BEFORE THE WASHINGTON STATE
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, Transport, and Termination (Recurring Costs)	)	DOCKET NO. UT-023003
	)	TWENTY-EIGHTH SUPPLEMENTAL ORDER GRANTING MOTION TO INCORPORATE DEPRECIATION RATES; GRANTING IN PART AND DENYING IN PART, REQUEST FOR CLARIFICATION OF THE 24TH AND 27TH SUPPLEMENTAL ORDERS

Synopsis: *The Commission grants Verizon's motion to incorporate updated depreciation rates into rates for unbundled network elements and grants in part Verizon's request for clarification of the 24th and 27th Supplemental Orders.*

1 **PROCEEDING**. Docket No. UT-023003 (cost docket) is a proceeding to review recurring costs and rates for unbundled network element (UNE) loops, switches, transport, and termination, and to review the deaveraged zone rate structure for loops.

2 **APPEARANCES.** Verizon Northwest Inc. (Verizon), by Catherine Ronis, attorney, Washington, D.C.; Qwest Corporation (Qwest) by Lisa Anderl, attorney, Seattle, Washington; AT&T of the Pacific Northwest, Inc. (AT&T), Pac-West, Inc. (Pac-West), and XO Washington, Inc. (XO), by Gregory J. Kopta, attorney, Seattle, Washington; MCI/WorldCom (MCI) by Michel Singer-Nelson, attorney, Denver, Colorado; Covad Communications Company (Covad), by Karen Frame, attorney, Denver, Colorado; WeBTEC, by Arthur Butler, attorney, Seattle, Washington; Eschelon Telecom, Inc. (Eschelon), by Dennis Ahlers,

Minneapolis, Minnesota; and Commission Staff, by Shannon Smith, Assistant Attorney General, Olympia, Washington.

3 **BACKGROUND.** On February 9, 2005, the Commission entered its 24th Supplemental Order, a final order establishing Verizon's recurring rates for UNEs, including average rates for 2- and 4-wire loops, switching, transport, and termination. The Commission also established revised deaveraged zone loop rates and rejected deaveraged zone switching rates.

4 On February 23, 2005, Verizon filed a Motion for Clarification and Petition for Reconsideration (Verizon Petition) of the 24th Supplemental Order. XO and PacWest also filed a Petition for Reconsideration (XO/PacWest Petition). The Commission entered its 27th Supplemental Order in this proceeding on June 10, 2005, denying the petitions for reconsideration and providing clarification of the 24th Supplemental Order.

5 On June 20, 2005 Verizon filed a motion to incorporate updated depreciation rates[1] into the unbundled network element (UNE) rates decided by the Commission in the 24th Supplemental Order. Verizon also requested further clarification of the 24th and 27th Supplemental Orders to assist in making its compliance filing.[2] We discuss the motion and the request for clarification below.

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[1] On April 12, 2005, the Commission entered a final order resolving Verizon's request for modification of its depreciation schedules in Docket No. UT-040520 and Verizon's general rate case in Docket No. UT-040788. *See*, Order No. 03, Order Approving and Adopting Settlement, Docket No. UT-040520 Apr. 12, 2005.

[2] On July 15, 2005, Verizon further requested a technical conference to address matters contained in its request for incorporation of depreciation rates. We have been able to run the VzCost model to incorporate new depreciation rates, making such a technical conference unnecessary.

MEMORANDUM

A. DEPRECIATION RATES.

6 Depreciation is the device used by companies to recover their investment in an asset over the life of the asset.[3] Depreciation is one of the components of UNE rates. In the cost docket, Verizon and AT&T/Staff proposed different depreciation rates. Verizon proposed to calculate depreciation expense based on Generally Accepted Accounting Principles (GAAP) – the depreciation methodology used in its financial reports. AT&T and Staff proposed that Verizon use its then currently authorized depreciation rates from Docket No. UT-992009[4] to calculate UNE rates.

7 In the 24th Supplemental Order, we rejected Verizon's GAAP-based depreciation expense calculation and adopted the depreciation rates from Docket No. UT-992009.[5] However, we advised the parties that once the Commission approved updated depreciation rates for Verizon,[6] they could petition to incorporate the changes into Verizon's UNE rates.[7] We adopted updated depreciation rates on April 12, 2005 in Docket No. UT-040520. In the 27th Supplemental Order in this docket, we noted that new depreciation rates had been approved and confirmed the parties' ability to petition for incorporation of new depreciation rates.

8 On June 10, 2005, Verizon filed its motion requesting that the updated depreciation rates from Docket No. UT-040520 be incorporated in UNE rates determined in this proceeding. Verizon based its request on the language in the cost docket orders encouraging the parties to petition for incorporation.[8]

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[3] Docket No. UT-023003, 24th Supplemental Order, February 9, 2005, ¶ 86.
[4] *In the Matter of the Investigation into the Propriety and Adequacy of Certain Depreciation Rates of GTE Northwest, Inc, Docket No. UT-992009, Order Authorizing Revised Depreciation Rates, June 16, 2000.*
[5] 24th Supplemental Order, ¶ 95.
[6] On April 5, 2004, Verizon filed a petition in Docket No. UT-040520 to revise the depreciation rates adopted in UT-992009.
[7] 24th Supplemental Order, ¶ 97.
[8] 27th Supplemental Order, ¶ 47.

9 Staff opposes the incorporation of the new depreciation rates at this time.[9] Staff contends that incorporating the new rates now will cause the Commission to expend significant time re-running the Verizon cost model to incorporate the new rates. Meanwhile, Verizon will gain the benefit of its current UNE rates which are higher than those the Commission established in the 24th Supplemental Order. Staff also voiced concern about the process of updating UNE rates generally, in light of the fact that Verizon is authorized to increase depreciation rates for switching and circuit accounts on January 1, 2007 according to the Docket No. UT-040520 depreciation order.[10] Staff points out that UNE rates set in this proceeding are based on data from 2002 and application of updated depreciation rates in 2007 to old UNE rates would be inappropriate.

10 **Discussion and decision**. In the two most recent cost orders, we permitted the parties to request that the new depreciation rates ordered by the Commission in Docket No. UT-040520 be incorporated in UNE rates set in this cost docket. We grant the Verizon petition. The Commission has been able to re-run the HM 5.3 and Verizon cost models expeditiously to incorporate the new rates, alleviating Staff's concern that Verizon would benefit from a lengthy delay.

11 We share the concern that UNE rates established in this docket are based on 2002 data and that by 2007, when Verizon is authorized to further revise its depreciation rates pursuant to our order in Docket No. UT-040520, UNE rates from this cost docket will be quite stale. Regrettably, the extraordinary length of the cost docket litigation makes it difficult to set rates based on the most current data. Future updates or revisions of UNE rates are more appropriately the subject of a new docket that will rely on fresh UNE cost data.

12 We calculate revised UNE rates that capture updated depreciation rates, as identified in Appendix A to this order. Verizon is directed to use those rates to promptly calculate its compliance filing rates, in accordance with instructions contained in the 24th and 27th Supplemental Orders and as clarified below.

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[9] Staff Response to Verizon Motion at 3.
[10] Docket No. UT-040520, Order No. 03, ¶ 13.

B. CLARIFICATION

13 Verizon seeks clarification of several aspects of the cost orders. Some require only a response affirming Verizon's approach, while others are more appropriately characterized as requests for reconsideration of the Commission's prior orders, which are found to be untimely and improper.

1. What are the appropriate cost estimates for non-switching UNEs other than the two- wire loop?

14 In the 24th Supplemental Order, we provided Verizon with UNE cost estimates derived from the Commission's runs of the HM 5.3 and Verizon cost models.[11] We instructed Verizon to weight those cost estimates 40% for HM 5.3 and 60% for VZCost, to produce new UNE rates in accordance with the Commission's Order. In Appendix A to the 24th Supplemental Order, we provided instructions for the weighting process and a spreadsheet with the cost estimates produced by the Commission. Verizon observes that the cost estimate spreadsheet in Appendix A covers only two-wire loops. Verizon contends that to prepare its compliance filings, the Commission should clarify what cost estimates to use for other non-switching UNEs, such as four-wire loops, DS-3 loops and interoffice transport.

15 **Response.** According to AT&T's witness, Robert Mercer, AT&T only provided HM 5.3 cost estimates for DS-0, DS-1, and DS-3 loops; transport; and switching.[12] We provided Verizon with the DS-0, transport, and switching output data from

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[11] There is an error in the 24th Supplemental Order, Appendix A, Cost Estimate Spreadsheet, where we show the costs by wire center produced by our run of VzCost. The cost estimates shown were based on an intermediate run of the VzCost model that did not contain all of the adjustments we directed in the 24th Supplemental Order. Table 4 of Appendix A to this Order contains columns showing the original 24th Supplemental Order cost estimates, our correction of the 24th Supplemental Cost estimates (to include all of the adjustments we made in the 24th Supplemental Order), and the cost estimates based on the new depreciation rates. The error in the 24th Supplemental Order cost estimates by wire center does not change our 24th Supplemental Order finding of a statewide average 2-wire loop rate of $18.86.

[12] Ex. 853.

HM 5.3 in Appendix A to the 24th Supplemental Order and Appendix B to the 27th Supplemental Order respectively, but not the remaining rate elements including DS-1 or DS-3 loops. We correct this oversight and update this information in this Order. For rate elements where the Commission accepted the cost estimates provided by both models (*i.e.* loop), Verizon should use the cost estimates provided with this Order and weight its rate calculations according to the methodology provided by the 24th Supplemental Order. For those rate elements where Verizon's model was rejected (*i.e.* switching), Verizon should rely exclusively on the output from HM 5.3 provided in Appendix A. For those elements where HM 5.3 does not supply a proposed rate, Verizon should rely exclusively on the output from its cost model to supply the appropriate rate. In its compliance filing Verizon should identify the order or filing that describes the rate elements at issue in this proceeding and the reference to the cost estimate(s) used to calculate each rate element.

2. Does Verizon need to run its cost model in order to make a compliance filing?

16 In the 27th Supplemental Order, we advised Verizon that it was not required to re-run its cost model in order to make a compliance filing in this case. Verizon points out that in paragraph 188 of the 27th Supplemental Order, the Commission requires Verizon to "identify each model input modified" which suggests, to the contrary, that Verizon will need to run its model. Verizon asks for clarification of its compliance obligations.

17 **Response.** Verizon need not run its cost model in order to make a compliance filing in this proceeding. The directions in paragraph 188 of the 27th Supplemental Order inadvertently captured language from the 24th Supplemental Order that is not applicable to compliance in this case. Verizon need only rely on the outputs from the Commission's runs of the cost models in Appendix A and perform the weighting calculations as appropriate.

3. How should Verizon incorporate SS7 and umbilical costs into the HM 5.3 switching rates?

18 An umbilical is a cable link between a wire center switch and a remote switch.[13] SS7 is a signaling system that tells the switch how to route a telephone call.[14] In the 27th Supplemental Order, we confirmed that costs for umbilicals and SS7 should be recovered through local switching rates, using updated HM 5.3 proposed switching rates.[15] However, since HM 5.3 did not provide for the inclusion of Verizon's proposed umbilical and SS7 costs in switching rates, we authorized Verizon to include those costs in its compliance switching rate.

19 In the 27th Supplemental Order, we instructed Verizon to "provide the Commission in the Verizon compliance filing with the ratio of umbilical and SS7 costs to its per-MOU switching rate from Verizon's original filing, so that we can inflate the HM 5.3 per-MOU rate by that factor."[16] Verizon now asks us to confirm "that the Commission's intention is to multiply the 0.00136 per-MOU rate for end office switching[17] by this factor."[18]

20 **Response.** Verizon has correctly described the methodology for inflating the HM 5.3 switching rate to account for umbilical and SS 7 costs. Verizon should use the switching data in Appendix A and the methodology described above to calculate the switching rates portion of their compliance filing.

4. Incorporation of new depreciation rates.

21 Verizon requests that the Commission incorporate updated depreciation rates from Docket No. UT-040520 into UNE rates in this proceeding. This issue is addressed and Verizon's motion granted in section A. of this Order.

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[13] 27th Supplemental Order, ¶ 149.
[14] *Id*.
[15] 24th Supplemental Order, ¶¶ 462-463.
[16] 27th Supplemental Order, ¶ 150.
[17] *Id.*, p. 67
[18] Verizon request for clarification, ¶ 3.

5. Five percent line reduction.

22 In the 24th Supplemental Order, we found that Verizon was entitled to a 5% line reduction to reflect a "forward-looking, fully competitive" market,[19] reasoning that under full competition, Verizon would lose customers to competitors, thus decreasing the number of Verizon lines and increasing Verizon's loop cost to serve remaining customers. In order to implement the 5% reduction, we increased Verizon's loop costs by 3.1%. We calculated the 3.1% by measuring the effect of a 5% line reduction in the HM 5.3 model, since we could not directly verify the results of such a reduction in the Verizon cost model.

23 In its request for clarification, Verizon acknowledges that in Appendix B to the 27th Supplemental Order, the Commission identified how the 5% line reduction was calculated in HM 5.3. However, Verizon claims that when it checked the calculation, the result was an increase to HM 5.3 loop costs of at least 5%, not 3.1%. Verizon seeks further clarification of this calculation, since it will affect the weighting calculation that Verizon is required to perform in its compliance filing. Moreover, Verizon suggests that the Commission should use the same 5% increase in both models, rather than adopting a 3.1% increase for the Verizon model results.

24 **Response.** We view this request for clarification as an additional request for reconsideration rather than a request for clarification which is denied as untimely and improper under our rules. WAC 480-07-835 defines requests for clarification of a final order. WAC 480-07-835(2) states that a motion for clarification is not appropriate if a party seeks to change an outcome of the final order. Such a change may only be requested through a petition for reconsideration, see WAC 480-07-850. Petitions for reconsideration may only be filed within ten days of a Commission final order. Moreover, the rule prohibits petitions for reconsideration of an order on reconsideration.

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[19] 24th Supplemental Order, ¶ 312.

25 We rejected Verizon's February 23, 2005 request for reconsideration of our 5% line reduction methodology.[20] Verizon now seeks to challenge the methodology again, but titles the challenge a request for clarification. Verizon seeks to change, rather than clarify, a Commission finding, and it is therefore a request for reconsideration. Under any guise, the time has long expired to file a petition for reconsideration.

26 In any event, the Commission is confident that its method for applying the 5% line reduction to the Verizon cost model is proper.

6. Increase in maximum copper cable size.

27 Fill factors are related to how much telephone plant is required to carry calls on a given telephone system. Fill factors show how much plant is open and available for future use, or show when it is appropriate to add more plant to meet demand.

28 Among the types of fill factors we discussed in the 24th Supplemental Order was copper feeder fill.[21] We decided that even though it appeared that Verizon and AT&T were using approximately the same feeder cable sizing factor to determine how much cable was necessary to serve the system, the copper feeder fill that was produced when the factor was used in Verizon's cost model was significantly lower than that produced by AT&T's HM 5.3 model.[22] The HM 5.3 model produced a fill of 76.5% and the Verizon model appeared to produce a fill of 51.93%.[23]

29 In its petition for reconsideration Verizon urged the Commission to reconsider the maximum cable size adjustment because Verizon claimed that there was no

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[20] 27th Supplemental Order, ¶¶ 105-106.
[21] 24th Supplemental Order ¶ *346 et seq.;* feeder plant is that part of the local loop (the loop is one of the three components of telephone plant - loop, transport and switching) that carries voice messages between callers.
[22] *Id*., ¶¶ 362-368.
[23] A lower fill factor may cause the model to require more plant to be used to serve customers than is necessary, thus raising costs.

actual discrepancy between the copper feeder fill produced by Verizon and AT&T, citing a computer report Verizon claimed was part of the record in this proceeding. We rejected Verizon's request for reconsideration, in part because we could find no evidentiary support for it.[24]

30 Verizon now provides a portion of a computer report that it claims supports its position that there was evidence in the record showing the "average segment" fill and the "head of route" fill.[25] Verizon points out that the "average segment" fill for density zone 1 on that report confirms that its copper feeder fill of 73.35% is approximately the same as that produced by HM 5.3. For this reason, Verizon argues that the Commission should not adjust Verizon's maximum cable size or copper feeder fill.

31 **Response.** Verizon's request is denied as untimely and improper. Verizon's request for clarification asks whether the Commission will change its adjustment to Verizon's maximum cable size, or conversely, whether the Commission will abandon its conclusion that Verizon's achieved copper feeder fill is too high. Verizon seeks to change a final order, rather than clarify it. Verizon challenged the Commission's finding on this issue in its petition for reconsideration of the 24th Supplemental Order,[26] which we rejected in the 27th Supplemental Order.[27] Verizon is now foreclosed from further reconsideration under the Commission's rules previously cited in our discussion of the 5% line reduction.

32 However, we will clarify that Verizon is correct that the computer report it referred to is a part of the record in this proceeding and that the report shows no significant discrepancy between the achieved copper feeder fills produced by VzCost and HM 5.3. Nevertheless, this clarification does not cause us to reconsider our adjustment to Verizon's maximum copper cable sizes.

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[24] 27th Supplemental Order, ¶ 70.
[25] *See*, attachment to Verizon request for clarification "Loop Fill and Statistics Reported by Density Cell."
[26] Verizon's petition for reconsideration at 43.
[27] 27th Supplemental Order, ¶ 70.

33 Contrary to Verizon's argument,[28] we did not conclude in the 24th Supplemental Order that an adjustment to VzCost's maximum copper cable sizes was required to increase Verizon's feeder fill.[29] Rather, in the 24th Supplemental Order, we noted that there was insufficient information in the record to determine why the HM 5.3 achieved fill appeared to be so much higher than the VzCost fill, when both models relied on similar sizing factor inputs.[30] We also observed that our upward adjustment to VzCost's maximum copper cable sizes, among the other changes described in Appendix A to the order, appeared to alleviate the concern about the discrepancy between the VzCost and HM 5.3 achieved fills, because our adjustments to VzCost produced copper-feeder fill rates of 72.22% for the average segment fill, and 60.04% at the head of the route.[31] Finally, we clearly stated in the 24th Supplemental Order that we adjusted upward Verizon's maximum copper cable sizes to be "consistent with industry practice,"[32] rather than for reasons related to fill or utilization rates.

ORDER

THE COMMISSION ORDERS That:

34 (1) Verizon's motion to incorporate depreciation rates from Docket No. UT-040520 is granted as found in Appendix A to this Order;

35 (2) Verizon's request for clarification is granted in part and denied in part, as set forth in the body of this Order;

36 (3) Verizon must make its compliance filing in accord with the 24th and 27th Supplemental Orders as modified by this Order within 20 days[33] of the

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[28] Verizon Petition, p. 43.
[29] 24th Supplemental Order, ¶ 362.
[30] *Id.*
[31] We found these values reasonable and therefore accepted Verizon's copper-feeder sizing factor. *See* 24th Supplemental Order, ¶ 365.
[32] 24th Supplemental Order, ¶ 416
[33] In light of our re-calculation of the UNE rates, as contained in Appendix A, Verizon need not re-run its cost model and should be readily able to make a compliance filing within 20 days of entry of this Order. Should Verizon require additional cost estimates to calculate any rate

entry date of this Order. Verizon must identify a UNE rate for all necessary cost elements at issue in this proceeding and identify the portion of the Order or Orders that describe the rate elements at issue.

DATED at Olympia, Washington, and effective this 17th day of August, 2005.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

MARK H. SIDRAN, Chairman

PATRICK J. OSHIE, Commissioner

PHILIP B. JONES, Commissioner

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element at issue in this proceeding Verizon must notify the Commission in writing within five business days of entry of this Order, so that the appropriate model output can be provided in a timely manner.

Appendix A

The Commission updated the HM 5.3 inputs to reflect the depreciation data approved in Docket No. UT-040520. The results appear in the following tables:

Table 1 – HM 5.3 DS-0 Cost Estimates

CLLI	Cost Estimate	CLLI	Cost Estimate	CLLI	Cost Estimate	CLLI	Cost Estimate
ACMEWAXA	$51.11	EDSNWAXX	$45.25	LKWNWAXA	$66.40	RCLDWAXB	$9.30
ALGRWAXX	$37.83	ENTTWAXX	$84.25	LOMSWAXA	$143.51	RDMDWAXA	$8.08
ANCRWAXX	$14.44	EVRTWAXC	$8.34	LVWOWAXX	$51.86	ROSLWAXA	$133.10
ARTNWAXX	$26.22	EVRTWAXF	$7.26	LYNDWAXX	$20.89	RPBLWAXA	$95.05
BGLKWAXX	$50.36	EVSNWAXX	$33.22	MLDNWAXA	$117.99	SKYKWAXX	$52.62
BLANWAXB	$21.00	EWNCWAXA	$21.14	MLSNWAXA	$276.50	SLLKWAXA	$8.68
BNCYWAXX	$41.19	FNDLWAXA	$24.51	MNFDWAXX	$140.42	SMSHWAXA	$13.81
BOTHWAXB	$8.55	FRFDWAXA	$96.89	MNSNWAXA	$38.18	SNHSWAXX	$20.89
BRBAWAXA	$19.16	FRTNWAXX	$97.08	MONRWAXX	$16.80	SOLKWAXX	$45.48
BRPTWAXX	$81.51	GERGWAXX	$108.40	MPFLWAXA	$73.54	STPSWAXA	$62.32
BRWSWAXA	$46.07	GRFDWAXX	$97.71	MRBLWAXX	$94.21	STWDWAXX	$23.34
BURLWAXX	$15.94	GRFLWAXX	$30.02	MRWYWAXA	$8.39	SULTWAXX	$33.48
CAMSWAXX	$17.88	GRLDWAXX	$29.27	MTVRWAXX	$12.31	SUMSWAXX	$35.07
CHLNWAXX	$36.83	HLLKWAXX	$8.70	MYVIWAXX	$12.09	SWLYWAXX	$23.84
CLVWWAXA	$19.55	HMTNWAXA	$52.33	NCHSWAXX	$40.67	TEKOWAXX	$84.63
CMISWAXA	$23.91	JUNTWAXA	$10.55	NILEWAXX	$63.38	THTNWAXA	$216.95
CNCRWAXX	$77.91	KNWCWAXA	$13.66	NWPTWAXX	$55.05	TNSKWAXA	$123.55
CNWYWAXX	$37.95	KNWCWAXB	$15.54	OKDLWAXX	$104.91	WDLDWAXA	$29.02
CPVLWAXX	$25.31	KNWCWAXC	$20.94	OKHRWAXX	$15.24	WNTCWAXX	$15.10
CRLWWAXA	$185.76	KRLDWAXX	$8.64	PALSWAXX	$56.59	WRLDWAXA	$20.23
CSHRWAXX	$28.24	LACNWAXX	$21.29	PLMNWAXX	$20.36	WSHGWAXA	$20.75
CSTRWAXA	$31.00	LARLWAXX	$24.83	QNCYWAXX	$57.24	WSPTWAXA	$17.72
DMNGWAXA	$50.31	LATHWAXA	$82.21	RCBHWAXX	$7.40	WSRVWAXA	$47.53
DRTNWAXX	$44.14	LKGWWAXA	$22.20	RCFRWAXB	$101.86	WTVLWAXA	$127.06
DVLLWAXX	$21.61	LKSTWAXA	$15.03	RCLDWAXA	$16.83	**Statewide Avg.**	$17.29

Table 2 - HM 5.3 DS-1 and DS-3 Cost Estimates

Loop elements			
DS-1 Loops		**DS-3 Loops**	
DS-1 Concentrator Unit Cost/month	$82.89		
DS-1 Feeder Unit Cost/month	$1.13	DS-3 Feeder Unit Cost/month	$94.38
DS-1 Distribution Unit Cost/month	$13.11	DS-3 Distribution Unit Cost/month	$734.19
DS-1 Total Unit Cost/month	$97.13	DS-3 Total Unit Cost/month	$828.57

Table 3 – HM 5.3 Switching and Transport Cost Estimates[34]

		Annual Cost	**Units**			**Unit Cost**	
End office switching	$	39,285,001	903,463		$	3.62	total switch cost per line per month
Non-Usage Related		14,075,816	903,463	switched lines	$	1.30	per line/month
Usage-Related		25,209,185	19,554,671,925	actual minutes	$	0.00129	per actual minute
Signaling network elements	$	1,451,657					
Links		245,446	235	links	$	86.88	per link per month
STP		1,049,094	13,592,140,373	TCAP+ISUP msgs	$	0.00008	per signaling message
SCP		157,116	672,916,540	TCAP queries	$	0.00023	per query
Transport network elements							
Dedicated							
Transport including Special	$	6,354,937	1,074,558	trunks	$	0.49	per DS-0 equivalent per month

[34] Consistent with Appendix B of the 27th Supplemental Order the number of switched lines and various traffic sensitive inputs were reduced by 5% in the Commission's updated model runs.

Transport		6,354,937	1,074,558	trunks	$	0.00005	per minute
Special		-	-	trunks			
Transmission Terminal		24,853,185	1,074,558	trunks	$	1.93	per DS-0 equivalent per month
					$	0.00019	per minute
					$	0.00024	total per minute
Common							
Transport	$	745,224	948,148,074	minutes	$	0.00060	per minute per leg (orig or term)
Transmission Terminal		478,146	948,148,074	minutes	$	0.00038	per minute
					$	0.00098	total per minute
Direct							
Transport	$	2,784,143	5,718,719,980	minutes	$	0.00049	per minute
Transmission Terminal		2,709,176	5,718,719,980	minutes	$	0.00047	per minute
					$	0.00096	total per minute
Tandem switch	$	1,235,096	802,060,365	minutes	$	0.00154	per minute
Operator systems	$	5,804,204					
Public Telephones	$	934,888					
Total (w/ Public)	$	289,056,106					
Total cost of switched network elements (w/o Public)	$	25.04	per line/month				

VzCost

While updating the depreciation data in VzCost we became aware that our 2-wire loop cost estimates for each Verizon wire center shown in Appendix A to the 24th Supplemental Order are incorrect because they contradict both the correctly stated statewide average 2-wire loop cost estimate of $18.86[35] and the investment per line estimate derived from our final run of VzCost.[36]

If one were to calculate the statewide average 2-wire loop cost estimate using the individual wire center cost estimates from Appendix A to the 24th Supplemental Order, the statewide average 2-wire loop rate would be 19.56,[37] as opposed to $18.86. These erroneous wire center level loop cost estimates from the 24th Supplemental Order are consistent with the statewide average and deaveraged zone cost estimates from a report produced by VzCost which was based on an intermediate run of the model that did not fully represent the decisions in the 24th Supplemental Order. The report corresponding to this intermediate run also produced an investment per line that that was consistent with the erroneous cost estimates.[38] The discovery of our reliance on data from the intermediate run leads us to conclude that the wire center level 2-wire loop cost estimates in the 24th Supplemental Order are incorrect.

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[35] 24th Supplemental Order, ¶447.

[36] We recreated Verizon's June 2003 VzCost filing incorporating all the adjustments required in the 24th Supplemental Order. We also recreated Verizon's March 2004 VzCost filing in this case, incorporating the adjustments required in the 24th Supplemental Order. The cost estimates from these recreated filings confirm that the 24th Supplemental Order wire center cost estimates were erroneous and that the corrected statewide average loop rates and per line investment contained in Appendix A to this Order are properly calculated.

[37] This calculation is based on a weighted average of the cost estimates from Appendix A to the 24th Supplemental Order and the total number of lines per wire center in the VzCost 'Demand' table. The Commission repeated this calculation for the 'Corrected 24th Supplemental Order' cost estimates and the cost estimates derived from the 'Updated Depreciation Data' found in Appendix A to this Order. In each case the statewide averages calculated by VzCost and the Commission differed by 4 cents, or approximately 0.2% of loop costs. We attribute this difference to rounding errors. Similar results were received when calculating the 5-zone deaveraged cost estimates.

[38] As noted at ¶165 of the 27th Supplemental Order, the correct investment per line for the 2-wire loop is $953.90. The erroneous intermediate run, used to produce the wire center cost estimates in Appendix A to the 24th Supplemental Order produced an investment per line of $986.90.

In this Appendix the Commission corrects the erroneous Verizon wire center cost estimates in the 24th Supplemental Order and updates the correct cost estimates to reflect the depreciation data approved in Docket No. UT-040520.

Table 4 – VzCost 2-Wire Loop Cost Estimates

CLLI	24th Supp. Order Cost Estimate	Corrected 24th Supp. Order Cost Estimate	Updated Depreciation Data Cost Estimate	CLLI	24th Supp. Order Cost Estimate	Corrected 24th Supp. Order Cost Estimate	Updated Depreciation Data Cost Estimate
ACMEWAXA	$31.14	$29.57	$30.38	LKWNWAXA	$47.73	$47.13	$48.54
ALGRWAXX	$36.89	$35.11	$35.99	LOMSWAXA	$122.68	$121.57	$125.12
ANCRWAXX	$18.53	$17.55	$17.98	LVWOWAXX	$28.13	$26.87	$27.68
ARTNWAXX	$23.71	$22.58	$23.14	LYNDWAXX	$23.73	$22.56	$23.16
BGLKWAXX	$25.44	$24.80	$25.46	MLDNWAXA	$132.43	$131.64	$135.53
BLANWAXB	$18.91	$17.94	$18.37	MLSNWAXA	$201.83	$199.33	$204.81
BNCYWAXX	$34.15	$33.36	$34.26	MNFDWAXX	$180.56	$179.94	$184.47
BOTHWAXB	$14.84	$14.59	$14.93	MNSNWAXA	$51.30	$49.70	$51.28
BRBAWAXA	$25.37	$24.01	$24.68	MONRWAXX	$18.19	$17.19	$17.63
BRPTWAXX	$41.27	$40.75	$42.02	MPFLWAXA	$32.18	$31.46	$32.24
BRWSWAXA	$91.76	$90.39	$93.49	MRBLWAXX	$46.72	$45.51	$46.68
BURLWAXA	$17.72	$16.82	$17.23	MRWYWAXA	$12.17	$12.04	$12.35
CAMSWAXX	$23.04	$21.87	$22.40	MTVRWAXX	$14.36	$13.60	$13.96
CHLNWAXX	$40.78	$39.52	$40.68	MYVIWAXX	$16.14	$15.84	$16.28
CLVWWAXA	$18.80	$17.45	$17.86	NCHSWAXX	$28.00	$26.85	$27.32
CMISWAXA	$20.19	$19.01	$19.57	NILEWAXX	$64.34	$62.67	$63.99
CNCRWAXX	$47.02	$46.22	$47.37	NWPTWAXX	$66.74	$65.30	$67.24
CNWYWAXX	$32.84	$31.44	$32.23	OKDLWAXX	$116.65	$115.82	$119.47
CPVLWAXX	$28.12	$26.95	$27.64	OKHRWAXX	$17.07	$16.21	$16.63
CRLWWAXA	$109.99	$109.16	$112.28	PALSWAXX	$72.24	$71.58	$73.71
CSHRWAXX	$39.42	$37.93	$39.06	PLMNWAXX	$30.55	$29.61	$30.33
CSTRWAXA	$38.23	$36.76	$37.64	QNCYWAXX	$65.32	$63.91	$65.82
DMNGWAXA	$36.15	$34.70	$35.67	RCBHWAXX	$10.61	$10.45	$10.69
DRTNWAXX	$30.81	$30.15	$30.99	RCFRWAXB	$141.24	$140.71	$145.11

DVLLWAXX	$21.60	$20.37	$20.92	RCLDWAXA	$16.12	$15.32	$15.70
EDSNWAXX	$46.61	$45.02	$46.15	RCLDWAXB	$12.49	$12.30	$12.58
ENTTWAXX	$68.06	$67.52	$69.49	RDMDWAXA	$13.87	$13.46	$13.76
EVRTWAXC	$11.50	$11.27	$11.52	ROSLWAXA	$164.86	$164.13	$168.95
EVRTWAXF	$9.26	$9.18	$9.37	RPBLWAXA	$59.15	$58.39	$60.04
EVSNWAXX	$34.10	$32.08	$32.89	SKYKWAXX	$39.36	$38.33	$39.05
EWNCWAXA	$29.06	$27.83	$28.53	SLLKWAXA	$14.41	$14.02	$14.43
FNDLWAXA	$25.93	$24.68	$25.38	SMSHWAXA	$19.59	$18.45	$18.94
FRFDWAXA	$111.57	$110.77	$114.09	SNHSWAXX	$17.82	$16.90	$17.32
FRTNWAXX	$181.60	$181.01	$186.61	SOLKWAXX	$52.87	$51.21	$52.74
GERGWAXX	$120.98	$120.40	$124.22	STPSWAXA	$53.45	$53.08	$53.93
GRFDWAXX	$110.41	$109.80	$113.02	STWDWAXX	$24.96	$23.66	$24.24
GRFLWAXX	$24.48	$23.21	$23.82	SULTWAXX	$22.20	$21.10	$21.61
GRLDWAXX	$25.09	$23.48	$24.34	SUMSWAXX	$42.10	$40.57	$41.53
HLLKWAXX	$12.10	$11.78	$12.03	SWLYWAXA	$18.92	$18.00	$18.52
HMTNWAXA	$35.98	$34.44	$35.31	TEKOWAXX	$129.80	$129.18	$132.73
JUNTWAXA	$11.95	$11.85	$12.13	THTNWAXA	$285.93	$284.87	$292.98
KNWCWAXA	$16.75	$15.77	$16.11	TNSKWAXA	$97.12	$96.21	$98.83
KNWCWAXB	$18.58	$17.64	$18.07	WDLDWAXA	$27.52	$26.31	$26.99
KNWCWAXC	$22.12	$20.81	$21.30	WNTCWAXX	$22.06	$21.03	$21.54
KRLDWAXX	$10.87	$10.56	$10.79	WRLDWAXA	$26.45	$24.97	$25.52
LACNWAXX	$22.58	$21.31	$21.89	WSHGWAXA	$22.34	$21.18	$21.75
LARLWAXX	$29.51	$28.30	$29.04	WSPTWAXA	$15.42	$14.02	$14.54
LATHWAXA	$85.70	$84.18	$87.07	WSRVWAXA	$48.75	$47.10	$48.40
LKGWWAXA	$23.44	$22.18	$22.82	WTVLWAXA	$105.47	$104.83	$107.75
LKSTWAXA	$20.03	$18.77	$19.26				

Table 5 – VzCost Monthly Recurring Cost Estimates

UNBUNDLED NETWORK ELEMENT/SERVICE	Cost Estimate
LOCAL LOOPS	
2 Wire Basic Unbundled Loop - Statewide Average	$19.34
2 Wire Basic Unbundled Loop - Density Cell 1	$14.26
2 Wire Basic Unbundled Loop - Density Cell 2	$24.71
2 Wire Basic Unbundled Loop - Density Cell 3	$46.53
2 Wire Basic Unbundled Loop - Density Cell 4	$113.00
2 Wire Basic Unbundled Loop - Density Cell 5	$292.98
2 Wire Digital-ISDN-BRI Loop - Statewide Average	$32.22
2 Wire Digital-ISDN-BRI Loop - Density Cell 1	$22.54
2 Wire Digital-ISDN-BRI Loop - Density Cell 2	$41.14
2 Wire Digital-ISDN-BRI Loop - Density Cell 3	$84.78
2 Wire Digital-ISDN-BRI Loop - Density Cell 4	$221.51
2 Wire Digital-ISDN-BRI Loop - Density Cell 5	$678.25
4 Wire - 4 Wire Customer Specified Signaling Loop - Statewide Average	$51.91
4 Wire - 4 Wire Customer Specified Signaling Loop - Density Cell 1	$41.54
4 Wire - 4 Wire Customer Specified Signaling Loop - Density Cell 2	$62.87
4 Wire - 4 Wire Customer Specified Signaling Loop - Density Cell 3	$107.29
4 Wire - 4 Wire Customer Specified Signaling Loop - Density Cell 4	$242.98
4 Wire - 4 Wire Customer Specified Signaling Loop - Density Cell 5	$614.98
Digital 4 Wire (56KD-64KD) Loop - Statewide Average	$56.80
Digital 4 Wire (56KD-64KD) Loop - Density Cell 1	$46.44
Digital 4 Wire (56KD-64KD) Loop - Density Cell 2	$67.77
Digital 4 Wire (56KD-64KD) Loop - Density Cell 3	$112.18
Digital 4 Wire (56KD-64KD) Loop - Density Cell 4	$247.87
Digital 4 Wire (56KD-64KD) Loop - Density Cell 5	$619.87
2 Wire Customer Specific Signaling Loop - Statewide Average	$21.95
2 Wire Customer Specific Signaling Loop - Density Cell 1	$16.77
2 Wire Customer Specific Signaling Loop - Density Cell 2	$27.44
2 Wire Customer Specific Signaling Loop - Density Cell 3	$49.65
2 Wire Customer Specific Signaling Loop - Density Cell 4	$117.49
2 Wire Customer Specific Signaling Loop - Density Cell 5	$303.49

DS1 Loop - Statewide Average	$115.16
DS1 Loop - Density Cell 1	$104.08
DS1 Loop - Density Cell 2	$154.08
DS1 Loop - Density Cell 3	$268.93
DS1 Loop - Density Cell 4	$388.42
DS1 Loop - Density Cell 5	$232.61
DS-3 Loop - Statewide Average	$680.05
ISDN Loop Extender (Digital) - Statewide Average	$14.49
SUB-LOOPS	
Subloop Distribution - 2 Wire - Statewide Average	$10.08
Subloop Distribution - 2 Wire - Density Cell 1	$7.96
Subloop Distribution - 2 Wire - Density Cell 2	$13.28
Subloop Distribution - 2 Wire - Density Cell 3	$20.75
Subloop Distribution - 2 Wire - Density Cell 4	$39.94
Subloop Distribution - 2 Wire - Density Cell 5	$60.85
Subloop Distribution - 4 Wire - Statewide Average	$20.13
Subloop Distribution - 4 Wire - Density Cell 1	$15.89
Subloop Distribution - 4 Wire - Density Cell 2	$26.54
Subloop Distribution - 4 Wire - Density Cell 3	$41.47
Subloop Distribution - 4 Wire - Density Cell 4	$79.85
Subloop Distribution - 4 Wire - Density Cell 5	$121.68
Subloop Feeder Element - 2 Wire - Statewide Average	$9.29
Subloop Feeder Element - 2 Wire - Density Cell 1	$6.33
Subloop Feeder Element - 2 Wire - Density Cell 2	$11.45
Subloop Feeder Element - 2 Wire - Density Cell 3	$25.81
Subloop Feeder Element - 2 Wire - Density Cell 4	$73.09
Subloop Feeder Element - 2 Wire - Density Cell 5	$232.16
Subloop Feeder Element - 4 Wire - Statewide Average	$31.80
Subloop Feeder Element - 4 Wire - Density Cell 1	$25.68
Subloop Feeder Element - 4 Wire - Density Cell 2	$36.36
Subloop Feeder Element - 4 Wire - Density Cell 3	$65.85
Subloop Feeder Element - 4 Wire - Density Cell 4	$163.16
Subloop Feeder Element - 4 Wire - Density Cell 5	$493.32

Subloop Feeder Element - DS1 - Statewide Average	$95.28
Subloop Feeder Element - DS1 - Density Cell 1	$86.30
Subloop Feeder Element - DS1 - Density Cell 2	$128.19
Subloop Feeder Element - DS1 - Density Cell 3	$233.39
Subloop Feeder Element - DS1 - Density Cell 4	$331.57
Subloop Feeder Element - DS1 - Density Cell 5	$163.90
Feeder Subloop Element - DS3 - Statewide Average	$614.62
Drop Sub-Element - 2 Wire - Statewide Average	$1.70
Drop Sub-Element - 2 Wire - Density Cell 1	$1.34
Drop Sub-Element - 2 Wire - Density Cell 2	$2.49
Drop Sub-Element - 2 Wire - Density Cell 3	$3.34
Drop Sub-Element - 2 Wire - Density Cell 4	$4.39
Drop Sub-Element - 2 Wire - Density Cell 5	$6.40
Drop Sub-Element - 4 Wire - Statewide Average	$3.41
Drop Sub-Element - 4 Wire - Density Cell 1	$2.69
Drop Sub-Element - 4 Wire - Density Cell 2	$4.98
Drop Sub-Element - 4 Wire - Density Cell 3	$6.68
Drop Sub-Element - 4 Wire - Density Cell 4	$8.77
Drop Sub-Element - 4 Wire - Density Cell 5	$12.81
NID / HOUSE & RISER	
NID to NID Connection - 2 Wire (per NID)	$0.7822817
NID to NID Connection - 4 Wire (per NID)	$1.56
Standalone NID - DS1 (per NID)	$0.8570888
House and Riser Cable - Building Access (Per Pair, Per Month)	$0.4539184
House and Riser Cable - Floor Access (Per Pair, Per Month)	$0.4539184
EEL IOF/TESTING	
2 Wire Analog Test Charge	$0.0315249
2 Wire Digital Test Charge	$0.0315249
4 Wire Analog Test Charge	$0.0630497
DS1 (1.544 mbps) Test Charge	$0.0734208
Digital 4 Wire (56 or 64 kbps) Test Charge	$0.0630497
Voice Grade - Fixed includes one end only	$15.38
Voice Grade - Per Mile	$0.1263791

2 Wire ISDN - Fixed includes one end only	$14.70
2 Wire ISDN - Per Mile	$0.3791374
COMMON TRANSPORT	
Common Transport - Per Mile	$0.0000038
Common Transport - Per Termination	$0.0000403
IOF/HICAP	
Interoffice Facilities (IOF) - DS0 Voice Grade - Per Mile	$0.1263791
Interoffice Facilities (IOF) - DS0 Voice Grade Fixed includes one end	$15.38
Interoffice Facilities - (IOF) - DS-1 Per Mile	$3.03
Interoffice Facility (IOF) DS-1 Fixed includes one end	$19.10
Interoffice Facilities (IOF) - DS-3 Per Mile	$16.29
Interoffice Facilities (IOF) - DS-3 Voice Grade Fixed includes one end	$114.73
E911	
E911 Database - ALI Gateway, Per Month	$22.39
DARK FIBER	
Dark Fiber - IOF - Verizon CO to Verizon CO - Serving Wire Ctr Chrg/Pair/SWC	$6.83
Dark Fiber - IOF - Verizon CO to Verizon CO - Interoffice Mileage Per Pair Per Mile	$116.39
Dark Fiber - IOF - Verizon CO to Verizon CO - Intermediate Office Chrg/Intermediate Office	$13.66
Dark Fiber - IOF - Verizon CO to CLEC CO - Serving Wire Center Charge/Pair/SWC	$6.83
Dark Fiber - IOF - Verizon CO to CLEC CO - IOF Channel Termination Fixed Charge	$9.42
Dark Fiber - IOF - Verizon CO to CLEC CO - IOF Channel Termination Mileage per pair per 1/4 mile	$29.10
Dark Fiber - IOF - Verizon CO to Verizon CO - Intermediate Office charge per intermediate office	$13.66
Dark Fiber - Loop - Serving Wire Center Charge/Pair/SWC	$6.83
Dark Fiber - Loop Mileage Charge per pair per 1/4 mile	$29.10
Dark Fiber - Loop Charge/Pair	$9.42
Dark Fiber - Subloop Feeder CO to RT - Serving Wire Ctr Chrg/Pair/SWC	$6.83
Dark Fiber - Subloop Feeder CO to RT - Mileage Charge per pair per 1/4 mile	$29.10
Dark Fiber - Subloop Feeder CO to RT - Charge/Pair	$6.83
Dark Fiber - Subloop Distribution RT to EU - Mileage Charge/Pair/Quarter Mile	$29.10
Dark Fiber - Subloop Distribution RT to EU - Charge/Pair	$6.83
Dark Fiber - Subloop Distribution RT to EU - Loop Charge/Pair	$9.42
Dark Fiber - Subloop RT to RT - Mileage Charge/Pair/Quarter Mile	$29.10

Dark Fiber - Subloop RT to RT - Transport Charge/Pair/RT	$6.83
Dark Fiber - Subloop RT to RT - Intermediate Office Chrg/Intermediate Office	$13.66
DAILY USAGE FILE (DUF)	
Daily Usage File (DUF) - Per Record Recorded	$0.0007118
Daily Usage File (DUF) - Per Record Transmitted	$0.0006880
SMS (AIN SERVICE CREATION)	
SMS Pricing (AIN) - Service Creation Usage - Remote Access per 24Hr. Day	$3,033.75
SMS Pricing (AIN) - Service Creation Usage - On Premises per 24 Hour Day	$3,033.75
SMS Pricing (AIN) - Certification and Testing per hour	$115.94
SMS Pricing (AIN) - Help Desk Support per hour	$115.94
Subscription Charge per line/month/service	$0.87866
SMS Pricing (AIN) - Database Query - Network Query	$0.00047
SMS Pricing (AIN) - Utilization Element Per ACU/Query	$0.00036
SMS Pricing (AIN) - Service Modification - DTMF Update Per Occurrence	$0.08137
Switched Based Announcement	$0.00111
SMS Pricing - (AIN) Service Creation Access Port Per Month Per Logon ID	$1,244.39