

1 reciprocal compensation to compensate the terminating carrier for the costs of
2 transport and termination).³¹

3 In the Interconnection Tariff case the Massachusetts Commission stated:

4 “Carriers are responsible to provide transport or pay for
5 transport of their originating calls, including reciprocal
6 compensation, between their own originating and the other
7 carrier’s terminating end-users customers. . . . Because Bell
8 Atlantic’s GRIP proposal would require CLECs to establish
9 additional interconnection points at Bell Atlantic tandem
10 and end offices and does not allocate transport costs in a
11 competitively neutral manner, we reject it. We direct Bell
12 Atlantic to revise its tariff to eliminate the GRIP proposal
13 and to include a provision that reflects that each carrier has
14 an obligation to transport its own customers’ calls to the
15 destination end-user on another carrier’s network or bear
16 the cost of that transport.” at 133.

17 Q. ARE THE ORIGINATING CARRIER’S FINANCIAL OBLIGATIONS
18 RELATED TO THE “CALLING PARTY’S NETWORK PAYS” RULE?

19 A. Yes. Prior to the passage of the Act and the advent of competition, the originating
20 carrier was responsible in most instances for the costs of originating, transporting
21 and terminating each local call, simply because calls never left the originating
22 carrier’s network. Consistent with the originating carrier’s overall financial
23 responsibility, the originating carrier collected and retained the applicable revenue
24 from the calling party. This is known as the Calling Party’s Network Pays
25 (“CPNP”) rule.

³¹ *Bell Atlantic Interconnection Tariff*, D.T.E. 98-57 at 132-133 (March 24, 2000);
MediaOne/Bell Atlantic Arbitration, D.T.E. 99/42/43, 99-52 at 12-13 (March 24, 2000).

1 The fundamental principle underlying CPNP is the fact that the calling party's
2 carrier (network) receives the revenue from the calling party and is responsible for
3 the costs incurred in carrying the call. Today, intercarrier compensation in
4 Virginia is under the CPNP regime. Verizon has not made any claim to the
5 contrary.

6 Q. IS VERIZON'S PROPOSAL CONSISTENT WITH THESE PRINCIPLES YOU
7 HAVE JUST DESCRIBED?

8 A. No. As I will describe in more detail below, Verizon's proposal completely
9 ignores these basic tenants of interconnection that have been affirmed by both
10 state commissions and the FCC, as described above. Verizon's proposal (1)
11 would enable it, rather than AT&T, to select the POIs, and (2) would transfer a
12 substantial amount of its origination and termination costs to AT&T.

13 Q. HOW DOES VERIZON DESCRIBE THESE INTERCONNECTION ISSUES?

14 A. In its Exhibit A to Verizon's Answer to the Petitions for Arbitration ("Verizon
15 Response")³², Verizon has inaccurately portrayed these issues as a question of
16 whether its subscribers should pay for the design of the AT&T network in
17 Virginia. Verizon portrays this issue as one "caused" by AT&T and its local
18 network design. That characterization is a biased view of the issue and entirely
19 misses the point. This issue arises because Verizon's network and the AT&T
20 network are configured differently, yet must still interconnect to serve a similar
21 geographic base of customers. Those differences, therefore, are not "caused" by
22 AT&T. Indeed, in this vein it is just as easy, and correct, to say that those

1 differences are “caused” by Verizon, because Verizon chose to design *its* local
2 network different than AT&T’s network. However, it is entirely inappropriate to
3 look at this issue from the perspective of either Verizon’s or AT&T’s network.
4 Neither network should be viewed as the “correct”, “baseline”, or “primary”
5 network. Nor is it appropriate to conclude that any one network imposes
6 interconnection costs on the other network. Rather, it is the interconnection of
7 *both* networks to one another that creates additional costs that neither would bear
8 if the networks were not required to be interconnected with one another.

9 Therefore, the focus of this issue should be on the harm to competition and
10 consumers in Virginia caused by the Verizon proposal and on the illegality of the
11 Verizon proposal under the Act and FCC regulations.

12 Q. PLEASE DESCRIBE THE SPECIFICS OF THE VERIZON PROPOSAL.

13 A. Verizon proposes that in most instances AT&T must deliver its traffic all the way
14 to the Verizon end office - or to what Verizon describes as a “geographically
15 relevant interconnection point” (what Verizon terms a “GRIP”). If AT&T doesn’t
16 establish a POI at every end office, then Verizon proposes that AT&T pay
17 Verizon for the additional transport costs that Verizon is incurring to deliver its
18 originating traffic to AT&T’s POIs. For traffic originating with Verizon, Verizon
19 proposes that it deliver its traffic only as far as the Verizon tandems, or in some
20 cases only as far as the Verizon originating switch. Moreover, Verizon does not
21 propose to pay AT&T anything for the costs of taking Verizon’s originating

32 Verizon Response at 6.

1 traffic from the point where it delivers its traffic to AT&T's switches for
2 termination.

3 The underlying assumption in this proposal is based on Verizon's assertion that it
4 should not be required to transport its local calls beyond its local calling area.³³
5 Thus, Verizon is identifying its local calling areas as the demarcation point that
6 should define the limits of its interconnection transport obligations. However,
7 Verizon's local calling areas are not and should not be the basis for defining
8 network interconnection and where a carrier's financial responsibility for carrying
9 traffic ends.

10 Q. WHY IS VERIZON'S PROPOSAL WRONG?

11 A. There is no logical, economic or technical reason to use Verizon's legacy local
12 calling areas to define the basis of network interconnection and the division of
13 financial responsibility between carriers. Verizon's local calling areas are an
14 artifact of a monopoly era and Verizon's network structure as it evolved over
15 time. Over the past century, local calling areas have been developed and
16 modified around the then-current technology and the corresponding network
17 capabilities that Verizon was able to deploy. As modern electronic switches
18 replaced cord switchboards and mechanical switching and as the cost of transport
19 decreased, local calling areas have generally evolved to encompass larger
20 geographical areas. Today's broad geographic coverage of AT&T's local
21 switches simply does not correspond to Verizon's legacy network architecture.

³³ Verizon Response at 8-13.

1 Further, Verizon's local calling areas are now used principally for the purpose of
2 setting certain local rates for Verizon's customers.

3 Moreover, a single local calling area is generally a thing of the past at least in
4 terms of its original significance. Originally, the local calling area was the one
5 and only geographic area within which an end user customer could make local
6 calls. Anything beyond that area was considered a toll call. This is no longer the
7 case. For some time now Verizon has offered expanded local calling area plans,
8 and now even offers essentially LATA-wide local calling in Northern Virginia³⁴.

9 The existence of these various calling plan options further dispels any suggestion
10 that there is any real economic or technical significance to the geographic scope
11 of any given local calling area. Rather, the existence of multiple plans for local
12 calling suggests that today the true significance of these geographic areas is as
13 marketing tools to sell different services. Given that these local calling areas are
14 basically marketing tools, one can expect that Verizon's local calling areas may
15 be subject to substantial changes as Verizon and its competitors seek competitive
16 advantages for their respective local service offerings. To have ILEC marketing
17 decisions dictate the foundation of CLEC interconnection requirements is wholly
18 inappropriate.

³⁴ Verizon customers in Alexandria-Arlington, Fairfax-Vienna and falls church-McLean have virtually LATA-wide local calling and extended area calling within the Virginia portion of LATA 236 . The Stafford exchange (formerly GTE territory) is the only Virginia exchange in LATA 236 NOT included in the local calling area-- but Leesburg, which is part the LATA 246 (Culpeper), IS included. Also, the Norfolk and Newport News local calling areas in LATA 252 encompass all of the LATA except Knotts Island and a portion of the lower peninsula. Richmond has local and extended area calling that

1 More fundamentally, however, interconnection based solely on Verizon's local
2 calling areas does not foster competition or benefit consumers. To establish
3 interconnection based on Verizon's local calling areas would discourage
4 competitors from expanding their own local calling areas for the benefit of
5 customers and competition. Moreover, using Verizon's local calling areas as the
6 basis for POI locations and financial responsibility substantially compromises the
7 network efficiencies of the alternative network architectures deployed by AT&T
8 which I described above; thus forcing AT&T into an inefficient Verizon-look-a-
9 like interconnection arrangement, and forcing AT&T's customers to bear the
10 burden of those inefficiencies.

11 Q. BUT DOESN'T VERIZON ALLOW AT&T TO SELECT A SINGLE POI PER
12 LATA?

13 A. Verizon claims that it does, but a review of its proposal makes it clear that the
14 "right" to select a POI is a right without any significance.

15 Q. PLEASE EXPLAIN.

16 A. Although Verizon claims that it accepts AT&T's legal right to designate a single
17 interconnection point per LATA, the compensation elements of Verizon's
18 proposal essentially eliminate that right. Verizon has proposed forcing AT&T to
19 be financially responsible for picking up Verizon traffic at some point in each
20 Verizon basic local calling area and transporting that traffic to AT&T's point of
21 interconnection in the LATA. This proposal would render AT&T's chosen

encompasses Verizon Virginia's entire portion of the LATA except Cartersville,
Cumberland and Fife.

1 interconnection points meaningless. AT&T derives no benefit from its right to
2 designate interconnection points unless they serve their intended purpose that is
3 delineating the boundaries between the originating carrier's network and payment
4 of reciprocal compensation to the terminating carrier for completing the call. By
5 agreeing that AT&T may interconnect at a single point in a LATA, Verizon
6 knows it offers nothing more than the sleeves out of its own vest since it requires
7 AT&T to pay the cost of transporting Verizon's own originating traffic from the
8 boundaries of its basic local calling areas to the point of interconnection
9 designated by AT&T.

10 It is a hollow gesture to allow AT&T to designate a single point of
11 interconnection and then require AT&T to pay the difference of the cost of that
12 single point of interconnection and the cost of multiple points of interconnection
13 in every Verizon basic local calling area. Verizon's proposal would effectively
14 eliminate AT&T's right to designate a single point of interconnection, because it
15 would force AT&T to pay Verizon *as if* AT&T were required to establish
16 multiple points of interconnection in all of Verizon's basic local calling areas. It
17 is plainly contrary to the objectives set forth by the FCC to allow a CLEC to
18 interconnect at a single point, but then require that CLEC to pay the incumbent
19 carrier for transport facilities as if the CLEC were required to interconnect at
20 multiple points. Any such decision would render meaningless the CLEC's ability
21 to interconnect at a single point in a LATA.

22 Moreover, this issue does not arise because AT&T has chosen to design its
23 network in some unique or complicated manner. Rather, it arises from the fact

1 that Verizon's network and AT&T's network are configured differently, yet still
2 must still interconnect to serve a similar geographic base of customers. Because
3 of those differences, if AT&T designates a single point of interconnection in a
4 LATA, it is possible that a call from a Verizon customer in a Verizon basic local
5 calling area to an AT&T customer in that same basic local calling area will have
6 to travel outside the basic local calling area to the point of interconnection before
7 it reaches AT&T's switch and ultimately AT&T's customer. As I indicated
8 earlier, this possibility reflects the different network configurations deployed by
9 AT&T and Verizon, and, in particular, the different emphasis on the number and
10 location of switches.

11 This difference in design, however, should be a difference without a distinction as
12 far as financial responsibility is concerned. The fact that a call from a Verizon
13 customer to an AT&T customer may have to travel outside the basic local calling
14 area should not in any way undermine AT&T's legal right to designate a single
15 point of interconnection in a LATA.

16 In effect, however, that is precisely what Verizon's proposal does. Verizon
17 asserts it does not dispute that AT&T has the right to interconnect with Verizon's
18 network at a single point within each LATA³⁵ Verizon's position, however, is
19 that it nonetheless should have no obligation to transport its traffic beyond its own

³⁵ Verizon Response at 9.

1 originating switch or tandem, as applicable.³⁶ Verizon contends that in certain
2 circumstances it is not responsible for any of the costs associated with
3 transporting its traffic beyond the switch from which the call originates. In
4 particular, for calls from customers in a Verizon basic local calling area to AT&T
5 customers in that same basic local calling area which must travel outside the basic
6 local calling area to get to the POI, Verizon would have the authority to declare
7 that Verizon bears no financial responsibility for the cost of getting those calls
8 from its originating switch to the POI. According to Verizon, in those
9 circumstances, AT&T would be responsible for the costs of the facilities needed
10 to transport *Verizon's own traffic* from the Verizon originating switch to the point
11 of interconnection. Accordingly, notwithstanding Verizon's stated acceptance of
12 a single point of interconnection in each LATA, Verizon's proposal has the
13 practical, and certainly the economic effect of requiring AT&T to have a physical
14 point of interconnection in every basic local calling area in Virginia.

15 Q. CAN YOU EXPLAIN HOW THIS PROPOSAL CAN HARM COMPETITION?

16 A. Yes. As I explained above, to effectively compete for local exchange customers
17 in Virginia, AT&T has designed and deployed a network architecture that is
18 substantially different than the embedded Verizon network. Because of this
19 difference in network architecture some calls from Verizon customers to AT&T
20 customers must be transported beyond the Verizon local calling areas to be

³⁶ In its contract, Verizon proposes that it may designate that its IP is at the Verizon originating end office under any one of a number of conditions. Such terms would provide Verizon the discretion carry traffic to its tandem or require AT&T to pick up Verizon's traffic from the originating switch.

1 delivered to the AT&T switch serving the terminating AT&T customers. As
2 noted above, despite unequivocal legal obligations requiring each party to bear the
3 cost to transport and terminate its own traffic, Verizon objects to bearing any
4 costs for Interconnection Facilities beyond the Verizon tandem switch, and in
5 numerous circumstances, beyond Verizon's own originating switch. This means
6 that Verizon is proposing that AT&T bear the cost of transporting Verizon's
7 originated local and expanded area calling and intra-LATA toll traffic from
8 Verizon's end office or tandem switch to AT&T's switch for completion of such
9 calls.

10 While reducing its transport burden for its originating traffic and transferring
11 those costs to AT&T, Verizon also proposes to increase AT&T's transport
12 obligations for AT&T's originating traffic beyond what it is required to bear
13 under the law. According to Verizon, AT&T is financially responsible for
14 delivering its own originating calls (calls from its customers to Verizon
15 customers) into every Verizon end office, but Verizon is not financially
16 responsible for delivering its originating traffic beyond the originating switch or
17 tandem, as applicable. Such an imbalance of responsibility is not only illegal, but
18 is on its face inequitable.

19 When one takes into consideration the reduction of Verizon's costs with the
20 increased costs imposed upon AT&T and the advantages in market power,
21 network ubiquity and positive economics associated with the large customer base
22 possessed by Verizon, the implications of the Verizon proposal on the
23 development of competition in Virginia and elsewhere are significant and cannot

1 be ignored. I will quantify the direct financial implications of Verizon's proposal
2 later in my testimony.

3 Q. ARE THERE ANY OTHER PROBLEMS WITH VERIZON'S PROPOSAL?

4 A. Yes. Under Verizon's proposed contract language, Verizon would be allowed the
5 discretion to designate any AT&T collocation arrangement as a Verizon IP. This
6 provision would have the effect of requiring AT&T to interconnect at such point
7 and "pick up" Verizon's traffic and transport it back to the AT&T terminating
8 switch without any compensation from Verizon. Besides the fact that this
9 provision is contrary to law and would unfairly require AT&T to bear the cost to
10 transport Verizon's traffic, this provision could also directly frustrate AT&T's
11 ability to enter and compete for customers in certain exchange areas.

12 Many Verizon central offices have limited or no space available for other parties
13 to collocate, meaning that occasionally AT&T must settle for less space than it
14 needs, or in some cases no space at all. Collocation space is by far the most
15 expensive space AT&T has in its network. AT&T often ordered smaller
16 collocation arrangements because of the large expense associated with such space.
17 More importantly, the number of trunks and lines that may be provisioned
18 through any one collocation arrangement are limited by the space within the cage.
19 Each Verizon trunk (i.e., a circuit carrying traffic originating on Verizon's
20 network to AT&T) that Verizon would force AT&T to carry through AT&T's
21 collocation arrangement results in one less AT&T customer line that can be
22 provisioned through that collocation arrangement. It would be possible, under
23 Verizon's proposal, for Verizon to prematurely exhaust AT&T's smaller

1 collocation arrangements by the additional requirements of interconnection trunks
2 carrying Verizon's traffic.

3 AT&T requires collocation space within Verizon end offices so that AT&T may
4 interconnect to UNEs provided by Verizon (e.g., for loop re-sale). AT&T should
5 be allowed to determine the use of collocation space it has obtained from Verizon
6 and should not be forced to surrender it to Verizon at Verizon's discretion.

7 Moreover, AT&T has no legal obligation to share its collocation space with
8 Verizon. If the Commission were to adopt Verizon's proposal, local exchange
9 customers in Virginia served by a Verizon end office in which AT&T's
10 collocation space is exhausted under the current arrangement would not enjoy the
11 same level of local exchange competition as customers in unaffected areas.

12 Q. HOW IS AT&T'S POSITION DIFFERENT FROM VERIZON'S PROPOSAL?

13 A. AT&T has taken the reasonable position that the responsibility for originating,
14 transporting, and terminating traffic should be mutual and that each party should
15 be financially responsible for transporting its own originating traffic to the POI on
16 the terminating party's network and pay for any transport and termination used to
17 complete the traffic. This proposal, as explained earlier in my testimony, is
18 consistent with the law and public policy on the matter.

19 Q. WHAT ABOUT THE POI ISSUE?

20 A. With respect to the POI issue, AT&T is offering Verizon more flexibility than
21 AT&T is obligated to offer under the law. Verizon and AT&T have agreed that
22 the parties will utilize one-way trunks to exchange local and intraLATA toll
23 traffic. In its experience over the past three years, AT&T has found that one-way

1 trunks provide several advantages to AT&T over two-way trunking
2 arrangements³⁷, but a major advantage is that one-way trunks enable each party to
3 establish POIs for its traffic independent of the other party's POI selection.
4 Although the Act does not grant Verizon a right to designate a POI for its traffic,
5 AT&T provides Verizon with the opportunity to designate an independent POI for
6 its traffic as long as Verizon and AT&T mutually agree to the location of
7 Verizon's POI. Through this process, Verizon is given the opportunity to
8 establish separate interconnection for its traffic in a manner that could lower
9 Verizon's costs.

10 There are a number of reasonable alternatives where AT&T may be willing to
11 have Verizon interconnect to deliver its traffic to AT&T, including, but not
12 necessarily limited to: AT&T collocations at Verizon serving wire centers
13 (subject to the space concern noted above), AT&T switching centers, other carrier
14 locations such carrier hotels, and via mid-span fiber meets. However, any one of
15 these options could be problematic for the interconnecting carrier under certain
16 circumstances. Therefore, since this is an additional right not provided for by
17 law, Verizon should be required to obtain the interconnecting carrier's mutual
18 agreement.

19 An example is the collocation option. As I testified earlier, Verizon proposes that
20 AT&T must allow it to designate, at Verizon's sole discretion, any AT&T
21 collocation site as a Verizon POI. Such a proposal, however, could result in
22 premature exhaust of AT&T's collocation space. Thus, AT&T's proposal on this
23 issue provides that if AT&T has forecasted sufficient spare transport capacity
24 related to a certain collocation arrangement, AT&T has the option to allow
25 Verizon to interconnect at that point, and receive compensation for the transport

³⁷ Regardless of AT&T's experience, the current rules permit the CLEC to designate whether the parties will interconnect under a one-way or two-way trunking arrangement.

1 provided to Verizon. Moreover, it would be in AT&T's interest to permit
2 Verizon to interconnect at AT&T collocations with sufficient capacity generating
3 additional revenue in the form of transport payments from Verizon.

4 Q. WHAT IF THE PARTIES CAN'T AGREE TO THE LOCATION OF THE
5 VERIZON POI?

6 A. Failing mutual agreement, AT&T proposes in its agreement that Verizon's POI
7 would default to the location of the AT&T switch(es) in the LATA.

8 Q. WHY IS THIS PROPOSAL FAIR?

9 A. The proposal has to be viewed in light of what the law allows and the underlying
10 policy reason for the law. The simple fact is that is the law provides that the
11 CLEC that gets to choose the POI, not the ILEC. Moreover, as I have indicated,
12 the policy reason for this rule is the clearly articulated decision to give the newer,
13 smaller CLECs – not the ILECs - the opportunity to minimize their costs and
14 increase their efficiencies. Providing CLECs with this opportunity recognizes the
15 extreme economic disadvantages that the CLECs face in attempting to break into
16 an incumbent's market while at the same time, having to rely on the incumbent
17 for some essential services. Moreover, it cannot be forgotten that Verizon retains
18 the vast majority of end users and the revenue that these customers produce – not
19 an insignificant advantage. Allowing the CLEC to identify the locations for
20 exchange of traffic will slightly level the playing field and assist in the
21 development of a competitive market. It is not only fair, but it is absolutely
22 necessary, a point already noted by the FCC in its *Local Competition Order*:

1 Q. THE VERIZON PROPOSAL PER LINE COST APPEARS EXTREMELY
2 HIGH. WHAT HAS CAUSED THIS?

3 A. Although there are many factors that contribute to the final result, two factors in
4 particular primarily drive these high costs.

5 Q. PLEASE DESCRIBE THE FIRST FACTOR.

6 A. As I discuss in my testimony under Issue V.2 (Interconnection Transport),
7 Verizon has proposed that all interconnection facilities AT&T leases from
8 Verizon should be priced at exchange access rates, whereas AT&T has asserted
9 such facilities should be priced at UNE rates. This cost study assumes that AT&T
10 would be required to lease transport from Verizon at access rates, as Verizon
11 proposes.

12 AT&T completed a similar cost study for the Verizon territory in New York State,
13 where the New York Public Service Commission has ordered that all
14 interconnection facilities are to be priced at UNE rates. Although AT&T has
15 substantially more lines in service in New York than in Virginia, the New York
16 cost study uses virtually the same assumptions as the Virginia cost study.
17 Accordingly, the primary factor causing the different per line results in the
18 Virginia and New York cost studies can be attributed to the prices AT&T must
19 pay for interconnection facilities. Table 2 compares the results of the Virginia
20 and New York cost studies.

1

TABLE 2

	VIRGINIA AT&T MONTHLY PER LINE INTERCONNECTION COSTS	NY AT&T MONTHLY PER LINE INTERCONNECTION COSTS
AT&T Proposal	\$0.94	\$0.12
Verizon Proposal	\$3.41	\$1.47

2

3 Q. PLEASE DESCRIBE THE SECOND FACTOR CONTRIBUTING TO THE
4 HIGH COST OF INTERCONNECTION.

5 A. In its Contract, Verizon proposes that it may designate that its IP is at the Verizon
6 originating end office under any one of a number of conditions. Where Verizon
7 makes this election, AT&T would be required to establish direct trunking to that
8 end office and reroute traffic from Verizon's tandem to the Verizon end office.

9 This would be highly inefficient for AT&T. AT&T would require, *at a minimum*,
10 250% more trunks to route traffic that is currently routed through a Verizon
11 tandem to each applicable Verizon end office. These additional trunks account
12 for a substantial portion of the additional costs shown in the cost study under
13 Verizon's proposal.

14 Q. IF A 250% INCREASE IN TRUNKS IS THE MINIMUM, HOW MANY
15 ADDITIONAL TRUNKS MAY ACTUALLY BE REQUIRED?

16 A. The low end of the range of 250% assumes that Verizon will allow some overflow
17 from the end office trunk group to tandem trunk groups in the busy hour.

18 However, since Verizon's contract proposal does not address this specific issue,
19 regarding which party bears the transport costs to route busy hour traffic through
20 Verizon's tandem, I am assuming, for the high end estimate, that Verizon would
21 require that AT&T establish the direct end office trunk groups as final trunk

1 groups. Final trunk groups are sized to carry the volume of traffic at the busy
2 hour with minimal blocking and must have correspondingly more trunks than
3 primary groups, which would overflow busy-hour traffic through a tandem.
4 Direct end office final trunk groups would require 690% more trunks than the
5 current tandem-routed groups.

6 Q. UNDER WHAT CONDITIONS DOES VERIZON PROPOSE TO DESIGNATE
7 ITS IP AT ITS ORIGINATING END OFFICE?

8 A. I would refer the Commission to Section 4.1 of the Verizon Contract. Some of
9 these conditions are particularly troubling. Verizon proposes that it be able to
10 designate every Verizon end office where AT&T has a collocation arrangement or
11 is using the collocation arrangement of a third party as a Verizon IP. Elsewhere
12 in its contract, in Section 4.2.8, Verizon proposes that AT&T be required to
13 directly interconnect at any Verizon end office where the traffic volume ever
14 exceeds the capacity of a DS-1 (Sub-Issue I.1A). Taken collectively, the Verizon
15 contract conditions likely would provide Verizon the right to establish Verizon
16 IPs at virtually every Verizon end office to which AT&T exchanges traffic.

17 Q. PLEASE DESCRIBE THE BASIC METHODOLOGY USED TO DEVELOP
18 YOUR COST ESTIMATE.

19 A. First, I used traffic usage reports to determine the number of interconnection
20 trunks in place today between AT&T's switches and Verizon's tandems and end
21 offices. I then determined the fewest number of DS-1 and DS-3 facilities needed

1 to cost efficiently carry the applicable number of trunks between each office.³⁹

2 To obtain the costs to be allocated to each party under the AT&T proposal, the
3 trunk quantities were allocated to each party in proportion to the historic balance
4 of traffic between the parties. To obtain the costs to be allocated to each party
5 under the Verizon proposal, the trunk quantities were allocated wholly to AT&T.
6 The cost of the transport for in-place trunk groups to the end offices and tandems
7 was then calculated based on the number of DS-1 or DS-3 circuits⁴⁰, the miles
8 between the switches based on the V&H data in the Local Exchange Routing
9 Guide ("LERG"). As I stated previously, access rates were used to determine the
10 costs to each party.⁴¹ This yielded the cost of the transport in-place today
11 between AT&T's switches and Verizon's end office and tandem switches. I then
12 calculated the cost of replacing the trunk groups to tandem switches with trunk
13 groups to the end office switches subtending the tandem switches. In addition, I
14 applied a growth factor to the usage data that allowed me to price out the impact
15 of Verizon's proposal in years 2 through 5.

16 Q. PLEASE DESCRIBE THE BASIC ASSUMPTIONS USED TO DEVELOP
17 THIS COST ESTIMATE.

18 A. The following assumptions were used:

³⁹ Since AT&T's Advanced Digital Link Service traffic is exchanged with Verizon over exchange access Feature Group D trunk groups, it is not possible to include these trunks, instead, the average minutes of use originating and terminating per business day were converted into equivalent DS-1 circuits.

⁴⁰ DS-3 circuits were utilized when the aggregate cost of the required number of DS-1 circuits exceeded the cost of a DS-3 circuit.

- 1 1. interconnection facility costs are equal to Verizon exchange access rates as
- 2 Verizon proposes;
- 3 2. trunk utilization would remain constant over the study period;
- 4 3. each Verizon end office to which AT&T exchanges traffic would meet one or
- 5 more of the Verizon contract conditions whereby Verizon may designate that
- 6 location to be a Verizon IP;
- 7 4. where tandem routed traffic is required to be placed on new end office trunk
- 8 groups, the distance of such new trunk groups is the median distant end office
- 9 subtending the tandem;
- 10 5. combined-used Feature Group D trunks are assumed to be engineered for
- 11 .01% blocking and 20% of traffic in the busy hour; and
- 12 6. the dispersion and distances of combined-used Feature Group D trunks is
- 13 identical to the dispersion and distances of the TCG and MediaOne trunk
- 14 groups.

15 Q. PLEASE DESCRIBE THE COST STUDY IN DETAIL.

16 A. A two-page summary of the cost analysis is attached to my testimony as Exhibit
17 DLT-5 (“Summary Work Sheet”). A complete Microsoft Excel file of the cost
18 study has been provided with my testimony on an accompanying Compact Disk

⁴¹ Because exchange access rates were used to determine each party’s costs, the results significantly overstate Verizon’s actual costs to provide itself interconnection facilities under the AT&T proposal.

1 labeled Exhibit DLT-6. The cost analysis is composed of five work sheets as
2 follows: Summary; DEOT; Tandem 1; Tandem 2; Tandem 3 and FG-D.

3 The **Summary Work Sheet** sums the applicable entries from each of the other
4 work sheets into three sections. The top section specifies the costs to AT&T and
5 Verizon under the AT&T POI proposal. The center section specifies the costs to
6 AT&T and Verizon under the Verizon IP proposal, assuming that AT&T would
7 be permitted to establish the direct end trunk groups as primary groups (allowing
8 busy hour traffic to be overflowed through Verizon's tandem). The bottom
9 section specifies the costs to AT&T and Verizon under the Verizon IP proposal,
10 assuming that AT&T would be required to establish the direct end trunk groups as
11 final groups (not allowing busy hour traffic to be overflowed through Verizon's
12 tandem). Within each of these sections, each row is labeled to reference the
13 worksheet from which the data was taken. Additionally, each cell is linked to its
14 data source, which can be identified by clicking on that cell using Microsoft
15 Excel. At the very bottom of the Summary Work Sheet is a table that calculates
16 AT&T's monthly per-line costs under each of the three cost scenarios.⁴²

17 The **DEOT Work Sheet** in the Microsoft Excel file calculates the costs of
18 existing direct end office trunk groups between AT&T switches and Verizon end
19 offices. "DEOT" means direct end office trunk. Each identified trunk group is

⁴² The number of lines used was developed from preliminary data that AT&T is accumulating to report to the FCC for the semi-annual FCC Report on Local Competition as of June 30, 2001.

1 separately priced according to number of trunks in the group and the applicable
2 airline mileage between the switches.

3 The **Tandem 1 Work Sheet** in the Microsoft Excel file calculates the costs of
4 existing tandem trunk groups between AT&T switches and Verizon tandem
5 switches. Each identified trunk group is separately priced according to number of
6 trunks in the group and the applicable airline mileage between the switches.

7 The **Tandem 2 Work Sheet** in the Microsoft Excel file calculates the cost of the
8 hypothetical primary end office trunk groups that would be required to carry local
9 and intraLATA toll traffic that is currently routed through a Verizon tandem.

10 (Primary trunk groups are designed to overflow high traffic volumes to an
11 alternative trunk group, normally a tandem group.) Within this work sheet, the
12 number of existing trunks is multiplied by 2.5 to reflect the additional trunks
13 required to convert tandem routed traffic to end office trunks. These additional
14 trunks are referred to a “splintering penalty”, since you are splintering a single
15 trunk group into several, possibly many, new groups. Since we did not possess
16 data showing the volume of traffic to each Verizon end office that is routed via
17 the tandem trunk groups, we assumed that the airline mileage of each hypothetical
18 direct end office trunk groups was equal to distance between the AT&T switch
19 and the median distant Verizon end office. This work sheet also shows the costs
20 assuming that the airline mileage is equal to the closest end office and the most
21 distant end office. However, these minimum and maximum distance costs are not
22 used in the Summary work sheet.

1 The **Tandem 3 Work Sheet** is similar to the Tandem 2 Work Sheet, except the
2 number of existing trunks is multiplied by 6.9 to reflect the splintering penalty
3 associated with converting tandem routed traffic to final end office trunks. Final
4 trunk groups are designed to carry all of the offered traffic without overflowing
5 traffic to an alternative trunk group. Needless to say, direct final trunk groups
6 would be extremely inefficient for AT&T and the costs reflect that. AT&T
7 prepared this work sheet because Verizon's network interconnection proposal
8 lacks the requisite detail to allow AT&T to determine what level of traffic
9 overflow, if any, Verizon would permit.

10 The **FG-D Work Sheet** calculates the cost of hypothetical direct end office trunk
11 groups for all local traffic that is currently combined on Feature Group D (IXC)
12 trunks for which the parties report factors for proper billing. The calculations
13 within this worksheet convert the reported volume of local traffic into equivalent
14 trunk group quantities and price them according to the average mileage used on
15 the DEOT work sheet.

16 Q. WHAT CONCLUSIONS CAN BE REACHED FROM THIS COST STUDY?

17 A. Implementing Verizon's proposal in Virginia would cause AT&T to bear the cost
18 of transporting Verizon's originating traffic from a point in each of Verizon's
19 local service areas to AT&T's switch. This increases AT&T's current local
20 interconnection costs by between \$798,000 and \$2,341,000 annually. During the
21 life of a 3 year ICA this translates into an increased cost to AT&T of anywhere
22 from \$6,918,000 to \$12,573,000. The low end of the range assumes that Verizon
23 will allow some overflow from the end office trunk group to tandem trunk groups

1 in the busy hour. The high end of the range assumes that each end office trunk
2 group is a final group and there is no overflow to a tandem group.

3 Q. COULD YOU DESCRIBE THE RELATIVE IMPACT OF THESE
4 INCREASED COSTS ON AT&T'S OPERATIONS IN VIRGINIA.

5 A. The cost to AT&T cannot be viewed in isolation. As I will point out once again,
6 Verizon and AT&T are not similarly situated carriers. Verizon is the incumbent
7 carrier with a 90%-plus market share.⁴³ All the other CLECs in Virginia share
8 the remaining small percentage of market share. Obviously, the effect of an
9 increase in interconnection costs on AT&T will be significantly different than the
10 effect on Verizon. Assuming that Verizon has 2.5 million lines in Virginia – a
11 conservative estimate – Verizon's 2001 interconnection costs under AT&T's
12 proposal would be 3.67 cents per line, per month (\$0.0367), an amount which
13 overestimates Verizon's actual costs since it is based on Verizon costs being equal
14 to its exchange access rates. In stark contrast, AT&T's costs under Verizon's
15 proposal would be nearly 100 times as high – some \$3.41 per line, per month.
16 These higher costs that AT&T would be forced to bear under Verizon's proposal
17 would make those Virginia markets that would have been marginally profitable
18 under AT&T's interconnection proposal, uneconomic to serve. If the
19 Commission is going to encourage local competition, it must enforce the Act and
20 its existing rules that provide for the equitable allocation of interconnection
21 expenses between the parties.

⁴³ FCC News, May 21, 2001, Table 6.

1 Consider, also, the way Verizon's proposal adds insult to injury. Most, if not all,
2 of the additional costs AT&T would have to incur would translate directly into
3 additional Verizon transport revenues, because AT&T would have little choice
4 but to obtain transport facilities from Verizon. Thus, not only does Verizon's
5 proposal increase AT&T's costs to AT&T, it does so in a way that boosts Verizon
6 revenues. This type of "double blow" will only serve to further suppress
7 investment in competitive facilities and will strengthen Verizon's place as the
8 monopoly provider in Virginia.

9 Simply put, Verizon's interconnection proposal harms the development of
10 competition in Virginia. AT&T has proposed, and my testimony explains, that
11 the interconnection arrangement adopted by the Commission should be neutral to
12 either party's network architecture (i.e., each party should have the same relative
13 obligations when it is in the role of originating carrier) and require each party to
14 bear the costs to transport and terminate its own traffic.

15