

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Review of:)
Unbundled Loop and Switching Rates;)
the Deaveraged Zone Rate Structure; and)
Unbundled Network Elements,) **DOCKET NO. UT-023003**
Transport, and Termination)
)
)

JOINT REPLY TESTIMONY OF

JOSEPH GILLAN

AND

RICHARD CHANDLER

ON BEHALF OF

**AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC.,
AND WORLDCOM, INC.**

May 12, 2004

1 **Q. Please state your names and the parties sponsoring your testimony.**

2

3 A. Our names are Joseph Gillan and Richard Chandler. We are testifying on behalf of
4 AT&T Communications of the Pacific Northwest, Inc. (“AT&T”) and
5 WorldCom, Inc (“MCI”). We previously filed direct and rebuttal testimony on
6 behalf of these companies in this proceeding.

7

8 **Q. What is the purpose of your rebuttal testimony?**

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10 A. The purpose of our testimony is to respond to claims by Verizon that the rates for
11 unbundled local switching should be usage sensitive because expected usage may
12 influence switch costs at the time the switch is designed and that a flat-rate
13 structure “subsidizes” AT&T and MCI because they target “high volume business
14 customers.” In addition, we comment on the one area where we agree with
15 Verizon – that is, that it would be inappropriate to deaverage the rate for
16 unbundled local switching, given its relative insensitivity to factors that may vary
17 geographically.

18

19 **Q. Why does Verizon claim that usage is the principal driver of switching cost?¹**

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¹ Verizon claims that roughly 65% of its fixed switch investment is actually usage sensitive. Reply Testimony of Willet Richter, Thomas Mazziotti and Harold West III (“Verizon Switching Testimony”), page 6.

1 A. In essence, Verizon’s argument collapses to the non-sequitur that *because*
2 switches are designed to accommodate virtually any usage level, that most of the
3 switch’s costs should be viewed as usage sensitive:

4

5 Most important, Mr. Gillan and Mr. Chandler do not account for
6 the fact that modern digital switches are traffic limited but are
7 designed *in advance* to avoid exhaust situations.²
8

9

10 ... costs are incurred based on the *anticipated need* for traffic
11 sensitive switch resources prior to deployment ...³
12

13

14 Because the cost of these [switch] resources varies based on
15 *expected* usage, users incur different costs based on their *actual*
16 usage.⁴
17

18 There are a number of fundamental flaws in Verizon’s “logic” and the conclusion
19 that it draws. Foremost is that the fact that merely because switches are designed
20 to accommodate anticipated usage does not make their cost “usage sensitive.”
21 That is, the modern forward-looking switching machine is equipped with
22 significant excess processor and switch fabric capacity that is normally not
23 approached by subscriber demand. Nortel’s ENET switching fabric, as a forward-
24 looking example, is an inherently non-blocking design which is “[u]nconstrained

² Verizon Switching Testimony, page 3 (emphasis in original).

³ Verizon Switching Testimony, page 7 (emphasis added).

1 by traffic and load balancing, [and] provisioning is based only on peripheral-link
2 terminations.”⁵ Furthermore, the peripheral-link terminations are conceptually no
3 different than integrated DLC connections, for which there is no usage charge,
4 even though the DLC system uses concentration. Therefore, so long as *actual*
5 usage is less than the *expected* usage there is no forward looking cost
6 consequence to usage. Where there is no decremental change in value – or
7 incremental need for additional cost – there is no justification for additional
8 charge.

9
10 Second, to the extent that usage would have a design effect, it would be the usage
11 in the busy hour, not usage during any other period. Yet, the “usage rate” that
12 Verizon proposes would apply to all usage, not just the expected usage in the peak
13 period that can even be claimed to having had *some* role in establishing the design
14 parameters of the switch. Even if it made sense to price peak usage based on the
15 theory that such expected usage influenced switch design -- and such a theory,
16 we believe, is incorrect -- that would still not justify imposing a charge on all
17 usage, irrespective of when it occurred.⁶

⁴ Verizon Switching Testimony, page 10 (emphasis added).

⁵ http://www.nortelnetworks.com/products/01/dms100/supernode/enet_switch.html

⁶ We are not suggesting that the Commission adopt time-of-day sensitive pricing. First, as we have repeatedly explained, merely because a factor may have influenced the design of a switch, that does not mean that its cost-consequences follow the design decision into the field and justify a specific price. Thus, we would not agree that a peak-period price is justified here. However, even if there were a theoretically sound justification for a peak-period price, administrative and practical considerations would advise against such a rate structure. Significantly, even if the Commission were to reject peak-period pricing solely on administrative

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2 **Q. Verizon also claims that there are occasions where a switch does reach**
3 **exhaust due to increased usage.⁷ Is this claim persuasive?**

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5 A. No. First, the Commission should never confuse the rule with the exception, and
6 the isolated instances claimed by Verizon hardly establish a pattern justifying its
7 pricing recommendation. Even more significant, however, is that Verizon never
8 explains whether the processor exhaust that it claims occurred was the result of
9 increased lines (and, therefore, increased usage), or whether the switches were
10 even of a contemporary design relevant to a forward-looking cost study.

11 Processor exhaust in earlier switch designs was not uncommon, but such designs
12 have long been superseded by more modern processor hardware and software
13 structures that do not normally exhaust real-time limits. Moreover, two (of the
14 three) examples of claimed “processor exhaust” were in Virginia, where the FCC
15 rejected Verizon’s request for a usage-based switching rate:

16

17 Given the record evidence that modern switches typically have
18 large amounts of excess central processor and memory capacity,
19 the usage by any one subscriber or group of subscribers is not
20 expected to press so hard on processor or memory capacity at any
21 one time as to cause call blockage, or a need for additional
22 capacity to avoid such blockage.... Principles of cost causation,
23 therefore, support a per line port cost recovery approach because,

grounds, that would not justify a non-time differentiated usage rate as a second best solution. Such an approach would misprice 23 hours of the day in a futile attempt to price the 24th – a poorly considered trade-off, even if reasonable to consider (which we would argue it should not).

⁷ Verizon Switching Testimony, page 12.

1 more than any other approach, it spreads getting started costs to
2 carriers in a manner that treats equally all subscribers served by a
3 switch.⁸
4

5 These “Virginia examples” did not persuasively support Verizon’s position in the
6 Virginia Arbitration and they should be even less persuasive here.

7
8 **Q. Verizon also claims that a flat rate structure would provide AT&T and MCI**
9 **a competitive advantage because of the allegation that AT&T and MCI**
10 **target “higher than average volume business customers.”⁹ Is this claim**
11 **accurate?**

12
13 A. No. As a threshold point, unbundled local switching is used by CLECs generally
14 (and AT&T and MCI specifically) to serve mass market customers. Large
15 enterprise accounts are typically served by CLECs using their own switching
16 facilities, not UNE-P. The characterization that either AT&T or MCI is serving
17 large business customers through UNE-P is not true,¹⁰ much less that the practice
18 would cause “smaller carriers” to subsidize these larger CLECs.¹¹ Not only is the

⁸ Memorandum Opinion and Order, Federal Communications Commission, CC Dockets No. 00-218 and 00-251, Released August 29, 2003 (“Verizon Virginia Arbitration Order”), ¶ 463.

⁹ Verizon Switching Testimony, page 14.

¹⁰ Although Verizon twice alleges that AT&T and MCI would use unbundled local switching to serve large business customers (pages 2 and 14), Verizon never offers any evidence to support this remarkable claim.

¹¹ In our experience, support for flat-rate local switching is widespread among all carriers leasing switching from the ILEC, small and large.

1 factual predicate to the claim false, however, but even if true (i.e., even if AT&T
2 and MCI did serve larger business customers with UNE-P), that fact would still
3 not cause a cross-subsidy to occur. As the FCC found when it adopted a flat-rate
4 for local switching in the Virginia Arbitration:

5
6 ... charging a per line port price for the central processor and
7 memory recovers these costs from competitive LECs on a
8 competitive neutral basis, thereby potentially extending to many
9 different subscribers the benefits of competition.... The incumbent
10 LEC's central processor and memory costs do not vary with
11 respect to whether a subscriber connected to its switch is a high or
12 low volume user, a residential or business user, or a peak-period or
13 off-peak-period user.¹²
14

15 Verizon's attempt that to justify its usage-based rate for local switching because
16 of its concern for competitors is factually incorrect (and suspect given its own
17 incentives).

18
19 **Q. Is there any area where you agree with Verizon?**

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21 **A.** Yes. We do agree with Verizon that staff's proposal to deaverage local switching
22 rates should not be adopted.¹³ As noted by Verizon, staff offered no explanation
23 as to why local switching should be deaveraged, so directly addressing its
24 rationale is not possible. More importantly, as Verizon notes, there are no

¹² Verizon Virginia Arbitration Order, ¶ 464.

¹³ Verizon Switching Testimony, page 17.

1 geographic-factors that significantly affect switch costs. Consequently, just as we
2 oppose imposing the additional complexity of unnecessary usage rates where the
3 underlying justification does not warrant it, we would oppose introducing the
4 complexity of geographically deaveraged port rates as well.

5

6 **Q. Does this conclude your reply testimony?**

7

8 **A. Yes.**