from the effects of an absence of market forces, it is far better to allow market forces to discipline prices and induce service quality improvements, as occurs when customers have meaningful choices of service providers. For these reasons, the Commission should affirmatively find that there should be no cut-off of UNE-P lines, and thereby preserve the status quo. Alternatively, if the Commission decides to establish a cut-off, the level should be sufficiently high so as to minimize the adverse impact upon customers.

CLECs face substantial operational and economic barriers to the expansion of their facilities-based services.

Q. YOUR TESTIMONY HAS EXPLAINED THAT THE TRO'S MASS MARKET SWITCHING SELF-PROVISIONING "TRIGGER" IS NOT MET ANYWHERE, IN PART BECAUSE CLECS ARE NOT USING THEIR OWN SWITCHES TO SERVE CUSTOMERS THROUGHOUT ANY OF THE SEVEN MSAs AT ISSUE. WHILE A DETAILED ANALYSIS OF WHETHER CLECS *COULD* EXTEND UNE-L INTO ADDITIONAL AREAS WOULD BE PART OF A "POTENTIAL DEPLOYMENT" INVESTIGATION – SOMETHING WELL BEYOND THE SCOPE OF THIS DOCKET – PLEASE BRIEFLY ADDRESS WHY CLECS HAVE NOT EXTENDED UNE-L MORE BROADLY.

A. The trigger analysis presented in the first section of this testimony demonstrates that the "trigger" for mass market switching has not been met. That is the end of the inquiry for purposes of this "triggers only" proceeding.

That being said, AT&T recognizes that the Commission may also want to understand ***why*** the trigger is not being met. The testimony below briefly addresses the types of economic and operational barriers CLECs face to serve mass market customers using their own switching facilities.

This testimony in no way attempts to quantify the additional costs and economic barriers that are precluding CLECs from reaching more customers on a UNE-L basis. The precise quantification of such costs will be the subject of a potential deployment proceeding, should Verizon attempt to bring such a case in the future.[115]

Rather, our purpose here is merely to familiarize the Commission with the types of additional costs and operational issues any CLEC must overcome to serve mass market customers with its own switching facilities.

Q. DOES THE TRO RECOGNIZE THE COST DISPARITIES AND OPERATIONAL BARRIERS CLECS FACE IN SERVING MASS MARKET CUSTOMERS WITH THEIR OWN SWITCHES?

A. Yes. Among the types of barriers to entry that the FCC expressly recognized in the TRO are "absolute cost advantages" enjoyed by ILECs like Verizon, or absolute cost disadvantages experienced by the CLEC. That is, competitors will be impaired if, in the absence of unbundling, an efficient CLEC would incur substantially higher costs than do the ILECs in order to self deploy the network facility in question. Thus, as the FCC observed, "[w]hen the incumbent LEC has absolute cost advantages, other firms may be deterred from entering the market." TRO, ¶ 90 and n. 302. This is particularly so if the ILEC is providing service at rates close to its average cost. *Id.*

More to the point here, and starting from its basic premise that an <u>economic</u> connection between the local loop and a CLEC switch is a condition of

[115] We note that the Commission believed it "most appropriate to consider potential deployment as part of any continuing review. . . ." and accordingly suggested that, if Verizon wished to pursue relief under a "potential deployment analysis," Verizon should "file for appropriate relief upon the conclusion of [the] 9 month investigation." Procedural Order at 16.

non-impairment, the FCC noted the evidence in its record indicating the large disparity between the cost that CLECs incur to connect their end-users' loops to their own switches and the significantly lower cost that the ILECs incur to do the same thing.[116] Although the FCC ultimately did not adopt specific studies attempting to quantify these costs as a basis for a national finding of impairment "on the basis of non-hot cut factors alone," it did find that the studies provided "significant evidence that competitors operate at a cost disadvantage compared to the incumbent."[117]

Indeed, those submissions – which included evidence concerning the disparity between the CLEC, which faced the "cost of backhauling the voice circuit to their switch from the customer's end office" where his/her loop terminates, and the ILEC, whose switches are located where the customers' loops end and thus does not experience such costs[118] -- persuaded the FCC that "other economic factors, in addition to the economic and operational barriers associated with the current hot cut process, may make entry uneconomic without access to the incumbent's switch." [119]

Q. WHAT "OTHER" ECONOMIC FACTORS WAS THE FCC REFERRING TO?

A. The FCC was referring to the additional costs CLECs would incur to "backhaul" a loop to their switch. As the FCC summarized the evidence on this point, the CLECs requirement to backhaul the circuit to their switches, *i.e.*, to extend the

[116] TRO, at ¶¶ 479-481.

[117] TRO at ¶ 483.

[118] *Id.*, at ¶ 479.

[119] TRO at ¶ 484.

1 customer's loop beyond the point where it had connected to the ILECs switch,
2 gives rise to "costs of collocating in the customer's serving wire center, installing
3 equipment in the wire center in order to digitize, aggregate, and transmit the voice
4 traffic, and paying the incumbent to transport the traffic to the competitor's
5 switch," all costs that "put [CLECs] at a significant cost disadvantage to the
6 incumbent."[120]

7 **Q. WHY DOESN'T AN INCUMBENT PROVIDER LIKE VERIZON FACE**
8 **THE SAME COSTS AS A CLEC WHEN IT USES ITS OWN SWITCHES?**

9 **A.** As the FCC itself found,[121] Verizon's legacy network architecture was designed
10 to support a single regulated monopoly provider, not a competitive market with
11 multiple service providers seeking access to Verizon's loops. This architecture
12 allows Verizon to efficiently connect its legacy loops to its own switches within
13 the wire center to provide service to end user customers. However, the legacy
14 Verizon network architecture provides an inefficient and uneconomic means for a
15 CLEC that tries to connect those same loops to its switch that is always remotely
16 located from the Verizon central office where these loops terminate. This
17 fundamental structural difference creates overwhelming operational and economic
18 advantages for Verizon, advantages that make it both impractical and uneconomic
19 for CLEC competitors to compete with Verizon to serve mass market customers
20 using an UNE-L architecture.

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[120] TRO at ¶ 480 (citations omitted).

[121] See TRO at ¶ 465 ("Specifically, the ***incumbent LECs' networks were designed for use in a single carrier, non-competitive environment*** and, as a result, the incumbent LEC connection between most voice-grade loops and the incumbent LEC switch consists of a pair of wires that is generally only a few feet long and hardwired to the incumbent LEC switch.") (emphasis added).

Q. HOW DOES VERIZON'S NETWORK DESIGN GIVE IT A COST ADVANTAGE OVER CLECS?

A. Verizon's network was designed and built based upon analog (and largely copper-based) technology. Because analog signals degrade over distance, copper loops could not exceed relatively short lengths without the need for expensive equipment to ensure that the voice signal could travel from the caller to the called party. As a result, Verizon deployed – and by virtue of its historical monopoly position it was able to deploy – a relatively large number of local switches, each of which served a relatively small geographic area limited generally to an area determined by the length of copper that could practically support voice services. Even as the ILECs have deployed increasing amounts of fiber optic equipment in the "feeder" portion of the loop in recent years, the "distribution" portion of loop plant – that connecting to the customer's premises – remains almost entirely copper, and the basic architecture characterized by a high density of local offices/switches where customer loops are terminated remains the same.

Furthermore, because a switch was placed at the termination point for these analog loops, Verizon could inexpensively connect its customers' loops to its switches by using a simple – and short -- set of "jumper" wires across the main distribution frame ("MDF"). And for the vast majority of mass market customers, those jumper pairs are left in place even when a customer moves, so that when a new customer moves in to this same residence or small business location, Verizon can re-activate service through the use of software commands from a service representative without the need for any physical work.

1 **Q. COULDN'T A CLEC SIMPLY DUPLICATE THIS NETWORK DESIGN?**

2 A. No. In contrast to Verizon, new entrants do not have the opportunity to achieve
3 scale economies for their switches *and at the same time* minimize loop distances
4 and costs by locating their switches where these loops terminate. The FCC
5 summarized the problem as follows: "The [CLECs'] need to backhaul the circuit
6 . . . effectively requires competitors to deploy much longer loops than the
7 incumbent". [122] The FCC's rules do not permit a CLEC to place a circuit switch
8 in a collocation.[123] And in all events, even if a new entrant were allowed to place
9 a circuit switch in every local serving office, it could not achieve the same scale
10 economies as the ILEC unless it possessed the same market share as the
11 incumbent did in that particular office. This situation is, of course, a practical
12 impossibility. Facing such market uncertainties, CLECs can at best expect to be
13 able to serve only a fraction of the total end-users in any ILEC wire center.

14 The local network architecture employed by an efficient CLEC that is self-
15 providing switches thus is very different from the ILEC network. Because
16 CLECs are attempting to enter markets that have long been dominated by a single
17 monopoly provider, they are unlikely – even in the medium to long term – to be
18 able to generate sufficient customer volume for it to make economic sense to
19 place their own switches at locations close to each ILEC central office. Instead, a
20 CLEC must provide service to customers from multiple ILEC central offices with
21 a single switch in order to generate a sufficient volume of customer line

[122] TRO at ¶ 480

[123] 47 CFR 51.323 (ILEC may refuse to permit collocation of equipment not necessary for access to UNEs or interconnection).

terminations and calls per switch that is comparable to the customer line terminations and call volume on a switch that is on average achieved by ILECs.

Q. WHAT DOES THIS MEAN FOR THE CLEC'S NETWORK?

A. It essentially means that the CLEC must create an overlay network infrastructure that is largely dedicated to the subset of customers won from the incumbent in a specific wire center in order to "backhaul" those customers' loops to its switch. Stated another way, the CLEC must add a very long, costly and dedicated "extension cord" in order to connect its end-users' loops to its switches. This requires the CLEC to:

(1) establish and maintain collocations at Verizon's wire centers, where customers' loops are "collected;"

(2) install and maintain the equipment necessary to digitize and, using concentration and multiplexing techniques, aggregate the traffic on those loops to permit connections to the CLEC's switch at acceptable quality levels; and

(3) establish the necessary transport facilities that provide the physical path connecting the CLEC's collocations and its switch.

Only after all of this infrastructure and these functionalities are in place and operational in each Verizon wire center in which it wishes to compete can a switch-based CLEC begin to offer service to customers in those incumbent's wire centers. Thereafter, for each individual customer line it seeks to serve, the CLEC must arrange and pay for a manual, volume limited, and costly "hot cut" process to have the customer's loop connection transferred to its collocation, and the customer's telephone number ported to the CLEC's switch.

Q. ARE THERE COSTS OTHER THAN 'BACKHAUL" COSTS THAT ADVERSELY AFFECT CLECS TRYING TO USE UNE-L?

A. Yes. As we mentioned above, in addition to the backhaul costs, a CLEC must incur the costs of "hot cuts" and number portability. "Hot cuts", as an example, are the transfer of the customer's active service with Verizon to the CLEC by transferring the customer's loop from the Verizon switch to the CLEC switch without interrupting the customer's service. Number portability is a critical capability established as a result of the Act. Number porting permits the customer to retain and freely move his/her telephone number among competing networks. Still other cost disadvantages may also exist for the CLEC, such as in customer acquisition cost or in OSS platform fixed costs, which may also add to the CLEC's disadvantage.

Q HOW DO THESE COST DISADVANTAGES AFFECT THE ABILITY OF CLECS TO SERVE CONSUMERS USING UNE-L GENERALLY OR FROM EXISTING ENTERPRISE SWITCHES IN PARTICULAR?

A. It lies at the very heart of the impairment CLECs would experience without access to unbundled switching and the unbundled network element-platform. In fact, the difference in the manner and cost of connecting loops to switches between Verizon and CLECs affects mass market customers, the consumers expecting to benefit from competition, in particular. The significant cost of the CLEC having to backhaul the loop, even after that cost is spread across all mass market customers that a CLEC can possibly serve, cannot be overcome by a CLEC being smarter or more agile in the market or by cutting corners on internal costs. It simply is too large.

1 **Q. DOES THE FCC AGREE WITH THAT CONCLUSION?**

2 A. Yes. For example, the FCC found that the failure of CLECs to utilize their
3 existing switches to provide UNE-L based service to residential customers "only
4 serves to demonstrate the barriers to such service." [124]

5 **Q. YOU'VE BEEN DISCUSSING THE CLECS' COST DISADVANTAGES.**
6 **IN CONTRAST, DOES VERIZON ENJOY ANY SPECIAL ADVANTAGES**
7 **THAT AGGRAVATE THE SITUATION?**

8 A. Yes. Verizon also significantly benefits from what economists might describe as
9 "first mover advantages" that translate into scale advantages. Because of its
10 status as the incumbent, monopoly provider, Verizon starts with all the customers
11 in a wire center, and each of them are already served by its switch and generating
12 revenue. Thus, Verizon does not have to expend resources attempting to persuade
13 customers to change carriers in order to acquire their business and revenues.
14 Unlike competitive carriers, Verizon does not need to "acquire" large numbers of
15 customers. It only needs to hold its existing customers while offering attractive
16 win-back offers to entice customers who left for a competitor to return.

17 **Q. HOW DO VERIZON'S FIRST MOVER ADVANTAGES AFFECT THE**
18 **CLECS' EXISTING COST DISADVANTAGES?**

19 A. Verizon's scale or share disadvantages multiply the backhaul cost disadvantage
20 described above. Switches are expensive, fixed cost investments and are thus

[124] TRO, at ¶ 449, fn.1371 (citations omitted). The FCC made a similar finding with respect to the CLECs' inability to use existing enterprise switches to provide mass market service. "We found significantly more probative the evidence that in areas where competitors have their own switches for other purposes (e.g., enterprise switches), they are not converting them to serve mass market customers and instead relying on unbundled loops combined with unbundled local circuit switching. Given the fixed costs already invested in these switches, competitors have every incentive to spread the costs over a broader base. Their failure to do so bolsters our finding that significant barriers caused by hot cuts and other factors make such entry uneconomic." TRO, at ¶ 447, fn.1365.

1 subject to substantial economies of scale. Put simply, switches must be filled
2 with the lines and traffic of paying customers in order to generate the revenues
3 needed to recover the cost of these high fixed-cost investments. However, in
4 order for a CLEC to achieve the same switch scale economies that Verizon
5 achieves for a single switch at a single wire center, that CLEC must aggregate
6 substantial quantities of loops from multiple central offices and bring the traffic
7 from each of them back to its own switch. To do so, it must build and pay for
8 multiple collocation and "backhaul" arrangements in order to achieve the same
9 scale efficiencies that Verizon achieves at a single location.

10 For example, assume Verizon has 40,000 mass market voice grade lines
11 terminating in its wire center and a switch in that wire center with the capacity to
12 handle the quantity of traffic generated by these lines. Assume, also, Verizon will
13 likely retain 80% of the customer lines while the CLEC community splits the
14 remaining 20%. If a CLEC expected to serve 10% of the lines out of that wire
15 center (or 50% of the aggregate CLEC market share), the CLEC would expect to
16 serve 4,000 customer lines out of the wire center while Verizon would have the
17 traffic and revenues from 32,000 lines to fill its switch and recover its costs.

18 In order for the CLEC to achieve the same 32,000 mass market lines on its
19 (distantly located) switch, it would have to aggregate a similar percentage of the
20 analog lines from approximately 8 Verizon central offices of equal size.
21 (Alternatively, the CLEC would have to fill its switch by accessing loops from a
22 larger number of smaller Verizon wire centers resulting in further increased
23 backhaul costs.) To achieve this degree of switch usage (32,000 lines), the CLEC

EXHIBIT 29

The Pace Coalition, *et al.*
October 4, 2004
Exhibit 29

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

Before Commissioners: **Brian J. Moline, Chair**
John Wine
Robert E. Krehbiel

In the Matter of a General Investigation to Implement the State Mandates of the Federal Communications Commission's Triennial Review Order	))))	**Docket No. 03-GIMT-1063-GIT**

DIRECT TESTIMONY OF

STEVEN E. TURNER

ON BEHALF OF

AT&T COMMUNICATIONS OF THE SOUTHWEST, INC.,

TCG KANSAS, INC.,

AND

BIRCH TELECOM OF KANSAS, INC.

NETWORK ARCHITECTURE AND
DS0 IMPAIRMENT COST ANALYSIS

JANUARY 30, 2004

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- A. IF CLECS ARE FORCED TO USE UNE-L ONLY, THEY WILL SUFFER A SIGNIFICANT COST DISADVANTAGE THAT WILL PRECLUDE THEM FROM SERVING THE MASS MARKET 34

platform fixed costs. While I do not address those costs here, they may also add to the CLECs' cost disadvantage.

Q. HOW HAVE YOU QUANTIFIED THIS ABSOLUTE COST DISADVANTAGE?

A. I identified the *additional* costs of loop connectivity incurred by CLECs, but not by the ILEC, if CLECs are required to provide facilities-based mass-market local services based upon a voice grade UNE-L architecture. Those costs include the costs of collocation, self-provided transport facilities, leased transport facilities and customer conversion. My understanding is that SBC has proposed that the proper geographic market definition for the Commission's impairment analysis is the MSA. Although AT&T and Birch advocate a different geographic market definition, at this time, my analysis focuses on determining the cost disadvantage for each MSA identified by SBC in its December 12, 2003 filing.

In performing my analysis, I followed the FCC's admonition not to examine results for a specific CLEC; instead, my analysis focuses on a hypothetical, efficient CLEC. The network architecture I assume is the one described earlier in this testimony.

Q. AS COMPARED TO SBC, WOULD A HYPOTHETICAL EFFICIENT CLEC EXPERIENCE ABSOLUTE COST DISADVANTAGES USING SELF-PROVIDED SWITCHING TO SERVE THE MASS MARKET?

A. Yes.

Q. HOW SIGNIFICANT IS THAT COST DISADVANTAGE?

A. The purpose of quantifying the cost disadvantage is to give an indication about the level of additional costs faced by the CLEC over and above the cost faced by the ILEC to

provide the same service. On average in the two MSAs identified by SBC on December 12, the cost disadvantage is approximately $12.14 per line per month. That is, the cost to the CLEC to provide service each month using UNE-L in SBC's serving territory in those two MSAs would be approximately $12.14 per line per month more than the cost to SBC to provide service on that same loop. Those cost disadvantages range from a high of approximately $13.53 per line per month to a minimum of approximately $11.05 for the MSAs identified by SBC.

Q. WOULD THESE COST DISADVANTAGES RESULT IN THE CLEC BEING IMPAIRED IN ITS ABILITY TO PROVIDE SERVICE TO MASS MARKET CUSTOMERS IN KANSAS?

A. Yes. Moreover, these costs do not include the monthly recurring charges paid to the incumbent simply to lease an unbundled loop. Thus, to the extent that the TELRIC costs paid by a CLEC to lease the loop are higher than the ILEC's efficient costs for providing the loop to itself, such cost disadvantages are not reflected and would increase the level of cost disadvantage I previously quantified.

Q. WHY DO THESE COST DISADVANTAGES RESULT IN IMPAIRMENT?

A. The absolute cost disadvantages analyzed in my testimony are created by differences in the basic characteristics of the network architectures employed by ILECs, on the one hand, and CLECs on the other. The network architecture testimony presented earlier in my testimony describes these important differences in the network configurations

1 employed by CLECs and ILECs in detail. These differences are generally recognized and
2 were explicitly acknowledged by the FCC in the *TRO*.[23]

3 **Q. DO THE DIFFERING ILEC AND CLEC NETWORK DESIGNS DESCRIBED**
4 **EARLIER IN YOUR TESTIMONY RESULT IN DIFFERENT COSTS TO**
5 **PROVIDE SERVICE TO MASS MARKET CUSTOMERS?**

6 A. Yes. The crucial fact is that costs to backhaul customer lines to the CLEC switch, and
7 hot cuts to provision the migration of service to the CLEC switch with limited service
8 interruption are not faced by the ILEC. As my earlier testimony describes, unlike a CLEC
9 seeking to use the UNE-L architecture, the ILEC connects its loops and switching using a
10 simple, inexpensive copper wire pair cross-connection in the central office where its
11 loops terminate. Thus, the ILEC's "backhaul" network consists of only a relatively short
12 pair of jumper wires.

13 Collectively, the CLEC's costs associated with collecting and backhauling its customers'
14 loops to its switch to create the same functionality as the ILEC's "short pair of jumper
15 wires" represents an absolute cost disadvantage and results in a substantial barrier to
16 market entry using UNE-L. Conversely, the backhaul disadvantage represents a
17 significant component of ILEC profit margin that is never eroded even if an efficient
18 CLEC actually entered these markets in the face of such a disadvantage.

---

[23] TRO, ¶ 480.

Q. WHAT DOES THE MINIMUM IMPAIRMENT DOLLAR FIGURE REPRESENT?

A. It represents the lowest cost disadvantage that a CLEC would face in the MSAs identified by SBC. As such, it provides a shorthand basis for supporting a general finding of economic impairment in those MSAs (and, by extension, throughout Kansas) consistent with the FCC's national finding of impairment.[24]

An important characteristic of impairment is that the number of customer lines a CLEC serves in a given ILEC central office (as distinct from the absolute size of the ILEC central office) is a key determinant of the absolute cost disadvantage. Thus, the cost disadvantage of serving 500 lines in a 10,000 line office would be much the same as the cost disadvantage of serving 500 lines in a 100,000 line office. That is because collocation charges and hot cut costs do not vary based on the ILEC office size, and the backhaul cost is largely a fixed cost related to the type of DLC deployed and network design. Generally, therefore, the average cost disadvantage per line decreases as the number of lines served in an office increases, but the important point is that it *never* drops below a level of absolute cost disadvantage that would preclude mass-market competition.

Thus, even if a CLEC serves a very substantial number of lines in an individual central office in Kansas, the minimum cost impairment per line I describe above would

[24] TRO, ¶ 459.

1 nevertheless constitute a cost penalty that would impair a CLEC from serving customers
2 in each or every MSA identified by SBC.

3 A CLEC cost disadvantage of the magnitude described above establishes that, if applied
4 properly, the trigger analysis should result in a finding of impairment throughout Kansas.

5 **Q. HOW DOES THE IMPAIRMENT YOU CALCULATED COMPARE TO CLEC**
6 **IMPAIRMENT COSTS CALCULATED BY THE ILECS?**

7 A. The types of costs and the general levels of impairment I have identified are consistent
8 with calculations submitted by ILECs during the FCC proceedings leading up to the *TRO*.
9 In January, 2003, for example, SBC submitted an *ex parte* letter to Chairman Powell
10 from James C. Smith, a Senior Vice President of SBC ("SBC *ex parte*").[25] Attachment 3
11 to that letter is a document entitled "SBC's Analysis of the Economic Viability of
12 Facilities-Based UNE-L Residential Serving Arrangements," in which SBC claims that it
13 "compares the cost of a UNE-L-based serving arrangement with the revenue stream a
14 CLEC could reasonably anticipate when serving residential customers."[26]

15 In its *ex parte* SBC identified a series of cost categories that CLECs might incur in using
16 UNE-L to serve residential customers that would not also be incurred by ILECs. These
17 include:

---

25 The SBC ex parte letter is included as Exhibit SET-10.

26 *Id.*, p. 1.

1 • payments by CLECs to ILECs for hot cuts (SBC appears, however, to have
2 excluded internal CLEC costs that would be incurred to implement the hot
3 cut process;[27]
4 • the costs of collocation;[28]
5 • the costs of GR-303 concentration and multiplexing equipment;[29] and
6 • transport costs.[30]
7 These are the very same cost elements that are reflected in the tools and calculations that I
8 discuss below.

9 For the three states that SBC analyzed, *i.e.*, California, Michigan and Texas, SBC
10 developed estimated cost differentials that totaled respectively $10.74, $10.88 and $10.74
11 per line for these cost components for a central office in which a CLEC would serve 250
12 lines; and $9.00, $7.85 and $8.80 per line, respectively, for these cost components for a
13 central office in which a CLEC would serve 500 lines.[31] Thus, SBC's own analysis
14 presented to the FCC shows that the cost disadvantage faced by a CLEC – essentially the
15 same cost disadvantage discussed in my testimony – is substantial. This analysis is also

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27 *Id.*, p. 3.

28 *Id.*, pp. 4-5.

29 *Id.*, p. 5.

30 *Id.*, p. 7.

31 *See*, Exhibit SET-11, February 4, 2003 Ex Parte letter from Joan Marsh, AT&T Director of Federal Government Affairs, to Ms. Marlene Dortch, Secretary, Federal Communications Commission in CC Docket Nos. 01-338, 96-98, and 98-147, p. 3.

1 noteworthy because it shows that a 100 percent increase in lines served results in only a
2 16 percent decrease in impairment.

3 **Q. PLEASE SUMMARIZE THE ISSUES YOU ADDRESS IN YOUR TESTIMONY.**

4 A. The critical issue to be considered in this proceeding is not whether CLECs can "deploy"
5 their own switches. Instead, the critical issue upon which this Commission should focus
6 is whether CLECs can "efficiently use" their own switch to connect to the local loops of
7 end users. The differences in the way end users' loops are connected to carriers' switches
8 are among the most important factors that cause CLECs to face substantial operational
9 and economic entry barriers when they seek to offer POTS to mass-market (residential
10 and small business) customers using their own switches and ILEC-provided loops (*i.e.*,
11 UNE-L facilities-based entry). The barriers to which I refer relate primarily to the
12 requirements that CLECs backhaul UNE-L traffic from the serving ILEC wire center to
13 the CLEC switch.

14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

15 A. Yes, it does.

EXHIBIT 30

The Pace Coalition, *et al.*
October 4, 2004
Exhibit 30

*** PUBLIC ***

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

In re: Investigation into the Obligation of Incumbent Local Exchange Carriers to Unbundle Network Elements	))))	**Docket No. I-00030099** **Filed: January 9, 2004**

DIRECT TESTIMONY OF REBECCA H. SOMMI ON BEHALF OF ARC NETWORKS, INC. D/B/A INFOHIGHWAY COMMUNICATIONS CORP., BROADVIEW NETWORKS, INC., BULLSEYE TELECOM, INC., MCGRAW COMMUNICATIONS, INC. AND METROPOLITAN TELECOMMUNICATIONS OF PA, INC. ("CLEC COALITION")

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[END BROADVIEW PROPRIETARY]

Q. If UNE-P is available, why does Broadview self-provision switching where it has operational collocation arrangements?

A. Broadview utilizes self-provisioned switching in instances where we have established collocation arrangements because in those circumstances the Company can earn a higher margin than through use of UNE-P purchased from Verizon.

Q. If that is the case, then why does Broadview use so much UNE-P in the wire centers in which it has active collocation arrangements?

A. As I noted above, Broadview uses UNE-P as a migration vehicle for moving customers to the Broadview switch. In addition, however, there are cases where an end user's loop simply cannot be migrated to the Broadview switch, and UNE-P is the only available option for providing competitive service. I will discuss the details of these issues in the next section.

Q. Does Broadview utilize UNE-P for any other purposes?

A. Yes. Broadview utilizes UNE-P for a number of purposes, and UNE-P is of critical importance to Broadview's overall business plan in Pennsylvania. In addition to the two uses outlined above, Broadview uses UNE-P to reach customers outside of our collocation footprint.

In some cases, Broadview utilizes UNE-P to serve multi-location businesses that have offices both outside of Broadview's collocation footprint and within Broadview's collocation footprint. To the extent possible, Broadview self-provisions switching to the wire centers in which Broadview has active collocation, but we will serve customers location outside of Broadview's collocation footprint using UNE-P. Without the ability to utilize a combination of UNE-P and UNE-L to serve multi-location customers in Pennsylvania, Broadview in all likelihood would not be able to serve multi-location customers in the Commonwealth that need telephone service beyond the reach of Broadview's network.

In other cases, Broadview utilizes UNE-P to reach new customers in areas in which Broadview has no collocation. The revenue generated by these end users helps support Broadview's network investment in collocation and self-provisioned switching. Over time, Broadview hopes to expand the reach of its collocation facilities both within the Philadelphia MSA and in other areas of Pennsylvania.

Q. To what extent does Broadview utilize UNE-P outside of its collocation footprint?

A. At present, Broadview has in service over **[BEGIN BROADVIEW PROPRIETARY]** **[END BROADVIEW PROPRIETARY]** Verizon wire centers outside of our **[BEGIN BROADVIEW PROPRIETARY]** **[END BROADVIEW PROPRIETARY]** Verizon wire center collocation footprint. UNE-P gives Broadview the ability to reach customers throughout Pennsylvania, not just Broadview's relatively small network of collocation arrangements. Again, access to UNE-P enables Broadview to expand its existing collocation footprint and serve a broader addressable market with self-provisioned switching.

Q. Does Broadview have any collocation applications pending with Verizon in Pennsylvania?

A. No.

Q. Does Broadview have any plans to submit an application for a new collocation arrangement with Verizon in Pennsylvania?

A. No.