offices and between the ILEC and CLEC for
15 purposes of transmitting local calls and for providing access to the IXC. While the cost
16 elements for switched transport are the same as those for unbundled transport, IXCs
17 require about 25 percent more interoffice transport for a typical long-distance call than
18 CLECs require for a typical local exchange call (via UNE-P).⁴² The reason is that a
19 substantial majority of the long distance calls that use switched access use one transport
20 link (i.e., from the ILEC to the IXC). In contrast, because about 25 percent of local calls

⁴¹ 47 CFR 51.319(d).

⁴² Anna-Maria Kovacs *et al.*, “The Status of 271 and UNE-Platform in the Regional Bells’ Territories,”
Commerce Capital Markets Equity Research, May 1, 2002, p. 11. (Hereafter *CCM May 2002*.)

1 on the ILEC's network are intraswitch (i.e., caller and called party are served on the same
2 switch) and require no transport, only about three out of every four local calls require
3 transmission. Accordingly, I do not use all of the transport costs from ARMIS in my
4 estimate of transport costs associated with unbundled transport. In an effort to be
5 conservative, I use one-half (rather than three-quarters) of the transport costs per minute,
6 as I documented in my cost analysis.⁴³

7
8 **Q15. DO THE ARMIS DATA REFLECT "LEGACY COST-ALLOCATION RULES"**
9 **OF RATE-OF-RETURN REGULATION THAT THE FCC ITSELF HAS**
10 **ABANDONED, AS CLAIMED BY MR. GILLAN?⁴⁴**

11 A15. No. While the FCC has abandoned rate of return regulation for large ILECs, it continues
12 to use that form of regulation for small ILECs. The FCC replaced rate-of-return
13 regulation with price caps for large ILECs because of deficiencies in that regulatory
14 approach which I will discuss later,⁴⁵ not because of any deficiency with ARMIS data,
15 which the FCC continues to find valuable.

16 For example, the FCC uses ARMIS data to produce many of its industry reports,
17 including the *Statistics of Communications Common Carriers*.⁴⁶ The FCC calls the

⁴³ See, work papers provided in response to AT&T Fifteenth Set of Data Requests, No. JG-11. In addition, an economist with one of the Joint CLECs (Z-Tel) says that he has adopted my approach in his own analysis of ARMIS-based ILEC costs. See T. Randolph Beard, George S. Ford, and Christopher C. Klein, "The Financial Implications of the UNE-Platform: A Review of the Evidence," White Paper from www.telepolicy.com, May 2003, p. 16 (fn. 51). (Hereafter *BFK*.)

⁴⁴ *Gillan Direct*, pp. 8-10.

⁴⁵ In the Matter of Policy and Rules Concerning Rates for Dominant Carriers, Part 1 of 3, CC Docket No. 87-313, Federal Communications Commission, 4 FCC Rcd 2873; 1989 FCC LEXIS 860; 66 Rad. Reg. 2d (P & F) 372, Release No.: FCC 89-91 37691, April 17, Released 1989; Adopted March 16, 1989, p.2, ¶¶ 11-14. (Hereafter *FCC Price Caps Order*.)

⁴⁶ *Statistics of Communications Common Carriers*, FCC, 2001/2002 ed., p. iv. (Hereafter *SOCCC*.)

1 *SOCCC* “one of the most widely used reference works in the field of
2 telecommunications.”⁴⁷ Indeed, the FCC notes that the *SOCCC* is “the only permanent
3 record of common carrier activity published by the Government Printing Office and sent
4 to repository libraries.”⁴⁸ Certainly, such an endorsement of a report that is largely based
5 on ARMIS data does not support the theory that ARMIS is but a remnant “from the days
6 when interstate carrier access service was regulated by rate-of-return.”⁴⁹ Moreover, the
7 FCC’s Wireline Competition Bureau itself has found “reasonable” TELRIC cost
8 estimates that are developed specifically from ARMIS data.⁵⁰

9
10 **Q16. HAVE OTHER PARTIES FOUND ACTUAL COST DATA, SUCH AS ARMIS,**
11 **TO BE USEFUL FOR ASSESSING THE REASONABLENESS OF UNE PRICES**
12 **OR THE “COSTS” PRODUCED BY COST MODELS?**

13 A16. Yes, a number of them have. In fact, the Joint CLEC witnesses themselves rely on
14 ARMIS data not merely to assess the reasonableness of a forward-looking cost estimate,
15 but actually to *produce* such estimates. For example, AT&T and MCI witness Mr.
16 Michael Majoros argues that this Commission should adopt the FCC asset lives, without
17 modification, as they are used in the ARMIS reports.⁵¹ Similarly, Joint CLEC witnesses

⁴⁷ *SOCCC*, p. iii.

⁴⁸ *SOCCC*, p. iii.

⁴⁹ *Gillan Direct*, p.8.

⁵⁰ Memorandum Opinion and Order, In the Matter of Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration, Federal Communications Commission, CC Docket No. 00-0218, ¶¶ 295-298. (Hereafter *FCC Verizon Virginia Order*.)

⁵¹ “These [FCC asset] lives are still used for FCC ARMIS reports, Interstate ROR reports, Universal Service models and specific costing as needed. In addition, with the explicit endorsement of the FCC, as discussed above, many states have chosen to use the FCC prescribed lives in UNE proceedings. Hence I do not agree

1 Messrs. Starkey and Fischer rely on ARMIS data in their analyses. Messrs. Starkey and
2 Fischer say that although they would prefer to develop a “bottoms-up” analysis
3 identifying only forward-looking costs, they find the use of book costs to be “equally
4 valid.”⁵² These witnesses conclude, “[W]e recommend that the commission rely upon the
5 equally valid approach of using booked, historic data for both the numerator and the
6 denominator [of the common cost allocator]. In this way, though the *data* being used
7 would by definition fail to be forward-looking, the *ratio* of common expenses and direct
8 costs could, with very little adjustment, be considered realistically forward-looking.”⁵³

9 Nor is this the only venue where the Joint CLEC members have relied on ARMIS
10 data. For example, in a recent California UNE proceeding, AT&T submitted testimony
11 regarding expenses that was substantially based on ARMIS data.⁵⁴ Another of the Joint
12 CLECs, Z-Tel, has issued a number of white papers that purport to demonstrate that
13 “actual” UNE costs are remunerative.⁵⁵ These analyses rely on ARMIS data. Likewise,
14 in Virginia, in a UNE pricing case decided by the FCC’s Wireline Competition Bureau,
15 AT&T/WorldCom’s cost studies contained inputs that were developed from ARMIS

they are stale and dated.” Direct Testimony of Michael J. Majoros on Behalf of AT&T Communications of Illinois, Inc., and MCI WorldCom, Inc., Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003, p. 41.

⁵² Direct Testimony of Michael Starkey [and] Warren Fischer, C.P.A. on Behalf of AT&T Communications of Illinois, Inc., WorldCom, Inc., McLeodUSA Telecommunications Services, Inc., Covad Communications Company, TDS Metrocom, LLC, Allegiance Telecom of Illinois, Inc., RCN Telecom Services of Illinois, L.L.C., Globalcom, Inc., Z-Tel Communications, Inc., XO Illinois, Inc., Forte Communications, Inc., and CIMCO Communications, Inc., Illinois Commerce Commission, Docket No. 02-0864, May 6, 2003, pp. 24-25. (Hereafter *Starkey and Fischer*.)

⁵³ *Starkey and Fischer*, pp. 25-26. (Emphasis in original.)

⁵⁴ “Joint Declaration of Thomas L. Brand and Arthur Menko in Support of Joint Applicants’ Opening Comments,” Before the Public Utilities Commission of the State of California, Application 01-02-024 et al., October 18, 2002.

1 data.⁵⁶ Thus, there is no consistency or justification for AT&T and MCI to claim that
2 ARMIS data are inappropriate for this Commission to consider to *verify* cost models,
3 when those very same companies, in this and other jurisdictions, use ARMIS data to
4 actually *produce* their cost models.

5 At least one state commission, to my knowledge, has explicitly endorsed the use
6 of actual cost data, from ARMIS, to benchmark a putatively forward-looking TELRIC
7 model. The New Jersey Board of Public Utilities found itself in a situation very much
8 like the one here in Illinois. In New Jersey, the UNE prices proposed by AT&T were far
9 lower than actual booked cost. The New Jersey Board rejected AT&T's cost model (the
10 "HAI" model) because, chief among the Board's concerns, AT&T's cost estimates were
11 far from Verizon New Jersey's actual costs. According to the New Jersey Board,

12 Chief among our concerns is a fact pointed out by Verizon NJ that
13 revealed that the HAI model assumes that Verizon's entire network could
14 be constructed for less than one-third of Verizon NJ's existing investment
15 and that it could be operated for approximately one-fifth of Verizon NJ's
16 current operating expenses. Although we recognize that forward-looking
17 investment and operating costs are likely to be less than embedded or
18 current costs, the substantial nature of the difference between the HAI cost
19 estimates and Verizon NJ's actual experience is indeed dramatic and
20 suggests to the Board that the HAI Model may potentially understate
21 forward-looking costs.⁵⁷

22 The New Jersey Board recognized the value in benchmarking a putatively forward-
23 looking model by considering real-world costs. The New Jersey Board was concerned
24 about deviations between actual and modeled costs that were of the same order of

⁵⁵ See, e.g., *BFK*.

⁵⁶ *Verizon Virginia Order*, ¶¶ 184, 269, 298.

1 magnitude as are the deviations in costs in this proceeding. Ultimately, in rejecting the
2 AT&T model, the New Jersey Board concluded:

3 Our conclusion [to reject the AT&T cost approach] is supported by the
4 testimony of both Verizon and the Ratepayer Advocate, who suggest that
5 the HAI Model, sponsored by AT&T, failed to use TELRIC-compliant
6 inputs and assumptions. It is the Board's belief that such an approach
7 would result in Verizon subsidizing CLEC entry into the local markets and
8 eliminate any incentive for CLECs to invest in their own facilities.⁵⁸

9 An FCC staff report opines on some reasons for a divergence between putatively
10 forward-looking costs and ARMIS costs, such as the possibility of accounting
11 depreciation rates that do not reflect economic depreciation, input price decreases,
12 inefficiency, and the possibility that “[e]xisting models may choose investment levels that
13 are insufficient to provide satisfactory levels of basic local telephone service.”⁵⁹
14 Nevertheless, the FCC staff report concludes that it may be instructive to use ARMIS
15 data to benchmark models that claim to be “TELRIC” models:

16 It may also be instructive to compare estimates calculated by the models
17 with data from Automated Record Management Information Systems
18 (“ARMIS”).⁶⁰

19 Investment analysts also have used ARMIS data (as well as financial reports filed
20 with the Securities and Exchange Commission, which likewise contain actual, booked

⁵⁷ *New Jersey Decision*, pp. 25-26. (Citations omitted.)

⁵⁸ Summary Order of Approval, *In the Matter of the Board's Review of Unbundled Network Elements Rates, Terms and Conditions of Bell Atlantic-New Jersey, Inc.*, Before the New Jersey Board of Public Utilities, Docket No. TO00060356, November 17, 2001, p. 4. (Footnote omitted.)

⁵⁹ Jay Atkinson, Chris Barnekov, David Konuch, William Sharkey, and Brad Wimmer, “The Use of Computer Models for Estimating Forward-Looking Economic Costs: A Staff Analysis,” White Paper, January 9, 1997, p. 6. (Hereafter *FCC Staff Analysis*.)

⁶⁰ *FCC Staff Analysis*, p. 5.

1 expenses and investments) to evaluate whether existing UNE prices compensate ILECs
2 for their actual costs. I discussed these reports in my direct testimony.⁶¹ Indeed, in the
3 face of the specific, tangible evidence I provided of investment analyst studies that
4 specifically estimate the profitability of UNEs, including SBC Illinois' UNEs, Mr. Gillan
5 makes the inexplicable, general, and unsupported claim that "investment firms do not
6 commonly evaluate the profitability of SBC's wholesale operations, but rather look at the
7 overall profitability of the company."⁶² Mr. Gillan also claims that a particular Merrill
8 Lynch report which I discussed does not share my "view of UNE rates" because this
9 report opines that there will be more market pressure driving a retail-to-wholesale access
10 line movement as competition increases, and that this is "just as the Telecommunications
11 Act of 1996 intended."⁶³ I agree with many of the facts in that analysis, though not with
12 all of the policy editorial offered by the analyst. In any event, the Commission should be

⁶¹ See, for example, *CCM May 2002* and *CCM November 2002*. See, also, Anna-Maria Kovacs *et al.*, "Status & Implications of UNE-Platform in Regional Bell Markets," Commerce Capital Markets Equity Research, November 12, 2001. (Hereafter *CCM November 2001*.) Anna-Maria Kovacs *et al.*, "The Status of 271 and UNE-Platform in the Regional Bells' Territories," Commerce Capital Markets Equity Research, April 15, 2002. (Hereafter *CCM April 2002*.) Anna-Maria Kovacs *et al.*, "*The Status of 271 and UNE-Platform in the Regional Bells' Territories*," Commerce Capital Market Equity Research, August 22, 2002. (Hereafter *CCM August 2002*.) Adam Quinton, *et al.*, "The Telecommunicator: Telecom Act Seven Years On—The UNE Shock Wave Belatedly Reverberates Around the RBOCs—And How!," Merrill Lynch Global Securities Research & Economics Group, September 23, 2002 (Hereafter *Merrill Lynch 2002*.) John Hodulik, *et al.*, "How Much Pain from UNE-P? Analysis of UNE-P Economics for the Bells," UBS Warburg Global Equity Research, August 20, 2002. (Hereafter *UBS Warburg*.)

⁶² *Gillan Direct*, p. 20. It is irrelevant whether investment analysts "commonly" evaluate the profitability of the company overall: I have presented tangible examples of investment analysts that have, in fact, evaluated the profitability of SBC's wholesale operations. Mr. Gillan's comment on what "commonly" occurs (true or not) is irrelevant.

⁶³ *Gillan Direct*, pp. 20-21.

1 aware of the fact that the Merrill Lynch UNE study that Mr. Gillan approvingly quotes
2 concludes that SBC Illinois' UNE-P prices are in worse shape than does my own study.⁶⁴

3 ARMIS costs are also used today by the FCC to regulate the access charges of
4 small ILECs.⁶⁵ In sum, Mr. Gillan's eagerness to reject ARMIS as a source of data (and
5 to reject actual cost data generally) that can be used to benchmark cost studies is not
6 shared by all of his Joint CLEC colleagues, by the FCC, by other policy makers, or by the
7 investment community.

8
9 **Q17. MR. GILLAN CLAIMS THAT THE COST ALLOCATION RULES REFLECTED**
10 **IN ARMIS DATA ARE NOT EVEN USED BY THE FCC FOR THE PURPOSE**
11 **OF ESTABLISHING INTERSTATE ACCESS CHARGES, AND THEREFORE**
12 **“THE NOTION THAT THESE RULES CAN RELIABLY ESTIMATE THE COST**
13 **OF INDIVIDUAL NETWORK ELEMENTS (OR THE UNE-P COMBINATION)**
14 **IS ABSURD.”⁶⁶ PLEASE RESPOND.**

15 A17. There is no merit to Mr. Gillan's argument. There may indeed be an arbitrary nature to
16 the ARMIS allocation *between the interstate and intrastate jurisdictions*, but this does
17 not affect my analysis because I “reverse out” the interstate/intrastate allocations to
18 restore total investment for each element. Hence, Mr. Gillan's claim that my testimony is
19 based on any assumption about or reliance on the validity of interstate access cost
20 allocation is incorrect.

⁶⁴ Merrill Lynch estimates that revenues less operating expenses (i.e., earnings before interest, income taxes, and depreciation and amortization or “EBITDA”) for the SBC Illinois UNE-P is -\$2.45. (*Merrill Lynch 2002*, p. 31.) My own computations are more conservative than are Merrill Lynch's. I estimate that EBITDA is on the order of \$1.25 (See *Aron Direct Testimony*, p. 11).

⁶⁵ 47 CFR 69.104 (general computation of charges).

⁶⁶ *Gillan Direct*, pp. 9-10.

1 For example, the FCC requires that one-quarter of common line investment and
2 expenses be allocated to its interstate common line category. In my study, I start with the
3 common line expenses and investments that have been allocated to the interstate
4 jurisdiction and multiply them by four to recover the total investment and expenses
5 associated with the common line. Thus, I reverse out the effect of the allocator. For
6 example, suppose the investment in a loop in 2002 were \$1,000. The interstate allocation
7 would be 25 percent of this, or \$250. This allocation may be arbitrary, but that does not
8 affect my results because I reverse out the 25 percent allocator by taking the \$250 and
9 multiplying it by 4 (i.e., 1 divided by 25 percent) thereby restoring the entire investment
10 amount.

11 Similarly, the FCC requires that local switching investment and expenses be
12 allocated to the interstate jurisdiction on the basis of Dial Equipment minutes (“DEM”).⁶⁷
13 I reverse out this allocation by multiplying the expenses and investment by the inverse of
14 the allocator (or, in the case of switched transport, one-half of the allocator for the
15 reasons I discussed).

16 The reason I start with the post-interstate/intrastate separations (Part 69) cost
17 categories is that these are reported by network element (common line, switching, and
18 transport) which, as I indicated, correspond to the unbundled loop and to the other
19 components of the UNE-P (with appropriate adjustments that I also described). In
20 particular, the (post-separations) common line account excludes investments associated
21 with data (high capacity) services. Hence, the post-separations accounts segregate POTS

⁶⁷ The allocator used is reported in the ARMIS, 43-04 report.

1 costs from data costs. The pre-separation figures are not disaggregated in either of these
2 ways.

3 Properly used, ARMIS accounts can be used specifically to identify the booked
4 expenses and investments associated with POTS, and with UNEs. My analysis begins
5 with the interstate portions of common line, local switching, and switched transport and
6 reverses out the effect of the inter/intrastate allocations. This produces *total* costs for
7 common line, local switching, and switched transport. This procedure not only permits
8 me to disaggregate costs into those categories that correspond to UNEs, but because the
9 separation process weeds out the non-POTS-related investments and expenditures, my
10 cost categories include POTS-related costs only.

11
12 **Q18. MR. GILLAN CRITICIZES YOUR BOOK COST ESTIMATE ON THE**
13 **ACCOUNT THAT YOU UNDERSTATE THE NUMBER OF COMPETITIVE**
14 **LINES.⁶⁸ PLEASE COMMENT.**

15 A18. My analysis used the FCC's Local Competition Report released on December 4, 2000,
16 with June 2000 data for my estimate of CLEC lines. I used the national total for all
17 states. I applied an estimation method so that I could apply the same methodology to all
18 states across the country. Even the data source suggested by Mr. Gillan has some states
19 for which CLEC line counts are withheld, making it impossible to use this source for all
20 states. While Mr. Gillan insinuates that underestimating the number of CLEC lines
21 would substantially affect my cost estimates, in fact, if Mr. Gillan's numbers are correct
22 and my CLEC line counts were understated by 176%, this would have no more than an

⁶⁸ *Gillan Direct*, p. 11.

1 8% effect on my per line cost estimates, since most of the total line count number
2 consists of ILEC lines. I provide below an updated analysis using UNE-L, UNE-P, and
3 resale line counts by ILEC by state from the FCC's *Local Competition Report* as of June
4 2002 (see Table 1).⁶⁹ The revised analysis has accounted for this refinement to my
5 methodology, and the results and conclusions remain unaltered.

6
7 **Q19. MR. GILLAN CONTENDS THAT YOU IGNORE ALL UNE-P LINES IN YOUR**
8 **CALCULATION OF SWITCHING AND TRANSPORT COSTS PER LINE.⁷⁰ IS**
9 **THIS CORRECT?**

10 A19. No, it is not. The calculations of switching and transport costs per line that I performed
11 for both 2001 and 2002 are based on total lines that use switching, including UNE-P.
12 These calculations can be verified in the workpapers I provided in discovery.⁷¹

13
14 **Q20. ACCORDING TO MR. GILLAN, THE LEVEL OF "BOOKED COST" THAT**
15 **YOU ALLOCATE TO RETAIL IS UNDERESTIMATED BECAUSE YOU APPLY**
16 **THE WHOLESALE DISCOUNT TO COSTS INSTEAD OF REVENUES.⁷²**
17 **PLEASE RESPOND.**

18 A20. This is incorrect. As Mr. Gillan can verify in the workpapers I provided in discovery, the
19 wholesale discount has been applied to the sum of the total cost and a return on capital of
20 12.19 percent, which is equivalent to a revenue requirement, which has been often used
21 by commissions to set prices.

⁶⁹ *Local Telephone Competition: Status as of June 30, 2002*, released December 2002. I have used line counts averaged over the year rather than year-end lines. This source also withholds information for certain states, but not for Illinois.

⁷⁰ *Gillan Direct*, pp. 11-12.

⁷¹ See *Response to AT&T Fifteenth Set JG-11*, file "ARMIS Summary IL.xls."

1

2 **Q21. HAVE YOU INCLUDED INVESTMENTS IN YOUR BOOK COSTS THAT ARE**
3 **CAUSED BY RETAIL ACTIVITIES, AS MR. GILLAN SUGGESTS?⁷³**

4 A21. No. As I explained in my direct testimony, I account for retailing costs that would be
5 avoided if SBC were the wholesale provider by using the wholesale discount rate of 17.8
6 percent developed by UBS Warburg. As I also explained in my direct testimony, this is a
7 conservative estimate.⁷⁴

8 **Q22. ANOTHER SUPPOSED “FLAW” IN YOUR BOOK COST STUDY IDENTIFIED**
9 **BY MR. GILLAN IS THAT HE CLAIMS YOU OVERESTIMATE SBC**
10 **ILLINOIS’ DEPRECIATION EXPENSE RELATED TO UNE-P AND UNE-L**
11 **FOR 2001.⁷⁵ PLEASE RESPOND.**

12 A22. My analysis did not overstate depreciation expenses. However, I must explain that Mr.
13 Gillan has relied on a number presented on a spreadsheet that was a mock-up of a
14 possible exhibit that was never completed but was inadvertently provided as part of
15 discovery.⁷⁶ The spreadsheet upon which Mr. Gillan relied⁷⁷ was not part of my analysis,
16 was not relied upon in my analysis, and contained an error. I apologize for erroneously
17 providing this spreadsheet and the resulting confusion caused to Mr. Gillan. I did also,
18 however, provide in the same discovery response the correct workpapers upon which my
19 analysis does rely.⁷⁸ Document “Derivation of Cash Flows for Table 2 (TRIIL).doc”

⁷² Gillan Direct, p. 12.

⁷³ Gillan Direct, p. 12.

⁷⁴ See Aron Direct Testimony, p. 9.

⁷⁵ Gillan Direct, pp. 12-13.

⁷⁶ Response to AT&T Fifteenth Set JG-11.

⁷⁷ File "Analysis of Depreciation Expense-IL.xls."

⁷⁸ File "Derivation of Cash Flows for Table 2 (TRIIL).doc."

1 calculates POTS-related depreciation for UNE-P and UNE-L, which totals \$660 million
2 after applying the wholesale discount to the common line portion. If wholesale discount
3 is not applied, the depreciation expense would be \$722 million, consistent with a total
4 depreciation expense of \$809 million. Hence, there is no overestimation.

5 **Q23. MR. GILLAN APPEARS TO ARGUE THAT YOUR COST ANALYSIS IS**
6 **FLAWED BECAUSE IT INCLUDES MARKETING EXPENSES THAT ARE**
7 **ASSIGNED TO LOCAL SWITCHING AND THAT, ACCORDING TO MR.**
8 **GILLAN, SHOULD BE EXCLUDED.⁷⁹ PLEASE COMMENT.**

9 A23. Mr. Gillan’s argument is incorrect, as I will explain. The ARMIS data that I used include
10 certain retail-oriented marketing and customer care expenses that would be inappropriate
11 to include in a study that focuses on UNE costs. I removed these retail expenses using a
12 “top-down” method. Insofar as all of the retail-oriented expenses are in the common line
13 category, I removed them by reducing *total* common line costs by the SBC Illinois resale
14 discount.⁸⁰ In Table 1 of my direct testimony, I show that the actual costs incurred by
15 SBC Illinois to provide UNE-L is about \$14.91 and the actual costs incurred to provide
16 UNE-P is about \$25.62. Had I not reduced common line costs by the SBC Illinois resale
17 discount, UNE-L costs would have been \$18.14 and UNE-P costs would have been
18 \$28.85, which I describe in footnote 2 of Table 1 of my direct testimony. Accordingly,
19 by applying the resale discount factor to the common line costs, I removed \$3.23 of
20 expenses per month associated with retail activity (i.e., $\$3.23 = \$28.85 - \$25.62$) for each
21 UNE-L and UNE-P.

⁷⁹ *Gillan Direct*, pp. 13-14.

⁸⁰ The ARMIS post-separations costs for local switching and switched transport are already wholesale costs. See, *Aron Direct Testimony*, pp. 9-10.

1 Alternatively, instead of applying the resale discount, one could attempt to
2 identify specific accounts that contain retail expenses and zero out these accounts (or
3 reduce them by some other relevant proportion). I refer to this as a “bottom-up”
4 approach. Mr. Gillan’s argument implicitly takes this approach, insofar as he identifies
5 marketing costs associated with local switching whose benefits are not evident to him.⁸¹

6 To determine whether the bottom-up approach would produce different results
7 than the top-down approach, I computed actual costs by removing all expenses associated
8 with marketing and customer care from the common line, local switching, and switched
9 transport categories.⁸² For this exercise, I removed *all* such marketing and customer care
10 expenses, even though some marketing and customer care is appropriate for a wholesale
11 operation. The book costs resulting from this approach are reported in Table 1. Based on
12 2002 ARMIS information and using the bottom-up approach, I find that marketing and
13 customer care expenses in aggregate account for about \$1.01 for the loop and \$0.73 for
14 the remainder of the platform. This is substantially less than the \$3.23 that I removed
15 from UNE-L and UNE-P using the top-down approach. Thus, the top-down
16 methodology is far more conservative (i.e., removes far more costs related to retail) than
17 is the bottom-up approach to which Mr. Gillan appears to subscribe. The bottom-up
18 approach, however, may in fact be more appropriate. My top-down methodology applies
19 the average discount over all services rather than applying only specific discounts that
20 may be more directly applicable to the network access line. Of course, one would not use

⁸¹ *Gillan Direct*, p. 13.

⁸² I calculated this by subtracting marketing (line 1140) and customer care (1150) from total expenses (line 1190) for each cost element (i.e., for the common line, local switching, and switched transport).

1 both the top-down, resale discount, approach and the bottoms-up approach to remove
 2 retail expenses, because this would result in double counting.

TABLE 1				
ANALYSIS OF REVENUES AND COSTS PER LOOP OR LINE PER MONTH				
FOR SBC ILLINOIS				
(2002 COST DATA; BOTTOM-UP APPROACH)				
		Source	UNE-L	UNE-P
SBC Illinois				
1	Revenue (i.e., UNE price)	<i>CCM November 2002</i>	\$ 9.81 ⁽¹⁾	\$ 12.50 ⁽¹⁾
2	Book Cost (including capital cost)	ARMIS/LECG	\$ 18.12 ⁽²⁾	\$ 31.68 ⁽²⁾
3	Net	L1-L2	\$ (8.31)	\$ (19.18)
4	% Revenue Increase Required to Break Even	L2/L1-1	55%	132%
Sources & Notes:				
⁽¹⁾ Source is <i>CCM November 2002</i> , with an update by LECG using NRRI 2003 information. Includes non-recurring charges amortized over 36 months. See, <i>CCM May 2002</i> , p. 11. ⁽²⁾ Source is FCC ARMIS files 2002 (http://www.fcc.gov/wcb/armis/). Data are adjusted by LECG analysts to obtain total wholesale (UNE) expenses and investment. Key assumptions: Loop costs are reduced by marketing and customer service expenses; assumed depreciation rates are FCC approved depreciation rates; and assumed cost of capital is 12.19%. Costs include an adjustment of 3.72% for uncollectibles.				

3
 4 Finally, I will respond directly to Mr. Gillan’s assertion that SBC Illinois’
 5 marketing of local switching is not evident to him.⁸³ Wholesale “customer care” includes
 6 expenses associated with account representatives and others, who would, for example,
 7 assist the customer with billing or operational issues, as explained in further detail by
 8 SBC witness Mr. Barch.⁸⁴ I understand that these issues can be very complicated in the
 9 wholesale environment. It is clear that some amount of marketing and customer care for
 10 wholesale customers is appropriate, and the top-down method that I used to remove retail
 11 marketing expenses is far more conservative than the alternative approach.⁸⁵

⁸³ *Gillan Direct*, pp. 13-14.

⁸⁴ Rebuttal Testimony of David J. Barch on Behalf of SBC Illinois, Illinois Commerce Commission, Docket No. 02-0864, January 20, 2004.

⁸⁵ The amount of marketing and customer care that Mr. Gillan says is in Local Switching (*Gillan Direct*, p. 13) amounts to about 33¢ per line per month, which hardly seems worth discussing given that there is a gap

1

2 **Q24. MR. GILLAN ARGUES THAT YOUR “CASH FLOW ANALYSIS” IS FLAWED**
3 **FOR A NUMBER OF REASONS.⁸⁶ DO ANY OF MR. GILLAN’S REASONS**
4 **PERTAIN TO CASH OPERATING EXPENSES?**

5 A24. No. In his entire discussion of my cash flow analysis, Mr. Gillan never says a word about
6 the operating expenses that I estimate (which are in Table 2 of my direct testimony).⁸⁷

7 These operating expenses (which exclude depreciation expense, interest expenses,
8 income taxes, and any return to equity holders) amount to \$6.54 per UNE-L per month
9 (and \$10.97 per UNE-P per month). These expenses alone are around 72 percent over

10 the \$3.80 UNE-L price proposed by AT&T. The operating expenses that are included in
11 my analysis represent operations and maintenance by outside plant engineers, their cash
12 salaries and benefits, and cash expenses associated with their equipment, such as the
13 gasoline for the trucks, as well as a share of overheads that are used to run the business.

14 This means that even if SBC Illinois spent absolutely no capital at all on UNEs, paid no
15 interest on its bonds, did not pay its income taxes, and did not provide a cash return to
16 shareholders, the Company still would not be able to cover the operating expenses that it
17 incurred in 2002 in the provisioning of UNEs if it were to charge prices recommended by
18 AT&T.

19 Thus, even if all of Mr. Gillan’s concerns about my cash flow analysis were
20 correct (and, as I will discuss, none of them are), the unrebutted cash operating expenses

of around \$15 between actual cost and AT&T’s proposed UNE-L price. In any event, my methodology removes far more “retail related” costs from total costs than would the alternative method.

⁸⁶ *Gillan Direct*, pp. 14-18.

⁸⁷ Mr. Gillan makes the general statement that the analysis is “built upon the same errors” as the cost analysis in Table 1 (*Gillan Direct*, p. 16). My rebuttal of these supposed errors therefore applies here as well.

1 by themselves exceed the UNE prices recommended by AT&T. This is yet another
2 demonstration that the prices recommended by the AT&T do not compensate SBC
3 Illinois for the cash operating expenses that it incurs in providing UNEs, and that the
4 prices do not come near the total costs that reasonably would be incurred by even the
5 most efficient of hypothetical firms.

6
7 **Q25. MR. GILLAN ARGUES THAT YOUR CASH FLOW ANALYSIS IS IMPROPER**
8 **BECAUSE IT IMPLIES THAT CLECS ARE PROVIDING THE CASH “UP**
9 **FRONT” TO PURCHASE THE ASSET.⁸⁸ PLEASE COMMENT.**

10 A25. This is nonsense. A CLEC must provide compensation for the month-to-month capital
11 spending that the hypothetical firm would make to replenish existing capital that supports
12 UNEs. That is, if each month this capital stock degenerated by \$100 as a result of wear,
13 the firm has to rehabilitate that capital stock through capital expenditures. The prices that
14 the firm charges for its services (or for its UNEs) must generate that \$100 (in addition to
15 other expenses and costs) on an ongoing basis if the firm is to be able to provide services
16 and UNEs over the long term.

17 Consider a simple example. Suppose a capital asset (e.g., a piece of equipment
18 for providing POTS service) costs \$300 and lasts 3 years. Suppose the company has 12
19 such pieces of equipment. In a steady state, each year the company would, therefore,
20 incur \$1200 in depreciation cost (\$100 per machine times 12 machines), retire 4
21 machines, and purchase 4 machines. Its cash capital cost each year on an ongoing basis
22 would therefore also be \$1200 (\$300 per machine for 4 machines). Hence, in steady

⁸⁸ *Gillan Direct*, p. 16.

1 state, the cash capital expense would match the depreciation cost in each year. A cost-
2 based price for use of the (entire) machine for a year (assuming no other costs) would be
3 \$100. In no way would this amount to “paying for the [equipment] up front” as Mr.
4 Gillan suggests—it is the economic rental rate for the use of the equipment based on its
5 annual (depreciation) cost which, in steady state, can be approximated (exactly, in this
6 simple case) by the cash capital outlay in the current year divided by the number of
7 machines.

8 Outside of “steady state,” depreciation expense will deviate from cash capital
9 expense and the latter becomes an imperfect approximation or indicator of the former.⁸⁹
10 If the network is growing at a declining (or negative) rate, for example, related new
11 investments will be below depreciation of existing assets, all else equal. Also if the
12 (FCC-ordered) depreciation lives reflected in ARMIS are longer than the assets’
13 economic lives, depreciation expense will be less than cash capital outlay. Additionally,
14 if prices of such equipment are declining over time, new investment costs would be
15 below depreciation of booked investment. For equipment that is getting more costly
16 (such as, perhaps, copper loops or capitalized labor), cash capital expenditures would
17 exceed depreciation expense. To the extent that current prices differ from historical
18 prices, this is a virtue rather than a defect of the cash capital expense approach because
19 the cash capital expense is a more accurate reflection of forward looking cost.

⁸⁹ In addition, the firm may elect to use some of its cash (accounting) profits to buy capital. The firm thus would be using payments from (e.g.) CLECs to legitimately fund its expansion capital, in contradiction to Mr. Gillan’s argument that this should not be done. Indeed, it may be the case (it is an empirical issue) that the cash generated from reasonable profits can entirely fund all of the ILEC’s expansion with respect to

1 In addition, if the firm is growing, it may purchase more equipment than it retires
2 in a given year. In that case, the firm might finance the expansion in several ways,
3 including debt, issuing new equity, or retaining earnings rather than paying dividends to
4 shareholders. In each case, it is the shareholders or debt holders—the providers of
5 capital—who are financing the expansion, not the customers who provided the cash.
6 That the cash provided by (all) customers may be used to purchase new equipment (as
7 well as pay wages to labor, and cover other costs) rather than returned as a dividend to
8 shareholders does not obviate in any way the fact that the use of that capital is a cost to
9 the shareholders, and certainly does not mean that CLECs, or any other customers, are
10 “financing” such expansion.

11 **Q26. MR. GILLAN ALSO OBSERVES THAT YOUR CASH CAPITAL**
12 **EXPENDITURE INCLUDES SPENDING ON ITEMS UNRELATED TO POTS**
13 **SERVICE.⁹⁰ PLEASE COMMENT.**

14 A26. Mr. Gillan is correct that cash capital expenditures in my cash analysis include non-POTS
15 capex, as I pointed out repeatedly in my testimony. As I also pointed out repeatedly, this
16 caveat does not apply to my total cost analysis in Table 1, because the data source used
17 for that analysis separately identifies POTS-related costs. The total cost analysis in Table
18 1 of my direct testimony does not include non-POTS spending. In contrast, ARMIS does
19 not disaggregate cash capex into POTS and non-POTS investments, which precludes my
20 doing so for my cash analysis.

UNEs. This is not a controversial part of financial economics. Mr. Gillan’s argument is simply wrong on this point.

⁹⁰ Gillan Direct, p. 16.

1 Although my cash analysis is not a *cost* analysis (which the analysis in Table 1 of
2 my direct testimony is), it provides valuable information regarding the *insufficiency* of
3 existing UNE prices. SBC Illinois' existing UNE prices do not recover operating
4 expenses and the minimal amount of capital expenditure as proxied by depreciation
5 expenses. Insofar as the firm experiences negative cash flow from the provision of UNEs
6 even before considering interest expenses, income taxes, and a return to equity
7 shareholders, that is important evidence that UNE prices are too low.

8
9 **Q27. MR. GILLAN SAYS THAT THERE IS NO EVIDENCE THAT SBC ILLINOIS**
10 **MADE ANY CAPITAL EXPENDITURES ON CIRCUIT SWITCHING IN 2001.⁹¹**
11 **PLEASE COMMENT.**

12 A27. Mr. Gillan is mistaken. There is ample evidence in ARMIS that SBC Illinois made
13 significant capital expenditures on circuit switching in 2001 (and, in fact, in 2002 as
14 well). In 2001, central office switching plant additions for SBC Illinois were about \$231
15 million.⁹² This represented approximately 21 percent of SBC Illinois' total plant
16 additions. The FCC ARMIS rules regarding what the ILEC can assign to the local
17 switching category specifically exclude spending on data switching (non-circuit
18 switching).⁹³ Accordingly, all of the \$231 million in plant additions are associated with
19 circuit switching. I have no knowledge about what specific items were included in the
20 \$231 million that SBC Illinois spent on local switching, but the sorts of items that would

⁹¹ *Gillan Direct*, p. 17.

⁹² ARMIS 43-02, Table B-1 B, line 2210.

⁹³ The local switching category in the ARMIS 43-01 is related to the provision of local (voice) switching services to IXCs related to long-distance calls, and accordingly excludes non-switched (e.g., data) services. (One can see this in, for example, 47 CFR 69.106(a) as it discusses local switching applied to IXCs.)

1 be included in this account are line cards, memory modules, and capitalized labor for
2 installing those items.⁹⁴

3
4 **Q28. MR. GILLAN HAS RESERVATIONS ABOUT THE USEFULNESS OF THE**
5 **OTHER STUDIES FROM INVESTMENT FIRMS YOU CITE TO, ON THE**
6 **GROUND THAT THEY “CANNOT SEEM TO AGREE WITH EACH OTHER,**
7 **MUCH LESS WITH THE CONCLUSIONS OFFERED BY DR. ARON”**
8 **REGARDING ESTIMATES OF THE AVERAGE REVENUE FROM UNE-P IN**
9 **ILLINOIS.⁹⁵ PLEASE RESPOND.**

10 A28. On the contrary, while the analysts applied different assumptions when assessing the
11 costs and revenues associated with UNE-P, they nevertheless *all* came to the same
12 conclusion as I do: UNE prices are not compensatory relative to booked costs in Illinois.

13 The objective of the investment firms I cite in my testimony was to perform an
14 analysis of UNE profitability suitable to guide their investment advice to their clients.
15 Commerce Capital Markets, UBS Warburg, and Merrill Lynch all conclude that the
16 revenues from UNE-P are substantially below cost. I have performed a more careful –
17 and perhaps more conservative – analysis of UNE-L and UNE-P, and have arrived at the
18 same conclusion. All of these analysts agree on the fundamental point that UNE rates are
19 uneconomically low in Illinois. The fact that all of these analysts conducted independent
20 analyses that involved different assumptions, but all arrived at the same conclusion,
21 strengthens this conclusion, not weakens it.

22

⁹⁴ Maintenance activities whose benefits extend over multiple years would be candidates for capitalization. See, e.g., Thomas R. Dyckman, Roland E. Dukes, and Charles J. Davis, *Intermediate Accounting* (Chicago: Irwin, 1995), p. 498.

⁹⁵ *Gillan Direct*, p. 21.

1 **Q29. MR. GILLAN PROVIDES AN ANALYSIS TO CLAIM THAT SBC ILLINOIS’**
2 **UNE PRICES ARE NOT DISCOURAGING INVESTMENT.⁹⁶ PLEASE**
3 **DISCUSS.**

4 A29. Mr. Gillan presents SBC Illinois’ annual plant additions since 1992. He computes the
5 average pre-Act (i.e., 1992 through 1995) plant additions and the average post-Act (i.e.,
6 1996 through 2002) plant additions. He finds that the post-Act average is higher than the
7 pre-Act average, and infers from this that the use of UNEs has not harmed SBC Illinois’
8 investments. There are several flaws with his analysis.

9 First, Mr. Gillan chooses the wrong years for the “dividing line” to demonstrate
10 his point. My testimony is that the huge increase in UNE-P, intensified by the below-cost
11 UNE-P prices, should be expected to discourage investment.⁹⁷ UNE-P use in the SBC
12 Illinois territory did not begin until the quarter ending March 2001.⁹⁸ Therefore, using
13 1996 as the dividing line is irrelevant to an assessment of the effect in UNE-P on
14 investment.

15 Aside from this flaw in Mr. Gillan’s analysis, there is a more fundamental error
16 with his entire approach. One cannot simply look at a time series of investment figures
17 and identify from the pattern a causal relationship to a given decision variable. There are
18 numerous reasons, in addition to regulatory decisions, that affect year-to-year capital
19 spending decisions at a firm such as SBC Illinois. One cannot legitimately attribute
20 changes in an investment data series to one cost-driver (such as UNE-P pricing and

⁹⁶ *Gillan Direct*, pp. 18-19.

⁹⁷ *Aron Direct Testimony*, pp. 33-39.

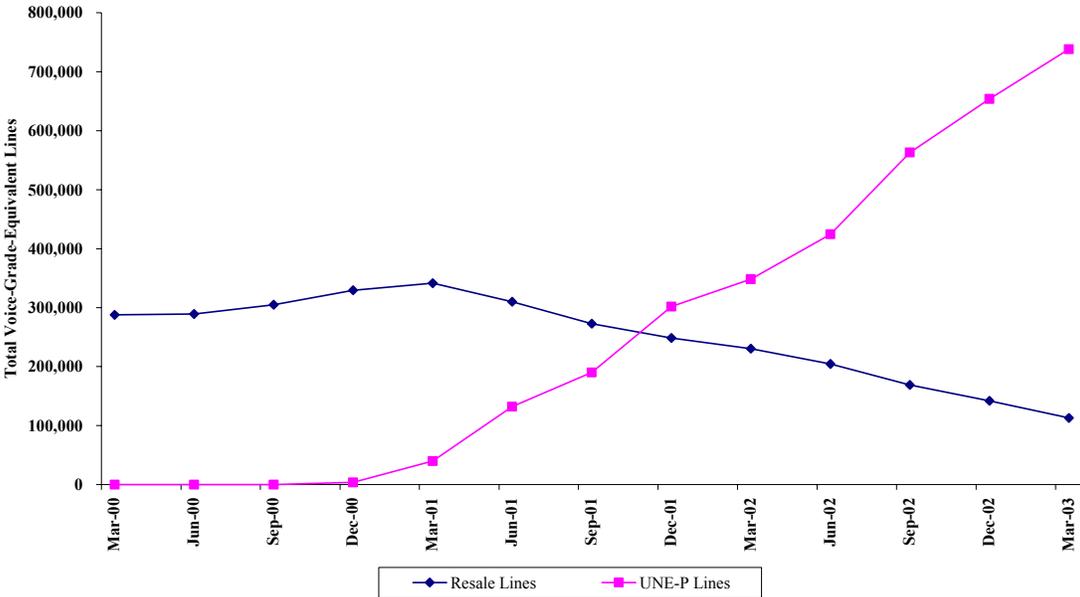
⁹⁸ *Aron Direct Testimony*, pp. 43-44.

1 usage) without engaging in some type of analysis to demonstrate that the cost driver (and
2 only that driver) is appropriate and control for other factors.

3
4 **Q30. MR. GILLAN SEEMS TO BE SURPRISED THAT YOU BELIEVE RESALE IS A**
5 **PLAUSIBLE METHOD OF ENTRY FOR CLECS. HE ARGUES THAT “LOCAL**
6 **SERVICE RESALE HAS BEEN DECLINING FOR YEARS, AS ENTRANT**
7 **AFTER ENTRANT CONCLUDED IT WAS UNPROFITABLE.”⁹⁹ DO YOU**
8 **AGREE?**

9 A30. The fact that resale has been declining is not proof that it is unprofitable. It more likely
10 suggests that CLECs are shifting their business model from resale-based entry to UNE-P
11 based entry, because the UNE-P is *more* profitable. As seen in Chart 1, the evidence
12 suggests that resale lines are being substituted for UNE-P lines.

Chart 1
Resale and UNE-P Lines in SBC Illinois Territory



Source: LECG Analysis of Data Provided by SBC

1 **Q31. MR. GILLAN CLAIMS THAT ALTHOUGH YOU DISCUSS THE HARMS**
2 **CAUSED BY UNDERPRICED UNES, YOU NEVER “ACKNOWLEDGE THE**
3 **HARMS CREATED BY UNECONOMICALLY HIGH UNE RATES.”¹⁰⁰ PLEASE**
4 **COMMENT.**

5 A31. I do not devote my direct testimony to the inefficiencies caused by inefficiently high
6 UNE prices because that is not the problem with today’s UNE prices for SBC Illinois.
7 UNE prices manifestly are too low, not too high, and the harms from uneconomically low
8 pricing are observable in the market today, as I documented. In contrast, I am not sure
9 what is to be gained by discussing a problem that does not exist.

10 **Q32. MR. GILLAN ARGUES THAT “LOCAL COMPETITION IS ONLY NOW**
11 **BEGINNING TO EMERGE, WITH UNE-BASED COMPETITION A CRITICAL**
12 **ELEMENT.”¹⁰¹ PLEASE COMMENT.**

13 A32. UNE-based competition that “emerges” as a result of inefficiently low UNE prices invites
14 into the market inefficient as well as efficient firms and serves to support firms that are
15 wards of the state, maintained by a subsidy flow from the ILEC, rather than substantial,
16 efficient competitors. Moreover, there is compelling evidence that the growth in UNE-P
17 lines (enhanced by below-cost prices) is harming the development of facilities-based
18 competition, as I discussed in my direct testimony.¹⁰² Because the new entrants
19 collectively are increasing their reliance on the ILEC network, there is less competition
20 along the network dimension.

21

⁹⁹ *Gillan Direct*, pp. 22-23.

¹⁰⁰ *Gillan Direct*, p. 23.

¹⁰¹ *Gillan Direct*, p. 23.

¹⁰² *Aron Direct Testimony*, pp. 42-45.

1 **Q33. MR. GILLAN CLAIMS THAT IF UNE PRICES WERE INCREASED, SBC**
2 **ILLINOIS' RETAIL SERVICE PRICES LIKewise WOULD HAVE TO BE**
3 **INCREASED.¹⁰³ IS THIS SO?**

4 A33. To support his argument, Mr. Gillan cites to a December 2002 Staff Report that compares
5 SBC Illinois' proposed UNE rates to its tariffed retail rates.¹⁰⁴ However, the analysis
6 cited by Mr. Gillan is incorrect as an analysis of potential CLEC profitability and the
7 potential for a price squeeze, because it does not include all local exchange revenues that
8 could reasonably be expected from a local service offering. It is more appropriate to
9 analyze actual revenues rather than tariffed rates, as I did in my direct testimony.¹⁰⁵ As I
10 explain in the analysis presented in my direct testimony, these local exchange revenues
11 include intraLATA toll and central office features. I found in my analysis that these
12 aggregate revenues exceed SBC's proposed UNE rates in all of the Company's access
13 areas.¹⁰⁶ I have updated my analysis here to reflect SBC's current proposed rates, and
14 this update reinforces my point. The available revenues exceed the proposed UNE prices
15 and provide sufficient margin to demonstrate that there would be no price squeeze.
16 Hence, Mr. Gillan's claim is unjustified.

17 **Q34. WOULD INCREASING LOOP RATES TO A GENUINELY TELRIC-**
18 **COMPLIANT LEVEL HARM UNE-L FIRMS?¹⁰⁷**

19 A34. Not necessarily. Certainly, inefficient firms will be harmed, at least until they become
20 efficient, but the Telecommunications Act does not contemplate the use of UNE prices to

¹⁰³ *Gillan Direct*, p. 23.

¹⁰⁴ *Gillan Direct*, p. 24, footnote 36.

¹⁰⁵ *Aron Direct Testimony*, pp. 24-34.

¹⁰⁶ *Aron Direct Testimony*, pp. 30-31.

¹⁰⁷ *Gillan Direct*, pp. 24-25.

1 support inefficient firms. Efficient, facilities-based firms may or may not be harmed. It
2 is true that an efficient forward looking, cost-based UNE-L (and UNE-P) price exceeds
3 today's existing prices for SBC Illinois. It is also true that "free money" from a subsidy
4 from a competitor can help a firm, at least in the short run. However, efficient UNE-L
5 firms will benefit from the elimination of subsidies that prop up otherwise-unviable
6 competitors. TA96 does not require subsidy flows from ILECs to CLECs; indeed, it
7 prohibits them because it requires that UNE prices be based on cost. Hence, any "harm"
8 to a UNE-L firm that results from the elimination of the subsidy should have no bearing
9 on policy.

10 UNEs and UNE prices under TA96 are designed to promote competition, not
11 provide a subsidy to a particular competitor, such as a CLEC that chooses to use UNEs.
12 Moreover, in the long run, the elimination of the subsidy flows for UNE-P and UNE-L-
13 based CLECs will help rationalize the market, will help ensure that those that remain are
14 efficient and win customers on the basis of superior products or product marketing rather
15 than on the basis of a subsidized input price, and that wise infrastructure investment
16 decisions are rewarded rather than penalized (by having the values of their investments
17 harmed by below-cost UNEs). The more important issue is that *customers* will benefit as
18 well because telecommunications investment decisions will be based on market
19 economics rather than inefficient pricing that deters both ILEC and CLEC from making
20 infrastructure investments. Efficient pricing will encourage more diversity and
21 robustness down to the network level, to the benefit of Illinois consumers.

1 **Q35. MR. GILLAN CLAIMS THAT THE NETWORK IS “INTENTIONALLY” A**
2 **COMMODITY AND NOT THE SOURCE OF PRODUCT DIFFERENTIATION.**
3 **AS SUCH, WILL IT NOT BE THE CASE THAT MORE FACILITIES-BASED**
4 **FIRMS REALLY DO NOT ADD SOCIAL BENEFITS?¹⁰⁸**

5 A35. Mr. Gillan is wrong because he confuses interoperability with homogeneity. The fact
6 that competing physical networks must (and do) interoperate smoothly in no way implies
7 that they lack unique and differentiated benefits to consumers. Wireless networks are an
8 obvious example of interoperable networks that are differentiated from the wireline
9 network. They are interoperable in that a wireless subscriber can seamlessly call a
10 wireline customer, and vice versa; but the features and characteristics of wireline service
11 differ meaningfully from those offered to wireless subscribers. There can be no question
12 that the differentiated features of wireless services—such as mobility, text messaging,
13 and digital imaging capabilities that are incorporated into wireless telephones—provide
14 enormous social benefits.

15 Mr. Gillan’s skepticism of the social benefit of competing facilities-based
16 providers derives, I believe, from his premise that if UNE prices were modified as I
17 advocate they should be, competing network providers would nevertheless choose to
18 mimic UNE-P providers and offer largely non-differentiated services. It may be true that,
19 if competing providers wanted merely to replicate the incumbent’s network, the social
20 benefits would be more limited than they in fact are. In fact, however, facilities-based
21 providers have more opportunity to bring value to consumers precisely because they are
22 not limited to so unimaginative a strategy, as UNE-P carriers are. Alternative network

¹⁰⁸ Gillan Direct, pp. 26-27.

1 providers have the ability to meaningfully differentiate their offerings through their
2 technology choices, as wireless providers have, and as cable telephony providers are
3 seeking to do, while maintaining technical interoperability of the networks.

4 In an empirical econometric analysis of the role of product heterogeneity in local
5 exchange markets in the late 90s (which was largely before the widespread use of UNE-
6 P), economists Shane Greenstein and Michael Mazzeo rejected the hypothesis of
7 homogeneous competitors.¹⁰⁹ Among CLECs' differentiation strategies that the authors
8 observed was a "buildout" strategy that entailed a facilities approach to enhance
9 reliability, ease of servicing of big clients in specific locales, and customizing services to
10 specific users.¹¹⁰ Another differentiation strategy was "service quality" in which the
11 CLEC sought to provide superior after-sale services, including superior network
12 maintenance activities (which would require a network to maintain).¹¹¹ According to the
13 Greenstein and Mazzeo study, therefore, facilities-based CLECs in their study strove to
14 differentiate themselves in meaningful and measurable ways, presumably to make
15 themselves more attractive to their customers.

16 Mr. Gillan implies that it is acceptable to discourage facilities-based competition
17 because such competition does not benefit society. This is a self-serving but
18 unsupportable argument that is contradicted by the requirements of TA96. The

¹⁰⁹ Shane Greenstein and Michael Mazzeo, "Differentiation Strategy and Market Deregulation: Local Telecommunications Entry in the Late 1990s," National Bureau of Economic Research Working Paper, June 2003. (Hereafter *Greenstein and Mazzeo*.)

¹¹⁰ *Greenstein and Mazzeo*, p. 8.

¹¹¹ *Greenstein and Mazzeo*, p. 8.

1 Telecommunications Act was not envisioned as a way of creating resellers all of whom
2 use the existing network infrastructure by holding UNE-P prices below an efficient level.
3

4 **Q36. MR. GILLAN CLAIMS THAT “INNOVATION IN THE VOICE**
5 **MARKETPLACE IS NOT GENERALLY FOUND IN THE NETWORK BUT,**
6 **RATHER, INVOLVES OTHER TANGIBLE DIMENSIONS OF A SERVICE—**
7 **HOW THE SERVICE IS PRICED, PACKAGED, AND SUPPORTED.”¹¹²**
8 **PLEASE COMMENT.**

9 A36. I agree that non-network “dimensions of a service” are important, and I agree that to the
10 extent competition consists largely of UNE-P-based CLECs, innovation will be limited to
11 these dimensions. But this limitation is an unfortunate artifact of, not a justification for,
12 uneconomically low UNE-P prices. As I discussed in my direct testimony, UNE-P and
13 resellers cannot add to network innovation.¹¹³ Clearly, there are certain important
14 innovations that can only be made at the network level. FCC Chairman Powell has
15 articulated some of these unique benefits. He has noted that facilities-based competition
16 provides benefits to society that resale (or what is essentially the same thing, UNE-P)
17 cannot provide. According to Chairman Powell:

18 [O]nly through facilities-based competition can an entity offer true
19 product and pricing differentiation for consumers.

20 Only through facilities-based competition will corporate spending on
21 equipment thrive.

¹¹² Gillan Direct, p. 27.

¹¹³ Aron Direct Testimony, p. 36.

1 Only through facilities-based competition can a competitor lessen its
2 dependency on an intransigent incumbent, who if committed to frustrate
3 entry has a thousand ways to do so in small, imperceptible ways.

4 Only through facilities-based competition can an entity bypass the
5 incumbent completely and force the incumbent to innovate to offset lost
6 wholesale revenues.

7 Only through facilities-based competition can our Nation attain greater
8 network redundancies for security purposes and national emergencies.¹¹⁴

9 While I believe that competition at the level of non-network dimensions can be
10 beneficial, I generally concur with Chairman Powell's assessment. There are socially
11 important benefits that are unique to innovation at the network level, and which
12 competition would encourage. Inefficient prices that skew the market toward non-
13 facilities-based competition in an effort to assist new entrants are misguided because they
14 increase sharing, and thereby decrease competition and innovation on those items that are
15 shared—namely, the network. Prices that do not compensate the ILEC for its costs create
16 a disincentive (on the parts of both ILEC and CLECs) to invest in the network, creating a
17 downward spiral in capital spending, infrastructure, employment, and customer benefits.

18
19 **Q37. MR. GILLAN ESTIMATES THAT ONLY ABOUT 44¢ OF EVERY REVENUE**
20 **DOLLAR IS ATTRIBUTABLE TO NETWORK-RELATED COSTS, SO “EVEN**
21 **WHERE COMPETITION FOCUSES ONLY ON NON-NETWORK**
22 **DIMENSIONS, IT BRINGS COMPETITIVE PRESSURE TO A SIGNIFICANT**
23 **PORTION OF THE INCUMBENT’S COST STRUCTURE.”¹¹⁵ PLEASE**
24 **COMMENT.**

¹¹⁴ Remarks of Michael K. Powell, Chairman of the Federal Communications Commission, at the Goldman Sachs Communicopia XI Conference New York, NY October 2, 2002, p.6 [as prepared for delivery].

¹¹⁵ *Gillan Direct*, p. 28.

1 A37. Mr. Gillan's 44¢ estimate is nonsense. When a proper analysis is done, it shows a very
2 different story, and one that is in stark contrast to Mr. Gillan's conclusion. Mr. Gillan's
3 approach (i.e., using revenues as a denominator) can produce a highly misleading result
4 because it would erroneously seem to attribute 56¢ of every dollar to non-network related
5 costs.

6 To see the error of such a claim, consider Table 2. A revenue dollar covers a
7 number of expenses, including the network-related items that Mr. Gillan considered, but
8 also several others. Mr. Gillan considered the items in lines 1, 2, and 3 collectively
9 (which he calls "network-related costs") and found that they accounted for 44¢. He
10 incorrectly attributes the balance (i.e., lines 4 through 8) to be costs to which the UNE-P
11 provider "brings competitive pressure." Insofar as the interest expense, equity return, and
12 income taxes on that equity return are the result of invested network assets there can be
13 no pressure brought to bear by UNE-P providers on these expenses. After all, not only
14 does the UNE-P provider not compete at the network level, it is fully dependent on the
15 ILEC's network. Similarly, there is some portion of overhead expenses that benefit the
16 network (and the UNE-P provider) and to which the UNE-P provider can bring no
17 competitive pressure.¹¹⁶

¹¹⁶ For example, a UNE-P provider does not bring competitive pressure to the ILEC's legal services (an overhead) that are used to (e.g.) obtain rights-of-way permission to new subdivisions. The UNE-P provider does not compete on this dimension, and in fact, depends on this ILEC activity.

1	Plant Specific Expenses
2	Plant Non-Specific Expenses
3	Depreciation Expenses
4	Customer Services Expenses
5	Overheads
6	Interest Expense
7	Income Taxes
8	Equity Costs

1
2 It is unambiguously true that the UNE-P provider can compete on Customer
3 Services level (i.e., line 4) and that it cannot compete on the network level (i.e., lines 1, 2
4 and 3). It would be useful, therefore, to compare the relative magnitudes of these
5 expenses, in order to assess Mr. Gillan’s claim. I, therefore, investigated what the FCC
6 calls the “Big Three Expenses.” These are Plant Specific Expenses, Plant Non-Specific
7 Expenses, and Customer Operations Expenses.¹¹⁷ (Plant specific and plant non-specific
8 expenses are together a subset of Mr. Gillan’s “network-related” expenses. They exclude
9 depreciation and amortization, which Mr. Gillan included; my analysis therefore is more
10 conservative than his.) I examined the Big Three expense categories that are associated
11 with the common line, local switching, and switched transport categories, rather than the
12 total ILEC expenses, to better identify those network and retailing expenses that are

¹¹⁷ 47 CFR 36.112(a). Plant Specific Expenses include Account 6210 Central Office Switching Expenses, 6220 Operator Systems Expenses, 6230 Central Office Transmission Expenses, 6310 Information Expenses, and 6410 Cable and Wire Facilities Expenses. I exclude Operator Systems and Information Expenses and look only at Switching, Transmission, and Cable and Wire Facilities (loop) expenses. Plant Non-Specific Expenses include account 6530 Network Operations Expenses. Customer Operations Expenses include 6610 Marketing and 6620 Services. In ARMIS, Plant Specific is found at line 1120 and Plant Non-Specific is found at line 1130. Customer Operations Marketing is found at line 1140, and Customer Operations Services is found at line 1150.

1 related to POTS service.¹¹⁸ I found that about 85 percent of the Big Three direct
2 expenses are associated with Plant Specific and Plant Non-Specific Expenses, and 15
3 percent are associated with Customer Operations. This means that of the direct expenses
4 incurred in the provisioning of POTS service, about 85 percent of the expenses are
5 associated with the network (i.e., with lines 1 and 2 of Table 2), on which the UNE-P
6 provider provides no competitive pressure, and about 15 percent are associated with
7 Customer Services (line 4), on which the UNE-P provider can provide competitive
8 pressure—even without considering depreciation expense. If I were to allocate capital-
9 related costs such as depreciation, interest expense, income taxes, and the equity return
10 on the basis of invested capital, it might change the proportions somewhat but the point
11 would remain: network-related expenses (even excluding depreciation) are some *four*
12 *times* customer-related expenses. My analysis shows what even the most untutored
13 observer of the telecommunications industry would anticipate, and that is that most of the
14 expenses associated with running a ubiquitous facilities-based local exchange telephone
15 company are associated with the network, not with customer operations. Mr. Gillan’s
16 analysis, in contrast, is misleading, and the inferences that he draws from it are wrong.

17
18 **Q38. DR. ARON, MR. GILLAN NOTES THAT YOU HAVE NEVER “CLAIMED”**
19 **THAT SBC’S LONG-DISTANCE ENTRY “WOULD MAKE NO**
20 **‘CONTRIBUTION TO THE MARKETPLACE’” UNLESS SBC FIRST BUILT A**
21 **NATIONAL LONG-DISTANCE NETWORK.¹¹⁹ IS THE FAILURE TO MAKE**
22 **SUCH A CLAIM CONSISTENT WITH YOUR POSITION REGARDING UNES?**

¹¹⁸ I reverse out the interstate allocation as I discussed earlier so that I calculate total costs, not just interstate-related costs.

¹¹⁹ *Gillan Direct*, p. 29.

1 A38. Indeed, Mr. Gillan is correct in attributing to me the view that RBOC entry into long
2 distance adds social value and enhances competition. Mr. Gillan fails to recognize,
3 however, an important distinction between RBOC entry in long distance, and UNE-P
4 competition in the local exchange.

5 In the former case, SBC Illinois leases *WilTel Communications Group's* network,
6 not AT&T's, MCI's, or Sprint's networks, so SBC's entry *does* bring new capacity to the
7 market.¹²⁰ Moreover, as I understand it, the SBC/WilTel transaction was entirely
8 voluntary on the parts of both buyer and seller, with the market, not regulators,
9 determining prices. Such market-based prices would be expected to encourage efficient
10 investment in new infrastructure, by both the incumbent long-distance companies and by
11 new entrants, such as SBC, or their infrastructure suppliers.

12 I do not think that Mr. Gillan is advocating market prices for the UNEs that
13 CLECs buy, or that ILECs can elect not to sell UNEs if the price is not compensatory (or
14 for any other reason). Rather, his testimony advocates UNE prices that manifestly are far
15 below actual cost. Perhaps if UNEs were set at market prices, third party providers such
16 as WilTel would invest in local infrastructure and lease it to CLECs, as has evolved in the
17 long distance market.

18
19 **Q39. MR. GILLAN ARGUES THAT THERE IS NO COMPETITIVE FAILURE IN**
20 **THE SBC ILLINOIS TERRITORY BECAUSE THERE ARE MORE LINES**
21 **BEING SERVED BY CLECS TODAY THAN A YEAR AGO, EVEN THOUGH**

¹²⁰ "WilTel Signs Largest Ever Capacity Deal," WilTel Press Release, January 22, 2003, /www.wiltel.com/newsroom/newsreleases/2003/2003-01-22.html.

1 **MOST OF THE ADDITIONS ARE UNE-P-BASED LINES.¹²¹ WHAT IS THE**
2 **HARM IN THAT?**

3 A39. The harm is that the increase in UNE-P-served lines is in part a result of a price subsidy
4 from the ILEC to the CLEC. It is not in the public interest to set prices below cost to
5 encourage CLECs to serve local exchange customers, for all of the reasons that I have
6 discussed.

7 As I indicated, the crowding-out of facilities-based carriers by non-facilities-based
8 carriers is harmful to Illinois. As I noted in my direct testimony,¹²² when UNE-P line
9 additions substantially increased during 2002, the gains in facilities-based lines
10 decreased, indicating that facilities investment has been discouraged by the inefficient
11 pricing of UNEs. However, as I also noted in my direct testimony,¹²³ the real harm is
12 done to Illinois consumers who have a less robust and redundant network architecture in
13 their state and less network innovation.

14
15 **Q40. ARE YOU PROMOTING AN “INDUSTRIAL POLICY” THAT OPPOSES UNE-**
16 **P?¹²⁴**

17 A40. Absolutely not. I did not characterize UNE-P as bad public policy, nor have I “attacked”
18 UNE-P as a method of entry, if it is provided where, and only where, each element
19 satisfies the Act’s impair test, and if prices are set properly. My contention is that UNE-P
20 prices are not compensatory. If UNE-P is being provided, it should be provided in

¹²¹ *Gillan Direct*, pp. 30-33.

¹²² *Aron Direct Testimony*, p. 45.

¹²³ *Aron Direct Testimony*, p. 14.

¹²⁴ *Gillan Direct*, p. 24.

1 compliance with the law, and should not be a subsidized method of entry. It is in the
2 interest of efficient competition that all prices be compensatory.

3 **Q41. HAVE YOU ADVOCATED THAT FACILITIES-BASED CLECS “BUILD NO**
4 **MATTER WHAT,” AS CLAIMED BY MR. GILLAN?**¹²⁵

5 A41. I never made such a foolish comment. Urging the elimination of a subsidy that exists for
6 the benefit of non-facilities-based carriers (which I do) is hardly the same as urging that
7 facilities-based carriers “build no matter what” (which I do not).

8 Mr. Gillan’s argument is that facilities-based CLECs cannot enter the market
9 because capital markets are essentially closed to them.¹²⁶ Mr. Gillan further notes that
10 non-facilities-based lines are increasing, and he concludes that this is not due to one
11 coming at the expense of another.¹²⁷

12 The first part of Mr. Gillan’s argument confuses cause and effect, and the second
13 part is inconsistent with the facts. The cause of the capital market’s concerns is that
14 facilities-based CLECs may not be profitable. One of the reasons for a lack of
15 profitability is that facilities-based CLECs must compete with non-facilities-based
16 CLECs that obtain UNEs at prices far below facilities-based costs. That investors
17 withhold funds from CLECs in such an unpromising economic environment should
18 surprise no one. Even facilities-based CLECs that would be more efficient than the ILEC
19 may not be able to compete with firms that are subsidized by the ILEC. Hence,
20 inefficiently priced UNEs harm efficient facilities-based CLECs even as they provide

¹²⁵ *Gillan Direct*, p. 31.

¹²⁶ *Gillan Direct*, p. 30.

¹²⁷ *Gillan Direct*, p. 31.

1 protection for inefficient non-facilities-based CLECs. This can result in a destructive
2 cycle in which the Commission hesitates to rationalize UNE prices for fear of harming
3 CLECs that have grown dependent on the subsidy, and perpetuates the perception that
4 facilities-based CLECs cannot make it in the marketplace. Moreover, the ILEC-
5 dependent CLECs will be very vocal in bemoaning their dependency to regulators.
6 Meanwhile, carriers that might otherwise be efficient facilities-based firms are
7 encouraged to avoid facilities investments and pursue UNE-P strategies. Rationalizing
8 UNE prices would reduce regulatory-induced dependency, increase genuine competition,
9 and set the stage for efficient infrastructure investment in the state, though this result may
10 require foresight to perceive and resoluteness to implement.

11
12 **Q42. DR. ARON, IN YOUR TESTIMONY YOU INDICATED THAT ILECS FACE A**
13 **“DOUBLE-WHAMMY” AS CLECS OBTAIN UNES AT PRICES BELOW COST,**
14 **AND THAT CLECS CREAM-SKIM THE BEST CUSTOMERS.¹²⁸ MR. GILLAN**
15 **ARGUES THAT SBC ILLINOIS ALSO, LIKE THE CLECS, SEEKS TO**
16 **PROVIDE ATTRACTIVE PACKAGES FOR THE BEST CUSTOMERS.¹²⁹**
17 **WHAT IS THE HARM IN COMPETING FOR THE BEST CUSTOMERS?**

18 A42. It is entirely rational and predictable that CLECs would compete for the most lucrative
19 customers and that ILECs would respond by seeking to retain those customers or win
20 them back. However, the effect of this competitive dynamic combined with, and
21 exacerbated by, uneconomic prices on both the wholesale (UNE) and retail sides of the
22 business creates a double-whammy that harms investment in the network. CLECs obtain
23 UNEs at below-cost prices, and then (rationally) compete for the customers who provide

¹²⁸ *Aron Direct Testimony*, pp. 39-41.

¹²⁹ *Gillan Direct*, pp. 34-36.

1 the most revenues (and generally, the largest contribution to the network). In contrast,
2 the ILEC is obligated to continue to serve unprofitable customers who provide no
3 contribution to the network. As previously profitable customers migrate to CLECs using
4 UNEs priced below actual costs, there are an increasing number of those who use the
5 ILEC's network, and cause costs on it, without contributing to its upkeep.
6

7 **III. RESPONSE TO THE TESTIMONY OF MESSRS. STARKEY AND BALKE**

8
9 **Q43. DID MESSRS. STARKEY AND BALKE ADDRESS CHARTS 1 AND 2 OF YOUR**
10 **DIRECT TESTIMONY?**

11 A43. Yes, they did, and I responded to this issue earlier.

12
13 **Q44. IN PARTICULAR, MESSRS. STARKEY AND BALKE CLAIM THAT "SBC'S**
14 **SUGGESTION THAT BECAUSE UNBUNDLED LOOP RATES IN WYOMING,**
15 **UTAH, SOUTH CAROLINA, OKLAHOMA, ARKANSAS OR ANY NUMBER OF**
16 **OTHER STATES WITH CHARACTERISTICS FAR REMOVED FROM THOSE**
17 **FOUND IN ILLINOIS, ARE HIGHER THAN THOSE IN ILLINOIS, AND**
18 **HENCE, SHOULD SOMEHOW INFLUENCE THE COMMISSION TO RAISE**
19 **RATES IN ILLINOIS, IS NONSENSE."**¹³⁰ **DO YOU HAVE ANY COMMENTS**
20 **ON THIS STATEMENT?**

21 A44. Yes, I do. Messrs. Starkey and Balke attribute this "suggestion" to SBC on page 13 of
22 their response testimony. On page 15, they attribute to me a similar suggestion that
23 because SBC Illinois' UNE prices are among the lowest in the nation, there is "some
24 problem with SBC Illinois' existing rates."¹³¹ They then proceed to argue that the

¹³⁰ *Starkey and Balke Direct*, p. 13.

¹³¹ *Starkey and Balke Direct*, p. 15.

1 “indication” is wrong. I am not sure where they found this “indication,” because it is not
2 an argument that I made and mischaracterizes my testimony. While I do conclude that
3 SBC Illinois’ UNE prices are below its actual costs of providing those UNEs, my
4 conclusions are not based on the comparison of SBC Illinois’ UNE prices to those in
5 other states, but on my analysis of SBC Illinois’ costs. My response to Messrs. Starkey
6 and Balke therefore is the same as my response to Mr. Gillan: A more careful reading of
7 my testimony would show that my presentation of UNE prices across the country is
8 followed immediately by the statement that low prices might not raise concerns if they
9 simply reflect correspondingly low costs, but that this is not the case in Illinois, as I then
10 proceed to demonstrate.¹³²

11
12 **Q45. MESSRS. STARKEY AND BALKE CLAIM THAT THE METHODOLOGY**
13 **USED TO DEVELOP THE UNE PRICES REFLECTED IN CHARTS 1 AND 2 OF**
14 **YOUR DIRECT TESTIMONY WERE NOT AVAILABLE FOR THEIR REVIEW**
15 **AND THAT, THEREFORE, THE RELEVANCE OF THE CHART BECOMES**
16 **QUESTIONABLE.¹³³ PLEASE COMMENT.**

17 A45. The UNE prices that I used, from the investment bank of CCM, are from a source of the
18 sort ordinarily relied upon by an expert. In addition, I reviewed CCM’s prices and
19 compared them with my own calculations for California, Texas, Illinois, Illinois, and
20 Michigan and found them to be reasonable. My staff discussed with the studies’ author,
21 Dr. Anna-Maria Kovacs, how the analysis was performed. I was satisfied that the price

¹³² *Aron Direct Testimony*, pp. 6-7.

¹³³ *Starkey and Balke Direct*, p. 13.

1 estimates reasonably reflect prices that were in effect at the time of the study and that the
2 overall price estimates were appropriate for comparison to my cost computations.

3 Moreover, I also compared Dr. Kovacs' price estimates with prices sponsored by
4 AT&T in an *ex parte* before the FCC during the Triennial Review proceeding.¹³⁴ Chart 2
5 shows the UNE-L price estimates of Dr. Kovacs and those sponsored by AT&T.¹³⁵ The
6 CCM data were published in November 2002, and, according to CCM, represent prices in
7 effect at that time.¹³⁶ The AT&T *ex parte* was presented a month earlier, and there is no
8 indication of the date at which each of the states' data were collected. Moreover, AT&T
9 may use a different weighting scheme than does CCM to develop an average UNE-L
10 price for the state, or AT&T may make a different assumption about the period over
11 which to amortize non-recurring charges.¹³⁷ Thus, one might expect some differences
12 between the two sets of data. Nevertheless, the first point of note is that there is less than
13 a 3% difference between CCM and AT&T's estimated weighted average UNE-L price
14 for SBC Illinois (i.e., \$9.80 for AT&T and \$9.53 for CCM). The second point is that
15 with a few exceptions the prices for the other states are remarkably similar. In those
16 states where the AT&T price is higher than or equal to the CCM price, it is higher by an
17 (unweighted) average of \$0.58. In the states where the AT&T price is lower (indicating

¹³⁴ Joan Marsh, "Notice of Oral Ex Parte Communication, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket Nos. 01-338, 96-98 and 98-147," September 24, 2002. (Hereafter *AT&T Triennial Review Ex Parte*.)

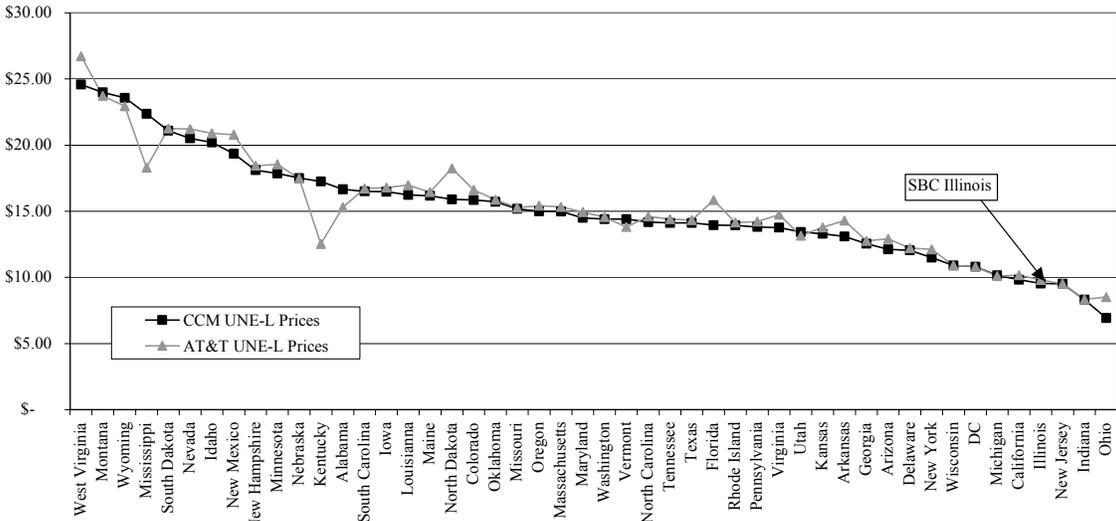
¹³⁵ Sources are as indicated in the chart.

¹³⁶ *CCM November 2002*, p. 4.

¹³⁷ CCM says that its UNE-L prices are based on a weighted average of the different geographic zones. See, e.g., *CCM November 2002*, p. 16.

1 more “conservatism” on the part of CCM), the AT&T price is lower by an (unweighted)
 2 average of \$1.34. In several instances (Florida, Kentucky, Ohio, Mississippi, and North
 3 Dakota), the two sets of prices differ substantially on a percentage basis, indicating,
 4 possibly, that the different parties possibly selected prices from different state
 5 commission orders, or different zone weightings.

Chart 2
Comparison of UNE-L Prices
Commerce Capital Markets versus AT&T



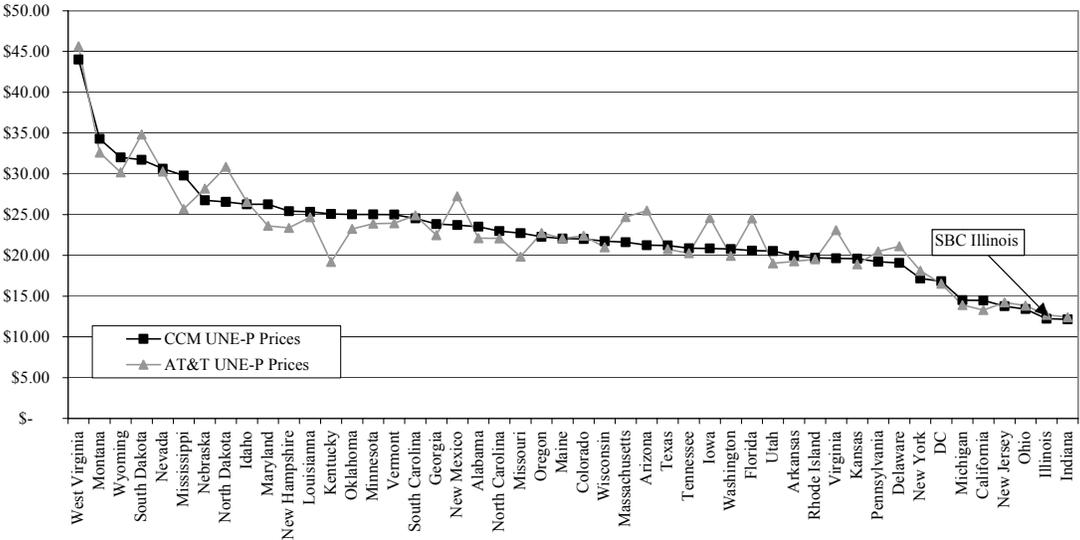
Sources:
 CCM November 2002
 Joan Marsh, “Notice of Oral Ex Parte Communication, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket Nos. 01-338, 96-98 and 98—147,” October 2, 2002.

6
 7 Chart 3 shows that the AT&T estimates for UNE-P prices are also similar to the
 8 estimates made by CCM.¹³⁸ The UNE-P prices carry over any differences in UNE-L
 9 prices, and can then compound (or offset) those differences as a result of differences in
 10 the prices of switching and transport. CCM computes traffic-sensitive prices two ways:

¹³⁸ The correlation between the AT&T and CCM UNE-P prices is 0.94. The correlation between the AT&T and CCM UNE-L prices is 0.96. (Note that a correlation coefficient of 1.00 indicates perfect (positive) correlation.)

1 one is based on an assumed 1411 minutes of use per line per month, the other is based on
 2 the state's DEM Minutes.¹³⁹ We use the latter assumption, as this is more in line with the
 3 ARMIS cost data that we use for each state. The AT&T exhibit does not describe how
 4 the prices were computed.

Chart 3
Comparison of UNE-P Prices
Commerce Capital Markets versus AT&T



Sources:
 CCM November 2002
 Joan Marsh, "Notice of Oral Ex Parte Communication, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket Nos. 01-338, 96-98 and 98—147," October 2, 2002.

5
 6 I conclude that these prices are remarkably similar, though there are some specific
 7 instances where states diverge by non-trivial amounts. (Illinois is not among those, since
 8 it varies by only 27¢ on the UNE-L price and only 47¢ (about 3.9 percent) for the full
 9 UNE-P.) Both CCM and AT&T identify Illinois as having one the lowest UNE-P prices
 10 in the country. Thus, while Messrs. Starkey and Balke question the validity of the CCM

¹³⁹ CCM November 2002, p. 16.

1 data (which was, by the way, provided in response to discovery),¹⁴⁰ they do not (nor can
2 they) provide any reason to believe that these prices are out of line, especially for Illinois.
3 Moreover, none of the differences in the prices would change at all my conclusions that
4 (1) SBC Illinois' UNE-L and UNE-P prices are far below the costs actually incurred by
5 the company to provide them and that (2) the existing UNE prices for SBC Illinois do not
6 reflect a properly-applied TELRIC methodology.

7
8
9 **Q46. MESSRS. STARKEY AND BALKE DIVIDE CHART 1 FROM YOUR DIRECT**
10 **TESTIMONY INTO "SEGMENTS" OR "SYMBOLIC CATEGORIES" THAT**
11 **THEY SAY REFLECT STATES' AVERAGE DENSITIES.¹⁴¹ THEY ARGUE**
12 **THAT THE STATES THAT ARE MORE DENSELY POPULATED, INCLUDING**
13 **ILLINOIS, WOULD HAVE LOWER UNE PRICES. PLEASE RESPOND.**

14 A46. Messrs. Starkey and Balke label their "segments" or "symbolic categories" as "less than
15 average," "relatively average," and "higher than average" densities.¹⁴² However, they
16 present absolutely no evidence that state densities really comport with their categories.
17 Nor do they provide any documentation on how the segments were derived or why the
18 divisions between segments are where they are.¹⁴³

¹⁴⁰ See *Response to AT&T Fifteenth Set JG11*.

¹⁴¹ *Starkey and Balke*, p. 14.

¹⁴² *Starkey and Balke*, p. 14.

¹⁴³ When asked, in discovery in Indiana, to support their categories, Messrs. Starkey and Balke simply repeated their mantra that the categories are "symbolic." They admitted that the categories are unsupported by any data. Nor did they indicate what their categories are symbolic of. Thus, their discussion of the "importance" of Maryland's movement from one symbolic category to another has no basis in any facts in this case. See Joint CLECs' Responses to SBC Indiana's Fourth Set of Data Requests of Joint CLECs, Nos. 131 and 132 in Cause No. 42393, Indiana Utility Regulatory Commission, August 29, 2003.

1 Messrs. Starkey and Balke’s main point, I gather, is that higher densities are
2 related to lower costs. As I will explain in more detail in my response to Dr. Staranczak,
3 however, an examination of the relationship across states between UNE prices and
4 density, or indeed, between UNE prices and forward looking costs or UNE prices and
5 booked costs demonstrates the substantial degree of randomness exhibited by TELRIC
6 prices. Most of the variability in UNE prices from one state to another is *not* explained
7 by line densities or even by cost proxy estimates. Hence, the “symbolic categories”
8 provided by Messrs. Starkey and Balke, for which they themselves provide no foundation
9 or evidence, upon further examination demonstrate the substantial randomness of UNE
10 prices.

11
12 **Q47. MESSRS. STARKEY AND BALKE CLAIM THAT THE CCM PRICES WILL**
13 **REQUIRE AN “UPDATE” BECAUSE SOME UNE PRICES ARE EXPECTED TO**
14 **CHANGE IN THE NEAR FUTURE.¹⁴⁴ PLEASE COMMENT.**

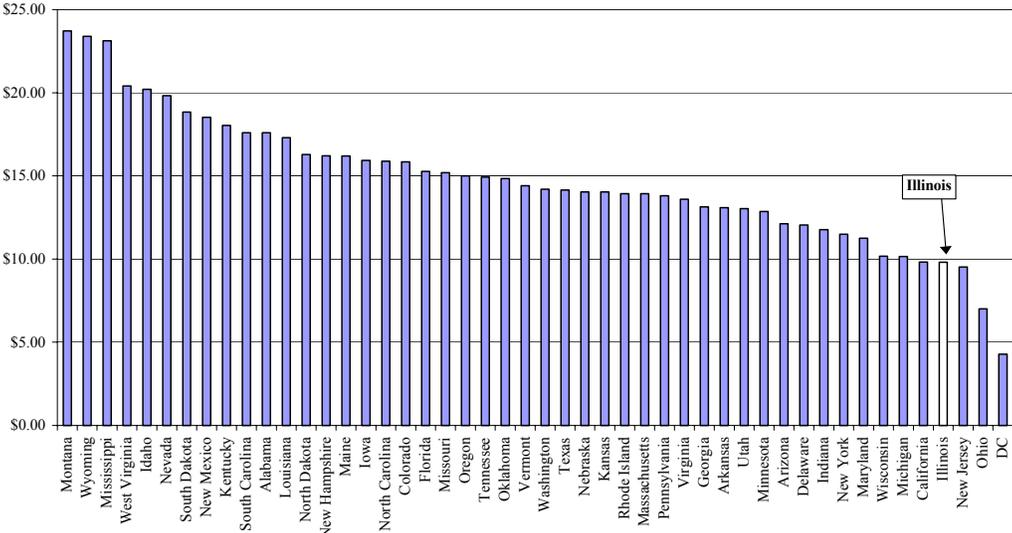
15 A47. I have no reason to dispute the fact that prices may change. In fact, they do change and I
16 have updated the prices accordingly. I present below an updated version of Charts 1 and
17 2 of my Direct Testimony to reflect more recent information on UNE-L and UNE-P
18 prices. The numbers are based on the UNE-L and UNE-P prices as developed by
19 investment analyst Dr. Anna-Maria Kovacs.¹⁴⁵ I updated the loop and switching prices
20 using data from the National Regulatory Research Institute (NRRI) and other

¹⁴⁴ *Starkey and Balke Direct*, pp. 15-17. The prices in Maryland and Wisconsin have in fact changed in the direction predicted by Messrs. Starkey and Balke.

¹⁴⁵ *See* Anna-Maria Kovacs et al., “The Status of 271 and UNE-Platform in the Regional Bells’ Territories,” Commerce Capital Markets Equity Research, November 8, 2002, p. 1. (Hereafter *CCM November 2002*).

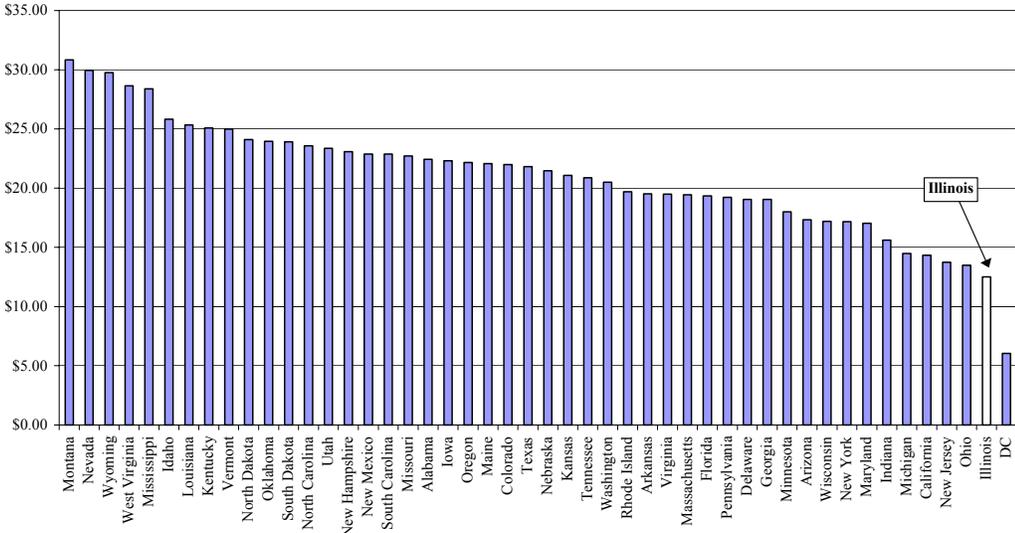
1 information. The CCM data, like the AT&T data from the Triennial Review *ex parte* I
2 discussed earlier and like the NRRI data I used for my update to the CCM prices, are a
3 snapshot, so they may have been accurate when made, but, over time, prices may be
4 revised.

**Chart 1, Revised
UNE-L Price**



Source: Anna Maria Kovacs et al. "The Status of 271 and UNE-Platform in the Regional Bells' Territories," Commerce Capital Markets Equity Research, November 2002, updated by LECG with NRRI information.

**Chart 2, Revised
 UNE-P Price**



Source: Anna Maria Kovacs et al. "The Status of 271 and UNE-Platform in the Regional Bells' Territories," Commerce Capital Markets Equity Research, November 2002, updated by LECG with NRR1 information.

1
 2 I believe that Messrs. Starkey and Balke attribute some sort of significance to the
 3 price reductions that have occurred in Maryland and Wisconsin.¹⁴⁶ I believe that their
 4 theory is that telecommunications costs generally have been decreasing over time,¹⁴⁷ and
 5 that telecommunications is a decreasing cost industry.¹⁴⁸ The theory is that prices
 6 likewise should decrease in Illinois as they have in Wisconsin and Maryland. They draw
 7 from this the inference that it is logically in "conflict" that revised prices could increase.

8
 9 **Q48. PLEASE COMMENT ON THIS LINE OF REASONING.**

¹⁴⁶ Messrs. Starkey and Balke state that it is "important" that Maryland is crossing from Segment 1 to Segment 3. (*Starkey and Balke Direct*, pp. 14-17.) However, insofar as there is no documentation on, or discernable meaning regarding the construction of these segments, one cannot logically conclude anything about whether crossing from one segment to another has any meaning at all.

¹⁴⁷ *Starkey and Balke Direct*, p. 18.

¹⁴⁸ *Starkey and Balke Direct*, p. 18.

1 A48. I fail to see any “conflict.” The line of “reasoning” pursued by Messrs. Starkey and
2 Balke is that the Commission should start with existing prices as a given and see if there
3 are any (downward) adjustments to be made. I can think of no policy justification to lock
4 in flawed prices.

5 As I have demonstrated, existing UNE prices for SBC Illinois are substantially
6 below the Company’s 2002 booked cost. It would be irresponsible, and contrary to the
7 Act’s requirement that UNE prices be based on cost, were the Commission to reduce
8 existing UNE-L prices once they became aware of the obvious flaws.

9 In fact, in Indiana I presented evidence like that I am presenting here in Illinois,
10 which showed that Indiana’s UNE prices were very significantly below SBC Indiana’s
11 booked costs. The Indiana Commission recently issued its decision in that case, in which
12 it ordered UNE-L prices to increase by over 40%.¹⁴⁹

13 **Q49. DR. ARON, MESSRS. STARKEY AND BALKE CLAIM THAT**
14 **TELECOMMUNICATIONS IS A DECREASING COST INDUSTRY.¹⁵⁰ WOULD**
15 **YOU PLEASE COMMENT ON THEIR DISCUSSION?**

16 A49. Yes. There are two senses in which an industry can be characterized as having
17 “decreasing costs.” By the standard economic definition, a decreasing cost industry is
18 one in which average costs are lower at higher levels of industry output (at a given point
19 in time). This can occur, for example, from the benefits of scale economies that are not
20 offset by increasing input prices.

¹⁴⁹ Order, *In the Matter of the Commission Investigation and Generic Proceeding of Rates and Unbundled Network Elements and Collocation for Indiana Bell Telephone Company, incorporated, d/b/a SBC Indiana, Pursuant to the Telecommunications Act of 1996 and Related Indiana Statutes*, Cause No. 42393 (January 5, 2004).

¹⁵⁰ *Starkey and Balke Direct*, p. 18

1 To the extent that local exchange telecommunications is, in this sense, a
2 decreasing cost industry (i.e., characterized by scale economies), an increase in
3 competition can cause average costs of any particular firm to *increase*. Whereas a single
4 firm can produce output at a low average cost, the introduction of another firm that gains
5 market share causes each firm to have lower output than did the single firm, and so each
6 will have higher average costs than was the case before, all else equal.

7 In contrast, Messrs. Starkey and Balke use the term in its lay sense, meaning that
8 costs fall over time at a given scale of operations.

9
10 **Q50. WHY DO MESSRS. STARKEY AND BALKE PRESENT EVIDENCE ON SBC'S**
11 **DECLINING OPERATING EXPENSES?**

12 A50. These witnesses appear to conclude that it demonstrates that a price increase is not
13 legitimate because the costs have trended downward (except for the increases in 2002).
14 They say that if SBC truly were interested in only updating its costs, we would expect to
15 see cost decreases.¹⁵¹

16 Messrs. Starkey and Balke then say that SBC Illinois “apparently believes this
17 Commission made a mistake in Docket No. 98-0486/0569.”¹⁵² I will discuss in my
18 response to Dr. Staranczak the incentives that commissions face in establishing UNE
19 prices that may explain why the prices established in Illinois are uneconomically low.
20 But regardless of the reason, the simple facts are that based on what we know today, (1)

¹⁵¹ Messrs. Brian F. Pitkin and Steven Turner make similar arguments (that cost trends have been down and that any revision of SBC Illinois’s UNE prices must be downward as well). My responses to Messrs. Starkey and Balke apply equally to the discussion of Messrs. Pitkin and Turner. See, *Pitkin and Turner Direct*, pp 9-10.

1 any fair-minded observer would conclude that the current prices are far below SBC
2 Illinois' actual costs; (2) it would be impossible for any real-world, though hypothetically
3 efficient, firm to attain the costs so far below those of SBC Illinois; (3) one might
4 suppose that we have learned something about genuinely TELRIC-based costs since
5 1996, and one of those lessons is that they are not arbitrarily low. With this information,
6 it is responsible to adjust prices to more economically efficient, TELRIC-compliant
7 levels.

8
9 **Q51. MESSRS. STARKEY AND BALKE CLAIM THAT INCREASING SBC**
10 **ILLINOIS' LOOP RATES "WOULD MOST LIKELY CONSTITUTE A**
11 **CONCEPTUAL ERROR."¹⁵³ PLEASE COMMENT.**

12 A51. I think that the concept that they are referring to is that because certain of SBC Illinois'
13 actual expenses have decreased over time, UNE-loop prices must decrease. Of course,
14 there is no such linkage because, as I discussed, the existing prices are uneconomically
15 low (and far below the costs that an efficient hypothetical firm reasonably could attain).
16 There is no logical "concept" that supports a downward adjustment to the current UNE
17 prices.

18 Moreover, while it may be true that switching costs have been declining, factors
19 relevant to loop costs are not as likely to decrease over time. This is because the
20 investment related to loop provisioning is labor-intensive.¹⁵⁴ Loops have not benefited as

¹⁵² *Starkey and Balke Direct*, p. 22.

¹⁵³ *Starkey and Balke Direct*, p. 15.

¹⁵⁴ Rebuttal Testimony of James R. Smallwood on Behalf of SBC Illinois, Illinois Commerce Commission, Docket No. 02-0864, January 20, 2004.

1 much from the advances in software design and computer processing power that
2 presumably account for the decline in switching costs.¹⁵⁵ According to ARMIS data,
3 cable and wire and circuit equipment investment per line has increased by 43 percent in
4 the past ten years. Thus, even if switching costs present a decreasing trend, costs for the
5 UNE-L costs should not necessarily be expected to decline.

6
7 **Q52. MESSRS. PITKIN AND TURNER PRESENT A TABLE SHOWING THAT UNE-P**
8 **PRICES HAVE BEEN GOING DOWN ACROSS THE COUNTRY.¹⁵⁶ ISN'T**
9 **THIS EVIDENCE OF THE DECLINING NATURE OF THE**
10 **TELECOMMUNICATIONS INDUSTRY?**

11 A52. No, it is not. As I will discuss in more detail in my response to Dr. Staranczak, there is
12 no evidence that UNE-P prices reflect actual costs. Hence, the observation that UNE-P
13 prices have been declining does not in any way prove that costs have been declining as
14 well.

15 **IV. RESPONSE TO THE TESTIMONY OF MR. DUNKEL**

16 **Q53. AT PAGES 8 THROUGH 10 OF HIS TESTIMONY, MR. DUNKEL CLAIMS TO**
17 **REFUTE YOUR UNE COST ANALYSIS WITH DATA THAT PURPORT TO**
18 **SHOW THAT SBC'S WHOLESALE BUSINESS IS, IN FACT, PROFITABLE.**
19 **DO HIS DATA REFUTE YOUR ANALYSIS?**

20 A53. No. Mr. Dunkel's numbers, if they are correct, do not undermine my analysis because
21 my analysis pertains to the costs of providing UNEs relative to the revenues from selling

¹⁵⁵ See, for example, Reply Brief for Petitioners WorldCom, Inc., The Association for Local Telecommunication Services, and Competitive Telecommunications Association. No. 00-555, In the Supreme Court of the United States, WorldCom, Inc., *et al.*, *Petitioners*, v. Verizon Communications, Inc., *et al.*, *Respondents*, July 23, 2001, p. 5.

¹⁵⁶ *Pitkin and Turner Direct*, p. 18.

1 them, which is the appropriate analysis for this proceeding. The numbers quoted by Mr.
2 Dunkel pertain, as Mr. Barch explains in his testimony, to SBC’s entire wholesale
3 business, which includes many other wholesale services such as switched and special
4 access, special billing arrangements, and billing and collection charges.¹⁵⁷ Whether
5 SBC’s wholesale revenues in the aggregate cover their costs in aggregate when one
6 includes services that are not UNEs is not relevant to my analysis nor to this proceeding.

7
8 **V. RESPONSE TO THE TESTIMONY OF MS. BALDWIN**

9 **Q54. MS. BALDWIN SEEMS TO BE CONCERNED THAT SBC’S PROPOSED UNE**
10 **RATES WOULD CAUSE “SUBSTANTIAL AND UNWARRANTED”**
11 **INCREASES IN RETAIL RATES FOR BASIC SERVICES.¹⁵⁸ IS HER**
12 **CONCERN JUSTIFIED?**

13 A54. Ms. Baldwin believes that the increase in UNE rates will pressure retail prices through
14 three channels. First, Ms. Baldwin argues that an increase in UNE rates would affect the
15 prices consumers pay to SBC’s competitors. Second, she hypothesizes that because
16 business services must pass an imputation test, an increase in UNE rates will “[create]
17 pressure on business retail rates.”¹⁵⁹ Third, Ms. Baldwin contends that an increase in
18 UNE rates might “raise concerns about anti-competitive price squeezes,” or that SBC
19 might engage in predatory pricing, and that the resolution of such concerns “could lead to
20 increases in residential retail rates.”¹⁶⁰

¹⁵⁷ *Dunkel Direct*, Attachment WDA-4.

¹⁵⁸ *Baldwin Direct*, pp. 5-7.

¹⁵⁹ *Baldwin Direct*, p. 6.

¹⁶⁰ *Baldwin Direct*, p. 8.

1 I note first that Ms. Baldwin offers no empirical justification for her concern that
2 retail prices will increase as a result of higher UNE prices, and her argument is therefore
3 purely conjecture. In any case, it is bad public policy to keep prices artificially low. I
4 have explained at length why prices below cost are harmful to competition and ultimately
5 to the consumers Ms. Baldwin wishes to protect from a “rate shock.”¹⁶¹

6 I respond to Ms. Baldwin’s price squeeze concerns in the same way I responded
7 to Mr. Gillan: Ms. Baldwin’s concerns about a potential price squeeze have been
8 addressed at length in my direct testimony.¹⁶² Neither Mr. Gillan nor Ms. Baldwin have
9 responded to the factual analysis I presented in my direct testimony, where I show that
10 concerns about a price squeeze are unwarranted. In my direct testimony I show that,
11 based on SBC Illinois’ revenue information, there is no evidence that SBC’s proposed
12 UNE rates would create a price squeeze.¹⁶³ In Table 3 below, I present an updated
13 analysis based on SBC’s current proposal, which supports the same conclusion.

¹⁶¹ *Baldwin Direct*, p. 6.

¹⁶² *Aron Direct Testimony*, pp. 24-34.

¹⁶³ *Aron Direct Testimony*, pp. 30-31.

TABLE 3 COMPUTATION OF AVERAGE RESIDENTIAL SBC ILLINOIS LOCAL SERVICE REVENUE AND UNE-P PRICES BY ACCESS AREA (UPDATED)				
By Line by month	ACCESS AREA			
	A	B	C	Total
Revenue Excl. Access ⁽¹⁾	** [REDACTED] **	** [REDACTED] **	** [REDACTED] **	** [REDACTED] **
Proposed UNE-P ⁽²⁾	\$11.72	\$20.51	\$23.25	\$21.51
Margin w/out Access	** [REDACTED] **	** [REDACTED] **	** [REDACTED] **	** [REDACTED] **
Access Revenues ⁽³⁾				** [REDACTED] **
Margin With Access				** [REDACTED] **

NOTES:
⁽¹⁾ Average monthly revenues per line per month are based on January through September 2002 data.
⁽²⁾ SBC proposed UNE-L price and the CCM November 2002 platform computations (with dial equipment minutes).
⁽³⁾ Sum of 2002 interstate switched access revenues (ARMIS) and 2002 intrastate switched access revenues (Aggregate Revenue Test from SBC Illinois Annual Price Cap Filing), divided by the total of business and residence lines (based on January through September 2002 data). These data are not available disaggregated by type of customer or by access area. The residential average access revenue may differ from the total average access revenue.

1
 2 Moreover, publicly available information on potential revenue reinforces my
 3 conclusion that there is no reason to believe that an increase in UNE prices would force
 4 competitors to raise their retail prices. For example, by AT&T’s own admission in its
 5 Triennial Review *ex parte* presentation,¹⁶⁴ CLECs can earn a gross margin in Illinois of
 6 56 percent under currently-effective UNE prices, the highest gross margin in the country,
 7 including all the other states in which AT&T already operates. Using the assumptions
 8 provided by AT&T in its own *ex parte* analysis, it is straightforward to calculate that
 9 AT&T would still earn at least a \$10.43 gross margin per line under SBC’s proposed
 10 rates (see Table 4). Likewise, a report by investment analysts at Banc of America
 11 Securities concludes that at the current UNE-P price, AT&T generates a gross margin of
 12 \$26.71 (68 percent) per local line in Illinois.¹⁶⁵ Moreover, according to my analysis of

¹⁶⁴ AT&T Triennial Review Ex Parte, chart labeled *UNE-P Associated Revenue*.

¹⁶⁵ David W. Barden, “AT&T Corporation Local Launches in More States; Putting UNE in Perspective,” Banc of America Securities U.S. Equity Research, May 13, 2003. (Hereafter *Banc of America*.)

1 their work, Banc of America’s analysis fails to include the access charges that AT&T
2 stands to earn from its customers. As shown in Table 4 below, when these access charges
3 are included, under SBC Illinois’ proposed rates, AT&T’s margins will be in the
4 neighborhood of \$20.86 per line (49 percent), according to Banc of America Securities’
5 revenue estimates. This is greater than the margin (in dollar terms) AT&T admitted to
6 the FCC was “sufficient,” and twice as much the minimum amount the FCC considered
7 to be sufficient margin in its *Verizon New Hampshire/Delaware 271 Order*,¹⁶⁶ which I
8 discuss in my direct testimony.¹⁶⁷

¹⁶⁶ *Verizon New Hampshire/Delaware 271 Order*, ¶ 157.

¹⁶⁷ *Aron Direct Testimony*, pp. 29-30.

TABLE 4					
PRICE SQUEEZE ANALYSIS WITH DIFFERENT REVENUE AND UNE-P PRICE ASSUMPTIONS					
		Based on SBC-IL Average Residential Revenue	Based on AT&T <i>Ex</i> <i>Parte</i>	Based on Banc of America Analysis of Generic CLECs	Based on Banc of America Analysis of AT&T
1	Revenues Excl. Access	**[REDACTED]** ⁽¹⁾	\$28.79 ⁽⁴⁾	\$36.56 ⁽⁶⁾	\$39.22 ⁽⁶⁾
2	Proposed UNE-P Price	\$21.51 ⁽²⁾	\$21.51 ⁽²⁾	\$21.51 ⁽²⁾	\$21.51 ⁽²⁾
3	Margin without Access	**[REDACTED]**	\$7.28	\$15.05	\$17.71
4	Access Revenues	**[REDACTED]** ⁽³⁾	\$3.15 ⁽⁵⁾	\$ 3.15 ⁽⁵⁾	\$ 3.15 ⁽⁵⁾
5	Margin (with Access Rev)	**[REDACTED]**	\$10.43	\$18.20	\$20.86
6	Percent Margin ⁽⁷⁾	**[REDACTED]**	33%	46%	49%

NOTES:
 Numbers in asterisks are confidential.
⁽¹⁾ SBC Illinois average revenue (excluding access revenues).
⁽²⁾ SBC Illinois' proposed UNE-L plus \$2.69 of estimated port and transport prices.
⁽³⁾ Sum of 2002 interstate switched access revenues (ARMIS) and 2002 intrastate switched access revenues (Aggregate Revenue Test from SBC Illinois Annual Price Cap Filing) divided by the total of business and residence lines (based on January through September 2002 data). The residential average access revenue may differ from the total average access revenue.
⁽⁴⁾ Average revenues per *AT&T Triennial Review Ex Parte*.
⁽⁵⁾ Access revenue estimate is an average of *UBS Warburg* estimate of \$4.00 and *Merrill Lynch* estimate of \$2.30.
⁽⁶⁾ Revenues (excluding access revenues) from *Banc of America*, pp. 8, 12.
⁽⁷⁾ Percent Margin is Line 5 divided by the sum of Lines 1 and 4.

1

2 **Q55. YOUR ANALYSIS IN TABLE 4 IMPLIES THAT CARRIERS SUCH AS AT&T**
 3 **DO NOT NEED TO INCREASE THEIR RETAIL PRICES, AND INSTEAD**
 4 **COULD ACCEPT A LOWER PROFIT MARGIN. WHY DO YOU BELIEVE**
 5 **THAT CLECS WOULD BE WILLING TO REDUCE THEIR MARGINS?**

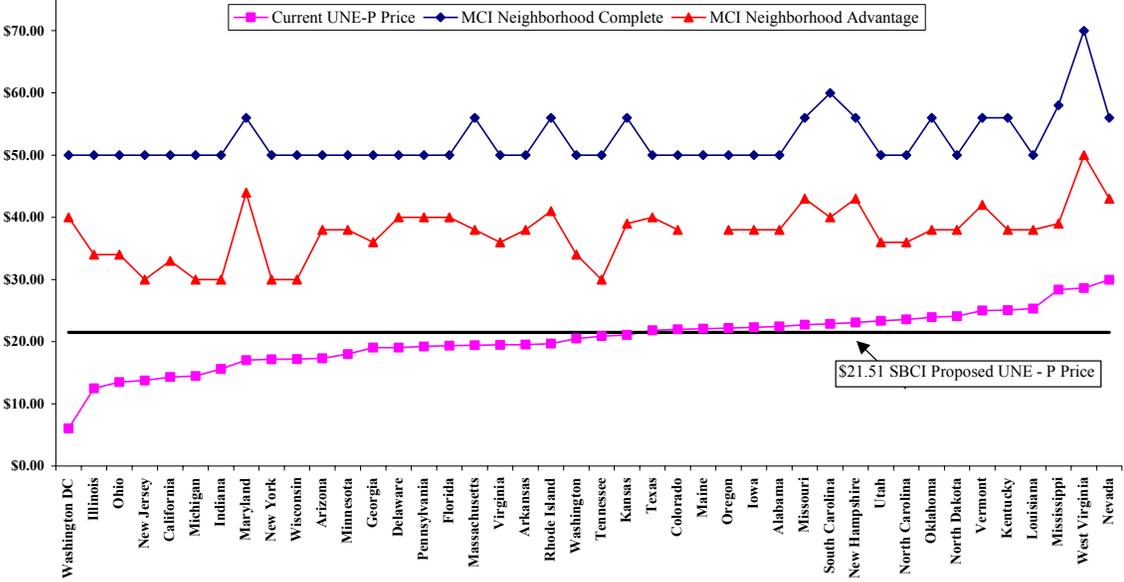
6 A55. My analysis of MCI's and AT&T's current offerings suggests that they both offer service
 7 in states that provide gross margins less than what would be the case in Illinois under
 8 SBC Illinois' proposal.

1 Chart 4 shows MCI's prices for its Neighborhood Advantage and Neighborhood
2 Complete plans in 40 and 41 states, respectively, (and Washington DC) along with the
3 average UNE-P prices in those states.¹⁶⁸ As can be seen on the graph, MCI's prices vary
4 among states with the same or similar UNE-P prices, and in other cases do not vary
5 among states with significantly different UNE-P prices. In Illinois today, MCI offers the
6 Neighborhood Complete plan for \$49.99. In fact, there are ten states in which MCI
7 operates and offers the Neighborhood Complete plan for the same \$49.99 as it is offered
8 in Illinois, and in which the average UNE-P price exceeds the SBC Illinois' proposed
9 UNE-P price (See Table 5).

10

¹⁶⁸ MCI Neighborhood Complete offers unlimited local, toll, and long distance calls, five features, and voicemail. MCI Neighborhood Advantage offers unlimited local calls, four features, and 200 minutes of long distance. Additional long distance minutes are 5 cents a minute. MCI's website states that The Neighborhood is available in all contiguous states and Washington, D.C. I was unable to find pricing data for Montana, South Dakota, Wyoming, New Mexico, Nebraska, and Idaho. Connecticut prices are not included in the chart because there is no UNE-P rate information for this state.

Chart 4
Pricing for MCI Retail Plans versus UNE-P Price



Note: The Neighborhood Complete plan includes unlimited local and long distance calling and five features. The Neighborhood Advantage plan includes unlimited local calling and four features.

Source: MCI website, Commerce Capital Markets Equity Research, Prices Updated Using NRRI

1

2

TABLE 5 MCI OPERATES IN 19 STATES WHOSE AVERAGE UNE-P PRICES EXCEED THE AVERAGE ILLINOIS UNE-P PRICE THAT SBC PROPOSES		
State	Average UNE-P Price	MCI Neighborhood Complete
Illinois	\$21.51*	\$49.99
Nevada	\$29.94	\$55.99
West Virginia	\$28.63	\$69.99
Mississippi	\$28.38	\$57.99
Louisiana	\$25.34	\$49.99
Kentucky	\$25.08	\$55.99
Vermont	\$24.99	\$55.99
North Dakota	\$24.10	\$49.99
Oklahoma	\$23.95	\$55.99
North Carolina	\$23.57	\$49.99
Utah	\$23.36	\$49.99
New Hampshire	\$23.08	\$55.99
South Carolina	\$22.87	\$59.99
Missouri	\$22.72	\$55.99
Alabama	\$22.43	\$49.99
Iowa	\$22.31	\$49.99
Oregon	\$22.17	\$49.99
Maine	\$22.08	\$49.99
Colorado	\$21.99	\$49.99
Texas	\$21.83	\$49.99
* SBC Illinois' proposed UNE-L price plus \$2.69 of estimated port and transport prices. <i>Source: MCI website, Commerce Capital Markets Equity Research, NRRRI data.</i>		

1
 2 Chart 5 shows the prices for what AT&T calls in most of its states the “Call Plan
 3 Unlimited.”¹⁶⁹ In Illinois, AT&T markets Call Plan Unlimited at \$26. As can be seen

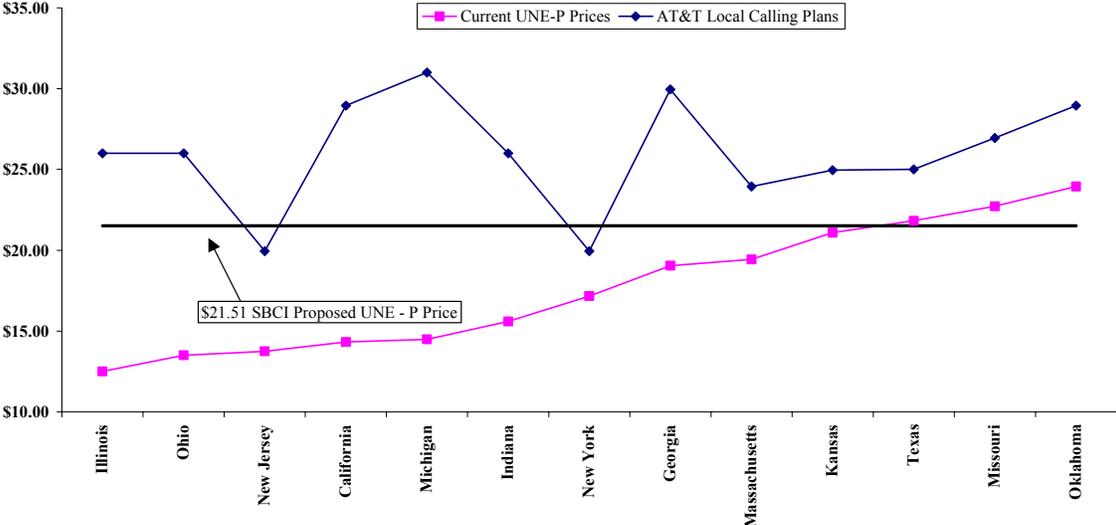
¹⁶⁹ The AT&T plan, "Call Plan Unlimited - 3 Features Enhanced," was analyzed because it afforded the most opportunity for comparison across states. The plan offers unlimited local calling, Caller ID with name and two additional features and requires AT&T long distance. In Texas the plan is called Local One Rate Plus 3. In Georgia and New York the plan gives the consumer a choice of any three features (one of which can

1 from the graph, there is no systematic correlation between the retail price AT&T charges,
2 and the UNE-P price it pays in the relevant states. AT&T charges less for this plan in
3 Kansas, New Jersey, and New York, and charges more for it in Georgia and Missouri. In
4 fact, while AT&T faces one of the lowest average UNE-P prices in the nation in Illinois,
5 it charges Illinois customers among its highest prices for its Call Plan Unlimited. The
6 *difference* between the price charged and the UNE-P price also varies wildly, as can be
7 seen in Chart 6. This difference is not AT&T's gross margin—AT&T's gross margin
8 will, in every case, be greater than the difference shown on the Chart, because the price
9 of the plan does not reflect additional charges that AT&T imposes on customers in each
10 state, and therefore, does not include additional revenue that AT&T earns in each state.
11 The difference that AT&T would earn in Illinois under SBC Illinois' proposed UNE-P
12 prices, not including the additional revenues I just alluded to, would exceed the
13 difference earned by AT&T in three of its other eight states.

14

be Caller ID with name). In these states the plan is called Call Plan 3-Pack and AT&T Local Service, respectively. In California, the plan only offers two features and is called Call Plan Unlimited – 2 Features Enhanced. In Oklahoma, the plan offers unlimited features and is called Call Plan Deluxe.

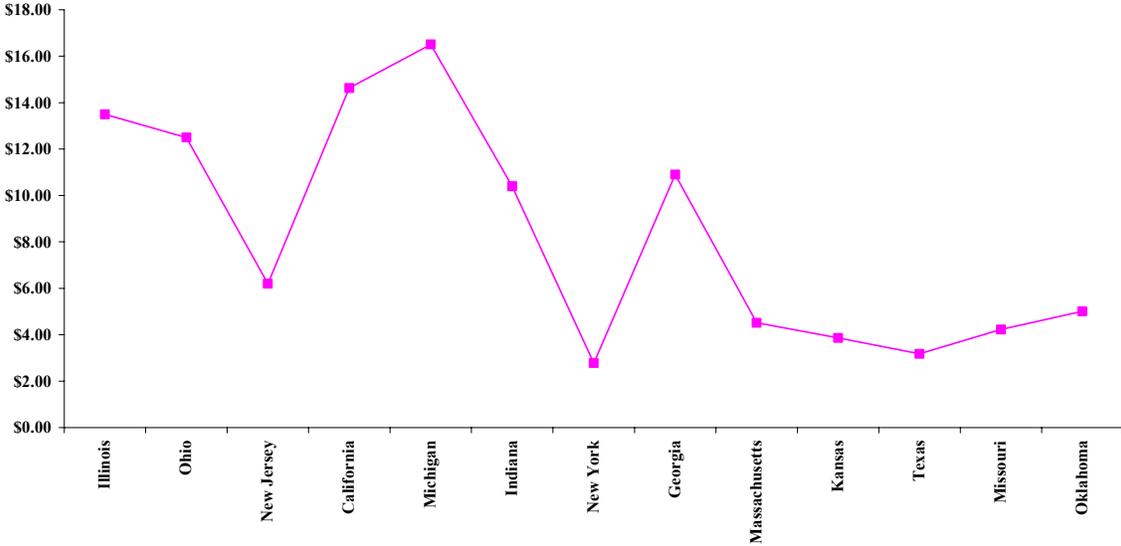
Chart 5
Pricing for AT&T Retail Plans Versus UNE-P Price



Note: AT&T plan is called "Call Plan Unlimited - 3 Features Enhanced" in most states, but the same or comparable plan is called slightly different names in other states.
 Source: MCI website, Commerce Capital Markets Equity Research, Prices Updated Using NRRI

1

Chart 6
Difference Between AT&T Price and UNE-P Cost



Note: Price - Cost difference is the cost of an AT&T three feature Local Calling plan minus UNE-P price. All plans include unlimited local calling, caller ID and two additional features, except California which only includes one additional feature.
 Source: MCI website, Commerce Capital Markets Equity Research, Prices Updated Using NRRI

2

1 **Q56. MS. BALDWIN SEEMS TO DISAPPROVE OF YOUR ANALYSIS OF THE**
2 **COMPOSITION OF ENTRY INTO THE LOCAL TELECOMMUNICATIONS**
3 **MARKETPLACE IN ILLINOIS. SHE CONTENDS THAT THE OBJECTIVE OF**
4 **THIS FILING SHOULD BE TO ESTABLISH COST-BASED UNE RATES, NOT**
5 **TO “FAVOR ONE FORM OF ENTRY INTO THE LOCAL MARKET OVER**
6 **ANOTHER.”¹⁷⁰ PLEASE RESPOND.**

7 A56. I agree with Ms. Baldwin that the objective of this proceeding is to establish cost-based
8 UNE rates, and I concur that it is the establishment of cost-based rates for UNEs that will
9 allow the development of “economically efficient” competition. I have emphasized this
10 point time and again: the objective of my testimony is to demonstrate that SBC Illinois’
11 current UNE prices are substantially below cost, and to explain the social harms that
12 these inefficiently low prices create. UNE prices that subsidize CLEC operations are
13 harmful to consumers and to competition. I believe my analysis of the state of
14 competition in Illinois clearly illustrates the undesirable effects of below-cost UNE rates:
15 CLECs are increasingly relying on SBC’s network to provide service, while facilities-
16 based CLEC line additions have slowed dramatically. Moreover, below-cost UNE rates
17 not only discourage CLEC investment; they discourage ILEC investment as well, as was
18 recently noted by the Seventh Circuit:

19 Prices for unbundled elements affect not only the allocation of income
20 among producers but also new investment and innovation: if the price to
21 rivals is too low, they won’t build their own plant (why make capital
22 investments when you can buy for less, one unbundled element at a
23 time?), and the incumbents won’t maintain or upgrade their facilities (why
24 make costly capital investments if you have to sell local loops to rivals for
25 less than it costs to produce them?).¹⁷¹

¹⁷⁰ *Baldwin Direct*, p. 11.

¹⁷¹ *AT&T Communications of Illinois, Inc. v. Illinois Bell Tel. Co.*, 2003 WL 22533675 at *1 (7th Cir. Nov. 10, 2003).

1 **VI. RESPONSE TO THE TESTIMONY OF DR. STARANCZAK**

2 **Q57. DR. STARANCZAK SEEMS TO ARGUE THAT SBC ILLINOIS’S UNE-P**
3 **PRICES ARE REASONABLE BECAUSE THEY ARE COMPARABLE TO**
4 **RATES IN OTHER STATES THAT ARE SIMILAR “IN TERMS OF**
5 **POPULATION AND TERRAIN.”¹⁷² IS HE CORRECT?**

6
7 A57. No. His conclusion neither follows from his premise, nor is his premise factually correct.

8 Presuming for the moment that Dr. Staranczak were correct and the UNE-P prices
9 in Illinois were systematically similar to prices in appropriately “comparable” states, this
10 would in no way imply that the UNE-P prices in Illinois are TELRIC-compliant or that
11 they are compensatory. Rather, it reflects the fact that state commissions respond to
12 similar political pressures and regulatory incentives across the country. The short run
13 interests of consumers to enjoy lower prices, advocated by consumer groups such as
14 those in this proceeding, and the regulatory desire to provide evidence of “competition,”
15 even if synthetic, create incentives for regulators to respond by decreasing prices below
16 long run costs.¹⁷³ Despite the good intentions of the regulators to advance consumer
17 welfare, this short run policy making is harmful to consumers and society in the long run,

¹⁷² Staranczak Direct, p. 8.

¹⁷³ See for example, J. Gregory Sidak and Daniel Spulber, *Deregulatory Takings and the Regulatory Contract*, (Cambridge: Cambridge University Press, 1997); Richard J. Gilbert and David M. Newbery, “The Dynamic Efficiency of Regulatory Constitutions,” *RAND Journal of Economics*, Vol. 25, No. 4 (Winter 1994); Thomas P. Lyon and John W. Mayo, “Regulatory Opportunism and Investment Behavior: Evidence from the U.S. Electric Utility Industry,” (unpublished working paper, June 2000); Oliver E. Williamson, “Franchise Bidding for Natural Monopolies – In General and With Respect to CATV,” *Bell Journal of Economics*, Vol. 7, No. 1 (Spring 1976); and Paul L. Joskow and Richard Schmalensee, “Incentive Regulation for Electric Utilities,” *Yale Journal on Regulation*, Vol. 4, (1986); Brian Levy and Pablo T. Spiller, “The Institutional Foundations of Regulatory Commitment: A Comparative Analysis of Telecommunications Regimes,” *Journal of Law, Economics and Organization*, Vol. 10, No. 2 (1994), p. 204; and David M. Newbery, “Rate-of-Return Regulation Versus Price Regulation for Public Utilities,” in *The New Palgrave Dictionary of Economics and the Law*, (London: MacMillan, 1998).

1 as unremunerative prices reduce investment and encourage inefficient entry. These
2 incentives are fueled and reinforced by the fact that low prices established by one state
3 commission are touted by CLECs to other state commissions as a benchmark, and those
4 benchmarks assume the legitimacy attendant to having been adopted by another
5 regulatory body, and are therefore perpetuated into other state regulatory decisions.

6 I do not wish to imply that ILECs do not also engage in vigorous regulatory
7 advocacy on their own behalf, or that regulators are not conscientious, sophisticated, or
8 smart. However, the insight of political economic theory is that in the midst of vigorous
9 regulatory advocacy on both sides, regulators themselves have incentives to engage in
10 behavior that appears on the surface to be most conducive to “promoting” competition,
11 but may not advance long-run consumer welfare. Under the current TELRIC regime,
12 these incentives lead to the downward spiral of unremunerative TELRIC prices that we
13 see in this country today.

14
15 **Q58. DO YOU BELIEVE THAT STATE COMMISSIONS AS A WHOLE “ARE**
16 **EITHER GROSSLY INCOMPETENT OR PART OF SOME SORT OF**
17 **NATIONAL CONSPIRACY TO PRICE UNES BELOW COSTS,”¹⁷⁴ AS**
18 **CHARGED BY DR. STARANCZAK?**

19 A58. No. This is a superficial and histrionic argument. As an economist, I conclude that the
20 best theory that explains the observed facts about UNE prices around the country is that
21 state commissions are neither grossly incompetent nor engaging in conspiracy, but rather
22 that they respond to the incentives they face, as I have described.

23

¹⁷⁴ *Staranczak Direct*, p. 11.

1 **Q59. WHY DO YOU SAY DR. STARANCZAK'S PREMISE IS FACTUALLY**
2 **INCORRECT?**

3 A59. As Dr. Staranczak did not provide the data or analysis to support his claims, it is difficult
4 to tell whether the states he identifies are similar “in terms of population and terrain.”
5 However, if one looks at the ILECs’ line density (the number of access lines per square
6 mile in the RBOC’s service territory)¹⁷⁵, a measure that is generally considered to be a
7 cost driver for telecommunications networks, his claims do not withstand scrutiny. The
8 line density in SBC’s territory in Illinois is 587 lines per square mile. While New
9 Jersey’s UNE-P prices are comparable to those in Illinois, New Jersey’s line density (in
10 the territory of Verizon, the major ILEC in that state) is over 1000—nearly double that in
11 Illinois. Other states with similar line densities to Illinois, including Florida,
12 Massachusetts, and Rhode Island (all of which have line densities in the 500s) have
13 UNE-P prices around \$20, which is 60 percent higher than the average UNE-P price in
14 Illinois. Indeed, there are other states, particularly the SBC states noted by Dr.
15 Staranczak, with line densities significantly lower than those in Illinois, but with similar
16 UNE-P prices. However, these facts merely demonstrate that across the country,
17 *variability* in UNE prices (not just the level of UNE prices relative to costs) reflects a
18 substantial amount of regulatory policy distortion, rather than simply reflecting costs, as
19 required by the Act.
20

¹⁷⁵ Square miles in the RBOC service territory were obtained from the HCPM model results posted on the FCC’s website. See, “HCPM Model Results (January 20, 2000),” www.fcc.gov/wcb/tapd/hcpm. Total lines correspond to the total billable access lines in 2001 from ARMIS Report 43-01, line 2150.

1 **Q60. HOW DO YOU KNOW THAT THE VARIABILITY OF UNE PRICES**
2 **REFLECTS A SUBSTANTIAL AMOUNT OF POLICY DISTORTION?**

3 A60. I have examined the UNE prices across the country, along with my own ARMIS cost
4 estimates, the line density data I described earlier, and an estimate of the forward-looking
5 UNE-P cost as proxied by the FCC's "synthesis" (or hybrid-cost proxy) model¹⁷⁶, to
6 determine whether the variations in UNE prices from state to state are well-explained by
7 variations in costs. I find that state commissions have in fact adopted UNE prices that
8 vary substantially across states for reasons that have little to do with objective,
9 measurable variations in their relative costs. To perform this analysis I ran ordinary least
10 squares ("OLS") regressions of UNE-P price on the cost proxies I just mentioned. If the
11 UNE prices adopted by state commissions are applied consistently across states and
12 properly reflect the carriers' forward looking costs of providing UNEs, then the OLS
13 model should "fit" the data closely; that is, the model's adjusted R-squared value should
14 be close to one. My regression results, which I provide as Schedule DJA-R1, reject this
15 hypothesis. In all the regressions I considered, the adjusted R-squared value did not
16 exceed 42 percent. This means that 58 percent of the variability of UNE prices across the
17 states is unexplained by *all* of the identified cost factors together.

18 Of course, I recognize that none of these cost proxies are perfect proxies for
19 forward-looking cost, but the fact that UNE prices vary substantially in ways that are
20 unexplained by all of these cost proxies suggests that state commissions exercise their
21 discretion in establishing UNE prices in ways that are random with respect to costs.

¹⁷⁶ "HCPM Model Results (January 20, 2000)," www.fcc.gov/wcb/tapd/hcpm.

1 Hence, justifying prices in one state by comparing them to prices in other states is an ill-
2 founded exercise.

3
4 **Q61. DOES THE PRODUCTIVITY FACTOR REFERENCED BY DR. STARANCZAK**
5 **SUPPORT HIS CLAIM THAT UNE PRICES PROPOSED BY STAFF ARE**
6 **SOUND?**¹⁷⁷

7 A61. No, on the contrary, it supports the opposite. According to the productivity factor that the
8 ICC applies to SBC under its price cap regulation plan, which is supposed to reflect the
9 amount by which the ICC believes that SBC Illinois can be expected to increase in
10 productivity each year, it would take over 20 years for SBC Illinois to decrease its costs
11 from its 2002 actual costs to the purported TELRIC costs on which its current UNE
12 prices are based. If one adjusts the productivity factor to remove the 1% consumer
13 dividend (which is included in the 4.3% productivity factor but was explicitly recognized
14 as not reflecting expected productivity enhancements),¹⁷⁸ it would take over 20 years for
15 SBC Illinois to achieve the efficiencies necessary to decrease its costs to the level of the
16 current purported TELRICs.¹⁷⁹ The idea that the difference between booked costs and
17 current UNE prices in Illinois could legitimately reflect achievable efficiencies by any
18 real firm is simply inconsistent with the ICC's own productivity expectations as
19 memorialized in the productivity factor.

¹⁷⁷ *Staranczak Direct*, p. 7.

¹⁷⁸ See Order in Docket 92-0448/93-0239, Consol., 1994 Ill. PUC LEXIS 437.

¹⁷⁹ $t \text{ years} = \frac{\ln(12.50) - \ln(31.68)}{-0.033} = 28.18$, where \$12.50 is the existing price, \$31.68 is the 2002 reported costs, and 0.033 is the "X-factor."

1
2 **Q62. IS A PRODUCTIVITY FACTOR APPROPRIATELY APPLIED TO**
3 **INDIVIDUAL UNE PRICES?**

4
5 A62. No. Individual elements have significantly different prospects for productivity
6 enhancements, as I explained earlier. For example, switching, which is an information
7 technology, may face significant productivity enhancements as computer technology
8 continues to improve. Outside plant costs, however, are driven to a large degree by labor
9 costs (which tend to increase over time) and other cabling costs, which may be less
10 sensitive to improvements in information technology. Whatever the specific effects of
11 technology on these different elements, it is clear that they differ and that the anticipated
12 cost changes would therefore differ from one element to another as well, perhaps very
13 substantially. Productivity factors adopted in price cap proceedings reflect an average or
14 aggregate across the Company's entire operations, based on actual booked costs.
15 Although they can be useful for purposes of establishing an overall cap on average prices
16 as a substitute for rate of return regulation, they were not designed for and are not useful
17 for identifying anticipated cost trends on any individual part of the network based on
18 forward-looking, hypothetical costs.

19
20 **Q63. DR. STARANCZAK CLAIMS THAT SBC'S REVENUES WOULD INCREASE**
21 **BY \$122 MILLION IF UNE PRICES WERE RAISED TO THE LEVEL OF**
22 **ARMIS COSTS THAT YOU QUANTIFY.¹⁸⁰ WHAT IS THE IMPORTANCE OF**
23 **THIS ANALYSIS?**

¹⁸⁰ *Staranczak Direct*, p. 11.

1 A63. The only importance of this analysis is that, if it is correct, it quantifies the degree to
2 which current regulatory policy subsidizes CLECs. TA96 requires UNE prices to be
3 based on cost, so if the Commission believes that subsidies to CLECs are good public
4 policy the subsidies must be implemented through explicit mechanisms¹⁸¹—rather than
5 enacting implicit subsidies from the ILEC to UNE-based CLECs— in a way that does not
6 favor UNE-based entry over other entry strategies. If Dr. Staranczak is correct, Illinois
7 would have to raise \$122 million in taxes or other revenue in order to fund the existing
8 regulatory subsidy as an explicit subsidy. This gives the commission perspective on the
9 costs of the current regulatory policy of implicit, distortionary subsidy through UNE
10 prices.

11
12 **Q64. DR. STARANCZAK CLAIMS THAT IF UNE RATES ARE INCREASED IN**
13 **ILLINOIS, THERE WILL STILL BE CREAM SKIMMING.¹⁸² DO YOU**
14 **AGREE?**

15
16 A64. Yes. Dr. Staranczak is correct that cream skimming is common throughout the economy
17 and would likely persist if UNE prices are raised to more economically rational levels.
18 My point was quite different: it was, first, that charging uneconomically low UNE prices
19 does not *discourage* CLECs from cream skimming (a fact with which Dr. Staranczak also
20 seems to agree, and which implies that low UNE prices tend not to benefit the low-
21 spending customers that are the traditional concern of universal service regulatory
22 policy), and second, and most importantly, that cream skimming is socially harmful *when*

¹⁸¹ § 252.

¹⁸² *Staranczak Direct*, p. 14.

1 *UNE prices are uneconomically low.* I neither deny the existence of, nor condemn,
2 targeted marketing as a general matter; on the contrary, targeted marketing is a normal
3 part of competitive activity. The harmful effects of cream skimming, and its relevance to
4 this proceeding, however is that when UNE prices are non-compensatory, the detrimental
5 effect on investment is magnified by cream skimming because CLECs are able to attract
6 the customers who contribute most to the maintenance of the network, while leaving
7 behind those customers who contribute least (or a negative amount). This would be
8 consistent with competitive market activity if the UNE prices were compensatory, and if
9 ILEC were able to increase prices to the low-revenue customers if the latter's prices are
10 not compensatory. In the absence of compensatory UNE rates, however, cream
11 skimming becomes a mechanism by which the high revenue customers who
12 disproportionately supported the network under traditional regulatory price structures
13 become subsidized customers, exacerbating the direct effects on long run investment
14 incentives that result from uneconomically low UNE rates.

15
16 **Q65. DR. STARANCZAK CLAIMS THAT HIGHER UNE RATES, AS PROPOSED BY**
17 **SBC, WOULD RESULT IN "RE-MONOPOLIZATION OF MUCH OF THE**
18 **LOCAL SERVICE MARKET."¹⁸³ PLEASE COMMENT.**

19
20 A65. This comment is entirely devoid of factual support or analysis, and is refuted by the
21 detailed analysis on price squeeze and CLEC margins I have provided in my direct
22 testimony and in this rebuttal testimony.

23
¹⁸³ *Staranczak Direct*, p. 14.

1 **Q66. DR. STARANCZAK COMPARES SBC'S FILL FACTORS TO CAPACITY**
2 **UTILIZATION RATES FOR MANUFACTURING FIRMS.¹⁸⁴ IS THIS AN**
3 **INSTRUCTIVE COMPARISON?**

4 A66. No. I note as an initial matter that it is entirely unclear how "capacity utilization" is
5 measured in the study referenced by Dr. Staranczak, or whether there is any reason to
6 think that the utilization rates cited there are measured on any sort of comparable basis to
7 the fill factors used in telephone network studies. Dr. Staranczak provides no reason to
8 believe there is any comparability. Nevertheless, assuming that there is some basis for
9 Dr. Staranczak's comparison, there are several reasons that such a comparison is
10 fallacious.

11 First, the capacity that is reflected in the capacity utilization rates in Dr.
12 Staranczak's sample is the capacity of production plants, not outside plant facilities. The
13 economic factors that determine efficient capacity utilization decisions in a telephone
14 plant network are not comparable to the spare capacity needs in an automobile factory or
15 electricity plant. A key difference is that outside plant is geographically specific and
16 non-fungible. Geographic variability of demand works to *decrease* spare capacity needs
17 in an auto plant, but *increases* the needs of spare capacity in loop plant. If consumers in
18 California increase their demand for cars by 5% one year, and consumers in New York
19 decrease theirs by 5%, the changes offset each other and dampen the need for spare
20 capacity at the auto plant. Hence, random variability decreases overall uncertainty about
21 capacity needs and decreases risk. In contrast, if residents in Evanston increase their
22 demand for telephone lines by 5% (due, say, to the significant amount of new

¹⁸⁴ *Staranczak Direct*, pp. 14-18.

1 condominium construction in town), while residents in Elgin decrease their demand for
2 lines by 5% (due, say, to abandonment of second lines in favor of cable modem service or
3 wireless), these effects do not offset the network's needs for spare capacity at all. The
4 spare loop capacity created in Elgin is of absolutely no use in meeting the needs of the
5 Evanston residents. Moreover, since the demand fluctuations in any geographic area are
6 largely unpredictable, there must be sufficient spare capacity in *each* area to
7 accommodate potential fluctuations and changes. Hence, in direct contrast to capacity
8 needs in factories, geographic demand variability increases spare capacity needs in a
9 telephone network.

10 Second, Dr. Staranczak acknowledges that it is appropriate to install spare
11 capacity in advance of demand needs due to the high cost of adding additional capacity
12 later. However, he argues that this is true of any industry, not just telecommunications
13 networks. Dr. Staranczak is undoubtedly correct, but his argument is irrelevant to
14 whether the amount of spare capacity can be compared across industries because his
15 argument is merely qualitative. While the tradeoff between the costs of maintaining
16 spare capacity now and the costs of adding capacity later certainly drives the existence of
17 spare capacity in any economic activity, the efficient *amount* of spare capacity will
18 depend on *how* costly it is to install additional capacity later relative to the carrying cost
19 of installing spare now. There is no reason to believe, and Dr. Staranczak provides none,
20 that the relative costs of augmenting capacity in an auto factory or aerospace plant
21 (relative to the costs of installing spare capacity to begin with) bear any relation to the
22 relative costs of augmenting capacity in outside plant. The idea that spare capacity is

1 driven in all industries by the same qualitative factors should somehow imply that the
2 quantitative amount of spare capacity would efficiently be the same is incorrect.

3 In addition to these factors, however, Dr. Staranczak fails to acknowledge that
4 incumbent telephone providers are subject to regulatory requirements that auto
5 manufacturers and aerospace companies are not. Every consumer is familiar with the
6 concept of “back ordered,” and it is not uncommon in the automobile market in particular
7 that if a specific model of car is popular, buyers may have to wait weeks or months to
8 receive delivery of one. Automakers do not maintain enough capacity to meet demand in
9 those peak circumstances because it is not cost-effective to do so when, instead, they can
10 ask customers to wait. Incumbent telephone companies do not have that luxury.
11 Companies such as SBC face stringent requirements promulgated and enforced by this
12 commission under which they would be fined if they asked customers in Evanston to wait
13 a few weeks or months to get a telephone line, until the company could get around to
14 installing additional capacity. Nor can a company like SBC decide not to serve sparsely
15 populated areas where economies of scale (and corresponding fill factors) would be
16 unattractive. SBC today provides service to all customers in its territory, regardless of
17 the unattractiveness of their location. Auto manufacturers, in contrast, can choose not to
18 build cars for which demand is so low that the fixed (time) costs of changing over the
19 assembly line would not merit the production run because it would uneconomically drive
20 down the efficient utilization of their plants’ capacity.

21 While the factors that drive spare capacity needs are qualitatively similar in many
22 industries, every industry has a unique set of quantitative cost tradeoffs driven by demand

1 characteristics, regulatory requirements (or lack thereof), technological constraints, and
2 input costs. A telephone network is unlike an auto plant, electricity generating plant, or
3 any other productive operation in ways that all tend to increase efficient spare capacity
4 requirements. It is therefore to be expected that spare capacity in a telephone network
5 would exceed that in other industries, if there is some sense in which they can be
6 compared at all.

7
8 **Q67. DR. STARANCZAK ARGUES THAT DESPITE THE FACT THAT SBC**
9 **OPERATES UNDER PRICE CAPS, THE COMMISSIONS SHOULD ASSUME**
10 **THAT IT OPERATES AN INEFFICIENT NETWORK.¹⁸⁵ IS THIS SOUND**
11 **ADVICE?**

12 A67. No. It ignores several factors, not the least of which is that the facts dispute his claim.
13 Dr. Staranczak argues that because SBC was, years ago, a rate of return regulated
14 company with an incentive to “gold plate” its network, that therefore its current fill
15 factors would continue to reflect that supposedly inefficient network.¹⁸⁶ While Dr.
16 Staranczak’s theory assumes that the commission utterly failed to oversee the prudence of
17 SBC’s investments while it was under rate of return regulation, his conclusion fails even
18 if this premise is correct. If Dr. Staranczak’s theory were correct, then one should see
19 that SBCI’s capacity utilization rates would be increasing over time, as SBC responds to
20 its “new” price cap incentives to improve its efficiency. A telephone network is not
21 static, but rather its parts are continuously being replaced, upgraded, retired, or
22 augmented. SBC Illinois invests hundred of millions of dollars each year in its POTS

¹⁸⁵ *Staranczak Direct*, p. 19.

¹⁸⁶ *Staranczak Direct*, p. 19-20.

1 network. If the network were bloated and inefficient, at least some of that inefficiency
2 would be reduced over time as capacity is used up, retired, and not replaced at the same
3 speed or level. The fact is, however, that Mr. White testifies that fill factors have been
4 stable in SBC's network for many years.¹⁸⁷ If Dr. Staranczak were correct, stable fill
5 factors would indicate that in pursuing its incentives to increase its efficiency, SBC has
6 neglected to increase its efficiency in its most important asset, its network, despite its
7 alleged high level of excess costs.

8 Of course, Dr. Staranczak could also believe (and he suggests as much) that SBC
9 simply does not respond to its incentives to decrease costs and improve efficiency. The
10 idea that SBC ignores its responsibility to its shareholders and ignores its own self
11 interested desire to make money in favor of perpetuating an inefficient network is a
12 theory that on its face should command little serious consideration by this commission.

13 In fact, the evidence demonstrates that SBC Illinois' plant has not remained static.
14 According to ARMIS data, SBC Illinois' investment in common line total plant in service
15 has doubled since 1990, from \$677 million to \$1.3 billion in 2002, and has increased by
16 \$438 million since 1994, when SBC Illinois became subject to price cap regulation.
17 These numbers imply that half of SBC's current network is new.

18 VII. RESPONSE TO THE TESTIMONY OF MR. HOAGG

19 Q68. PLEASE COMMENT ON MR. HOAGG'S STATEMENT THAT THE SUPREME 20 COURT REJECTED THE ARGUMENTS THAT TELRIC-BASED PRICING

¹⁸⁷ Direct Testimony of Dr. Randall S. White on Behalf of SBC Illinois, Illinois Commerce Commission, Docket No. 02-0864, December 23, 2003, p. 24.

1 **REDUCES CLECS' INCENTIVES TO INVEST IN FACILITIES,¹⁸⁸ AND THAT**
2 **TELRIC STANDARDS PRODUCE PRICES THAT ARE TOO LOW.¹⁸⁹**

3 A68. The Supreme Court rejected the claim that *properly-calculated* TELRIC prices
4 necessarily, as a matter of principle, reduce incentives to invest. It did not dispute the
5 fact that incorrectly applied TELRIC rules that lead to unattainably low prices would
6 distort investment incentives. As I hope to have made clear by now, my testimony does
7 not opine on the validity of TELRIC pricing *per se*, and I am not advocating prices that
8 are not TELRIC compliant. I do object, however, to how the TELRIC standards have
9 been applied in Illinois. Forward-looking prices should be founded on reality, and the
10 Courts have also made clear that it is regulators' responsibility to ensure a proper
11 application of TELRIC standards.¹⁹⁰

12 It should be noted that the FCC has recently raised the concern that the current
13 TELRIC methodology is insufficiently tied to reality. In its TELRIC NPRM,¹⁹¹ the FCC
14 has questioned whether it should make changes to its rules for pricing UNEs and, in
15 particular, has raised the issue of whether the instructions it gives state regulators for
16 choosing a hypothetical network design should be altered, clarified, or made more
17 prescriptive in some fashion. The FCC specifically noted its concern with the states'
18 *applications* of the current TELRIC methodology: "To the extent that the application of
19 our TELRIC pricing rules distorts our intended pricing signals by understating forward-

¹⁸⁸ *Hoagg Direct*, pp. 8-9.

¹⁸⁹ *Hoagg Direct*, pp. 16-17.

¹⁹⁰ *Verizon*, at *127.

1 looking costs, it can thwart one of the central purposes of the Act: the promotion of
2 facilities-based competition.”¹⁹² The focus of its concerns is to require regulators to
3 choose a design for the network that “is more firmly rooted in the real-world attributes of
4 the existing network, rather than the speculative attributes of a purely hypothetical
5 network.”¹⁹³ Particularly, in light of the FCC’s concern that states may be misapplying
6 the TELRIC standard, the Commission should strive to implement the TELRIC standard
7 with proper guidance from objective facts about ILECs’ costs.

8
9 **Q69. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

10 A69. Yes.

¹⁹¹ See *In the Matter of Review of the Commission’s Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers*, WC Docket No. 03-173 (September 15, 2003) (“*TELRIC NPRM*”).

¹⁹² *TELRIC NPRM*, ¶ 3 (emphasis added).

¹⁹³ See *TELRIC NPRM*, ¶ 4.