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December 17, 2003

Hon. Marlene H. Dortch
Secretary
Federal Communications Commission
The Portals II
445 12 Street, SW
Washington, D.C. 20554

Re: Comments of the New York State Department of Public Service in the Matter of the Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers; WC Docket No. 03-173, FCC 03-224

Dear Secretary Dortch:

For filing, attached please find the Comments of the New York State Department of Public Service in the above-referenced matter in response to the Commission's Notice of Proposed Rulemaking, released September 15, 2003 and published in the Federal Register on October 17, 2003.

Sincerely,

Kathleen H. Burgess
Assistant Counsel

Att.

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

In the Matter of	)	
	)	WC Docket No. 03-173
Review of the Commission's Rules Regarding the Pricing	)	FCC 03-224
of Unbundled Network Elements and the Resale of Service	)	
by Incumbent Local Exchange Carriers		

COMMENTS OF NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE

Dawn Jablonski Ryman
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Public Service Commission
of the State of New York
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Dated: December 15, 2003
Albany, New York

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Attachments

1. Case 98-C-1357 – Proceeding on Motion of the Commission to Examine New York Telephone Rates for Unbundled Network Elements, Recommended Decision on Module 3 Issues by Administrative Law Judge Joel A. Linsider (issued May 16, 2001)

2. Case 98-C-1357 – Supplemental Recommended Decision on Pricing of Ducts and Conduits by Administrative Law Judge Joel A. Linsider (issued June 18, 2001)

3. Case 98-C-1357 – Order on Unbundled Network Element Rates (issued January 28, 2002)

4. Case 98-C-1357 and 00-C-1945 – Proceeding on Motion of the Commission to Consider Cost Recovery by Verizon and to Investigate the Future Regulatory Framework – Order Instituting Verizon Incentive Plan (issued February 27, 2002)

5. Case 98-C-1357 – Order Denying Rehearing Petitions (issued February 6, 2003)

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20054

In the Matter of

Review of the Commission's Rules Regarding	)	
the Pricing of Unbundled Network Elements	)	WC Docket No. 03-173
and the Resale of Service by Incumbent Local	)	FCC 03-224
Exchange Carriers	)	

Introduction and Summary

The New York State Department of Public Service (NYDPS) submits these comments in response to the Federal Communications Commission's (Commission) Notice of Proposed Rulemaking (NPRM) published in the October 17, 2003 Federal Register. The NPRM reexamines the rules applicable to pricing of Unbundled Network Elements (UNEs) and resold telecommunications services that incumbent local exchange carriers (ILECs) must make available to competitive local exchange carriers (CLECs) pursuant to the Telecommunications Act of 1996 (the Act). The Commission established the pricing methodology for UNEs known as Total Element Long Run Incremental Cost (TELRIC),[1] and this NPRM is the first reexamination of these rules.

[1] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499 (1996) (Local Competition Order), aff'd in part and vacated in part sub. nom. Comp. Tel. Assoc. v. FCC,117 F.3d 1068 (8th Cir. 1997) and Iowa Utilities Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997), aff'd in part and remanded, AT&T v. Iowa Utilities Bd., 525 US 366 (1999); on remand Iowa Utilities Bd. v. FCC, 219 F.3d 744 (8th Cir. 2000), reversed in part sub nom. Verizon Communications, Inc. v. FCC, 535 US 467 (2002).

The NYDPS supports the Commission's decision to reexamine whether the current pricing rules are achieving one of the central purposes of the Act, which is to promote facilities-based competition.[2] We agree that the pricing rules must produce rates that are just, reasonable and non-discriminatory, are consistent with the Act's goal of promoting competition, and do not create incentives for carriers to avoid investment in facilities.[3] To this end, the Commission's goals for UNE pricing are appropriate. In support of these goals, the NYDPS agrees with the Commission's conclusion that TELRIC should incorporate "real world" attributes of the ILEC's network. Likewise, factors that are reflected in TELRIC rates, such as depreciation and cost of capital, should be calculated in a manner that state commissions determine reflects the actual risks that an ILEC faces in a particular market. Further, the non-recurring charges that an ILEC charges to recover the costs in processing an order for a competitor should also reflect the same network construct as used to establish recurring charges.

However, state commissions should continue to have the flexibility to set UNE prices in a manner that sends efficient entry and investment signals to all competitors while providing ILECs a reasonable opportunity to recover the forward-looking costs of providing UNEs. The Commission should not require that states conduct new proceedings within nine months but, rather, state commissions should have the flexibility to determine whether their UNE prices are consistent with the Commission’s methodology and when they will initiate new cost proceedings.

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[2] NPRM at ¶ 3.

[3] NPRM at ¶ 3.

Finally, attached to these comments are the New York Public Service Commission (NYPSC) Order and Recommended Decision from the most recent examination of UNE pricing in New York, which may be helpful in answering more specific questions contained in the NPRM.[4] Summary responses to the various specific questions asked in the NPRM that are not addressed in the text of these comments, with specific references to the applicable portion of the Order and Recommended Decision, are also provided in the Appendix.

I. Background of NYPSC Proceedings

The NYPSC undertook its first TELRIC costing examination after the inception of the Act.[5] This proceeding, the First Network Elements Proceeding, consisted of four phases that examined resale as well as the pricing of UNEs and other wholesale services. Subsequently, in September 1998, the NYPSC announced its intention to undertake a comprehensive reexamination of the rates established in the First Network Elements Proceeding.[6] Among other reasons, the NYPSC determined that costs change continually and, moreover, the continuing evolution of the telecommunications industry, including the demand for additional lines and Internet usage, warranted a Second Network Elements Proceeding to reexamine the assumptions underlying the determinations in the First Network Elements Proceeding.

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[4] Case 98-C-1357, Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements, Order on Unbundled Network Elements (issued January 28, 2002) (hereinafter referred to as "Order"); Recommended Decision on Module 3 Issues by Administrative Law Judge Joel A. Linsider (issued May 16, 2001) (hereinafter referred to as "Recommended Decision").

[5] Case 98-C-1357. The procedural history of this case, which includes the dates of all related NYPSC orders for the First and Second Network Elements Proceedings, is set forth in the Order, pp 1 – 8.

[6] Case 98-C-1357, Order Denying Motion to Reopen Phase 1 and Instituting New Proceeding (issued September 30, 1998).

The Second Network Elements Proceeding consisted of three modules: Directory Database (DDB); Collocation; and UNEs generally. Following a comprehensive review of the costs of Verizon's UNEs, the NYPSC issued its Order on Unbundled Network Element Rates, which are effective in New York today. [7]

II. The Commission's Goals for UNE Pricing Provide the Appropriate Incentives

The Commission determined in the Local Competition Order that there are two objectives for employing UNE pricing. First, the Commission stated that "UNE prices should be set in a manner that sends efficient entry and investment signals to all competitors."[8] Second, these prices "should provide incumbent LECs an opportunity to recover the forward-looking costs of providing UNEs."[9] The Commission is now seeking comment on whether these two goals ought to remain the primary goals of the UNE pricing rules.

We agree that these goals should remain the primary goals. There is, of course, a potential tension between encouraging efficient entry for competitors while at the same time providing ILECs with the ability to recover their forward-looking costs. The Commission's goals cannot be achieved if UNE prices are so low that CLECs would have little incentive to invest in their own facilities and ILECs cannot recover their economic costs. On the other hand, if UNE

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[7] Case 01-C-1945, Verizon New York, Inc. – Cost Recovery and Future Regulatory Framework (hereinafter referred to as "Verizon Incentive Plan Order"), Order Instituting Verizon Incentive Plan (issued February 27, 2002). In the Verizon Incentive Plan Order, NYPSC stated that the rates for UNEs are those set in the Order in Case 98-C-1357 with the sole exception being the rate of the non-recurring charge for two-wire and four-wire hotcuts.

[8] NPRM at ¶ 38, citing Local Competition Order at 15844, ¶ 672.

[9] NPRM at ¶ 38, citing 47 USC Section 252(d)(1). The Commission notes that "UNE prices need not, however, provide for a full recovery of historical costs. Local Competition Order, 11 FCC Rcd at 15857-58, ¶. 705 ("Neither a methodology that establishes prices for interconnection and access to network elements directly in the costs reflected in the regulated books of account, nor a price based on forward-looking costs plus an additional amount reflecting embedded costs, would be consistent with the approach we are adopting.")

rates are set too high they could serve as barriers for new entrants. TELRIC was designed as a means for reconciling these two goals, and the Commission ought to maintain the same objectives as it reexamines UNE pricing principles.

III. UNE Rates Should Reflect "Real World" Attributes

The Commission states that one of the most controversial aspects of TELRIC is the assumption that the cost of a UNE should be determined based on the cost of deploying the most efficient technology throughout its service area. The question presented is: "If a single carrier were to build an efficient network today to serve all customer locations within a particular geographic area, taking as given only the locations of existing wire centers, how much would it cost to construct and maintain the network?"[10]

The Commission now posits that the TELRIC rules "should more closely account for the real-world attributes of routing and topography of an incumbent's network in the development of forward-looking costs."[11] In its view, this proposed pricing methodology, while forward-looking, "must be more representative of the real world and should not be based on the totally hypothetical cost of a most-efficient provider building a network from scratch."[12] The Commission seeks comment on whether this approach would address claims that the current TELRIC rules distort a competitor's decision whether to invest in new facilities or lease an incumbent's facilities.

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[10] NPRM at ¶ 49.

[11] NPRM at ¶ 52.

[12] NPRM at ¶ 53.

The NYDPS agrees that UNE rates should more closely account for the real-world attributes of an incumbent's network in the development of forward-looking costs if they are to achieve a just and reasonable result. In a competitive market, technology upgrades are not instantaneous, but evolutionary, and smaller competitive markets do not enjoy the same economies of scale and scope as do a single, larger network. Consequently, in the Second Network Elements proceeding, the NYPSC adopted Verizon's cost model, which, in large part, relied on historical data and forward looking estimates by engineers. The NYPSC further adjusted Verizon's cost model to reflect TELRIC assumptions. This model more closely accounted for the actual network technology and the practices Verizon currently engages in. The AT&T and MCI model was rejected because its assumptions and algorithms held a "tenuous link to the real world."[13]

Costs based on real-world attributes would account for dynamic inefficiencies inherent in the provisioning of services in a real network, which would otherwise be obviated in a purely hypothetical network. Reflecting inefficiencies into the TELRIC model makes it more likely that CLECs will invest in facilities if they can build or buy their own facilities for less than it would cost them to lease these facilities from the ILEC. Basing the costs on a hypothetical construct may likewise discourage ILECs from investing in facilities if the end result is that CLECs will continue to lease from them at less than it costs ILECs to build new facilities. On the other hand, accounting for the real-world attributes could encourage ILECs to become more efficient in order to meet competitive threats from CLEC facilities-based carriers. The level of competition

[13] Recommended Decision, p. 34.

in New York[14] validates the NYPSC's consideration of real-world attributes of the network in setting UNE rates.

IV. Depreciation Practices Should Reflect A Competitive Environment

In the Local Competition Order, the Commission concluded that depreciation schedules should take into account expected decline in the value of goods.[15] In the Triennial Review Order, the Commission declined to mandate any particular set of economic lives, but clarified that a carrier could accelerate recovery of the initial outlay of an asset to reflect anticipated decline in value.[16] In this rulemaking, the Commission states that it has been reluctant to rely solely on financial reporting lives because Generally Accepted Accounting Principles (GAAP) might permit companies to adopt depreciation methods that result in excessive depreciation expense.[17] The Commission queries whether this reluctance is warranted and seeks comment on how financial reporting lives are calculated and whether they accurately represent the anticipated economic life of assets.

The Commission should not adopt a specific rule; it should continue to rely on state commissions to determine whether the use of the depreciation lives used for GAAP purposes are appropriate for setting TELRIC rates. The NYPSC recently embraced the concept for intrastate ratemaking purposes of aligning Verizon's regulatory financial figures and depreciation reserves

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[14] For the year ending December 31, 2002, CLECs served 3,368,415 lines, which represents a 24% share of the market.

[15] NPRM at ¶ 93, citing Local Competition Order at 15849, ¶ 686.

[16] NPRM at ¶ 93, citing Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Report and Order and Order on Remand and Future Notice of Proposed Rulemaking, ((Docket No. 01-338, Federal Communications Commission 03-361 released August 21, 2003 (Triennial Review Order) at ¶¶ 689-691.

[17] NPRM at ¶ 98.

with those used in its filings with the Securities and Exchange Commission (SEC), which employ GAAP to set forth Verizon's financial condition and operations.[18] As ILECs, such as Verizon, operate in an increasingly competitive environment, regulatory accounting should likewise move in a similar fashion to the use of GAAP. Just as the Commission has expressed its reluctance to move to GAAP, we, too, would need to carefully evaluate the level of real competition in New York and use the company's GAAP depreciation lives as one of the factors which could be used to inform our rate-setting process. Therefore, consistent with the view that UNE rates should be based upon real world attributes, the Commission should not adopt a one-size fits all policy. State commissions should have the flexibility to determine whether GAAP depreciation lives better reflect the treatment of depreciation in the competitive market or whether these lives should be but one factor in determining the appropriate UNE rates.

V. The Cost of Capital Should Reflect the Risks of the Real World

The Commission stated in the Local Competition Order that the "currently authorized rate of return at the federal or state level is a reasonable starting point" for determining the cost of capital.[19] The authorized rate of return at that time was 11.25%, but the Commission noted that states could "adjust the cost of capital if a party demonstrates to a state commission that either a higher or lower level of cost of capital is warranted."[20] In the Triennial Review Order, the Commission clarified that a TELRIC-based cost of capital should reflect the risks of a

[18] Verizon Incentive Plan Order, at p. 9. The NYPSC did not use GAAP depreciation lives in determining TELRIC rates, but did employ shorter depreciation lives than the FCC depreciation lives. See Appendix, pp. 18-19.

[19] NPRM at ¶ 82, citing Local Competition Order, 11 FCC Rcd at 15856, ¶ 702.

[20] Id.

competitive market.[21] The Commission held that TELRIC prices should reflect the risk of ILECs losing customers to competitors and should not be based on an unreasonably low cost of capital because it would discourage CLECs from investing in their own facilities. In the instant proceeding, the Commission asks parties to identify variables that determine the cost of capital and how to quantify components of risk that are reflected in the cost of capital.[22]

The NYDPS supports the Commission's conclusion that a TELRIC-based cost of capital should reflect the risks of a competitive market. This conclusion is also consistent with the Commission's determination that UNE pricing rules should more closely account for the real world attributes of the ILEC's network. While the Commission may provide guidance, state commissions should have the flexibility to account for a range of factors when assessing the risks of the competitive market. For example, if a state commission allows the use of GAAP depreciation lives, as compared to longer regulatory lives, the probability the ILEC will not recover the estimated TELRIC investment costs is less, and this lower risk should be considered when deciding the TELRIC-based cost of capital.

The NYPSC, after carefully considering the evidence on the record in the Second Network Element Proceeding and the Commission's rules, adopted a cost of capital of 10.5% as summarized in the following table:

	PERCENTAGE	COST	WEIGHTED COST
Debt	35%	7.3%	2.6%
Equity	65%	12.1%	7.9%
Total	100%		10.5%

[21] NPRM at ¶ 83, citing Triennial Review Order at ¶¶ 680-684.

[22] NPRM at ¶ 85.

The cost of capital adopted by the NYPSC to set UNE rates reflected the real world risks to Verizon as the market continues to evolve. The cost of capital should not be based on a "fantasy marketplace" where the provision of local phone service is as "competitive as the sale of detergent."[23] Specifically, the NYPSC increased the equity ratio from 55%, based on the average equity ratios of a proxy group of highly regulated ILECs, to 65% in recognition of the actual level of competition that had occurred in Verizon's marketplace. The 12.1% return on common equity (ROE) for Verizon was higher than the NYPSC permitted other New York ILECs because of the assumed higher risk due to increased competition. This contrasts with the ROE for New York's independent telephone companies which face little competition. The NYPSC authorized 9.13% for a company with 65% equity, which is approximately 25% less than the ROE permitted Verizon in the Second Network Elements Proceeding.

Therefore, the NYDPS agrees that a consistent set of assumptions should be used to set the appropriate cost of capital, which should reflect the real world risks, and not hypothetical risks, to the ILEC as the market continues to evolve towards facilities-based competition.

VI. Non-Recurring Charges Should be Based on a Consistent Network Construct

a. Recurring and Non-Recurring Charges:

Non-recurring charges (NRCs) recover the “installation” or “set-up” costs that an ILEC incurs in processing an order from a CLEC for a UNE.[24] The Commission asks what costs an ILEC should be permitted to recover for activities necessary to initiate service to a CLEC. The Commission states that consistency among the various component rates is important because

[23] Case 98-C-1357, Order, p. 80, citing Recommended Decision, pp. 76-77.

[24] NPRM at ¶ 114.

using one set of network assumptions for recurring charges and a different set for NRCs could potentially result in over-recovery or under-recovery.[25]

The NYDPS agrees with this conclusion. In approving Verizon's NRC rates, the NYPSC generally applied TELRIC's forward-looking, least cost principles in the same manner they were applied for developing Verizon's recurring UNE rates. As the NPRM states, such consistency is important because if there are different assumptions for different UNE rates, the mixed signals could result in under-recovery or over-recovery of forward-looking costs, which would be detrimental to the goal of encouraging facilities-based investment.

b. Operational Support System

An issue related to the recovery of costs is the relationship between NRCs for manual activities and an ILEC's operational support system (OSS).[26] The Commission seeks comment on what assumptions should be made with respect to the capability of the ILEC's OSS when setting NRC rates. Additionally, the Commission asks whether costs to develop and operate the OSS itself should be recovered through expense factors or different charges and, if a separate charge, how should it be calculated.[27]

State commissions should be permitted to assume additional productivity that would result from a more efficient OSS, if the OSS is found to be operating inefficiently, e.g., that there are an excessive number of CLEC orders that cannot be processed electronically and require more costly manual intervention, because TELRIC assumes the most efficient network. With respect to cost recovery, the NYPSC determined that Verizon's OSS costs should be recovered through separate charges that were calculated in the same manner as Verizon's other recurring

[25] NPRM at ¶ 117.

[26] NPRM at ¶ 118.

[27] Id.

and non-recurring UNE rates. This practice, which has not been challenged by any party, is consistent with the Commission's view that rates should recover costs in the manner in which they are incurred and by the cost causer rather than spread among all users.

c. Recovery of Costs

The Commission asks whether the costs that an ILEC incurs in processing an order from a CLEC should be recovered as a NRC or as a recurring charge.[28] Since most of the NRCs at issue are labor costs, the Commission suggests limiting recovery through NRCs to those costs that exclusively benefit the CLEC ordering the UNE.[29] The cost of activities for which NRCs are not permitted would be recovered in recurring charges through expense factors.

While this approach would likely reduce the number of activities for which NRCs would be permitted, the use of NRCs to recover one-time costs is consistent with the Commission's view that rates should recover costs in the manner in which they are incurred, and should be maintained. The suggestion that bill credits be issued for the NRCs that would be eliminated as a result of this rulemaking should be rejected. Not only would this be costly to implement, and be time consuming, but in our experience, it is not something the parties in the New York proceedings thought required a new approach.

d. Disconnection Costs

The Commission asks whether disconnection costs should be recovered as a separate cost at the time of disconnection or if they should be recovered through a NRC imposed at the time of installation.[30] The NYDPS supports recovery of disconnection costs through an NRC imposed at the time of installation because this practice, which appears to be consistent in New York and

[28] NPRM at ¶ 120.

[29] Id.

[30] NPRM at ¶ 127

elsewhere for retail and wholesale service, recognizes the reality that it is difficult to recover costs once service is disconnected.[31] Verizon recovers the cost of disconnecting UNEs at the time of installation as a component of the applicable NRC, which considers the time value of money over the average period for which the CLEC is expected to use the UNE.

e. Loop Conditioning Costs

The Commission asks when and how loop conditioning costs should be recovered.[32] Consistent with our view that TELRIC costs should reflect real world attributes but should also reflect the most recent and efficient technology, the NYDPS agrees that loop conditioning costs should be recovered through NRCs, based upon the actual costs incurred by the ILEC for conditioning loops, using the assumption that they are conditioned in the most efficient manner given current technology and the location of the ILEC's wire centers. An ILEC should not be permitted to recover costs for removing items, e.g., load coils, when the item would not have been part of the loop under applicable design criteria. The Commission's proposal to allocate loop conditioning costs among present and future carriers that may provide DSL service over the conditioned loop would be administratively burdensome to calculate and implement. The Commission should permit the states, who are closest to the facts, to determine the appropriate rate design. In any event, states that have already acted, as we have done in New York, should be permitted to retain their current rate designs.

VII. State Commissions Should Have Flexibility to Determine When Rate Changes are Warranted

The Commission states that UNE price proceedings require a substantial commitment of resources from all involved parties.[33] The Commission queries whether there might be

[31] Case 98-C-1357, RD at p. 185.

[32] NPRM at ¶ 130

[33] NPRM at ¶ 138.

mechanisms that would be used to adjust UNE prices over time, e.g., a national or state-specific productivity factor,[34] or whether states should have the ability to conduct a full UNE proceeding at their discretion.[35]

Markets will evolve differently throughout the country; therefore, state commissions ought to have the discretion to determine when it is appropriate to conduct a UNE pricing proceeding. A state commission may want to take into consideration whether conducting a new proceeding would promote or hinder stability in the market or whether it would result in unfairness to investors. Consistent with the Commission's conclusion that TELRIC should be based on real world attributes, the decision whether to undertake a new proceeding to reexamine UNE rates should be made by those regulators closer to the market. There is no reason to require states and the parties to bear significant costs when states, such as New York, have little incentive to allow significantly out-of-date UNE rates to continue without review.

VIII. State Commissions Should Determine Whether New TELRIC Proceedings are Required

The Commission seeks comments on how any changes to the UNE pricing rules should be implemented by the states and whether a national timetable ought to be established so that state commissions can reset rates in accordance with any new rules, e.g., should state proceedings be conducted within nine months.[36]

The NYDPS suggests that state commissions should determine whether its UNE prices are consistent with the Commission's rules and whether a new proceeding is imminently warranted. Requiring that all states conduct new proceedings within nine months fails to take into account different approaches, different resources, and different levels of competition.

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[34] NPRM at ¶ 139.

[35] NPRM at ¶ 140.

[36] NPRM at ¶¶ 149-150.

Moreover, states that are in substantial compliance with the new rules should be permitted to continue to use the existing UNE rates in order to maintain stability in the market place until a new review is warranted.

The Commission also asks whether a true-up mechanism ought to be established to account for the difference between the current UNE rates and rates that will result from changes in the rules.[37] We see no reason for such an approach. Not only would it be administratively burdensome to calculate and implement, it would bring uncertainty to the market until such time as the true-ups were satisfied. Moreover, in states such as New York where all UNE rates are permanent, there is no expectation that a true-up will occur.

Conclusion

In all the above reasons, the NYDPS supports the Commission's proposal to adopt a TELRIC methodology that accounts for the real world attributes of the ILEC's networks. The Commission should not mandate a particular approach, but should grant states the flexibility to evaluate the existing market conditions and to set UNE rates accordingly.

Respectfully submitted,

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[37] NPRM at ¶ 151.

APPENDIX

1. Paragraphs 63-66[38] - Network Routing and Construction

An overview of the cost studies considered and the basis for selecting the cost study adopted by the New York State Public Service Commission (NYPSC) in Verizon of New York's (Verizon) most recent UNE rate case (Case 98-C-1357, Module 3) is provided on pages 14-20 of the NYPSC's January 28, 2002 Order (Order). A more comprehensive description of the two cost studies is provided on pages 20-25 of the corresponding Recommended Decision (RD) of Administrative Law Judge Joel A. Linsider, issued on May 16, 2001. The table below indicates where specific cost studies and the related issues are generally described.

Item	RD Pg(s)	Order Pg(s)
Switching	123-124	20
Loops	80-92	87-95
DSL: Compatible Loops	150-153	128-129
Interoffice Transport	144-145	122
Nonrecurring Charges	175-177	139-141

2. Paragraphs 67-70 - Technology

A summary of the discussion pertaining to the costs of an optimally designed network can be found in the section on Network Annual Cost Factors on pages 46-50 of the RD and pages 66-69 of the Order.

3. Paragraphs 71-72 - Structure Sharing

Verizon proposed treatment in Case 98-C-1357, which was not opposed and was adopted by the RD and the Order, was described on page of 153 of Verizon's February 7, 2000 Panel Testimony as follows: "In determining structure investment, the Company's study took account of the fact that some poles are jointly owned with other utility companies. Only that portion of the structure investment owned by Verizon was considered in the study. Moreover, any revenues received by Verizon for pole attachments and conduit rentals were offset against the Annual Cost Factors for pole and conduit maintenance."

4. Paragraphs 73-75 - Fill Factors

The discussion relating to fill factors is found on the following pages.

Issue	RD Pg(s)	Order Pg(s)
Loops	92-100	98-105
House & Riser Cable	119-121	116-118
Dedicated Transport	147-148	125-127

5. Paragraphs 76-81 - Switch Discounts

The discussion pertaining to the level of discounts for switch investment costs can be found at pages 123-143 of the RD and pages 34-46 of the Order.

[38] Refers to the paragraphs in the NPRM containing the questions we are responding to.

6. **Paragraphs 82-91 - Cost of Capital**

A discussion of the cost of capital input used to set Verizon's current UNE rates is provided on pages 66-80 of the RD and pages 79-87 of the Order.

7. **Paragraphs 92-108 - Depreciation Expense**

Discussion related to the depreciation lives used to set Verizon's UNE rates can be found on pages 62-66 of the RD and pages 76-78 of the Order. All of the cost models considered by the NYPSC utilized the levelization method described in the NPRM at ¶106. The levelization method adopted considered the time value of money impact of recovering the plant's investment cost over the life of the plant via depreciation expense.

8. **Paragraphs 109-113 - Expense Factors**

The forward-looking productivity adjustments made to actual expenses is discussed on pages 53-56 of the Order and pages 37-40 of the RD. See also the "forward-looking to cost adjustment" (FLC), discussed on pages 56-61 of the Order and pages 49-55 of the RD.

The specific issues that arose in connection with estimating non-plant expenses, such as customer care or common overhead can be found on the following pages.

Issue	RD Pg(s)	Order Pg(s)
Removal of Retail Avoided Costs	44-45	62-63
Other Support	50-51	---
Wholesale Marketing	51-54	69-70
Common Overhead		
Common Overhead Expenses	55-56	71
Special Pension Enhancement	56-60	72-75
Merger Savings	60-61	75-76

See also the discussion pertaining to loading costs allocated based on revenue. See RD, pages 45-46 and Order, page 65.

9. **Paragraphs 114-130 - Non-Recurring Charges (NRCs)**

The discussion pertaining to the capability of Verizon's Operational Support Systems (OSS) are described in pages 182-184 of the RD and pages 141-143 of the Order. The NYPSC Order on Rehearing is enclosed.

With respect to disconnection charges, the NYPSC determined to include these charges in the installation NRC. This discussion is on page 185 of the RD.

The cost studies used to set Verizon's rates for DSL capable loops are generally described on pages 150-153 of the RD and pages 128-129 of the Order. Verizon's rates for loop conditioning NRCs are specifically discussed on pages 186-189 of the RD and pages 143-145 of the Order.

10. **Paragraphs 147-148 - Interconnection Pricing and Reciprocal Compensation**

Verizon's reciprocal compensation rates are based on the UNE rates approved by the NYPSC. See pages 189-198 of the RD and pages 160-161 of the Order.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

RECOMMENDED DECISION BY
ADMINISTRATIVE LAW JUDGE JOEL A. LINSIDER

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

NOTICE OF SCHEDULE FOR FILING EXCEPTIONS

(Issued May 16, 2001)

Attached is the Recommended Decision of Administrative Law Judge Joel A. Linsider in Module 3 of this proceeding, together with a copy of the Commission's rules governing the procedures to be followed. Briefs on exceptions will be due in hand to the undersigned and all active parties on June 11, 2001 and briefs opposing exceptions will be due in hand to the undersigned and may be mailed to all active parties on June 29, 2001. Each party will be allowed a total of 200 pages for its brief and reply brief, to be allocated between the two briefs at the party's discretion.

JANET HAND DEIXLER
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

RECOMMENDED DECISION ON MODULE 3 ISSUES

BY

ADMINISTRATIVE LAW JUDGE JOEL A. LINSIDER

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APPEARANCES

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

APPEARANCES: See Appendix A

JOEL A. LINSIDER, Administrative Law Judge:

INTRODUCTION AND PROCEDURAL HISTORY

In September 1998, the Commission announced its intention to undertake, beginning in January 1999, a comprehensive reexamination of the unbundled network element (UNE) rates of Verizon New York Inc. f/k/a Bell Atlantic-New York,[1] as set in the First Network Elements Proceeding. (That case is referred to as "the First Elements Proceeding" or, simply, "the First Proceeding.")[2] This ensuing case has had a

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[1] Cases 95-C-0657 et al., First Network Elements Proceeding, Order Denying Motion to Reopen Phase 1 and Instituting New Proceeding (issued September 30, 1998). Except where clarity otherwise requires, Verizon is referred to as such throughout this recommended decision, even in references to matters that predate the name.

[2] The First Elements Proceeding comprised four phases, designated "Resale" and Phases 1, 2, and 3, as follows. Resale: Opinion No. 96-30 (issued November 27, 1996). Phase 1 (network elements generally): Opinion No. 97-2 (issued April 1, 1997); rehearing, Opinion No. 97-14 (issued September 22, 1997). Phase 2 (primarily Operations Support Systems and Nonrecurring Charges): Opinion No. 97-19 (issued December 22, 1997); rehearing, Opinion No. 98-13 (issued June 8, 1998). Phase 3 (various issues, including collocation): Opinion No. 99-4 (issued February 22, 1999); rehearing, Opinion No. 99-9 (issued July 26, 1999). The phases and their opinions are referred to as "Phase 1," "Phase 2 Rehearing Opinion," etc., without further specification.

long and complex procedural history, including various interim measures and extensions of deadlines in response to pertinent federal court decisions. Only the broad outlines of that history will be recounted here; further details will be set forth as needed in the context of specific issues to which they may be pertinent.

On the basis of an initial collaborative process facilitated by Department of Public Service Staff, the proceeding was divided into three modules: Directory Database (DDB); Collocation; and Unbundled Network Elements (UNEs) generally.[3] The first two modules culminated in Commission decisions issued during the first half of last year.[4] During the course of the proceeding, special expedited tracks were established for consideration of certain digital subscriber line (DSL) rates and line sharing rates; those, too, have been concluded.[5] In several instances, described below, issues raised in those earlier modules and tracks gave rise to matters considered further here.

Initial testimony in Module 3 was originally scheduled to be filed in December 1999, with hearings to begin in February 2000. For a variety of reasons, including the broad scope of the proceeding, the need to take account of actions by the FCC and of a federal court decision, and the strike by Verizon employees during August 2000, that schedule was extended on

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[3] Case 98-C-1357, Ruling on Scope and Schedule (issued June 10, 1999).

[4] Module 1 (DDB): Case 98-C-1357, Opinion No. 00-2 (issued February 8, 2000); Order on Petitions for Rehearing (issued June 29, 2000). Module 2 (Collocation): Case 98-C-1357, Opinion No. 00-8 (issued June 1, 2000); Order Denying Petitions for Rehearing of Opinion No. 00-08 (issued January 4, 2001).

[5] DSL: Case 98-C-1357, Opinion No. 99-12 (issued December 17, 1999); Order Denying Petitions for Rehearing (March 17, 2000). Line Sharing: Case 98-C-1357, Opinion No. 00-7 (issued May 26, 2000); Order Denying Petition for Rehearing (issued October 3, 2000).

several occasions, and hearings were ultimately held in December 2000. The only one of these factors that warrants specific note here is the decision of the United States Court of Appeals for the Eighth Circuit to vacate 47 C.F.R §51.505(b)(1), a portion of the FCC's rules central to the requirement that UNEs be costed and priced on the basis of Total Element Long-Run Incremental Cost (TELRIC).[6] (That decision is now stayed pending Supreme Court review; these matters are discussed further in the next section.)

In view of the Eighth Circuit's ruling and the uncertainty it was said to create with regard to the proper costing standard, Verizon urged suspension of the proceeding. All other parties opposed any suspension; they questioned, among other things, the import of the court's decision in jurisdictions beyond the Eighth Circuit and argued (contrary to Verizon's view) that Verizon in any event remained bound to TELRIC pricing by conditions imposed by the FCC in approving the merger of its predecessor companies.[7] I declined to suspend the proceeding, citing "(1) the time it likely will take for [the] uncertainties to be resolved, (2) the effect of the FCC's merger conditions[[8]] during that interval, and (3) the Eighth Circuit's sustaining of forward-looking pricing [as a matter of principle, despite its rejection of the specific version of forward-looking pricing embodied in the rule it had vacated]."[9] I recognized, however, the possible need to reexamine the course of the proceeding in the event circumstances changed.

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[6] Iowa Utilities Bd. et al. v. FCC, 219 F.3d 744(8th Cir. 2000).

[7] CC Docket No. 98-184, GTE Corporation and Bell Atlantic Corporation, Memorandum Opinion and Order (rel. June 16, 2000), FCC 00-221 (GTE/BA Order).

[8] This referred to conditions imposed by the FCC on the NYNEX/Bell Atlantic merger as well as the Bell Atlantic/GTE merger just noted.

[9] Case 98-C-1357, Ruling on Module 3 Schedule (issued August 24, 2000), p. 7.

Verizon sought reconsideration of that ruling, in part on the grounds that the FCC had recently construed its earlier order approving the NYNEX/Bell Atlantic merger in a manner assertedly suggesting that the Bell Atlantic/GTE Order likewise did not require TELRIC pricing as a merger condition.[10] I declined to reconsider, noting the significant difference in wording between the two merger orders and seeing no need to change my conclusion that "what the [Bell Atlantic/GTE] order means may ultimately be a matter for the FCC and the courts to decide, but for present purposes [it] provides an adequate basis for concluding that Verizon remains obligated, notwithstanding the Eighth Circuit's decision, to continue pricing UNEs on a TELRIC basis and will remain so obligated at least until the Eighth Circuit's decision is sustained or becomes non-appealable."[11] The proceeding went forward on that basis.

Initial testimony was filed (on February 7, 2000 and, with respect to some issues, on February 22, 2000[12]) by Verizon, jointly by AT&T and WorldCom, Inc., jointly by Covad Communications Company and Rhythms Links Inc., and by FairPoint Communications Corp. Responsive testimony, due June 26, 2000, was filed by Verizon, AT&T (alone), WorldCom (alone), AT&T/WorldCom (jointly), Rhythms/Covad (jointly), the CLEC

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[10] Verizon cited the FCC's dismissal of complaints that Verizon had violated such a commitment made in connection with the NYNEX/Bell Atlantic merger. File No. E-98-05, AT&T Corporation v. Bell Atlantic Corporation, and File No. E-98-12, MCI Telecommunications Corporation et al. v. Bell Atlantic Corporation, Memorandum Opinion and Order (rel. August 18, 2000).

[11] Case 98-C-1357, Ruling Denying Request for Reconsideration (issued September 18, 2000), p. 4. The FCC staff has since stated its view that the merger condition has this effect. Letter from Dorothy T. Attwood, Chief, Common Carrier Bureau, to Michael Glover, Verizon Communications, Inc. (September 22, 2000).

[12] Portions of the February 22 testimony were admitted as part of the line sharing track previously referred to.

Coalition,[13] the CLEC Alliance,[14] Z-Tel Communications, Inc., Cablevision Lightpath, Inc., the Cable Television and Telecommunications Association of New York, Inc. (CTTANY), and the United States Department of Defense and all Federal Executive Agencies (Federal Agencies). Rebuttal testimony, due October 19, 2000, was filed by Verizon, AT&T/WorldCom, Rhythms/Covad, the CLEC Coalition, FairPoint, and DOD/FEA. In addition to these principal filings, supplemental or supplemental responsive or rebuttal testimony on particular issues was submitted by Verizon (May 23, September 11, September 25, November 8, November 22, and December 5), Rhythms/Covad (November 13), and CTTANY (November 29). The use made of electronic information transfer among parties in this proceeding is noteworthy and contributed greatly to the efficient development of the record; among other things, the very extensive evidence submitted by Verizon and by AT&T/WorldCom was posted on websites from which it could be downloaded (with passwords required for proprietary information).

An attorneys' prehearing conference was held in New York City on November 30, 2000 for the purpose of introducing pre-filed testimony into the record via affidavit, subject to later cross-examination of witnesses as to whom cross had not been waived. Hearings were held in Albany on December 7, 8, 12, 13, 15, 19, and 20,[15] and an on-the-record post-hearing attorneys' teleconference was held on December 21. Following the hearings, Staff of the Department of Public Service posed a

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[13] The CLEC Coalition comprises Allegiance Telecom of New York, Inc.; Intermedia Communications Inc; and NEXTLINK New York, Inc.

[14] The CLEC Alliance comprises CoreComm New York, Inc.; CTSI, Inc.; Mpower Communications, Inc.; Network Plus, Inc.; RCN Telecom Services, Inc.; and Vitts Networks, Inc.

[15] The parties demonstrated creativity and mutual consideration in devising a schedule that permitted witnesses to plan on appearing on specific days and otherwise structured the complex proceeding in a manner convenient to all.

series of questions to Verizon and AT&T; their responses have been admitted as exhibits 457 and 458 respectively.

The record comprises 4,954 pages of stenographic transcript (numbered 1,150-6,103) and 159 exhibits (numbered 301-459).[16] The following pages of the transcript have been provisionally designated as proprietary: 1620-1877 (public version at 1362-1617), 2067-2216 (public version at 1917-2065), 3110-3189 (public version at 2832-2911), 3813-3958 (public version at 3666-3811), 3984-4008 (public version at 4009-4032) 4059-4135 (public version at 4137-4204A), 4255-4302 (public version at 4206-4253), 4432-4453 (public version at 4456-4476), 4558-4576 (public version at 4541-4557). Provisionally proprietary exhibits are 317P, 320P, 324P, 326P, 328P, 330P, 333P, 339P, 358P, 367P, 370P, 375P, 381P-389P, 392P, 411P, 412P, 414P, 417P, 418P, 448P, 453P, and 455P. My ruling on the final status of the provisionally protected material is pending.

Initial briefs, due February 16, 2001, were filed by Verizon, AT&T, CTTANY, Lightpath, the CLEC Alliance, the CLEC Coalition, the Federal Agencies, FairPoint, Rhythms/Covad, and Z-Tel. Reply briefs, due March 14, 2001, were filed by those parties except for Z-Tel.

This recommended decision considers all issues except those related to conduit rentals. Conduit rentals will be the subject of a supplemental recommended decision.

LEGAL CONTEXT; THE STATUS OF TELRIC

This case, like the First Elements Proceeding, has been litigated on the basis of the Federal Communications Commission's total element long-run incremental cost (TELRIC) standard despite the legal cloud cast over the standard by a federal court decision. Because of the importance of the standard, its background, nature, and current status warrant review.

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[16] Exhibit 459, Verizon's supplemental response to interrogatory CTTANY-VZ-52, has not previously been formally admitted; I hereby admit it.

Under §252(d)(1) of the Telecommunications Act of 1996 (the 1996 Act),

> Determinations by a State commission of the just and reasonable rate ... for network elements ...--
>
> (A) shall be--
>
> (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the ... network element... and
>
> (ii) nondiscriminatory, and
>
> (B) may include a reasonable profit.

In its regulations and order implementing the 1996 Act,[17] the FCC determined that these pricing provisions should be carried out by setting prices on the basis of each element's TELRIC, along with a reasonable allocation of forward-looking common costs.

The New York Commission in Phase 1 of the First Elements Proceeding described TELRIC in the context of other costing methods.[18] It noted that TELRIC was a term coined by the FCC to describe the version it was adopting of the more familiar total service long-run incremental cost (TSLRIC) method. An analysis of TSLRIC amounts to an estimation of long-run incremental cost (LRIC) where the increment of service that is studied is the total demand for the service. LRIC, in turn, measures incremental cost (i.e., the cost of producing an additional quantity of a good or service) over a period long

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[17] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket Nos. 96-98 and 95-105, First Report and Order (rel. August 8, 1996)(the Local Competition Order).

[18] Phase 1 Opinion, pp. 9-15.

enough so that all of the firm's costs become variable or avoidable.

All of the foregoing costing methods are forward-looking, taking account of the costs to be incurred in the future, rather of than embedded, historical costs. In defining the TELRIC method, the FCC added the specification that costs "should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent [local exchange carrier's] wire centers."[19] This is the so-called "scorched node" premise, which takes as a given only the location of the incumbent local exchange carrier's [LEC's] existing wire centers and otherwise contemplates a network designed in accordance with the most efficient technology available, regardless of the technology actually deployed. It has generated considerable controversy, much of it more heated than illuminating, over the legality and wisdom of setting UNE rates on the basis of "hypothetical," or, even, "fantasy" networks.

After the start of the First Proceeding, the FCC's TELRIC rules were stayed and ultimately vacated by the Eighth Circuit Court of Appeals on the grounds that the FCC had exceeded its authority in adopting them.[20] The case nonetheless proceeded to decision on a TELRIC basis, inasmuch as all parties' studies had been based on TELRIC; even Verizon, which objected to TELRIC and reserved its rights to submit other studies if TELRIC were overturned, had submitted a TELRIC study in view of the FCC's regulations. The Commission noted that "TELRIC is certainly a reasonable approach to use, though just as certainly not the only one; and, as [Verizon] recognizes, as a practical matter there is no alternative other than the very

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[19] 47 C.F.R. §51.505(b)(1).

[20] Iowa Utilities Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997).

unattractive one of temporary rates while a lengthy new case is litigated."[21]

The United States Supreme Court eventually reversed the Eighth Circuit on the issue of FCC authority, reinstated the rules, and remanded for consideration of the substantive challenges that had been raised to TELRIC pricing.[22] That remand eventuated in an Eighth Circuit decision that again overturned portions of the FCC's rules, including the TELRIC definition in §51.505(b)(1), cited above, this time on the grounds that it was inconsistent with the provisions of the 1996 Act requiring UNE prices to be based on the cost of providing the elements. In the Eighth Circuit's judgment, "Congress was dealing with reality, not fantasizing about what might be," and basing prices on the hypothetical network of TELRIC violated Congress's intent that the costs to be taken into account are those of "providing the actual facilities and equipment that will be used by the competitor (and not some state of the art presently available technology ideally configured but neither deployed by the ILEC nor to be used by the competitor."[23] The Eighth Circuit added, however, that it did not reject the use of forward-looking costs in the setting of UNE rates; and it declined to reach the claim that TELRIC rates would amount to an unconstitutional taking of the ILEC's property, regarding that claim as unripe for decision until actual rates could be evaluated. The Supreme Court has agreed to review the Eighth Circuit's determination, and the TELRIC rule at issue remains in effect pending that review.

Following the Eighth Circuit's decision last summer, Verizon moved to stay the proceeding in view of the uncertainty over the costing standard that would ultimately apply; CLECs generally opposed the motion. As recounted above, I denied the motion and its later renewal, and the proceeding went forward on a TELRIC basis.

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[21] Phase 1 Opinion, p. 15.

[22] AT&T Corp. v. Iowa Utilities Bd., 525 U.S. 366 (1999).

[23] Iowa Utilities Bd. v. FCC, 219 F.3d 744 (8th Cir. 2000).

At case end, Verizon continues to stress the uncertainty associated with the TELRIC standard pending Supreme Court review. It contends that the existing rates are reasonable, TELRIC-based, and pro-competitive (indeed, that many are too low), and it asks the Commission to forbear from setting new UNE rates until the applicable standard is clarified by the Supreme Court and parties have had the opportunity to submit new (presumably non-TELRIC) studies if warranted by the Supreme Court's decision. Other parties, once again, favor having the case decided.

I see no more need now to recommend deferral of a decision than I did earlier to cut off the litigation. The TELRIC rules remain in force, and the proceeding has gone forward on a TELRIC basis; the Supreme Court's decision cannot be predicted and is unlikely to be rendered before the end of the year at the earliest; and the issues in the case are ripe for decision. That decisional process should go forward.

One further aspect of the TELRIC background should be briefly noted. Section 254 of the 1996 Act directed the FCC to establish a universal service support system to ensure the delivery of affordable telecommunications services. In the ensuing proceeding (the Universal Service Proceeding), the FCC ultimately adopted a forward-looking cost model to be used in determining an eligible carrier's level of universal service support. The FCC adopted its cost model in two stages: in the first stage, it adopted the Model Platform, which contains the fixed aspects of the model[24]; in the second stage, it selected the input values for the Model Platform.[25] Parties occasionally cite the FCC's Universal Service Proceeding determinations, and the presentations and analysis there are sometimes instructive; but it is important to keep in mind the FCC's caution that its model "was developed for the purpose of determining federal

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[24] Federal-State Joint Board on Universal Service et al., CC Docket Nos. 96-45, 97-160, Fifth Report and Order (rel. October 28, 1998).

[25] Id., Tenth Report and Order, (rel. November 2, 1999).

universal service support, and it may not be appropriate to use nationwide values for other purposes, such as determining prices for unbundled network elements."[26]

OVERVIEW OF PARTIES' POSITIONS

To convey a general sense of the issues to be dealt with in this proceeding, this section of the Recommended Decision describes without comment the overall contours of each party's position. Points referred to here will be treated in greater detail below.[27]

Verizon

As already noted, Verizon's primary recommendation is that the Commission forbear from setting new rates now given the uncertain standing of the TELRIC method for analyzing costs. Short of that, it would have the Commission set new rates on the basis of its studies, which are said to be forward-looking (but not speculative or based on "fantasy networks"), grounded in actual data derived from Verizon's records, transparent, fully documented, and compliant with TELRIC. (Despite that compliance with TELRIC, Verizon reserves its objections to that method, expressing agreement with the Eighth Circuit that TELRIC is "unlawful and inappropriate.") In contrast to its own studies, the costing model sponsored by AT&T and WorldCom continues to suffer, according to Verizon, from flaws associated with its predecessor Hatfield Model, as described by the Commission in Phase 1 of the First Proceeding.

Referring to what it calls the "scare campaign in which AT&T has blamed regulators for its own business failures and has threatened to exit the market if its demands for UNE rate reductions are not met," Verizon attributes AT&T's difficulties to matters other than UNE rates and notes, in any

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[26] Id., ¶32.

[27] Arguments made by more than one party are not necessarily attributed to all parties making them, but all briefs have been fully considered.

event, that the Commission's task is to protect competition, not competitors.[28] It argues as well that true competition must be facilities-based and that artificially low UNE rates "will only prolong the CLECs' counterproductive use of--as opposed to interconnection with--Verizon's network."[29] It insists that

> the Commission's goal in this proceeding should not simply be to reduce rates, or to artificially stimulate any and all competitive entry. Rather, the Commission should seek to provide appropriate incentives for true facilities-based competition by avoiding any understatement of UNE costs. Verizon's studies provide the best basis for achieving that objective."[30]

AT&T

Jointly with WorldCom, AT&T sponsored a costing model known as HAI 5.2-NY (HAI Model). The model, described in greater detail below, is a successor to the Hatfield Model sponsored by AT&T and WorldCom (then MCI) in the First Elements Proceeding. AT&T identifies two ways in which the Commission can set proper rates in this proceeding: either by starting with Verizon's cost study and substantially adjusting it in accordance with AT&T's proposals, or by using the HAI study as the basis for rate setting. Recognizing that no party's cost calculations will reflect absolute mathematical certainty, AT&T contends that the two approaches it advocates--the Verizon studies properly adjusted and the HAI Model results--tend to produce results that converge.[31]

AT&T devotes considerable attention to the broader context in which UNE rates must be set. It contends that

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[28] Verizon's Initial Brief, p. 3.

[29] Id.

[30] Id., p. 34 (emphasis in original).

[31] AT&T notes in this regard that the Commission's decision in Phase I grew out of what the Commission found to be the convergence between the Hatfield Model and Verizon's studies when the inputs to each were properly adjusted.

competition in New York's local telephone markets is limited and fragile and will be undermined by UNE rates that exceed their costs and permit Verizon to extract excessive revenues from local market entrants, to the detriment of customers for both local and long distance service. It argues that UNE price increases could be justified here only if the prices set in the First Proceeding were erroneously low or if the underlying costs had increased since 1997; according to AT&T, neither of these is the case. The first premise, it contends, is undermined by Verizon's robust financial performance in recent years, while the second is belied by generally declining costs in the telecommunications industry. On the contrary, it sees a need for immediate reduction in existing UNE rates.

AT&T charges that the evidence in the case shows, among other things, that Verizon's existing loop rates exceed forward-looking costs by about $7.70 per month in Manhattan and about $6.60 per month in the major cities rate zone[32] and that switching rates exceed forward-looking economic costs by at least 70%. It is not surprised by the statement of Verizon's co-chief executive that "'whoever is buying'" AT&T's basic local service package 'knows <u>they're not making any money on it</u>.'"[33] AT&T contends that Verizon recognizes that the local exchange telecommunications business in New York cannot be profitable for CLECs under Verizon's existing UNE rates but that it nevertheless proposes substantial increases in those rates.

AT&T attributes Verizon's aggressiveness in seeking increased UNE rates to its having "eaten the carrot" of FCC approval under §271 of the 1996 Act for its entry into the long distance market. Even before that approval had been granted, it maintains, Verizon cooperated only grudgingly in efforts to erode its local market dominance, but the granting of §271 approval accounts for Verizon's now "unconstrained

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[32] Loop rates are deaveraged into three zones: Manhattan, major cities, and the rest of the state.

[33] AT&T's Initial Brief, p. 2, citing a newspaper article that so quotes the Verizon officer (emphasis added by AT&T).

aggressiveness"[34] in proposing in this case methodological innovations that tend to increase its calculated UNE costs.

CLEC Alliance

The CLEC Alliance likewise sees no basis for increased UNE rates, citing Verizon's robust finances and denying any cost increases since 1997. Contending that the existing rates are too high, it warns that any increase would have a substantial negative effect on competition, noting recent bankruptcies and lesser financial problems of various CLECs. It asserts that the purpose of TELRIC is to overcome barriers to market entry by preventing the ILEC from recovering all costs associated with its existing monopoly network, and it argues as well that because the ILECs have greater access to the pertinent cost information, they bear the burden of proving the nature and magnitude of the forward-looking costs they seek to recover. The CLEC Alliance denies that Verizon has sustained that burden of proof, contending that the large volume of material submitted by Verizon is "next to useless for purposes of conducting a detailed examination and analysis."[35] It charges that Verizon has continued the use of assumptions rejected by the Commission in the First Proceeding and changed other assumptions without explaining why.

Disputing any suggestion that Congress intended UNE-based competition as a mere transition to facilities-based competition, the CLEC Alliance contends that the main point of the 1996 Act is to lower entry barriers to competition of all sorts. It asserts that even under existing UNE rates, facilities-based competition exceeds UNE-based competition by nearly five to one, but that local competition remains generally "a fragile patchwork concentrated in small niches and submarkets."[36]

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[34] Id., p. 8.

[35] CLEC Alliance's Initial Brief, p. 7.

[36] CLEC Alliance's Reply Brief, pp. 6-7.

In support of its positions, the CLEC Alliance presented a comprehensive study of Verizon's costs and critique of its proposals, prepared by QSI Consulting.[37] It suggests rates could properly be set on the basis of Verizon's studies as adjusted by QSI.

CLEC Coalition

The CLEC Coalition maintains that even though regulators have held the New York market to meet the minimum standards of §271 of the 1996 Act, the market cannot be considered competitive "in any true sense".[38] It cites Verizon's continued market power and the consequent need for continued regulatory oversight, including with respect to UNE rates.

The CLEC Coalition directs most of its attention to Verizon's method for estimating expenses. It contends that even if Verizon's basic method is sustained, proper adjustments to make its expense factors more forward-looking would show its proposed rates to be inconsistent with TELRIC. It characterizes its own adjustments as a starting point to which those advocated by other parties should be added.

WorldCom

In an introductory section of its brief captioned "The Battle of New York," WorldCom maintains that "competition in the local exchange market in New York is at a critical crossroads."[39] Like AT&T, it asserts that Verizon is attempting to increase the rates for network elements in order to exacerbate the price squeeze applied to actual and would be UNE-based competitors. It, too, cites Verizon's co-CEO's statement that UNE-based competitors are not making any money, and it warns that "unless unbundled networking elements are significantly reduced to reflect true economic cost, so that meaningful profits can be

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[37] Exhibits 355-357, 358P, and 359.

[38] CLEC Coalition's Initial Brief, p. 2.

[39] WorldCom's Initial Brief, p. 2.

earned, local competition in New York is not sustainable."[40] It asserts that costs, if anything, have fallen since UNE-rates were last set; that Verizon's having secured §271 approval has given it an added incentive to impose a price squeeze on competing carriers, and that the methodological refinements to which Verizon attributes much of its proposed increase in rates are abusive, distorting, or contrary to TELRIC. It charges generally that Verizon's studies are based on embedded costs and current labor times and thereby attempt to recover the costs associated with its inefficient current operations. TELRIC pricing, it continues, required that these embedded inefficiencies be eliminated and, beyond that, that additional forward-looking adjustments be made to fully capture the savings associated with advanced technology.[41] In view of the cost savings associated with next-generation networks, MCI urges that the Commission "substantially reduce Verizon's proposed cost recovery, rather than merely tinkering with or providing token one-time adjustments to current embedded costs."[42] It defends UNE-based competition, disputing Verizon's emphasis on facilities-based competition, and contends New York's UNE rates exceed those in other pro-competitive states.

WorldCom devotes its briefs to critiquing Verizon's studies. It does not discuss in any detail the HAI study it co-sponsored with AT&T, stating only that "AT&T's Initial Brief fully explores the relevant issues concerning the [HAI] cost study and demonstrates that it accurately identifies Verizon's forward-looking economic costs to provide [UNE's] in New York."[43]

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[40] Id., p. 3.

[41] WorldCom states in this regard "it is increasingly clear that the 100 percent fiber fed/[next generation digital loop carrier] broadband network construct adopted by the Commission in Phase 1, and proposed here, will result in enormous savings, particularly with respect to network operation costs." (WorldCom's Initial Brief, p. 8.)

[42] Id., p. 9.

[43] Id., p. 1.

Rhythms/COVAD

Asserting that "this proceeding presents the New York Public Service Commission with the opportunity to bring to fruition the pro-competitive policies it has adopted over the years,"[44] Rhythms/COVAD, which treat primarily DSL-related issues, warn that these pro-competitive efforts would be defeated by a failure to price network elements at cost-based competitive levels. They say that Verizon's study is methodologically flawed and incorporates overstated cost estimates that will price competitors out of the market. In particular, they charge that Verizon's study fallaciously posits two separate networks--one for digital subscriber line services and one for all other services; as a result, the charges that apply to DSL competitors are neither efficient nor forward-looking. They assert as well, among other things, that Verizon's study fails to take proper account demand for DSL services; that its loop conditioning charges are designed to recover work that would not occur in a forward-looking environment; and that its loop qualification charges grow out of a failure to allow its competitors direct access to its loop qualification data base.

FairPoint

Addressing itself only to questions of rate deaveraging, FairPoint notes that the loop rates in Manhattan and a few other large urban areas have helped to start local exchange competition. It expresses concern about the absence of such competition in the remainder of the state, where loop rates are much higher under existing loop rate deaveraging. It offers a series of alternative rate structures under which "the rural rate band would ... apply to truly rural areas and not to the downtown areas of smaller cities and towns,"[45] thereby intending

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[44] Rhythm/COVAD's Initial Brief, p. 1.

[45] FairPoint's Initial Brief, p. 2.

to extend the benefits of local exchange competition to a broader segment of the state.

CTTANY

CTTANY's 50-page brief is directed to Verizon's proposal to increase conduit rental rates substantially--by between 621% and 729% for main conduit rental, and between 449% and 1,083% for subsidiary conduit rental.[46] It urges rejection of the forward-looking costing method responsible for those increases and adoption, instead, of the FCC's formula based on historic costs. (Conduits are not a UNE and are not subject to mandatory TELRIC pricing) In CTTANY's view, doing so would insure fair facilities-based competition despite Verizon's "monopoly ownership and control of distribution and transmission facilities in New York"; provide Verizon a reasonable return on its investment; bring state and federal regulation of conduit rental and pole attachments into harmony; and alleviate the administrative burden that CTTANY sees as associated with Verizon's proposed method.

As noted, conduit rental rates will be the subject of a separate recommended decision.

Z-Tel

Asserting that UNE rates properly based on TELRIC are essential to the continued development of local exchange competition in New York, Z-Tel criticizes several specific aspects of Verizon's studies. In particular, it urges the Commission to reject usage-sensitive charges for unbundled local switching, contending that Verizon incurs no usage-sensitive costs in providing unbundled local switching to itself or its competitors.

Lightpath

[46] CTTANY's Initial Brief, p. 1.

Noting that its ability to serve its customers "is critically dependent on efficient interconnection with Verizon's network,"[47] Lightpath, a facilities based CLEC, contends that Verizon's geographically relevant interconnection points (GRIPs) proposal (the sole issue it considers) would undercut the voluntarily negotiated interconnection between the two companies. In addition, it regards the proposal as poor public policy, imposing inefficient transport obligations on CLECs, and it contends that Verizon has offered no argument in support of the proposal beyond those already found by the Commission to be inadequate.

Federal Agencies

The Federal Agencies note the federal government's interest as a large consumer of telecommunications services in New York State, explaining that UNE prices will play a large role in determining the retail prices that will be charged by CLECs and the degree of competitive choice that end users will enjoy. They go on to challenge various aspects of Verizon's studies, contending, among other things, that they fail to reflect current technologies and fail to incorporate all available costs savings. They regard the HAI Model as preferable to Verizon's studies, maintaining that it is more open to public scrutiny and that related models have been accepted by regulators in other jurisdictions.

SUMMARY AND OVERALL ASSESSMENT OF THE TWO STUDIES

As already noted, two studies of UNE costs and prices have been submitted in this proceeding--Verizon's own cost studies, and the HAI Model jointly sponsored by AT&T and WorldCom. The studies differ substantially in their method and results, though AT&T, again as already noted, maintained that proper adjustments to Verizon's studies would cause it to produce results that converge with HAI's. Overall, the parties'

[47] Lightpath's Initial Brief, p.2.

briefs devote vastly more attention to Verizon's studies than to HAI. Verizon's initial brief, for example, devotes only some 60 of its 390 pages to a discussion of HAI; the remainder presents and defends Verizon's own studies. But even AT&T allocates approximately 185 of the 200 pages in its initial brief to challenging and adjusting Verizon's studies and only some 12 pages to presenting its own, and WorldCom declines to discuss HAI at all, simply endorsing AT&T's presentation. Noting those data, Verizon suggests AT&T is abandoning its model or improperly withholding its arguments until its reply brief. Neither allegation is established; while AT&T devotes a substantially greater portion of its reply brief (32 of 105 pages) to its own HAI Model, it fairly uses those pages to respond to Verizon's arguments. But the fact remains that at the briefing stage, at least, the primary focus of all parties is on Verizon's studies and the adjustments to them that may or may not be needed.

That being as it may, my initial task is to examine the two studies in general and determine whether one or the other should be the starting point for analysis or whether it would be proper once again to apply the "convergence" method that emerged in the First Elements Proceeding and that AT&T at least suggests might be proper here. This section of the recommended decision undertakes that inquiry, beginning with descriptions of the two studies.

Verizon's Study

Verizon generally begins by attempting to identify the relevant investment associated with each network element.[48] It does so by determining the pertinent material cost, applying a utilization factor to develop a material cost per unit, and then applying investment loadings to capture the additional cost of engineering, furnishing, and installation (EF&I); of power requirements; and of central office land and building (L&B)

[48] For this account, see, generally, Verizon's Initial Brief, p. 13 et seq.

investment. Verizon describes in detail the manner in which these components are estimated; some of them are discussed further below. To a considerable extent, they are based on Verizon's actual historical data as adjusted and on estimates by its engineers.

To translate investments into monthly costs (and to develop nonrecurring charges, in a separate process that starts by estimating labor costs), Verizon uses annual cost factors (ACFs). According to Verizon, ACFs "are ratios calculated from aggregate account data that represent overall cost relationships for particular categories of equipment"; in contrast to the investment loadings that capture relationships between material costs and investments related to installation, power, and land and building, ACFs represent relationships "between certain types of expenses and either (1) relevant investments, (2) other relevant expenses, or (3) total revenues."[49] Verizon explains the operation of the ACFs as follows:

> In determining the recurring cost for a UNE, the total installed investment is first multiplied by an expense-to-investment ACF. This provides an estimate of investment-related expense for the UNE, together with any direct operating expenses. The resulting recurring expense amount is multiplied by an expense-to-expense ACF[,] which factors in certain common overhead costs. A growth revenue loading factor is then applied to incorporate costs related to uncollectibles, Commission assessments, and other revenue-based expenses. The result in an annual recurring cost, which can then be divided by 12 to establish monthly recurring UNE rates.[50]

Verizon notes that the ACFs perform the same functions as the carrying charge factors (CCFs) did in the First Network Elements Proceeding but incorporate certain methodological refinements. The ACFs generated considerable controversy (especially, but far from exclusively, with respect to a forward-looking-to-current

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[49] Id., p. 23.

[50] Id.

[FLC] adjustment, said to undermine their claim to be forward-looking) and are discussed in greater detail below.

Finally, Verizon deaveraged its rates into three geographic zones, as required by the FCC rules. The zones would continue to be Manhattan, major cities, and the remainder of the State. Inasmuch as loops are the only element whose costs were found to vary among the zones, the rates for other elements would not differ by zone.

Verizon contends, overall, that its studies are long-run, fully forward-looking, and in compliance with TELRIC.[51] It asserts that while it does not take account of speculative future innovations--something not required by proper long-run costing--it adjusts its raw expense data to appropriately reflect forward-looking assumptions, and it assumes all UNEs to be provisioned using the most efficient technology currently available; as a result, its total TELRIC cost is substantially below its current actual cost. In summarizing its method, it asserts that "the use of actual data kept the studies grounded in reality; the aggressive assumption of the ubiquitous deployment of current technology, and of current prices, insured that the studies were TELRIC-compliant."[52] It goes on to offer the following examples of its forward-looking assumptions:

> Studies for voice grade loops assumed the use of "Next Generation" Digital Loop Carrier ("NGDLC") technology and GR303 integration.
>
> Location of remote terminals in loops was based on a forward-looking redesign of a statistically valid sample of feeder routes.

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[51] In so doing, it once again reserves its objections to TELRIC, expresses agreement with the Eighth Circuit's conclusion that "the TELRIC regulations are unlawful and inappropriate," and it continues to urge "the adoption of alternative approaches that better reflect [its] actual costs." (Verizon's Initial Brief, p. 8.)

[52] Id., p. 11.

> Local and tandem switching studies were based on "model switches" designed to efficiently serve current demand levels.
>
> 100% SONET fiber ring design was assumed for interoffice transport, and DWDM technology was utilized for OC-48 transport.
>
> Nonrecurring cost studies assumed mechanization, process improvements, and work eliminations not yet achieved in Verizon's actual operations.
>
> Productivity adjustments were reflected in the ACFs for Network and Administration.
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> The Maintenance ACF for copper cable was adjusted to eliminate any increased maintenance expense associated with aged or deteriorated cable.[53]

Finally, Verizon contends that its costing method avoids any risk of double recovery of either investment costs or expense. Specific double recovery concerns, some of which were identified by the Commission in earlier decisions, are discussed below.

Verizon attributes much of the difference between its existing and proposed rates to refinements in its costing methods, thereby seeking to refute AT&T's suggestion that rate increases could be justified only if costs have increased or rates in the First Proceeding had been miscalculated. (AT&T doubts that costs have increased but Verizon asserts that in many categories they have.) As advances over its earlier method, it identifies updated inputs; a comprehensive study rather than one performed in three phases; changes in the provisioning construct that underlies the cost studies, based on a better understanding of the features required by CLECs and the manner in which UNEs will be provisioned; clarifications by the Commission and by the FCC of how UNEs are to be offered and priced; and methodological refinements such as the FLC and the introduction of deaveraged environmental factors. The controversies engendered by these methodological refinements are discussed below; Verizon here argues that they should be

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[53] Id.

welcomed and not rejected on grounds of novelty or merely because they increase prices.[54]

Verizon argued as well that its studies are well organized into modules and that their inputs can easily be modified for sensitivity analysis. It at least tacitly recognizes that the HAI Model may be more user-friendly than its studies, but contends that the reliability of a model is more important than its ease of use.[55] Finally, it recognizes that its study relies to a degree on proprietary information but sees this as necessary because of its use of "real world" data, some of which is necessarily proprietary. It contends that reliance on proprietary data has not prevented effective analysis and review, inasmuch as the data were made available to Staff and parties who had signed the protective order.

The HAI Model

The HAI Model is described as a "bottom-up economic-engineering costing model of [Verizon's] basic local exchange service . . . . It estimates the costs that an efficient firm would incur to provide UNEs for narrowband voice-grade telephone services, but capable of providing access to advanced services."[56] As a bottom-up model, it proceeds to develop UNE costs by modeling the construction of a telecommunications network on the basis of detailed information regarding Verizon's demand quantities, network component prices, and costs and expenses. It first determines the current demand for Verizon's services, using geo-coded customer location data or, where those data are not available, by assigning surrogate locations in accordance with an algorithm. It takes account as well of Verizon's line count data, by wire center as of 1998. The Model then groups customers into clusters, in accordance with

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[54] Id., pp. 32-33.

[55] Id., p. 35.

[56] Tr. 1,285. AT&T does not describe the model in its brief; the summary here is taken from the testimony of its witness Mercer and the model description in Exhibit 314.

specified criteria, and associates the clusters with serving areas that can be efficiently served by available local exchange technology. The serving area is a rectangle calculated by the clustering algorithm and permits the model to estimate the type and amount of outside plant required to serve it, taking account of terrain and other pertinent attributes.

The Model next determines the amount of the various network components needed to support the known demand for the elements and services in question, using "optimization routines" that insure the use of outside plant technically and economically suited to local conditions, the proper choice of feeder technology, the proper choice between wireline and wireless distribution systems, and efficient inter-office fiber optic transport rings. Next, the Model estimates the investment required to purchase and deploy the requisite quantities of each identified component. In doing so, it takes account of public information and information from subject matter experts. The Model then determines the cost of operating and maintaining the network, taking account of capital carrying costs, network operations, maintenance, customer operations, and corporate overhead. Finally, the Model produces output results identifying forward-looking UNE costs.[57]

In its brief, AT&T contends that the record shows the HAI Model conforms to the TELRIC standard as applied by the Commission.[58] It contends as well that the study is fully documented and can be readily understood, tested and manipulated by interested parties. In this regard it points to the documentation provided in Exhibit 314 and to the testimony of witness Donovan in support of the study's outside plant inputs,

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[57] Tr. 1,285-1,290. Much greater detail regarding the HAI Model is provided in Exhibit 314, comprising a model description, a user guide, and input portfolios.

[58] AT&T's Initial Brief, p. 168. AT&T does not elaborate on this claim in brief but offers two transcript references to statements to this effect by its witnesses (id., n. 431) and cites Exhibit 314.

the testimony of witness LoFrisco in support of the corporate overhead and forward-looking network operations factors, and the testimony of witness Hirshleifer in support of the cost of capital input. It notes as well that the study is formatted in Microsoft Excel, which permits the derivation of every formula and cell to be traced. It adds that the study has been modified to correct "the few bona fide calculation mistakes" that Verizon identified and contends that "with these revisions to the study in place, the evidence shows that the engineering assumptions, methodologies, calculations, and inputs underlying the [HAI] study reasonably develop Verizon's forward-looking economic costs to provide UNEs."[59]

Arguments

The obverse of the greater emphasis on specific flaws in and adjustments to Verizon's studies is the greater stress (albeit in the far fewer briefing pages devoted to it) on the overall qualities of the HAI Model. Consistent with that briefing practice and the state of the record (which includes numerous specific adjustments to the Verizon study that must be addressed), this general section of the recommended decision describes primarily Verizon's overall critique of the HAI Model and AT&T's defense.[60] Overall criticisms of Verizon's model comprise primarily the allegations that it rests too heavily on historical data and is insufficiently forward-looking; and that it therefore produces rates that would permit Verizon to recover (or more) its embedded costs, thereby violating the TELRIC concept and seriously threatening the development of local

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[59] AT&T's Initial Brief, p. 170, citing, for refutation of Verizon's criticisms of the model's inputs and assumptions, Tr. 1,942-2,064.

[60] In presenting these lengthy arguments, I have tried to convey their contours and tenor while avoiding detail that would have made the account far too long. Interested readers are referred to the briefs, and parties should be assured that all arguments, even if not recounted here, have been read and considered.

service competition in New York. These concerns recur in the many specific challenges, criticisms, and proposed adjustments to Verizon's studies and will be fully presented and discussed as they arise.

Verizon characterizes the HAI Model as "a convoluted agglomeration of engineering assumptions, arbitrary allocations and estimating methodologies that are inadequately described, difficult to decipher and often fail to function as intended."[61] It charges, among other things, that the Model is inconsistent with TELRIC; that its outputs have never been validated against real-world data; that it requires continuous correction; and that its results are volatile and, in any event, well below the lowest rates set in any other TELRIC proceeding. Contending that the FCC's Universal Service Proceeding model produces loop costs more than double the highest HAI estimates, Verizon asserts that the HAI Model "makes the patently unreasonable claim that Verizon's entire network could be built for about one-third of Verizon's existing investment, and operated at about one-fifth of Verizon's costs."[62] It charges that the Model's sponsors have failed to address the criticisms of the Hatfield Model expressed by the Commission in the First Elements Proceeding, where the Commission found that model "flawed in concept," and it organizes its brief around the criticisms there expressed by the Commission.

More specifically, Verizon argues, first, that the HAI Model fails to produce proper TELRIC cost estimates, which the FCC intended "to identify an incumbent carrier's actual forward-looking costs based on the deployment of 'efficient new technology' to the extent 'compatible with the existing infrastructure.'"[63] Contending that the AT&T/WorldCom witness acknowledged that a proper TELRIC model should "estimate costs

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[61] Verizon's Initial Brief, p. 326.

[62] Id., p. 328, citing Tr. 2,948; 2,950-2,952.

[63] Id., p. 331, citing 47 CFR §§51.503-51.511; Local Competition Order, ¶685; Tr. 5,838.

that an efficient competitor using forward-looking technology actually would be able to achieve,"[64] Verizon contends that the HAI Model, to the contrary, is premised on the artificial assumption of a brand new, fully functioning network being dropped into place instantaneously. Among other shortcomings, the Model therefore excludes the costs of growth, customer churn, and fluctuations in demand; and it fails, among other things, to take account of the costs for growth or add-on switch capacity.

The Model likewise applies, in Verizon's view, unrealistically high utilization factors that avoid the cost of capacity needed in many parts of the network. It includes as well cost-minimizing assumptions that fail to reflect the realities of an operating network; these include the premise that poles, trenches, and conduit throughout the network are immediately shared by two or three other utilities. Asserting that "even the sponsor's own witnesses have acknowledged that no network will ever look like the HAI hypothetical construct,"[65] Verizon contends that the proponents of the HAI Model have failed to bear their burden of explaining how and why the Model works as it does and of demonstrating that it performs reliably. It points to the Model's need for frequent revisions and corrections and to the portions of its design that are proprietary, and it criticizes the Model for its alleged failures in documentation, its frequent references to unsupported judgement, and the changes over time in how that judgement has been exercised.[66] Among other things, Verizon challenges the "best practices study" cited by the HAI proponents as showing that Verizon's cost could be reduced as

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[64] Tr. 5,844-5,845.

[65] Verizon's Initial Brief, p. 336, citing Tr. 2,930-2,931. It should be noted that the citation is not to testimony by AT&T/WorldCom witnesses in this proceeding but to testimony by Verizon witnesses recounting statements made in other jurisdictions by HAI proponents.

[66] Verizon's Initial Brief, pp. 339-346.

much as 50% (by application of the "forward-looking network operations factor").[67] It charges that this study is "just a distorted mathematical averaging of ARMIS data from a sample of mismatched companies, offered up to suggest conclusions that are inconsistent with the underlying data"[68] and that it lacks any controls to ensure that the reported data involve similar operations performed under comparable circumstances.

Beyond that, Verizon charges, the HAI Model relies on formulas so complex and confusing that it is nearly impossible to determine if mathematical errors have been made. It asserts that AT&T/WorldCom witness Dr. Mercer misconstrued one of his own Model's calculations when it was presented to him on cross examination, an error it says was conceded by AT&T and WorldCom in their response to record request No. 11.[69] Verizon adds that these concerns are compounded by allegedly incomplete and contradictory responses by the Model's sponsors to requests for information and clarification, and it urges that the HAI Model's sponsors be held to the standards of full disclosure and candor imposed on Verizon in a rate proceeding. Citing in particular the anomalous ratios of distribution structure to cable costs said to be shown in its Exhibit 443, Verizon contends that instead of responding fully to the identification of those anomalies, AT&T and WorldCom sought, unpersuasively, to challenge the data used by the exhibit--data, according to Verizon, submitted by AT&T/WorldCom themselves earlier in the proceeding and not updated because they had not significantly changed. It asserts that even the revised versions of the Model submitted in response to the identification of errors continue to be flawed in a variety of ways.[70]

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[67] Exhibit 313.

[68] Verizon's Initial Brief, p. 343, citing Tr. 6,007-6,029.

[69] Verizon's Initial Brief, pp. 347-348, citing Exhibit 440, Tr. 6,003, and Exhibit 454 (on-the-record request No. 11).

[70] Verizon's Initial Brief, p. 355.

Verizon next charges that the Model rests "on a series of erroneous engineering assumptions, arbitrary allocation schemes[,] and novel estimating methodologies that have never been shown to produce reasonable results."[71] Among other things, the Model estimates outside plant on the basis of current rather than potential or ultimate demand; uses a clustering process and geo-code database rejected as inadequate by the FCC in the Universal Service Proceeding;[72] and never demonstrates the reasonableness of its method for estimating the needed amount of distribution cable, which implies skyscrapers several hundred stories tall and then deals with that anomaly by including in the cost estimate only sufficient cable to reach the first 50 floors. Verizon criticizes as well various aspects of the HAI Model's assumptions with regard to switching costs, interoffice facilities, and common costs and expenses.[73] objecting, among other things, to the premise of a linear relationship between a firm's direct costs and its common costs. Verizon further contends that the HAI Model's estimates begin with known system requirements in New York but go on to estimate "a hypothetical infrastructure on the basis of a series of simplifying assumptions and untested algorithms--none of which has been demonstrated to be reasonable and reliable."[74] It contends, for example, that while the Model's sponsors initially dismissed Verizon's argument that HAI's $14.6 million estimate of the cost of tandem switching capacity was unreasonable, they later revised the Model to increase the estimated number of tandem switches from 9 to 16, the needed investment in tandem switching by more than 640%, and the estimated per minute cost of tandem switching by more than 35%.[75] Verizon charges that the Model's sponsors reject any effort to compare its outputs to the

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[71] Id., p. 356.

[72] Id., p. 357

[73] Id., pp. 360-365.

[74] Id., p. 366.

[75] Id., p. 367, citing Exhibit 319 (Attachment 2).

existing network and urge its adoption solely on the basis of unproven assurances of sound engineering, reasonable techniques, and appropriate inputs.

Verizon points as well to the FCC's criticisms of a related HAI Model and to state commissions that have rejected various versions of it, as well as to this Commission's rejection of its predecessor in the First Elements Proceeding. Finally, Verizon challenges various inputs used in the model which, it says, "were derived by mixing and matching data taken out of context, drawn from different companies, operating in different parts of the country over different periods of time, [and] create an array of mismatched numbers that, again, do not reflect the actual costs any company is likely to incur."[76]

In response, AT&T argues, as a general matter, that the Commission should concern itself with only the most recent version of the HAI Model, which corrects the genuine errors identified during the proceeding, and should disregard the earlier versions noted by Verizon. It disputes as well what it characterizes as Verizon's claim to have only "scratched the surface"[77] in pressing its critique, asserting that Verizon consultant NERA has engaged in extensive criticism of the HAI Model in many jurisdictions and can be assumed to have identified by now all of the Model's flaws. AT&T replies at considerable length to the allegation that it has not been responsive to questions about the Model, describing in detail its responses to Verizon's inquiries as well as to those posed by Staff following the hearing.

More specifically, AT&T first disputes Verizon's charge that the HAI study violated TELRIC principles in its use of excessively high fill factors and of new switch discounts. It contends that the Model provides capacity for additional demand by using fill factors consistent with those already found

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[76] Verizon's Initial Brief, p. 373; specific inputs are criticized at pp. 373-379.

[77] AT&T's Reply Brief, p. 63.

reasonable by the Commission, maintaining that the Model effectively sizes the network at 100% of the local exchange customer base, allows for additional growth, and provides enough capacity to account for the additional volatility that might be associated with Verizon's loss of customers and facilities to competition. (Fill factors and switch discounts are discussed extensively below, in the context of AT&T's proposed adjustments to Verizon's study).

AT&T next disputes the charge of inadequate documentation for and explanation of the study. It contends it clarified various assumptions in its interrogatory responses, but that in some instances, it was required, because of lack of information, to "make assumptions in lieu of replicating the detailed planning and engineering process that an ILEC like Verizon actually goes through in configuring its network,"[78] and that those assumptions were reasonable. It contends that Verizon's criticism of its 50% forward-looking network operations factor ignores the record evidence confirming, through four separate runs of the analysis that take account of Verizon's various criticisms, that the 50% factor is reasonable.[79] It insists the adjustment was based on publicly available Verizon data that Verizon has not shown to be distinguishable from analogous data in other jurisdictions that tended to confirm AT&T's assertions.

AT&T likewise disputes the criticism that the HAI study is complex and confusing, pointing to Verizon's full exploration of the study. It denies that its witness Mercer misread the formula for tandem common equipment investment, explaining that he simply misspoke in a response given subject to check and that the record on the point is clear.

AT&T disputes in detail Verizon's claim that Exhibit 443 demonstrates anomalous results, contending that the data used in the exhibit are not what they were represented to

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[78] Id., p. 75.

[79] Id., pp. 77-80.

be and that the exhibit therefore should be disregarded and the portions of Verizon's initial brief based on it excluded from consideration. AT&T nevertheless responds specifically to two asserted anomalies raised for the first time in brief on the basis of Verizon's further consideration of Exhibit 443, explaining the anomalies and calculating that even if they warrant re-running the model, their effect is only a one-cent change in the statewide loop rate.

Finally, AT&T disputes the claim that the FCC's Universal Service Proceeding model generates loop costs far in excess of HAI's; it attaches to its reply brief an analysis said to show that proper use of the FCC's model generates costs that approximate HAI's.[80]

Discussion

In assessing the competing analyses, one must first discount the parties' various "arguments from result." The HAI Model need not be rejected merely because it would reduce existing rates and deny Verizon the recovery of all of its actual costs--something contemplated not only by TELRIC but also by traditional regulation, which allowed recovery only of prudent costs; and Verizon's study is not facially absurd because it would increase rates and make it harder for CLECs to compete. We cannot presume the outcome of proper TELRIC analysis; and if the costs are reasonably and fairly calculated, the price chips should be allowed to fall where they may.

Second, we must recognize that we are not writing on a clean slate. The Commission determined, in the First Elements Proceeding, that while both presentations suffered from serious weaknesses, the HAI Model's predecessor was "more flawed in concept than [Verizon's] study."[81] Verizon's present study differs little enough from the last one in overall method that there is no basis for rejecting it in concept. That does not

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[80] Id., p. 93; Attachments 5-17.

[81] Phase 1 Rehearing Opinion, p. 8.

mean that all its innovations are sound; some are not. All aspects of the study, both old and new, require rigorous criticism, and many will be seen to warrant substantial adjustment. But the Commission has already determined that a study like Verizon's can be a reasonable starting point for TELRIC-based rate setting and that it is not, for example, disqualified by reason of using historical costs as a point of departure.

The HAI Model, meanwhile, needs to overcome the burden of its predecessor's rejection by the Commission, and it is far from clear to me that it has. Its "tenuous link to the real world" remains a serious concern, for in its effort to avoid reliance on Verizon's historical costs, it makes all manner of subjective assumptions. If TELRIC required avoiding reference to historical costs even as a starting point, there might be no alternative to a method like HAI's. But if TELRIC permits--as the Commission found it does--initial reliance on historical costs as long as they are severely examined and modified as needed in light of forward-looking analysis, that sort of company-specific analysis seems more likely to achieve a reasonable result than one that makes extensive use of algorithms based on subjective assumptions.

AT&T's briefs and testimony demonstrate that Verizon has overstated its criticisms of the HAI Model and that some of Verizon's "gotchas" can be explained away. But when all is said and done, the recurring corrections to the Model seem to confirm its weaknesses more than its suppleness, and the Model continues to suffer from the flaws identified by the Commission in the First Elements Proceeding. Verizon likewise overstates its case when it suggests that AT&T and WorldCom have abandoned their support for the HAI Model; AT&T's comment in brief that the case could be decided either on the basis of HAI or on the basis of Verizon's study suitably adjusted is nothing other than lawyerly argument in the alternative. Still, AT&T's ability to reach that result confirms the capacity of Verizon's study to be adjusted, adding to one's confidence that it can be used as the

starting point for analysis without concern that the end-point of the analysis will be thereby determined.[82]

Accordingly, I recommend, for theoretical and practical reasons alike, that the Commission use Verizon's study as the starting point for decision making. As a matter of theory, HAI is a ponderous tool that is too far removed from the reality of Verizon's circumstances to be used when there is an alternative better grounded in real data. As a practical matter, Verizon's study lends itself to adjustment in a manner that appears able to produce a sound result. The remainder of this recommended decision will be devoted to those adjustments.

ANNUAL COST FACTORS

Introduction

As already mentioned, Verizon used annual cost factors to convert TELRIC investments into annual costs for UNEs and to develop nonrecurring charges. The factors are expressed as ratios whose numerator is pertinent expenses and whose denominator may be relevant investments, other expenses, or revenues. Six of the eight ACFs use an investment denominator; they are identified as (1) the depreciation ACF, (2) the return, interest, and Federal income tax (RIT) ACF, (3) the ad valorem tax ACF, (4) the network ACF, (5) the wholesale marketing ACF, and (6) the other support ACF. The common overhead ACF is an expense-to-expense ratio used to identify and allocate common overhead expenses, special pension enhancement payments, and savings associated with the Bell Atlantic/NYNEX merger. Finally, the gross revenue loading ACF, expressed as an expense-to-revenue ratio, allocates uncollectibles and Commission expenses.

To develop its ACFs, Verizon began with 1998 expenses, which it claims to have adjusted (from $7.866 billion overall to

[82] This is not to say that the HAI Model lacks the capacity to be adjusted, but only that the demonstrated adjustability of Verizon's study obviates any potential concern that choosing it as the starting point predetermines the outcome.

$5.316 billion overall) to insure compliance with TELRIC, to reflect the Commission's decisions in the First Elements Proceeding, and to capture an assumed level of productivity and savings. In addition, it asserts, the ACFs reflect no growth in costs since 1998, thereby sparing UNE customers the effects of inflation. Verizon contends that "the ACFs provide customers with the benefits of productivity gains, even when specific programs have not been identified to achieve these gains, while insulating customers from cost increases, even when the increases are known and certain."[83]

Verizon maintains that its ACFs were developed in a manner largely consistent with that used to develop carrying charge factors (CCFs) in the First Proceeding.[84] It argues as well that substantial reductions in the expenses captured by the ACFs, as urged by some parties, would unlawfully and improperly deny it the opportunity to recover the costs it actually expects to incur in providing UNEs and violate the statutory mandate that rates be just and reasonable. Verizon explains as well that it applied three generic adjustments to its ACF calculations "in order to insure that the ACFs used in this proceeding accurately reflected TELRIC assumptions."[85] The adjustments are said to exclude retail costs, account for inflation and productivity, and apply a forward-looking-to-current conversion.

Objections to the ACFs pertained to the calculation method in general, to the generic adjustments just noted, and to specific ACFs. The general objections are discussed first, followed by a discussion of specific ACFs. Cost of capital issues are considered under the next major heading.

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[83] Verizon's Initial Brief, p. 39.

[84] The differences between the two processes are described at Tr. 2,366-2,369; they are specifically discussed only to the extent they are controversial.

[85] Verizon's Initial Brief, p. 41.

Overall Method and Generic Adjustments

1. Productivity

In estimating the expenses to be allocated through the ACFs, Verizon assumed productivity savings of 2% above inflation for network related expenses (primarily maintenance) and 10% above inflation for non-network related expenses; it asserts that these are the figures that the Commission applied in Phase 1 of the First Proceeding as well as in a Rochester Telephone Corporation proceeding.[86] The CLEC Coalition argues, in general, that application of the concepts used by the Commission in the First Proceeding requires that the productivity figures be substantially increased.

According to the CLEC Coalition, the 10% figure applied by the Commission in the first proceeding represents an annual rate of 5% applied over two years (1995, the base year for the data, to 1997, the year the prices were to take effect). In this proceeding, 1998 data are being used, and the rates will take effect in late 2001, suggesting a productivity factor of at least 15% (5% over three years) or even 20% (if a fourth year is recognized). Citing the testimony of its witness Kahn, it goes on to argue that the 5% annual figure should be regarded as a minimum, given the downward trend in telephone company average costs, the 6.0%-to-6.5% annual productivity revealed by FCC studies, the telephone industry labor productivity advances that exceed even those figures, and the incentive to productivity that can be expected to flow from increased competition. It therefore advocates an annual productivity figure of 5.0% to 5.5%, which it contrasts with the implicit annual rate of 3.33% that follows from Verizon's application of 10% productivity improvement over a three-year period.

Verizon had sought to justify its productivity figure by reference to productivity offsets applied in other jurisdictions in price cap proceedings; but the CLEC Coalition

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[86] Tr. 2,398. The Rochester Telephone proceeding is Case 95-C-0657 et al., First Network Elements Proceeding, et al., Opinion No. 99-8 (issued July 22, 1999).

argues that the productivity offset used in a price cap proceeding "will not reflect the agency's judgement of the rate of productivity growth--the matter at issue in this costing proceeding--but a design parameter intended to help meet the overall set of often competing public policy goals."[87] Among other examples, it cites a Kentucky decision in which the productivity offset was eliminated from the price cap calculation; it explains that the Kentucky Commission was not implying that it foresaw no productivity growth but, rather, expressing its preference to have productivity savings used for infrastructure development rather than price reduction.

With respect to maintenance expenses, the CLEC Coalition would use a 4% productivity adjustment, the effect of extending Verizon's 2% factor to encompass a four-year adjustment period. With regard to copper distribution facilities, however, it would apply the 15% or 20% adjustment, contending that very little copper distribution plant is turning over, and that the 5% per year "adjustment properly reflects the improvement in maintaining whatever copper plant may be in place."[88]

Verizon objects to increasing the productivity adjustment. It argues that the adjustment applied by the Commission in the First Proceeding and replicated here had been premised not on actual cost control programs but merely on the Commission's estimate of what would be reasonable; that it carried the adjustments forward even though it believed them to be obviated by other adjustments in the proceeding; that its studies absorb the effects of inflation and known cost increases such as the 4% annual increase in wages negotiated at conclusion of the 2000 strike; and that there is no basis in the record for the productivity figures offered by witness Kahn. It contends, among other things, that Dr. Kahn misused an FCC staff report, failing to take account of the anomalous nature of one of the

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[87] CLEC Coalition's Initial Brief, p. 19.

[88] CLEC Coalition's Initial Brief, p. 22.

years studied, and that removal of that year would reduce the figure to 4.6%. In addition it says, the Bureau of Labor Statistics data Dr. Kahn relied on to support his 6% productivity figure pertained to a wide range of telecommunications companies, not only local exchange companies; and the productivity gain shown for the industry by the data was 4.9%, not 6.0%. Beyond that, it says Dr. Kahn greatly understated likely inflation levels.

In its reply brief, Verizon takes the CLEC Coalition to task for proposing, in brief, adjustments even higher than those advocated by Dr. Kahn in his testimony. It reiterates its criticisms of that testimony and points to a Maine proceeding in which Dr. Kahn's testimony showed that telephone company costs had increased by 20% from 1990 to 1999. It agrees with the CLEC Coalition that the productivity offset used in a rate cap proceeding may reflect matters other than an estimate of productivity, but it explains that its presentation on those offsets, which showed an average offset of 2.95%, demonstrated annual productivity of about 3.95%.

The CLEC Coalition responds by citing the Commission's decision in the First Proceeding, as well as FCC decisions, as standing for annual productivity factors greater than those implied by Verizon's analysis here.

Both parties direct most of their efforts on this issue to the proper annual productivity figure and pay relatively little attention to what appears to be at the heart of the CLEC Coalition's claim: the interval between "base year" and "rate year" is longer here than it was in Phase 1, and use of the same annual productivity figure therefore should result in a greater overall adjustment. In denying Verizon's petition for rehearing in Phase 1, the Commission said that

> The 10% level, properly ambitious, was selected...in view of the likelihood that the development of competition would lead to productivity gains, and to ensure that all resulting savings were anticipated. The productivity factor is applied to expenses

> and is generally consistent with the annual total factor productivity (TFP) gain of slightly over 5% contemplated by the PRP [New York Telephone Company incentive regulation] decision. To the extent it is slightly higher, it properly recognizes the additional savings that may be attributed to developments since the PRP, including enactment of the 1996 Act.[89]

Verizon's testimony calls into serious question the 5% and higher annual productivity figures advocated by the CLEC Coalition, but there is no basis either for an annual figure as low as the 3.33% implied by Verizon's proposal to apply a 10% adjustment over the period from 1998 to 2001. A figure so low would certainly be at odds with the Commission's use in the First Proceeding of a "properly ambitious" productivity level. Verizon's own presentation shows that the average productivity factor selected by regulators in price cap proceedings implies an annual productivity level of about 3.95%, and applying that annual figure in this proceeding, over a period somewhat in excess of three years, suggests an overall productivity adjustment of 12.0%, which I recommend. Similarly, the productivity adjustment for maintenance should be 3%, using the Phase 1 annual figure but recognizing the longer interval in the present case. Finally, Verizon has successfully rebutted the CLEC Coalition's proposal to treat copper plant maintenance differently; the premise of no plant turnover has not been established.

2. Forward-Looking-to-Current Factor

According to Verizon, CCFs were traditionally calculated by finding the relationship between current expense and current investment and then applying the resulting ratio to convert the investment into customer charges that permit recovery of both investment and expenses. In a TELRIC context, the numerator of this factor--current expense--is significantly

[89] Phase 1 Rehearing Opinion, pp. 52-53 (footnote omitted).

reduced to reflect forward-looking TELRIC assumptions, and unless the denominator is likewise reduced, the correspondingly lower factor, when applied to forward-looking TELRIC investment, will underrecover expenses to a degree not contemplated by the TELRIC method. Reducing the denominator is impractical, inasmuch as TELRIC investments cannot be determined before the end of the study process. Accordingly, Verizon proposed an adjustment, termed the forward-looking-to-current (FLC) factor, that would divide the ACF by .70, representing the approximate ratio of total incremental costs to the current level of those costs as calculated in the First Proceeding and in proceedings in Massachusetts and Pennsylvania. It applied the FLC factor to the network, wholesale marketing, other support, and common overhead ACFs--those in which a reduction in investment could not be assumed to imply a comparable reduction in expenses. It did not apply the FLC to the depreciation, RIT, and ad valorem ACFs, which are directly related to investment levels, or to the gross revenue ACF, which directly reflects the level of expenses. Verizon notes that even with the FLC applied, its studies reflect only $5.316 billion in recognizable costs, in contrast to its claimed actual costs of $7.571 billion.

The FLC drew the fire of numerous parties, most of whom saw it, in AT&T's words, as "nothing more than a poorly disguised attempt by Verizon to recoup its embedded, inefficient operating costs. Such recovery would violate TELRIC . . . ."[90] AT&T goes on to argue that the application to lower TELRIC investment levels of current expense-to-investment ratios, which Verizon characterizes here as an unnecessary and unwarranted reduction in expenses, was cited by Verizon in the First Proceeding as a factor insuring that its cost calculations captured forward- looking efficiency gains and productivity improvements. Indeed, AT&T goes on, the Commission found a need to recognize even greater savings through application of the productivity factors previously discussed. AT&T therefore

[90] AT&T's Initial Brief, p. 47.

expresses surprise that Verizon would attempt to increase its cost factors by almost 43%, and it contends that doing so would, in effect, substitute an embedded cost analysis for a forward-looking TELRIC analysis.

Verizon claims that it has already reflected prospective efficiencies through such steps as absorbing inflation, applying productivity gains, and capturing merger savings; but AT&T contends that this simply means it has complied with the Phase 1 Opinion. AT&T therefore denies that any of these adjustments justify the FLC factor, which would overwhelm their combined effect. Finally, AT&T maintains "it cannot be a coincidence that Verizon first proposed its egregious FLC factor only after its long-distance entry in New York had been authorized. This proposed adjustment to Verizon's UNE rates is fundamentally anticompetitive in its effect and, inferably, in its intent."[91]

The CLEC Alliance likewise views the adjustment as nothing more than a back-door attempt to recover embedded costs. It argues, for example, that legal and executive expenses, contrary to Verizon's premise, would be reduced "under an assumption of workable competition in which [Verizon's] regulatory efforts to perpetuate its monopoly are assumed away."[92] Citing the FCC's ban on recovering embedded costs in a TELRIC analysis, the CLEC Alliance sees no basis for assuming that expenses in a forward-looking construct would bear the same percentage relationship to investment as do current expenses, nor does it see any basis for assuming that the same 70% factor should be applied to all of the asset categories at issue. Finally, it argues that the FLC factor is inconsistent with other internal Verizon data, according to which the cost of equipment in 1998 and 1999 is in some instances lower than in the past and in other instances higher.

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[91] Id., p. 52.

[92] CLEC Alliance's Initial Brief, p. 32.

The CLEC Coalition argues similarly, suggesting that an alternative method to adjust investment balances to forward-looking levels could be based on current-cost to book-cost ratios and price indices developed by Verizon for the plant and equipment it purchases. The CLEC Coalition also takes issue with Verizon's premise that current costs can be measured by regulated revenues, citing testimony that revenues might be a surrogate for costs only if the market were competitive or Verizon's monopoly operations were subject to rate of return regulation, neither of which is the case.

WorldCom asserts that "the FLC factor increases Verizon's annual recovery of expenses by a staggering $225 million."[93] It argues that Verizon admitted in cross-examination that the FLC factor would enable it to recoup the expense reductions that result from applying historical cost factors to a TELRIC-consistent investment base reflecting the forward-looking technology contemplated in the first proceeding.[94] Z-TEL likewise sees the FLC factor as inconsistent with TELRIC.

Verizon responds that the FLC is needed to avoid a windfall to CLECs--in effect, a double count of TELRIC-related savings. It contends that the CLECs are arguing for the preservation of existing rate methods, even if shown to be inapposite in the TELRIC environment. It disputes the premise that the Commission previously rejected an FLC, explaining that its presentation in the First Proceeding had not reduced the numerator of the CCF to reflect forward-looking assumptions. The CLECs, meanwhile, reiterate their charge that Verizon would use the FLC to recover embedded costs, in violation of TELRIC, and that the effect of the FLC is to increase ACFs by about 43%. AT&T points to the Commission's statement, in adopting the Phase 1 productivity adjustment discussed in the previous section, that "[Verizon]... is unpersuasive when it argues that

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[93] WorldCom's Initial Brief, p. 52.

[94] Id., p. 53, citing Tr. 5,317-5,321.

forward-looking expense reductions are adequately captured by application of historical CCFs to a presumed lower investment base"[95]; and it charges that Verizon is ignoring that decision.

AT&T correctly cites the Phase 1 determination, but it disregards an important distinction between the Phase 1 CCFs and the ACFs proposed here. In Phase 1, the CCFs was calculated for the most part as the ratio of historical expenses to historical investment, and the Commission was properly unpersuaded that application of that ratio to TELRIC investment would adequately capture pertinent forward-looking savings. Here, in contrast, the numerator of Verizon's proposed ACF is forward-looking TELRIC expense, yet the denominator remains historical investment; the ratio, accordingly, is lower than it would have been in Phase 1. That lower ratio is still applied to forward-looking TELRIC investment, thereby in effect double counting the TELRIC adjustment, as Verizon argues. Seen in this light, the FLC does not convert TELRIC costs to embedded; it merely tries to restore a "twice-TELRICed" cost calculation to one that recognizes TELRIC only once--as was the case initially in Phase 1.

That the FLC appears sound in concept, however, does not necessarily mean that it is correctly calculated. Verizon derived its FLC by using revenues as a proxy for investment (since TELRIC investment could not yet be estimated) and finding that forecast TELRIC revenues came to only 70% of historical revenues in the base year of 1995. Verizon's response to Staff's post-hearing question PSC-VZ-1 now provides an estimate of TELRIC investment, and that investment, overall, comes to 75.3% of historical investment in the 1998 base year for this case. That comparison (rounded to 75%) is more apt than the one Verizon used, and the FLC should be reduced in a manner consistent with it. (The availability of the TELRIC investment might suggest recomputing the ACF on that basis, using forward-looking expense in the numerator and forward-looking investment

[95] AT&T's Reply Brief, pp. 3-4, citing Phase 1 Opinion, p. 98.

in the denominator and thereby obviating the FLC entirely. That, however, would be a cumbersome effort that would fundamentally change the nature of the ACF as a factor that makes use of historical relationships. Also desirable though impracticably cumbersome would be an FLC separately computed for each category of investment. The best course for now is to retain the FLC but to adjust it on the basis of the information now available.)

Finally, use of the FLC to avoid double counting the effects of TELRIC requires being sure that the remaining "single count" is not understated. To that end, expense adjustments should be rigorously applied where warranted. These include the productivity adjustment previously discussed, as well as others considered below.

3. Removal of Retail Avoided Costs[96]

Consistent with the premise of the FCC's UNE pricing regulations (since called into question by the Eighth Circuit's decision), Verizon's studies reflected the assumption that Verizon was a purely wholesale company and therefore sought to remove avoidable retail costs from consideration.[97] Verizon

[96] This heading considers Verizon's effort to remove retail avoided costs from its ACF calculations generally. A separate question, discussed below, relates to whether retail activities were properly removed in determining the wholesale marketing ACF.

[97] The FCC required removal of "avoidable" retail costs, while the Eighth Circuit determined that the 1996 Act called only for removal of "costs that are actually avoided," a lesser amount, and rejected the premise that the ILEC would become a wholesale-only provider. Verizon notes that these aspects of the Eighth Circuit's decision were not stayed by the Supreme Court's grant of certiorari and argues that the Commission must take them into account; it reserves its right to submit, after the Commission's decision, a revised study that develops avoided costs in a manner consistent with the Eighth Circuit. As the CLEC Alliance notes, however (Reply Brief, pp. 18-19), the Eighth Circuit's decision pertained to resale rates, not UNEs. Extending it to the calculation of excluded retail costs for purposes of UNE pricing may have the

contends that it conducted a full review of each expense category to determine those that would be avoided in a wholesale-only environment and that its study is more detailed than the study used to determine the avoided cost percentage for purposes of setting the wholesale rate in the Resale Phase of the First Elements Proceeding.

AT&T argues that Verizon should have excluded Universal Service Fund contributions, which are assessed on the basis of retail end-user revenues and therefore would not be incurred in a wholesale-only environment. It suggests that other access-related charges should be excluded as well, but in the absence of information needed to assess their magnitude offers no adjustment on their account; it therefore regards its approach as conservative.

In Verizon's view, the hypothetical wholesale-only environment would likely involve changes in the Universal Service Fund, and it is unlikely that Verizon and other ILECs would be relieved of responsibility for universal service. More fundamentally, it emphasizes the Eighth Circuit's rejection of the wholesale-only premise that underlies the exclusion of Universal Service Fund expenses.

AT&T has not addressed itself to the effect of the Eighth Circuit's approach on its Universal Service Fund adjustment, and Verizon has not presented any estimate of how that decision would affect its figures. The parties may address themselves to this issue further in their briefs on exceptions; for now, Verizon's retail adjustment will be adopted as a placeholder.

4. ACF Versus CCF

As noted, Verizon's ACF method, in contrast to the CCF mechanism used in the First Proceeding, assigns some costs and expenses not on the basis of investment but on the basis of

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benefits of consistency, but the CLEC Alliance presents arguments, on which judgment can here be reserved, against doing so.

expenses or revenues. The CLEC Coalition objects to the change, urging continued use of CCFs. It is concerned in particular about the common overhead ACF, the calculation of which on an expense-to-expense basis results in the assignment of a portion of those overheads to nonrecurring charges, which, because they entail no investment, bear no assignment of common overhead under the CCF method.

Verizon sees the change as an improvement, contending that because all products and elements receive the benefit of the overhead costs, all, including nonrecurring items, should bear a reasonable portion of those costs. The CLEC Coalition, however, regards the change as a gratuitous increase in nonrecurring costs that shifts risk from the ILEC to the CLEC, in an anticompetitive manner, by increasing the upfront charges that CLECs must bear.

In its reply brief, the CLEC Coalition characterizes this as primarily a policy issue, i.e., whether CLECs should bear recurring costs as part of up-front nonrecurring charges. But Verizon argues persuasively that nonrecurring charges should bear a portion of the overhead costs from which they benefit, and the ACF method for allocating those costs appears reasonable.

Network ACF

1. Arguments

Verizon's network ACF, based on actual 1998 data that were reviewed to identify reasonably anticipatable reductions, "includes repair, rearrangement and testing expenses, as well as testing equipment capital costs, plus plant account and general network loadings."[98] In calculating the factor, Verizon assumed a reduction in "R dollars," the costs associated with subscriber troubles, on the premise that such troubles would diminish with the placement of newer copper plant. It did not reduce "M dollars," the expenses attributable to rearrangements associated with customer moves, municipal requirements, and network

[98] Verizon's Initial Brief, p. 54.

upgrades, seeing no basis for assuming that such costs would decline.

AT&T charges that the network ACF should have been adjusted to remove excessive repeat repair costs, which result from poor workmanship and inefficient processes that should be assumed away in a TELRIC context. On the basis of Verizon's service quality reports, AT&T calculates a repeat repair rate of approximately 16%, and it proposes to remove the associated costs from the network ACF. It contends its adjustment may be understated because it eliminated only estimated direct costs associated with certain plant accounts and did not extrapolate potential cascading cost effects of repeat repairs and poor work quality. The CLEC Coalition notes that the repeat repair adjustment should be in addition to any productivity adjustment.[99] Verizon contends, however, that repeat repairs are often attributable to causes other than error and poor workmanship.[100] In any event, it says, the TELRIC construct does not presume perfect performance, and the costs of repeat repair will continue to be incurred in the future.

The CLEC Alliance argues, more generally, that the network ACF is inflated because its numerator (costs) fails to reflect the reduced cost of maintaining new equipment while its denominator (investment) is based on the net book cost of depreciated equipment, much lower than the cost of investment in new equipment required under TELRIC. To correct for the overstated numerator and understated denominator, the CLEC Alliance proposes to reduce the network ACF by 25% (after removal of the FLC factor). It contends that Verizon "is attempting to have it both ways in its effort to recover the increased cost for new, more efficient equipment, <u>and at the same time</u> recover maintenance costs that would be associated with old and increasingly obsolete equipment."[101] The CLEC

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[99] CLEC Coalition's Initial Brief, p. 31.

[100] Tr. 3,314, citing AT&T's acknowledgement of that in an interrogatory response.

[101] CLEC Alliance's Initial Brief, p. 12 (emphasis in original).

Alliance disputes Verizon's suggestion that advanced technology will not necessarily reduce repair costs and that increased sophistication of the technology in fact makes repair related problem solving more complex; according to the CLEC Alliance, new technology yields many efficiencies, including reduced maintenance costs. It contends that Verizon has failed to meet the burden of proving its claim that maintenance costs will not decline over time.

In a similar vein, WorldCom cites suggestions by the Commission in the First Proceeding and by Staff in the organizational stages of this case that a new, optimally designed network would incur lower maintenance costs than the existing network. WorldCom contends that the use of fiber feeder and electronics permits rapid expansion of capacity without costly rearrangements, through the use of line cards, and it cites a claim by regional Bell operating company SBC that new loop infrastructure "will substantially reduce the need to rearrange outside plant facilities when installing new or additional services."[102] WorldCom urges that M dollars be reduced by 50% to recognize these considerations, as recommended by AT&T's witness.[103]

Verizon responds that it regularly removes obsolete, high-maintenance equipment from its network, thereby avoiding excessive maintenance costs; that the inclusion of depreciated plant in the current investment base does not overstate expense; and that the CLEC Alliance's 25% reduction in the ACF and WorldCom's 50% reduction in "M dollars" are arbitrary and unsupported. It claims to have explained in detail why there would be no reduction in "M dollars"--moves and rearrangements--in a TELRIC future.[104]

In a more specific point, WorldCom charges that Verizon's network ACF is overstated because of a diminution in

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[102] Exhibit 393, p. 7.

[103] Tr. 1,242-1,243.

[104] Verizon's Reply Brief, p. 36, citing Tr. 2,378.

the adjustment--the copper repair adjustment factor (CRAF)--designed to eliminate recovery of expenses associated with repairing deteriorated copper plant. In the First Proceeding, the "deteriorated copper repair reduction," an important portion of the CRAF, was set at 60%; Verizon here proposes to reduce it to 35% and thereby reduce the overall CRAF from 42% to 25%. The 35% deteriorated copper repair reduction results from averaging the 60% used in the First Proceeding on the basis of a 1996 study with a new estimate of a 10% reduction that, WorldCom charges, lacks evidentiary support and is simply an unexplained estimate. The change increases repair expense recovery by approximately $89 million, thereby wiping out the 2% productivity adjustment included in the ACF. WorldCom goes on to express outrage over Verizon's alleged failure to mention that it reduced the Phase 1 CRAF, and it urges the Commission to reverse this "surreptitious" reduction and set it at 42%.[105]

Verizon responds that it reduced the CRAF to reflect the "commonsensical notion," missed in the First Proceeding, that newer plant already in good condition is less likely to experience large trouble rate improvements in the future. It claims as well to have supported its 10% improvement estimate, which it openly characterized in an interrogatory response as appropriate "for tracking units that would be experiencing excellent service."[106]

2. Discussion

Turning first to the treatment of "M dollars," Verizon has failed to refute the reasonable expectation, expressed by both the Commission and its staff and seemingly adopted by SBC in the document reproduced in Exhibit 393, that moves and rearrangements will be less costly in a forward-looking system. Verizon's testimony says only that "even if...has in place an optimally designed network, it will still be required to

[105] WorldCom's Initial Brief, pp. 54-57.

[106] Verizon's Reply Brief, p. 34, n. 80.

reconfigure its facilities to reflect new municipal ordinances and movement of customers."[107] That, of course, is true; but Verizon fails to address itself to the extent to which those activities will be less costly than they have been in the past and to the efficiencies cited by SBC. The 50% adjustment to "M dollars" proposed by WorldCom is not specifically supported and seems high; a 30% adjustment should be used unless parties can show on exceptions that a different figure is warranted. Making this adjustment also resolves the CLEC Alliance's concern about the alleged mismatch between the numerator and denominator of the ratio: consistent with the general approach with respect to ACFs, the numerator is forward-looking while the denominator reflects historical plant investment.[108]

Verizon correctly argues that repeat repairs cannot be attributed exclusively to a shoddy initial effort, as AT&T would imply. But there can be little doubt that at least a portion of such repairs do flow from difficulties associated with the initial work; and Verizon's carrier-to-carrier metric reports, which refer, among other things, to installation troubles, bear out that inference. Finally, Verizon's adjustment to the CRAF was neither surreptitious nor unexplained, and it makes sense in concept. The specific 10% figure is inadequately supported, however, since there is no reason for assuming that all equipment will have as small an improvement as the best-performing units; there are bound to be some whose improvement rates will be greater. In the absence of a better estimate, and recalling that Verizon bears the burden of proof, a current estimate of 25% should be substituted for Verizon's 10% and averaged with the 60% of the First Proceeding.

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[107] Tr. 2,378.

[108] As already noted, my recommended approval of the FLC, which is premised on avoiding any double counting of TELRIC adjustments that may result from their presence in both the numerator of the ratio and the investment base to which it is applied, makes it even more important to ensure that the numerator reflects all forward-looking cost reductions.

Other Support ACF

The "other support" ACF recovers expenses related to information management, research and development, and procurement as well as expenses and capital investments associated with various non-revenue producing investments such as motor vehicles and general purpose computers. The CLEC Alliance objects to this recovery of shared costs through an annual cost factor applied to capital investment, arguing that the shared costs are also related to expenses[109] and "should not differ proportionally based on investments."[110] The CLEC Alliance characterizes this ACF, as applied by Verizon, as a "capricious and arbitrary ACF cost booster,"[111] and it urges application of this factor, like the common overhead factor, to expenses rather than to investments.[112]

Verizon responds that nearly all expenses recovered through the other ACFs similarly relate in part to expense as well as investment, but that application of a factor to investment is an accepted and fair way to recover the costs.

Verizon's response is persuasive; there is no need to modify this ACF.

Wholesale Marketing ACF

The wholesale marketing ACF captures the expenses of "advertising, product management and customer interfacing functions."[113] Verizon claims to be seeking recovery only of the

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[109] CLEC Alliance's Initial Brief, p. 21.

[110] Id., p 22.

[111] Id., p. 23.

[112] The CLEC Alliance's position in this regard appears to be opposed to that of the CLEC Coalition, which objects, as noted above, to assignment of the common overhead factor on the basis of expenses and urges continuation of the previous practice of assigning those expenses, too, on the basis of investment.

[113] Verizon's Initial Brief, p. 59.

costs that would be incurred in a wholesale market, contending that it eliminated retail avoided costs. CLECs urge reduction or elimination of all advertising costs as well as reduction of product management costs.

AT&T characterizes as "absurd" the recovery of any advertising expenses, contending that allowing it requires CLECs to pay twice for advertising--once to Verizon and once through their own advertising channels.[114] It notes that the Commission in the First Proceeding required Verizon to treat 90% of its advertising expenses as retail avoidable, asserts that Verizon has never advertised UNEs,[115] and contends that the full page ads in Telephony magazine that Verizon had cited as being directed to wholesale customers promoted services other than UNEs. WorldCom argues to similar effect, noting that Verizon has not advertised UNEs or placed brand awareness or market stimulation advertising related to UNEs; it asserts that Verizon's continuing bottleneck monopoly over local exchange facilities largely negates any incentive to advertise and that advertising to stimulate additional CLEC market activity could lead Verizon to lose additional retail customers. It cites Verizon's statement at the hearing that it had not found such advertising to be warranted by cost/benefit analysis.[116] The CLEC Alliance adds that brand awareness campaigns--analogous to Intel's "Intel Inside" stickers on computers--would be inapposite here, and that Verizon in fact forbids its CLEC customers to use its trademark, inasmuch as the CLEC is its retail competitor as well as its wholesale customer.[117] Z-TEL argues to similar effect, characterizing the wholesale marketing costs as speculative.

Verizon takes a very different view of advertising, challenging as an improper "backward look" the CLECs' emphasis on the fact that Verizon is not now conducting wholesale

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[114] AT&T's Initial Brief, p. 61.

[115] Tr. 5,205-5,207.

[116] WorldCom's Initial Brief, p. 65, citing Tr. 5,215.

[117] CLEC Alliance's Initial Brief, p. 16.

advertising. It contends that in the fully competitive market contemplated by TELRIC, in which Verizon would be an exclusively wholesale provider, it would undertake market stimulation advertising, brand awareness advertising, and advertising to CLECs themselves. It points to the Commission's historical allowance of advertising costs even to pre-competitive utilities and to the need to distinguish Verizon's products from those of other providers of wholesale services. It asserts as well the need to advertise to CLECs themselves, citing the advertisements already placed by alternative providers of telecommunication services in the trade press,[118] and it notes that, since the close of the hearings, it has placed advertisements in trade journals extolling its own network services in contrast to those of other providers. It adds that the wholesale-only premise, and the inquiry into whether the costs at issue are retail-avoidable, are inconsistent with the Eighth Circuit's decision. In its view, the decision means that the pertinent inquiry is into "whether Verizon, as a company engaged in both retail and wholesale operations, would actually avoid particular costs."[119]

With respect to product management expense, Verizon regarded 49.73% of the account to be retail-avoidable. AT&T and the CLEC Alliance regard that figure as greatly understated, contending that a detailed review of function codes suggest a much higher avoidable percentage. Pointing for example to the expense of maintaining tariffs, AT&T contends that Verizon's retail tariffs far outweigh in volume its wholesale tariffs, and the CLEC Alliance suggests that even wholesale tariffs include restrictive provisions whose purpose is not to incur wholesale sales but to assist Verizon's retail operations. They suggest that 90% of product management expenses be treated as retail-avoided.[120]

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[118] Verizon's Initial Brief, p. 62, citing Tr. 3,323-3,324.

[119] Verizon's Reply Brief, p. 45 (emphasis in original).

[120] AT&T's Initial Brief, p. 63; CLEC Alliance's Initial Brief, p. 18.

Verizon regards the 90% figure as arbitrary inasmuch as it is based on no workpapers or data, and it insists that the product management costs that remain after its own 49% adjustment--an excessive adjustment under the Eighth Circuit decision, it adds--will continue to be incurred in a wholesale environment. They include not only tariff-related costs but also the costs of meeting CLEC customers and responding to their questions. It notes, for example, AT&T's admission in an interrogatory response that Verizon's wholesale network services group meets regularly with AT&T representatives,[121] and it sees no record basis for assuming that this group and its resulting costs will disappear in the future.

Finally in this regard, the CLEC Alliance objects to the recovery of operator services and directory assistance(OS/DA) costs through UNE rates, noting that OS/DA is not a UNE itself and that Verizon is proposing to offer and price it as a non-regulated service. It contends that Verizon has treated zero percent of OS/DA costs as retail avoided, which incorrectly assumes that all CLECs will use Verizon's OS/DA services and thereby drives up the costs of UNEs for CLECs that do not use OS/DA services. CLECs that choose to take Verizon's OS/DA services will pay for it separately, and the associated costs, says the CLEC Alliance, should not be recovered through UNE ACFs generally.

Verizon makes a strong case for its position on product management expense. Given the continuing need to work with its CLEC UNE customers, as demonstrated by ongoing activities of that sort, I see no basis for assuming a greater portion of these costs to be avoided.

Advertising is another matter. It may overstate the case to say no advertising costs would be incurred in a wholesale-only environment, and Verizon appears to have begun at least some advertising of its network to UNE purchasers. But the factors that warranted treating 90% of these costs as retail

[121] Tr. 3,326.

avoidable remain, for the most part, in place; among other things, there is little reason to anticipate brand awareness campaigns. In view, however, of the advertising that is now underway, the disallowance should be reduced to 85%.

The CLEC Alliance makes a valid point with respect to not imposing OS/DA costs on CLECs that choose not to take those services from Verizon. Verizon's silence in response may indicate agreement; in any event, its proposed rates already distinguish between CLECs that take OS/DA service and those that do not, so no further adjustment is needed on that account.

Finally, parties may use their briefs on exceptions to present, in greater detail, their views on the implications of the Eighth Circuit's decision for this issue.

Common Overhead ACF

"The common overhead ACF reflects common overhead expenses, SPE [Special Pension Enhancement] or equivalent expenses[,] and savings from the Bell Atlantic/NYNEX merger."[122] The three components are discussed separately.

1. Common Overhead Expenses

Common overhead expenses are those associated with activities, previously designated as "general and administration (G&A) functions," including executive, planning, general accounting and finance, external relations, legal, and human relations. In contrast to the First Elements Proceeding, where these expenses were recovered through an expense-to-investment factor, Verizon here proposes to recover them through an expense-to-expense ratio; as noted, the principal practical effect of the change is to allocate a portion of these expenses to nonrecurring charges, which are calculated on the basis of expense rather than investment.

WorldCom contends that historical one-time expenses (such as those related to Y2K concerns) should be excluded from

[122] Verizon's Initial Brief, p. 63.

the overhead deemed recoverable in a TELRIC calculation and that the FCC has so held in its Universal Service Proceeding.[123] It recommends application of an adjustment comparable to the 20% adjustment that the FCC there applied to the executive, planning, and G&A overheads in Account 6700. Verizon responds that WorldCom has not shown that its proposed adjustment is comparable to the FCC's and that, in any event, WorldCom misreads the FCC's Universal Service Proceeding decision, which does not address the pricing of UNEs. In contrast, it continues, the Local Competition Order establishes the right of ILECs to recover the reasonable costs they will incur; that principle was affirmed in the recent decision in WorldCom's lawsuit growing out of the First Elements Proceeding and other Commission actions[124]; and WorldCom has not shown that Verizon will experience a 20% reduction in these expenses. With specific reference to Y2K costs, Verizon reiterates its earlier claim that they served to defer the incurrence of costs for other planned projects.

The CLEC Alliance urges that lobbying, legal, and regulatory costs be removed from the overhead calculation, characterizing as "irrelevant" Verizon's claim that lobbying costs are "below the line" and not used in developing ACFs.[125] It regards such legal efforts and lobbying as inevitably adverse to CLEC's interests and as benefiting Verizon's retail offerings. Verizon responds that lobbying expenses are not included and characterizes as "frivolous on its face" the suggestion that legal and regulatory costs should be excluded, contending they are necessary costs of operation that all companies recover in their prices.[126]

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[123] WorldCom's Initial Brief, p. 61.

[124] Verizon's Reply Brief, p. 43, citing MCI Telecommunications Corp. v. New York Telephone Co., No. 97-CV-1600, slip op. p. 22 (N.D.N.Y., March 7, 2001). That decision is discussed further below.

[125] CLEC Alliance's Initial Brief, p. 25.

[126] Verizon's Initial Brief, pp. 68-69.

While the 20% adjustment is unsupported and the Universal Service Order may be inapposite, Y2K expenses are inherently a one-time event. And while it is certainly possible that the deferral of other projects avoided an overall cost balloon in the year in which they were incurred, Verizon, though bearing the burden of proof, has not shown that to be the case. The common overhead ACF should be recalculated to exclude costs related to Y2K efforts; Verizon should include, in its brief on exceptions, an estimate of those costs.

The CLEC Alliance's proposal should be rejected. As Verizon notes, the lobbying expenses are already excluded, and reasonable legal and regulatory expenses are necessary and allowable costs of doing business.

2. Special Pension Enhancement

This venerable issue involves Verizon's proposal to recover certain costs associated with offering enhanced retirement benefits in order to reduce its workforce. In Phase 3 of the First Proceeding, the Commission denied Verizon's request to recover some $387 million of such costs. It cited procedural grounds, related to the timeliness of the claim; and substantive grounds, including, among other things, the need to recognize possible offsetting savings. Despite that denial, it authorized renewed consideration of the issue in this proceeding, albeit on a prospective basis only, and it added, in response to AT&T's request for rehearing, that Verizon bears the burden of showing any allowance to be procedurally and substantively proper.[127]

In the present proceeding, Verizon seeks to recover some $400 million of SPE, a figure based on the average of 1998-1999 SPE expense, adjusted to remove avoidable retail costs. It argues that its cost studies already reflect a very optimistic

[127] Phase 3 Opinion, pp. 21-22; Phase 3 Rehearing Opinion, pp. 6-7. A full discussion of the issue's background appears in the Phase 3 Recommended Decision (issued October 2, 1998), pp. 18-20.

view of possible offsetting savings but that these savings "can be realized only if Verizon continues to restructure its workforce in the same way that it has in the recent past. Such restructurings necessarily require the expenditure of SPE costs."[128]

AT&T objects to recognition of SPE costs, regarding such recognition as contrary to both TELRIC and Commission precedent and characterizing the costs as ones "that Verizon must absorb to rid itself of excess inefficient layers of management and union employees in order to compete effectively in the future"; such costs would not be incurred by an efficient forward-looking company.[129] It contends that the anticipated savings recognized by Verizon provide only a 1.55% reduction in UNE costs while the SPE recovery increases those costs by 4.96%, and it cites the suggestion by Department of Public Service Staff, in a White Paper issued in another proceeding, that Verizon has understated the cost savings that will result from mergers.[130] AT&T insists that "CLECs should not be required to pay for Verizon's inability to develop, and retain, a properly sized, efficient workforce."[131]

Similar arguments are offered by the CLEC Alliance and CLEC Coalition, which stress that the employees to be cut would never have been present in a TELRIC construct and object to allowing Verizon to recover the cost of needed downsizing from its competitors, who must themselves reduce their workforces.[132] The Alliance calculates that removal of the SPE would reduce the overhead loading from 11.9581% to 6.0987%,[133] and the Coalition

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[128] Verizon's Initial Brief, p. 64.

[129] AT&T's Initial Brief, p. 54.

[130] Case 00-C-1945, Verizon New York, Inc. - Cost Recovery and Future Regulatory Framework, Staff White Paper (released January 2, 2001).

[131] AT&T's Initial Brief, p. 56.

[132] CLEC Alliance's Initial Brief, p. 27.

[133] Id., p. 28.

argues that Verizon has failed to demonstrate that the 1998-1999 average cost is typical of what can be expected in future years. It suggests that these are transition costs best viewed as an investment or capital loss, which, if recovered at all, should be recovered over an extended period that allows the matching of benefits to the costs. WorldCom argues in a similar vein, charging that "[Verizon] has long been one of the most inefficient of the larger ILECs in the United States," and that CLECs should not fund its efforts to increase its efficiency.[134] It notes as well that firing employees would avoid the need for SPE payments. Z-TEL argues to similar effect.

Verizon's position on the item stresses the need for any corporation in a dynamic environment to restructure its workforce on a regular basis, and Verizon disputes what it characterizes as AT&T's view that TELRIC requires the assumption of a totally static situation. It argues that retirement incentives are commonly used in connection with restructuring workforces and that AT&T itself has restructured its workforce on a number of occasions without claiming that the steps are needed to remove excess and inefficient layers of employees. Verizon asserts that competitive forces will, if anything, require more such restructurings in the future and that there is no reason to assume that the costs would be avoided in a TELRIC construct. It maintains that AT&T has taken too narrow a view of the savings to be compared with the SPE expense (which should include, as well, the overall productivity adjustments); that there is no basis for assuming that firings could have been an equally effective way to restructure Verizon's workforce; and that data for the six years from 1994 through 1999 confirm the reasonableness of the amount included in Verizon's study.[135]

In the competitive environment contemplated by TELRIC, companies may incur early retirement incentive costs, as Verizon

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[134] WorldCom's Initial Brief, p. 60.

[135] The data are set forth in Exhibit 410, CC-VZ-154 (Revised Supplemental Response).

maintains; and the costs to be allowed here, if any, should reflect the normal level of costs that Verizon could be expected to incur in that environment. Verizon seeks $400 million of costs, roughly the average of its 1998 and 1999 actual costs, and it cites data going back to 1994 to confirm the reasonableness of those figures. But the data in CC-VZ-154 show considerable variation in those costs over the years in question (and that 1998 and 1999 are the second and third highest of the six years), calling into question its reliance on the two-year average. More importantly, the six years encompass two unusual mergers--NYNEX/Bell Atlantic and Bell Atlantic/GTE--that could be expected to involve unusual levels of early retirement, as well as the transition from monopoly to competition. The CLECs' arguments about Verizon's historical inefficiency may well be overstated, but there is little doubt that regulation cannot be as effective as competition in keeping costs down. As a result, the movement from regulated monopoly to competition will likely involve a degree of workforce reduction that cannot be expected to continue in the competitive environment, and those transitional costs should not be recovered in a TELRIC construct, whose assumptions include a properly sized workforce.

Taking all these factors into account, it is impossible to conclude that Verizon has borne its burden of proving the level of SPE payments it could be expected to incur in a forward-looking TELRIC environment. Its claim for $400 million should be rejected, and there is no basis on this record for identifying some lower amount. (The factors noted above are significant enough to sustain a qualitative judgment that the actual amount is likely to be closer to zero than to $400 million.) In addition, as already noted, allowance of the FLC adjustment requires special diligence to be sure that all forward-looking expense reductions are properly reflected. Accordingly, SPE recovery should again be denied.

3. Merger Savings

Verizon asserts that the common overhead ACF reflects the savings associated with the NYNEX/Bell Atlantic merger that were presented in its filing of December 22, 1999 in Case 95-C-0657, adjusted to remove retail costs and in certain other respects.[136] It objects to reflecting further savings associated with the Bell Atlantic/GTE merger, contending that it is too early to tell what percentage of those savings should be attributed to New York intrastate regulated operations and, in any event, whether further adjustments are needed in light of the productivity already recognized.

AT&T disputes Verizon's view that it is premature to reflect Bell Atlantic/GTE merger savings, noting potential sources of such savings, but it does not attempt to adjust Verizon's presentation on their account and simply suggests "it would not be inappropriate" for the Commission to do so.[137] The CLEC Alliance asserts that the Bell Atlantic/GTE merger will lead to reduced corporate overhead expenses, including those associated with the departure of senior executives, and it cites the Commission's statement in approving the Bell Atlantic/GTE merger that a portion of the merger savings should redound to the benefit of New York consumers. It offers no specific estimate but asks the Commission to require further reductions in UNE rates to recognize additional merger savings. WorldCom notes the stated expectation, in a 1998 annual report, that the Bell Atlantic/GTE merger will yield annual expense savings of $2 billion by the third year following completion of the merger. It recommends a reduction of 3.57% in the common overhead ACF to reflect Bell Atlantic/GTE merger savings, consistent with the

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[136] The December 22, 1999 filing was made pursuant to the Commission's Phase 2 decision to disallow certain development costs pending a showing that the conditions imposed in authorizing the NYNEX/Bell Atlantic merger, including the flowing through to customers of the merger savings, had been met. Those issues are now being considered in Case 00-C-1945.

[137] AT&T's Initial Brief, p. 66.

adjustment in the HAI Model;[138] the CLEC Alliance advocates a similar adjustment. The Federal Agencies argue that substantial savings provide the only rational justification for the Bell Atlantic/GTE merger, and that there is no reason not to reflect a reasonable estimate of savings in the rates set here.

Verizon responds that its studies were completed before the closing of the Bell Atlantic/GTE merger, and that it will provide an estimate of the savings in Case 00-C-1945, where the matter is being addressed.

There can be no doubt that an estimate of savings associated with the Bell Atlantic/GTE merger should be reflected in the rates set here. Verizon should include an estimate of those savings in its brief on exceptions (which will be due following the date for Verizon's submission in Case 00-C-1945), and all parties should comment on how to reflect those savings, given that rates likely will be set in this case before the conclusion of Case 00-C-1945.

[138] WorldCom's Initial Brief, p. 63, citing Tr. 1,259-1,262.

Depreciation ACF

In Phase 1 of the First Elements Proceeding, the Commission determined that the depreciation lives to be used in estimating UNE costs should be those set for Verizon's predecessor in the FCC's triennial represcription process. Citing both the Local Competition Order's presumption in favor of the prescribed rates and Verizon's failure of proof, it rejected Verizon's proposal to use shorter depreciation lives based on generally accepted accounting principles. It held that the prescribed lives to be used should be those recommended by [the] Commission for New York Telephone, consistent with the FCC's mandate, for intrastate purposes, rather than the lives prescribed by the FCC for Bell Atlantic's Maryland subsidiary, as the Hatfield Model proponents had urged.[139]

Early in the present proceeding, as part of its efforts to assist the parties in identifying issues, Staff stated, in pertinent part, that

> the Commission decided in [the First Elements Proceeding] that TELRIC depreciation rates should be based on depreciation lives used in calculating booked depreciation on a regulatory basis. If the service lives for [Verizon's] plant changed since rates were set in [the First Proceeding], the new service lives and depreciation rates should be used in developing TELRIC element costs.[140]

Claiming consistency with the Commission's earlier decision and Staff's guidance, Verizon urges use of the depreciation lives adopted by the Commission for regulatory purposes effective January 1, 1998. AT&T disputes that claim and urges use of the longer lives (and consequently reduced depreciation cost) set by the FCC in 1995

The depreciation rates that went into effect for regulatory purposes on January 1, 1998 did so, pursuant to the

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[139] Phase 1 Opinion, pp. 47-48; Phase 1 Rehearing Opinion, pp. 55-56.

[140] Staff Memorandum dated August 11, 1999, quoted at Tr. 3,360 and in Verizon's Initial Brief, p. 69.

process called for by Verizon's Performance Regulatory Plan (PRP), following review by Staff. According to Verizon, its cost studies therefore reflect the depreciation lives used for regulatory purposes, using service lives that have changed since rates were set in the First Proceeding, and thus comply with the Staff Memorandum.

AT&T objects, contending, first, that Verizon has simply failed to support its depreciation proposals with the specificity required by the FCC.[141] It contends further that the rates are inconsistent with the Commission's determination in the First Proceeding, which required use of the depreciation rates "most recently prescribed for Verizon"; those, according to AT&T, remain those adopted in Opinion No. 97-2 rather than the much shorter lives here proposed. AT&T notes as well that Staff questioned the rates filed in 1998 and suggested that a full study conducted without the constraints of the PRP might not have reduced depreciation lives to the extent there proposed by Verizon.

AT&T goes on to support its own proposals on the basis of its witness Lee's testimony. It argues that forward-looking pricing requires the use of economic depreciation rates based on the expected economic lives of newly placed plant, and Mr. Lee explained how the FCC's depreciation prescription process had become more forward-looking and offered what he regarded as empirical evidence of that development. AT&T argues as well that Verizon's witness on the subject of depreciation was not a qualified expert, and it disputes his argument that the FCC lives, initially prescribed in 1995, were no longer valid. It notes that the FCC renewed its prescribed life ranges in 1999 and stated then that the lives were appropriate for use by state commissions in establishing UNE prices. AT&T points as well to the use of the FCC depreciation lives in other jurisdictions, each of which, according to AT&T, regarded those lives as forward-looking and appropriate for TELRIC purposes. The CLEC

[141] AT&T's Reply Brief, p. 57, citing Local Competition Order ¶702.

Alliance argues to similar effect, stressing that the rates advocated by Verizon were accepted by Staff in 1998 only in the context of the PRP, and alleging misrepresentation in Verizon's argument that the rates are consistent with those approved for UNE pricing in Opinion 97-02.

Verizon, for its part, sees the question of whether the FCC's depreciation lives are forward-looking as largely irrelevant. It emphasizes that the FCC rates favored by AT&T were set more than six years ago on the basis of even older data and that the Staff Memorandum, like the Commission's order in the First Proceeding, recognized that the PRP provided a mechanism for changing intrastate regulated depreciation lives and that such changed lives should be used in UNE studies. It notes that there was no traditional triennial represcription in 1998 and that the FCC therefore did not review in any detail the continued adequacy of the 1995 rates. It regards as true but irrelevant that the FCC's represcription process has become more forward-looking over the years, and it insists that AT&T has failed to explain why interstate depreciation lives adopted by the FCC in 1995 are better than intrastate depreciation lives accepted by the Commission in 1998. Arguing that the PRP anticipated a continued shortening of depreciation lives in light of the development of competition, Verizon maintains its 1998 study is consistent with that expectation.

Verizon disputes as well the charge that it failed to present a presentation on depreciation, contending that its witness Minion had more relevant expertise than Mr. Lee; that it was not obligated to submit a full-blown depreciation study in view of its reliance on the 1998 effort; and that it has met its burden of overcoming any presumed reliance on the FCC's represcribed rates, given its compliance, consistent with Staff's memo, on the specific process followed in New York. It suggests that the jurisdictions that relied on the FCC's prescribed rates did so in the absence of state-specific alternatives or at a time when the FCC's rates were less stale.

The key to this issue is whether the service lives adopted in 1998 under the PRP are, in fact, changes that should be taken into account pursuant to Staff's August 1999 memo in this case. Two considerations suggest they are not. First, Staff's report on its review of those service lives expresses important reservations:

> Although Staff has reviewed the company's proposals with respect to the benchmark established in the PRP, we did not conduct a full study in the traditional sense and, therefore, have made no recommendations regarding the appropriateness of the company's depreciation parameters in the context of this study. Staff believes that if a full study were conducted without the constraints of the PRP, although we may have recommended reducing projection lives somewhat for certain accounts in the central office and outside plant categories, it does not appear likely that lives would have been reduced as low as those proposed by the company. Likewise, future salvage factors would have correlated more closely to actual salvage experience than those proposed by the company.[142]

Verizon ignores these important qualifications, which suggest strongly that the service lives set in 1998 should not be treated as typical regulatory service lives to be applied here as Verizon proposes. They reflect the special circumstances and constraints of the PRP, and, unlike the 1995 lives, they are not based on a thorough analysis of Verizon's construction program, technological advances, competition, and other factors affecting service lives. Beyond that, the 1998 changes predate Staff's August 1999 memo, and if Staff contemplated using those rates here, it could have said so.

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[142] Letter to Robert Welsh, Bell Atlantic Network Services, from Dennis F. Taratus, Chief-Dominant Carrier Performance, dated June 24, 1999.

Verizon is right to express concern that the 1995 data may be going stale and to stress the superiority of New York-specific service lives. But the staleness has not been demonstrated, and the FCC's 1999 action, though not a full-scale represcription, warrants continued confidence in the 1995 rates. Meanwhile, the benefits of New York specificity can be realized by continued use of the depreciation rates actually used in the First Elements Proceeding, and that is my recommendation.

COST OF CAPITAL

Overview

Cost of capital presentations were made by Verizon and by AT&T jointly with WorldCom. Verizon proposed a figure of 12.6%, which it regarded as conservative in light of its study's conclusion that a forward-looking weighted average cost of capital related to the supplying of UNEs would be in the range of 13.03% to 13.38%. AT&T/WorldCom estimated the weighted average cost of capital to be in the range of 9.17% to 9.91%.

The parties differed little in their estimates of the cost of debt, but they held very different positions regarding the cost of equity and the capital structure. The differences reflect in part Verizon's view that it should be seen as a fully competitive enterprise subject to all the associated risks and entitled to a correspondingly higher return on investment and AT&T/WorldCom's contrary view that an incumbent local exchange company remains an inherently less risky operation.

Verizon witness Vander Wiede calculated a cost of equity of 14.78%, based on a discounted cash flow (DCF) analysis of a proxy group comprising the companies included in the Standard and Poors (S&P) Industrials, and a debt cost of 7.77%. It contemplated a debt/equity ratio in the range of 25%/75% to 20%/80%; the former implied an overall capital cost of 13.03%, while the latter implied 13.38%. In its studies, it used a figure of 12.6%, equal to the figure it uses in its own business

decisions;[143] in light of Dr. Vander Wiede's calculations, it regarded that figure as conservative.

AT&T/WorldCom witness Hirshleifer calculated an equity cost of 10.42%, averaging the results of a DCF analysis of a proxy group comprising the regional Bell holding companies and the larger independent telephone companies (10.24%) and a capital asset price model(CAPM) analysis (10.6%). It envisioned a capital structure ranging from 54% debt/46% equity to 20% debt/80% equity and an overall cost of capital (assuming a debt cost of 7.86%) ranging from 9.17% to 9.91%; the midpoint of that range is 9.54%.[144]

As a point of reference, it may be noted that the Commission in the First Proceeding adopted a weighted average overall cost of capital of 10.2%, reflecting a cost of equity of 12.1% and a debt/equity ratio of 40%/60%.[145] The decisions underlying that result are discussed below, to the extent pertinent.

Verizon's Presentation

Verizon argues that the cost of capital, no less than other costs, must be determined on a forward-looking basis that contemplates a competitive market, and it criticizes AT&T for inconsistently assuming, in this one area only, a backward-looking market in which Verizon is a near monopolist enjoying the lower cost of capital associated with its lower risk. It charges that AT&T in effect advocates a traditional, regulated, non-TELRIC approach to cost of capital, taking account of book values of debt and equity rather than economic or market values.

Verizon's witness Vander Weide analyzed the risk of providing unbundled network elements in New York. He found relatively high levels of risk associated with the business's

[143] Verizon's Reply Brief, p. 63.

[144] Tr. 2,292, reflecting the updated estimates in rebuttal testimony, as slightly increased in a letter to me from AT&T's counsel dated January 31, 2001.

[145] Phase 1 Opinion, p. 40.

high leverage, which made it acutely sensitive to changes in revenues, and with the substantial growth of competition in the State, as evidenced by the large number of interconnection agreements between Verizon and its competitors and the competitors' provision of service to more than one million lines. Verizon cites in that regard investors' forecasts that competition will increase and derides what it characterizes as AT&T's "scare campaign,"[146] which attempts to blame regulators rather than AT&T's own missteps for AT&T's failure to make a go of it in the local market; it points to the successful entry of other CLECs, including WorldCom.[147] A third factor said to contribute to Verizon's risk is technological change, which lowers the cost of entry to competitors while endangering Verizon's ability to recover its investments. Finally, Verizon sees risk in regulation itself, which constrains Verizon's operations in comparison with those of its competitors and may require Verizon to incur costs that will not be recovered. Verizon contends that its own risk (i.e., that of Verizon-New York, the New York local exchange company) exceeds that of its parent, which has greater geographic and product diversity, better access to capital markets, and greater potential economies of scope and scale.

In light of these considerations, Verizon asserts that the overall risk it faces in offering UNEs is comparable to the forward-looking risk of the S&P Industrials, which therefore provide a reasonable proxy group to use in determining Verizon's cost of capital for purposes of offering UNEs. Applying a single-growth DCF analysis to that group yielded a cost of equity of 14.78%. In the First Proceeding, the Commission analyzed 11 companies involved in the provision of local exchange service, and Verizon's witness accordingly considered the four remaining telecommunications companies that were not the subject of pending mergers and found a 14.22% cost of

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[146] Verizon's Initial Brief, p. 80.

[147] Id., pp. 81-83.

equity; use of that equity cost would produce an overall cost of capital between 12.68% and 12.99%. He believed, however, that an analysis of telecommunications companies generally would understate the forward-looking cost of equity, inasmuch as their stock prices had been bid up in anticipation of mergers while growth forecasts failed to reflect the cost savings and revenue growth potential associated with those mergers.

To determine the capital structure, Dr. Vander Wiede examined three groups of companies: the S&P Industrials, firms that offer local exchange service, and interexchange carriers. He found that the capital structure for all three sets of companies typically contained no more than 20% debt and no less than 80% equity, confirming the conservative nature of the range of capital structures he recommended. For further confirmation, he analyzed local exchange companies earnings before interest, taxes, depreciation, and amortization in order to estimate the market value capital structure of Verizon's stand alone local exchange operations; that analysis showed capital structure containing from 18% to 21% debt and 82% to 79% equity.

In the First Proceeding the Commission adopted a capital structure comprising 40% debt and 60% equity. Dr. Vander Wiede regarded that as insufficiently forward-looking (embodying only small movement from the historical capital structure of 45% debt/55% equity) and as failing to represent the capital structure of firms operating in a competitive environment.

Finally, Dr. Vander Wiede calculated a cost of debt of 7.77%, based on the average yield to maturity of Moody's A-Rated Industrial Bonds for December 1999.

AT&T's Presentation

AT&T argues that the capital intensive nature of local telephone service makes the cost of capital an important part of overall costs under TELRIC and that Verizon's inflated cost of capital will deter competition, encourage inefficient construction of bypass facilities by entrants, and generate

subsidies for the incumbent's business. It asserts that "by asking the Commission to assume a competitive market where one does not exist, Verizon is actually trying to ensure that such a market will never exist."[148] AT&T's witness Hirshleifer estimated a weighted average cost of capital for Verizon in the range of 9.17% to 9.91%, premised on an equity cost of 10.42%, a debt cost of 7.86%, and capital structures ranging from 54% debt/46% equity to 20% debt/80% equity.

To estimate Verizon's cost of equity, Mr. Hirshleifer applied a three-growth-stage DCF analysis to a proxy group comprising the remaining regional Bell holding companies and the larger independent telephone companies. He regarded that sample as comparable to Verizon and believed the market information related to them already reflected the onset of competition, which had long been expected by investors. Given that the overall risk associated with those companies exceeds the risk of supplying UNEs alone, AT&T regards the resulting cost of equity as conservatively high.[149]

AT&T used a cost of debt of 7.86%. It sees no significant difference on that point from Verizon, noting that both parties' estimates may be conservatively high in their omission of short-term debt and their reference to Verizon's operations overall rather than the less risky provision of UNEs alone.[150]

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[148] AT&T's Reply Brief, p. 37.

[149] Mr. Hirshleifer also presented a capital asset pricing model (CAPM)analysis, averaging its result with that of his DCF analysis. Verizon's initial brief challenges the CAPM in various ways and AT&T's reply brief defends it against those attacks, but AT&T's own initial brief mentions it only once (at p. 143), to note without elaboration that Mr. Hirshleifer relied on it as well as on his DCF analysis. Given that posture of the parties and the Commission's historical reluctance to rely on the CAPM to estimate the cost of capital, I will not discuss the CAPM further.

[150] AT&T's Initial Brief, pp. 144-145.

With respect to capital structure, AT&T noted that, in general, the greater the degree of operating risk faced by a company, the greater the proportion of equity in its capital structure. It maintains that the unreasonably high level of risk contemplated by Verizon's witness led him to assume a capital structure incorporating too much equity. Mr. Hirshleifer suggested a broad range of capital structures, ranging from 54% debt/46% equity to 20% debt/80% equity. Using the midpoint of that range together with Verizon's cost of equity would reduce Verizon's calculated cost of capital to 12.16%.

Arguments

AT&T begins its analysis with ¶702 of the Local Competition Order, in which the FCC concluded that the

> currently authorized rate of return at the federal or state level is a reasonable starting point for TELRIC calculations, and incumbent LECs bear the burden of demonstrating with specificity that the business risks that they face in providing unbundled network elements and interconnection services would justify a different risk adjusted cost of capital or depreciation rate. These elements generally are bottleneck, monopoly services that do not now face significant competition.

Mr. Hirshleifer's analysis emphasized this monopoly nature, and AT&T disputes Verizon's premise that its cost of capital should be set as if it were a player in a fully competitive market. It notes in this regard a statement by Verizon's own consultants that TELRIC requires an assumption that "(1) the ILEC will effectively be a monopolist in the provision of network elements for the indefinite future and (2) competitors will need to obtain such elements to compete over this timeframe."[151]

AT&T goes on to argue that ¶702 imposes on Verizon the burden of demonstrating the need for a different risk adjusted cost of capital. It notes as well that ¶702 concludes with the

[151] AT&T's Initial Brief, p. 141, citing Exhibit 408, p. 4.

observation that the "risk adjusted cost of capital need not be uniform for all elements," and contends that Verizon's witness failed to recognize any distinction between the risk faced by Verizon in providing monopoly wholesale telephone services--the inquiry here--and the greater risk it faces in providing its competitive telephone services including far flung business ventures encompassing wireless service and investments overseas. AT&T claims that its witness Hirshleifer took account of these factors in concluding "that a risk-adjusted cost of capital for the lines of business at issue in this proceeding is undoubtedly less than Verizon's overall cost of capital based on its entire range of business activities."[152]

In advocating a three-stage growth model, AT&T disparages Verizon's "analytically easy but completely unreasonable assumption that a firm's present growth rate will remain constant indefinitely. Such an assumption," AT&T continues, "would mean that a firm growing at a rate in excess of the annual growth in GDP would eventually subsume the entire U.S. economy."[153] It contends that its three-stage growth model is consistent with the "almost universally accepted principle that multi-stage models should be used when evaluating companies whose growth rate exceeds that of the economy as a whole."[154] Mr. Hirshleifer assumes high growth during the first five years, above-average but decreasing growth for the ensuing 15 years, and growth tracking the economy as a whole thereafter. Noting that a constant growth model applied to AT&T's proxy group of companies would increase the cost of equity by 379 basis points, AT&T contends that proponents of a single-stage model must assume, unreasonably, that the sample companies will maintain growth rates higher than the economy as a whole forever and that their stock prices will not rise to reflect that growth.

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[152] AT&T's Initial Brief, p. 143.

[153] Id., p. 146.

[154] Id.

With regard to choice of proxy group, AT&T maintains that Dr. Vander Wiede's use of the S&P Industrials rests entirely on the premise that TELRIC assumes vigorous competition but thereby conflicts with the FCC's premise that UNEs are a bottleneck monopoly service. Beyond that, the S&P Industrials comprise a very broad group of companies facing risks and opportunities far different from those confronted by Verizon or other telecommunications companies and, in AT&T's view, Verizon's witness showed no similarity between Verizon and those companies, making only "the unreasonable and speculative assumption that the advent of competition will make local providers such as Verizon as risky as the S&P Industrials."[155] Mr. Hirshleifer's proxy sample, in contrast, is more nearly comparable to Verizon. The unreasonably high level of risk contemplated by Verizon's witness likewise caused him to assume a capital structure incorporating too much equity.

In sum, AT&T maintains that Verizon has simply not carried its burden of proving that its business risks entitle it to the rate of return it seeks.

Verizon regards AT&T's 9.54% cost of capital as unreasonable, noting that it is below the cost of capital figure that AT&T used in 1997 in making its own investment decisions[156]; below the 11.25% cost of capital that the FCC found to be a reasonable starting point for TELRIC calculations"[157]; and below the 10.2% figure that the Commission adopted in the First Network Elements Proceeding. Given the increased competition in New York, Verizon regards these reductions in the cost of capital as unreasonable. More specifically, it sees no basis for Mr. Hirshleifer's premise that Verizon enjoys monopoly power in the provision of UNEs, citing competitive developments in New

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[155] Id., p. 150.

[156] The AT&T figure, and, accordingly, the spread between the two figures, are proprietary.

[157] Local Competition Order, ¶702.

York State and alleging Mr. Hirshleifer's lack of familiarity with them.[158]

With specific reference to capital structure, Verizon disputes Mr. Hirshleifer's reference to book value capital structure (55% debt/45% equity), contending that book value capital structures are irrelevant to determining forward-looking costs. (AT&T denies using book value, explaining that Mr. Hirshleifer reflected the lower risk of the network element leasing business by choosing a capital structure at the midpoint between the market value and book value capital structures of telephone holding companies.)

Verizon disputes as well the proxy group of companies analyzed by Mr. Hirshleifer, contending that the sample size was too small, encompassing only four telecommunications companies; that all telecommunications companies are merger targets, rendering their market data unreliable for DCF purposes; and that holding companies of the sort analyzed by Mr. Hirshleifer are less risky, not more so, than the business of offering UNEs, given the holding companies' ability to diversify, to take advantage of economies of scope and scale, and to have greater access to capital markets. Meanwhile, while Verizon may face less competition than the S&P Industrials, it faces greater risk from high leverage, technological change, and regulatory policy.

Verizon goes on to note that in the First Proceeding the Commission rejected the three-growth DCF model, seeing no reason to depart from the traditionally used single-stage model. It maintains as well that Mr. Hirshleifer's DCF analysis fails to reflect the fact that dividends are paid quarterly, as did Dr. Vander Weide, nor does it provide for recovery of flotation costs. (AT&T responds that flotation costs need not be added, inasmuch as they are already accounted for the price of a company's stock, and that, in any event, Verizon has issued little stock in the past five years and appears unlikely to undertake large equity financings soon. It likewise sees no

[158] Verizon's Initial Brief, pp. 91-95.

need to reflect quarterly dividend payments, contending it would provide Verizon the benefit of both quarterly and monthly compounding.[159])

Finally, Verizon argues that AT&T's proposed cost of capital fails to pass the test of reasonableness. Noting again that AT&T used a higher cost of capital in making its own investment decisions, it contends that AT&T has an economic interest in estimating that cost of capital as accurately as possible. It argues as well that Mr. Hirshleifer's DCF method, applied to other companies, unreasonably suggests that riskier companies had lower costs of equity than less risky companies, and it disputes Mr. Hirshleifer's efforts in his rebuttal testimony, to challenge the analyses that lead to those inferences.[160]

WorldCom and the CLEC Alliance support AT&T's cost of capital estimate, offering substantially similar arguments. WorldCom points to the frequent rejection by regulators in other jurisdictions of Verizon's competitive market assumption and emphasizes its view that Verizon remains a monopoly provider of network elements with no effective competition in the wholesale market. The CLEC Alliance similarly argues that the development of competition in the retail local exchange markets, which Verizon cites to support its assumption, has no relevance to the risk faced by a firm engaged solely in providing access to local exchange facilities at wholesale. It contends that Dr. Vander Weide's method is identical to the one rejected by the Commission in the First Elements Proceeding and that his result is compromised by the lower estimates issued by Verizon's management in connection with its recent mergers; it disputes Verizon's effort to distinguish those estimates on the basis of the purposes they are intended to serve.

Finally, the Federal Agencies advocate a capital structure of 40% debt and 60% equity, as used in the First

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[159] AT&T's Reply Brief, pp. 54-56.

[160] Verizon's Initial Brief, pp. 103-106.

Proceeding. They contend the less leveraged capital structure advocated by Verizon is merely a fictional target at least for the foreseeable future, and that to shift its capital structure to that extent, Verizon would have to retire billions of dollars of debt or issue billions of dollars of equity capital. They cite in this regard the stable nature of Verizon's capital structure over the past decade and, like the CLECs, recommend a capital structure based on Verizon's books rather than a market-based structure, given Verizon's virtual monopoly in the relevant market. They add that the unreasonably high equity component in Verizon's capital structure results in an unnecessarily high allowance for income taxes.

Discussion and Conclusion

The Commission's decision in the First Elements Proceeding, which considered the issues posed here, can serve well as the starting point for analysis. With respect, first, to risk profile, the Commission (referring to predecessor corporations) said:

> New York Telephone greatly strains the FCC's forward-looking concept in taking it as warrant for regarding NYNEX as comparable, for cost of capital purposes, to certain industrial firms operating in different, if fully competitive markets. One can recognize the consequences of competition in telecommunications without concluding that NYNEX will operate in the same environment and face the same risks as the S&P Industrials.
>
> AT&T's proxy group, meanwhile, uses a group of telecommunications firms whose capital costs reflect the lower risks associated with regulation, along with the market's recognition of the onset of competition in areas traditionally seen as monopolies. The resulting figures provide a reasonable starting point for estimating NYNEX's own capital costs, since it, too, is a firm whose traditional monopoly lines of business are being opened to competition. But this starting point must be adjusted to reflect a change in NYNEX's risk profile. Accordingly, we will use AT&T's proxy group to calculate the DCF-based cost of equity (which already reflects the market's judgments regarding the effects of competition on the proxy

> group companies). The historical debt/equity ratio, however, will be modified, from 45%/55% to 40%/60%, in order to bring it, and the resulting overall cost of capital, within the range of those that might characterize a communications firm such as NYNEX operating in a competitive environment we are endeavoring to promote.[161]

These observations are no less pertinent today than when first made. Verizon correctly argues that TELRIC should not be understood to contemplate a "fantasy network" that makes use of speculative technology. But neither should it be taken to require basing the cost of capital on a "fantasy marketplace," in which the provision of local telephone service is as competitive as the sale of detergent. Such a market is our goal; together with federal regulators we are fostering it; and significant progress in that direction has been made. But one cannot realistically claim that the goal will be reached with respect to local service within the next few years. With respect to UNEs, vibrant competition seems even more remote; indeed, were it achieved, there would be no need for regulators to require TELRIC pricing in the first place. Accordingly, for the reasons noted by the Commission above, I recommend use of AT&T's proxy group to determine the cost of equity. To recognize continued movement toward a competitive market, however, the capital structure should be further modified to 35% debt/65% equity.

With regard to quarterly dividends and flotation costs, the Commission rejected, "as unnecessary and contrary to precedent," Verizon's proposed treatment:

> With respect to quarterly dividends, see e.g., Case 28947, The Brooklyn Union Gas Company - Rates, Opinion No. 85-15 (issued September 26, 1985), p. 52 (adjustments such as this are "unnecessarily complex refinements"). More specifically, the effects of quarterly dividend payments need not be recognized inasmuch as investors can reinvest dividends themselves and do not regard the proceeds of doing so as part of their expected return. As for flotation

[161] Phase 1 Opinion, pp. 38-39.

> costs, see e.g., Case 28947, New York Telephone Company - Rates, Opinion No. 85-17 (issued October 11, 1985), pp. 196-198 (denying flotation costs in the absence of clear evidence of contemplated stock issuance).[162]

Those observations remain valid. Verizon's present arguments regarding flotation costs were rejected in the Phase 1 Rehearing Opinion,[163] and its further claims with respect to quarterly dividends have been refuted by AT&T's witness.[164] There is no need to modify the result otherwise reached to account for these factors.

Finally, with respect to the multi-growth DCF method, the Commission said:

> . . . we have traditionally used, in rate cases, a single-growth model (or, on occasion, a two-growth model), and AT&T has shown no need to depart from that practice here. To be sure, a firm maintaining an above-average growth rate in perpetuity would, as an arithmetic truism, eventually consume the entire economy; but that absurd theoretical result has not precluded use of an above-average single growth rate in the past[165] and need not be of any greater practical concern here. Among other things, New York Telephone properly notes that stock repurchases reduce growth in total dollar earnings, and its witness Vander Weide pointed out that dividends more than 20 to 25 years out have little effect on a firm's stock price and that use of a single-stage, above average growth factor requires assuming only that above-average growth can be sustained for 20 or 25 years.[166]

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[162] Id., p. 40, n. 2.

[163] Phase 1 Rehearing Opinion, pp. 66-67.

[164] Tr. 2,250-2,251.

[165] E.g., Case 90-G-0734, National Fuel Gas Distribution Corporation - Rates, Opinion No. 91-16 (issued July 19, 1991)(growth factor of 6.1%, Gross Domestic Product growth of 2.8%) (footnote in original).

[166] Phase 1 Opinion, pp. 39-40.

AT&T's arguments in the present case resemble in many ways those in the First Proceeding, and there continues to be no basis for rejecting the single-growth model and adopting a three-growth model as a matter of principle or theory. But the Commission in Phase 1 noted that it had, on occasion, employed a two-growth DCF analysis, and the unusual circumstances--primarily, a one-growth figure that seems attributable to particular conditions and very likely unsustainable--that warranted recourse to it (or to some other alternative) appear to exist here as well.[167]

Using the AT&T proxy group with updated data would suggest, under a one-growth DCF model, a return on equity of 14.77%--almost the same as the return Verizon calculated on the basis of its own proxy group. The figure comprises a dividend yield of 2.45% (measured as of March 30, 2001) and a growth rate of 12.32% (based on I/B/E/S growth rate as of March 15, 2001). Several factors suggest that result is unreliable and out-of-line, incorporating a growth rate that will not be sustained.

For one thing, the equity return calculated in the First Proceeding, 12.1%, exceeded the cost of debt calculated there (7.3%) by 4.8 percentage points. The present cost of debt (measured, as in Phase 1, as the average of Moody's composite rate for Aa rated debt and S&P's composite rate for A rated debt as of April 3, 2001) is 7.39%, and a 14.77 equity cost would

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[167] For example, the Commission spoke favorably of a two-growth DCF in Case 28211, Consolidated Edison Company of New York Inc. - Electric Rates, Opinion No. 83-7 (issued March 9, 1983); in view of anticipated substantial changes in that company's payout ratio, it used a one-growth DCF that had been adjusted to reflect those factors. In Case 29327, Niagara Mohawk Power Corporation - Electric and Electric Street Lighting Rates, Opinion No. 87-3 (issued March 13, 1987), it used a two-growth DCF in view of the "transitional" changes in that company's financial position, related to bringing on line a large, long-term construction project. See also Case Central Hudson gas and Electric Corporation - Electric Rates, Opinion No. 86-18 (issued July 17, 1986).

exceed that figure by 7.38 percentage points. There is no explanation for so substantial an increase in equity risk premium, and it calls the calculated equity return seriously into question. Beyond that, there are several factors that could account for an extraordinarily high growth factor in the short run, among them the growth of wireless and data/internet and international services. These are unlikely to continue to sustain the growth factor in this way, and some remedial adjustment seems warranted.

Several alternatives present themselves. A three-growth DCF, applied to the AT&T proxy group, using the I/B/E/S growth rates for the first five years, an average of that growth rate and AT&T's alleged sustainable growth rate (6.29%) for the ensuing 15 years, and the sustainable growth rate thereafter produces an average equity cost of 10.30%. A two-stage analysis, using the sustainable rate after the first five years, produces an average cost of 9.26%. These figures appear unduly low, particularly when compared to a broadbased average calculated in the Merrill Lynch Quantitative Profiles analysis, using a three-stage growth model. The April 2001 edition of that document calculated a DCF return of 11.2% for both the S&P 500 and for a group of 29 telecommunications companies.

In view of these widely divergent estimates and the ongoing major changes in the industry that may account for them, it seems to me that a fair and conservative result can be obtained by applying to the current cost of debt the same equity risk premium that emerged in the First Proceeding. The cost of debt, as noted, is now 7.39%, and the equity risk premium in the First Proceeding was 4.8 percentage points. That suggests a cost of equity in this proceeding of 12.19%, a figure well within the range supportable by the record as a whole. The resulting overall cost of capital, using a debt/equity ratio of 35%/65%, comes to 10.5%, as shown in the following table:

	Percentage	Cost	Weighted Cost
Debt	35%	7.39%	2.6%

Equity	65%	12.19%	7.9%
Total	100%		10.5%

LOOP COSTS

Introduction and Overall Method

Verizon submitted studies of the costs of providing unbundled access to two- and four-wire analog loops and two- and four-wire digital loops.[168] Its cost studies claim to assume a fully forward-looking design based on next generation digital loop carrier (DLC) technology, supported by fiber optic feeder cable, even though DLC is nowhere near universal deployment. Among other things, DLC provides for the conversion of analog signals into digital format in a remote terminal (RT) located in the outside plant, allowing for the direct delivery of digital line signals to digital line switch ports. Verizon maintains this configuration is always less costly than one that terminates an analog signal at the switch, assuming costs are analyzed by taking account of the loop/switch combination as a whole and not from the perspective of the loop alone. According to Verizon, "comparing loop costs, without reference to switching costs, is a fallacy that undermines most CLEC analysis of the relative costs of all-copper loops and fiber-fed DLC-

[168] According to Verizon, "a two-wire analog loop is a transmission circuit consisting of two wires that is used to both send and receive voice conversation in the 300-3000 Hz frequency range. This is the basic loop type used for providing voice-grade 'POTS' service. A four-wire analog loop consists of two pairs, one to transmit and one to receive. It is used in certain private line and data service applications. A two-wire digital loop is a two-wire loop suitable for the transmission of certain high-speed data services. In particular, Verizon's two-wire digital ('premium') loop can be used to provide ISDN - Basic Rate interface ('BRI') service to an end-user customer. A four-wire digital loop will support DS1-level transmission. It can be used, among other things, to provide ISDN - Primary Rate Interface ('PRI') service to an end-user customer. (Tr. 2,421-22.)" Verizon's Initial Brief, pp. 108-109, n. 247.

equipped loops at short lengths."[169] Verizon cites in this regard the Commission's endorsement, in the First Elements Proceeding, of a 100% fiber feeder/DLC configuration, and it continues to regard that premise as consistent with TELRIC.

Verizon's loop architecture also assumes the use of forward-looking GR-303 technology, which, among other things, permits a smaller number of switch ports to serve a given number of POTS loops.[170] Nevertheless, Verizon's studies consider not only the "integrated" DS1 level GR-303 interface but also a more costly DS0 level "universal" (non-GR-303) interface. This use of universal DLC (ULDC) interfaces rather than integrated DLC (IDLC) is controversial and is discussed below.

Along with the foregoing technology assumptions, Verizon's study posited use of existing outside plant routes and lengths, on the premise that they are driven by factors, such as geography and local land-use requirements, that will not change in a forward-looking environment. It then determined the equipment that would be deployed along those routes by randomly selecting 55 wire centers (representing all three of its proposed density zones) and asking its outside plant engineers to develop a forward-looking design for each of the 242 feeder routes within those wire centers. It explains that "the engineers were asked to assume current customer and central

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[169] Id., p. 112.

[170] The initially analog signal appears at the switch port as a DS0 digital channel (a voice-grade digital channel, i.e., a digital channel of the lowest capacity), having been converted to that format at the remote terminal. There is, however, no DS0-level loop/switch interface, and DS0s are grouped as a 24-channel DS1 for interconnection. The GR-303 interface group comprises up to 28 DS1 channel groups interconnecting a remote terminal and a switch, and it obviates a one-to-one association of switch ports and loops by taking advantage of the fact that only some customers will be requesting service at any given time and establishing a connection between a DS0 channel and a loop only when the customer picks up the phone. That phenomenon is referred to as "concentration." (Verizon's Initial Brief, p. 115.)

office locations, and current routing of feeder cable, but otherwise to develop designs that were in no way constrained by the current, 'embedded' deployment of facilities. In this way, Verizon insured that the loop design underlying its studies would be fully forward-looking."[171] In determining the quantities of equipment to be deployed, Verizon made assumptions regarding utilization factors, and it applied what came to be called an "environmental factor," said to take account of zone-specific differences in the amount of work required to install outside plant. Finally, it developed a "link cost calculator" that costs out the facilities designed by the outside plant engineers.

Each step of Verizon's analysis drew criticism from other parties, as next discussed. Issues related specifically to digital subscriber loops (DSL) are discussed in a separate section.

Network Design

1. Loop Configuration; Fiber vs. Copper

A major source of controversy in the First Elements Proceeding was Verizon's assumption of 100% fiber optic feeder; other parties argued, in general, that for relatively short loops (various cut-off points were identified) copper feeder would be less expensive, and the Hatfield Model contemplated its use. The Commission ultimately determined to use the 100% fiber feeder network, finding that when installation and maintenance, among other things, were taken into account, fiber offered cost and operational advantages that warranted its use even for relatively short narrow band loops.[172] In the present proceeding, there is general (though not universal) agreement that all-fiber feeder is the technology of choice as long as it is deployed in a manner that maximizes its advantages; but several CLEC parties deny that Verizon has done so.

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[171] Verizon's Initial Brief, pp. 118-119.

[172] Phase 1 Opinion, pp. 82-84; Phase 1 Rehearing Opinion, pp. 22-29.

WorldCom offers an extended critique of Verizon's loop configuration, distinguishing between the high-density Manhattan zone and less dense regions. In Manhattan, Verizon assumes either a remote terminal located in the customer's building, served by fiber directly to the building (84% of total lines) or else an outside remote terminal, with a copper subfeeder from the RT to the distribution interface (16% of lines). According to WorldCom, an additional alternative would be an RT located in the central office itself; for loops under 4,000 feet, in situations where the RT cannot be located in the customer's building, WorldCom believes a central office RT would be less costly than an outside RT, "simply because the typical outside RT configuration always involves RT site location costs."[173] Although the average loop line in Manhattan is 2,700 feet, Verizon shows no lines served by an RT in the central office, and WorldCom alleges that it therefore overstates the cost of the forward-looking network.

Turning to other areas of the State, WorldCom contends that Verizon ignored the fundamental engineering principle, recognized in its own engineering guidelines, that fiber-fed RTs should be located at a "location that minimizes the copper cable's length leaving the RT site to the customer premises."[174] It contends that Verizon simply assumed that feeder and distribution lengths would be the same as in the existing embedded plant. While Verizon asserts that its engineers designed the forward-looking network free of existing constraints, it nevertheless acknowledges that the feeder and distribution lengths reported in the loop model were the same as in the existing plant.[175] WorldCom recommends what it characterizes as a conservative 10% downward adjustment of loop costs to recognize these inefficiencies.

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[173] WorldCom's Initial Brief, p. 44.

[174] Id., p. 45, citing Exhibit 445 (WCOM-VZ-120 §5).

[175] Id., p. 46, citing Tr. 2,418-2,419.

WorldCom contends as well that Verizon's loop cost model improperly assumes that each central office terminal (COT) serves only two RTs--a "dual-feed" arrangement--when in fact its engineering guidelines specify that more RTs could be deployed to maximize utilization of the COT.[176] It argues that compliance with this guideline would increase COT utilization and reduce COT installation costs per line, and it suggests adoption of a COT fill factor of 90% to correct the flaw.[177] Finally, WorldCom contends that Verizon fails to reflect optimal DLC line concentration, in that it assumes a 3:1 concentration ratio even though its "network planners highlight that the architecture and features of the GR-303 system include variable line concentration as high as 6:1," a figure endorsed by Verizon's economic and network planning studies.[178] WorldCom calculated that use of a 6:1 concentration ratio would reduce DS1 channel unit costs from $3.90 per circuit to $1.95. It asserts that the traffic engineering blockage concerns cited by Verizon as requiring the 3:1 ratio have not been shown to be anything other than attributable to inefficiencies in the legacy network.

The CLEC Alliance contends that Verizon's failure to take full advantage of the alleged efficiencies of an all-fiber/DLC feeder architecture warrants reconsideration of the Commission's previous determination to posit its use. It contends that Verizon's own numbers show that an all-copper loop construct would yield lower total loop costs and that the use of fiber should be limited to loops longer than the cross-over point at which the use of fiber feeder begins to lower the cost of the entire loop. It asserts that Verizon's own network planning guides provide for the use of copper for distances under 4,000 feet.

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[176] WorldCom's Initial Brief, p. 47, citing Exhibit 445 (WCOM-VZ-120 §5.3).

[177] Fill factors are discussed below.

[178] WorldCom's Initial Brief, p. 48, citing Exhibit 414P.

The CLEC Alliance argues as well, like WorldCom, that Verizon has failed to take advantage, in a TELRIC compliant manner, of the efficiencies offered by fiber, such as by placing RTs closer to end users and maximizing the length of the fiber feeder sub loop. It charges that Verizon "uses copper where fiber should be used because of the length of the distribution loop, and it uses all fiber to the curb of large buildings where the entire loop is less than 1,000 feet."[179] The CLEC Alliance adds that Verizon, in response to an argument that it used too little fiber cable relative to copper cable, analyzed a wire center--Albany State Street--that by its own admission was anomalous.[180]

Verizon responds to these various critiques. To WorldCom's point about RT placement in Manhattan, it explains that the cost of outside RTs is avoided in the 84% of instances in which the RT is located inside the customer's building. In the remaining 16% of instances, the possibility of placing the RT in the central office rather than outside is implicitly taken into account though not identified as a separate model.[181] It disputes as well the broader charge, by both WorldCom and the CLEC Alliance, that it failed to take full advantage of fiber/DLC technology, contending that RT placement was based on forward-looking feeder design. It asserts that the overall ratio of fiber feeder length to copper subfeeder and distribution length is an efficient 4:1, not the lower figure erroneously calculated by WorldCom witness Dr. Ankum on the basis of a small, non-representative sample of loops.

Verizon defends as well its 3:1 concentration ratio. It argues that too high a ratio entails an unacceptable risk that a call will be blocked; that its engineers determined that 3:1 was the maximum recommended ratio; that the 6:1 ratio referred to in its planning document was, in effect, a straw man

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[179] CLEC Alliance's Initial Brief, p. 77.

[180] Id., p. 78.

[181] Verizon's Reply Brief, p. 68.

used for analysis rather than a guideline that took account of traffic considerations;[182] and that WorldCom has shown neither that a higher ratio would be acceptable nor that the need to keep the ratio at 3:1 results from inefficiencies associated with the embedded network rather than customer calling patterns. It likewise supports its premise of two RTs to each COT, contending that its guideline does not specifically recommend multiple rather than dual feed and that additional costs and operational difficulties may be associated with the multiple feed option. It therefore contends that "in practice, multiple RT arrangements are only used where grossly inefficient underutilization of COTs would otherwise occur."[183]

Finally, Verizon disputes the CLEC Alliance's argument for the use of copper in short loops, arguing, among other things, that the CLEC Alliance failed to recognize, in its cost comparison, the fixed costs of terminating copper loops on digital switches. It asserts as well that the CLEC Alliance misread the Verizon engineering guideline it cited as supporting the use of copper.

While these issues are novel in their content, they are classic in their form. In effect, a utility is estimating its costs on the basis of its experience and projecting those costs to the future in a manner intended to take account of forward-looking developments. (The forward-looking premise is applied more aggressively under TELRIC than under traditional forecast test years, but in a manner not fundamentally different in form.) The utility's data and experience are a good source of information on what can be expected in the future, but the utility has a clear self-interest in erring on the side of high cost forecasts. For both reasons, it bears the burden of proof, and the regulator must ensure that only proven costs are allowed. In so doing, the regulator should avoid groundless speculation or what Verizon characterizes as "the Panglossian

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[182] Verizon's Initial Brief, p. 116, n. 264.

[183] Verizon's Reply Brief, p. 76.

perspective of the CLECs, who seem to believe that all difficulties will magically dissolve in a sufficiently 'forward-looking' environment."[184] But where a range of estimates is suggested by the record, regulators have always made reasonable adjustments that impel a utility to seek efficiencies, just as it would be impelled to do by a competitive market.

Against that background, I conclude that Verizon has, for the most part, successfully defended its network design. There is certainly no basis for revisiting the Commission's decision that an all-fiber-feeder, DLC construct represents the least-cost, most efficient, forward-looking network, nor do I see any need to modify Verizon's assumptions with respect to the placement of RTs. But the record suggests a range of reasonable options with respect to concentration ratio and the number of RTs to each COT. As to the former, Verizon has not borne its burden of proving that a 3:1 concentration ratio is the absolute maximum, though it does seem likely that a concentration ratio as high as 6:1 could imperil adequate service--and not merely because of alleged inefficiencies in the legacy network. To ensure that prices are set on the basis of a reasonable, least-cost premise, I recommend use of a concentration ratio of 4:1. Likewise, Verizon has not shown that more than two RTs per COT would be unacceptable, though it has identified costs and risks that may be associated with a higher ratio. The record overall suggests not a specific adjustment here, but recognition of this concern in the choice of a fill factor, as discussed below.

2. Integrated vs. Universal DLC

As already noted, Verizon studied two alternative loop/switch interfaces: the integrated DS1 level interface and the universal DS0 level interface. The latter is more expensive, but Verizon maintains its use is dictated in some circumstances by service choices made by the CLEC. Several CLECs dispute that premise.

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[184] Id., p. 75.

Verizon maintains that a CLEC wishing to take advantage of the efficiencies offered by a DS1 (that is, 24-loop) interconnection may do so, but that a CLEC wishing to connect only a single loop instead of purchasing an entire DS1 level interface has no alternative but to use the UDLC mechanism, in which a voice grade analog signal is transmitted over a copper facility and is then converted on the COT into a DS0 channel that can be delivered to the digital switch. Verizon recognizes that this connection is less efficient but maintains it is the only available way to connect an individual two- or four-wire analog loop or two-wire digital loop to the NGDLC system. In its view, the choice between the two types of interconnection is up to the CLEC.

WorldCom charges that Verizon's claim ignores the recently developed ability of GR-303 IDLC systems to achieve DS0 unbundling, permitting a DS0 interconnection without a universal interface. It charges that UDLC is "an outmoded, high-cost embedded technology that has no role in a forward-looking TELRIC network."[185] It points to the Commission's rejection, in a compliance phase of the First Proceeding, of Verizon's effort to show that ISDN-BRI loops could not be connected using integrated technology, and it maintains that Verizon has similarly failed to make a showing of infeasability here. AT&T argues similarly, accusing Verizon of giving lip service to TELRIC while in fact reverting to embedded cost recovery principals. The CLEC Alliance adds that Verizon uses IDLC to provide loops to its own retail customers and that to deny it to interconnecting CLECs is discriminatory. It emphasizes the widespread nature of IDLC deployment and identifies the operational as well as the cost disadvantages of UDLC. Rhythms/Covad take Verizon to task for "posit[ing] a forward-looking, TELRIC-compliant network using IDLC loops and then develop[ing] UDLC rates that ignore that technology."[186]

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[185] WorldCom's Initial Brief, p. 41, citing Tr. 1,419-1,421; 3,738.

[186] Rhythms/Covad's Initial Brief, p. 6.

In response, Verizon maintains that the technological innovations said to permit use of an IDLC interface for individual voice-grade loops cannot, in fact, do so efficiently and that a CLEC that sought to provision a loop in this manner would still incur the costs of a full DS1-level interface. It contends that the CLECs are not asking for "an integrated interface as such"; "rather they are seeking a rate that recognizes the efficiencies of such an interface, without paying the high unit costs associated with providing that interface for less than a DS1's worth of loops."[187]

The CLEC argue credibly that GR-303 technology should be able to obviate UDLC in the near future if it cannot already do so, and that a properly forward-looking TELRIC analysis should take account of those developments. But it appears as well that the capacity may not yet be available, and that its timing is less than certain. In these circumstances, WorldCom's reference to the process used in the First Proceeding is particularly apt. Rates should now be set on the basis of UDLC connections in the situations where Verizon proposes to do so, but they should be adjusted downward one year from now, to reflect IDLC connections, unless Verizon can show that it would be unreasonable to make that adjustment.[188]

Survey Method

AT&T offers several criticisms of the survey in which Verizon asked its plant engineers to redesign a sampling of feeder routes. It contends that the responses are hearsay; that they were "scrubbed"[189] by managers; that the sample data may not be representative; and that the analysis simply represents subjective determinations by the outside plant designers. AT&T contrasts Verizon's study of only 10.6% of its wire centers and

[187] Verizon's Reply Brief, p. 72.

[188] To clarify, I recommend that the adjustment be made one year from the date of this recommended decision, not one year from the date of the Commission's action in the proceeding.

[189] AT&T's Initial Brief, p. 30.

11.7% of its feeder routes with the HAI study's analysis of all of Verizon's service territory. AT&T charges further that the study was rushed; that it contains numerous simplifying assumptions that generated homogeneous data; and that the study inconsistently suggests that average loop component lengths always sum to the maximum loop length. The CLEC Alliance offers similar arguments, adding that Verizon's engineers have an incentive to overstate costs--for the sake of conservatism as well as to enhance Verizon's position--and arguing that survey evidence typically is admissible as an exception to the hearsay rule only if the survey is "material, more probative on the issue than other evidence and if it has guarantees of trustworthiness."[190] In the absence of such considerations here, it says, Verizon has not borne its burden of proof.

Verizon replies that the subjectivity of its study means that "it is grounded in the informed expert judgment of human engineers who are actually familiar with and responsible for [the] routes [in question]" and that such subjectivity "is superior to the supposed 'objectivity' (and factual invalidity) of the HAI Model."[191] It adds that the HAI Model itself uses judgment as justification for its inputs and algorithms. It asserts that the sum of the average lengths of its loop components was, in fact, equal to the average loop length, that the surveys were not rushed but conducted over a period of many months without pressured deadlines, and that the data entries for feeder routes were homogenous simply because the survey form was designed to obtain the data at the wire center level, not the feeder route level. Verizon sees no source of bias in the survey, noting that the participants had no responsibility for UNE rates and arguing that they had nothing to gain by overstating requirements. While the surveyed engineers were not witnesses, the individuals who designed and administered the survey were available for cross-examination.

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[190] CLEC Alliance's Initial Brief, p. 68, citing cases.

[191] Verizon's Reply Brief, pp. 76-77.

I see no systemic flaw in the survey process. I have already recommended that the Commission find an analysis that starts from Verizon's own information to be acceptable--indeed, preferable to one grounded more in abstractions--and Verizon's survey was a reasonable way to gather the needed information.[192] Likewise, I find no evidence of deliberate bias in the manner in which the study was conducted. Of course, one strength of the study--its reliance on the expert opinion of Verizon's experienced engineers--is simultaneously a weakness, in that their subjective judgments, involving not a right answer or a wrong one but a range of possibilities, will likely be swayed by institutional loyalties.[193] No specific adjustment on that account is identifiable, but the concern is one that can affect how discretion should be exercised in making other adjustments as to which the record suggests a range of options.

Demand Forecast and Utilization Factors

Determining the needed level of investment requires assessing the demand for service over a pertinent period and the utilization (or "fill") factor for the equipment, i.e., an "estimate of the proportion of [the] facility that will be 'filled' with network usage."[194] Verizon took account of "ultimate demand"; that is, it recognized growth over a ten-year period and assumed, for loop distribution plant, a utilization factor of 40%. (Ultimate demand is considered in the context of loop distribution plant, though the issue is not unique to it;

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[192] Reliance on the survey is not precluded by the hearsay rule. Such information is routinely used in our proceedings, as long as sufficiently knowledgeable witnesses are presented, and we are not, in any event, "bound by the technical rules of evidence." (Public Service Law §20(1).)

[193] To say this, I stress, is not to impute culpable conduct or even to call into question the legitimacy of the survey technique. It is simply to recognize a reality that must somehow be dealt with in using the survey results.

[194] Local Competition Order ¶682, cited at Verizon's Initial Brief, p. 14.

other utilization factors are discussed at the end of this section.) The CLECs argued, in general, that these assumptions require them to pay for capacity that they neither use nor need.

1. Distribution Fill Factor

WorldCom asserts a general mismatch, in the determination of per-unit loop costs, between a denominator reflecting current demand--in connection with which Verizon assertedly acknowledged that future demand was speculative--and a numerator based on ultimate demand, reflecting a network sized to meet current requirements as well as expected growth over the next ten years. WorldCom charges that Verizon presents its ultimate demand analysis as a theoretical discussion of the proper fill factor for copper distribution cable, in which it adjusts current demand levels upward to take account of the occupation of now-unoccupied housing units, the construction of new housing units, the conversion of single-family homes into multi-family units, the development of undeveloped land, and the conversion of other structures into housing units. These calculations produced a 40% fill factor for distribution cable, equivalent to 2.5 access lines per current residential customer, and MCI charges that this means that each time it purchases a loop from Verizon, it pays for 2.5 loops. It adds that even though it is paying for spare facilities, it is not allowed to use them, and thereby subsidizes the lines that Verizon uses to compete against it.

MCI contends further that the FCC rejected, in the Universal Service Proceeding, the use of ultimate demand to determine fill factors, citing both the speculative nature of the forecasts and the need for consistency between numerator and denominator and the unit cost calculation. Contending that Verizon never addressed in testimony the FCC's rejection of ultimate demand analysis, WorldCom finds incredible Verizon's witness's claimed ignorance of the FCCs action.[195] It

[195] WorldCom's Initial Brief, p. 16.

characterizes as "deliberate distortion"[196] Verizon's argument that its 40% fill factor was the estimate of its networking engineering experts rather than the result of its ultimate demand analysis, noting Verizon's admission that the engineering experts at issue were not those surveyed in this proceeding but those involved in the previous proceeding's cost studies, where Verizon also proposed a 40% fill factor even though its field engineers had recommended fill factors of 70% to 80%. (The Commission in that proceeding adopted a distribution fill factor of 50%.[197]) WorldCom recommends adoption of the FCC's copper distribution cable fill of 75% for high density regions, such as Manhattan; it notes that the Michigan Commission recently adopted that figure. Lower factors, but in no event less than 55%, could be used in some less dense areas. Alternatively, WorldCom would have the Commission consider AT&T's alternative, next discussed.

AT&T criticizes Verizon's method on similar grounds, asserting that the method "require[s] CLECs to pay prices today for network facilities that will not be needed by anyone for another ten years."[198] It offers a number of specific criticisms of Verizon's growth assumptions, contending, among other things, that if actual growth and service characteristics of distribution areas were taken into account, utilization levels in mature neighborhoods could be set much higher than in other areas. AT&T suggests that Verizon's overstatement of needed capacity be corrected by taking Verizon's estimate of 4% annual growth and developing an adjustment factor for each asset account that will spread the annual costs over the average number of lines anticipated to use the asset over its expected life. It does so by computing the ratio of the present value of current demand plus growth lines over each projected asset life to the present value of current demand over that same time

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[196] Id., p. 17.

[197] Phase 1 Opinion, p. 65, Phase 1 Rehearing Opinion, pp. 41-45.

[198] AT&T's Initial Brief, p. 35 (emphasis in original).

period, using the FCC's prescribed asset lives and AT&T's recommended cost of capital. It then divides each asset's annual cost factor by the appropriate growth-to-current-demand ratio. In addition, AT&T applied adjustments to Verizon's fill factor calculation and computed an average distribution fill factor of 56%.[199] The CLEC Alliance, offering similar arguments, also supports a distribution fill factor of 56%.

The CLEC Coalition advocates use of the 50% distribution fill factor adopted by the Commission in the first proceeding. It contends that by starting with a distribution fill factor of 60% at current demands and adjusting it to reflect both long-term demand and construction breakage,[200] Verizon overstates its adjustment, given that part of the ultimate demand requirements would be met simply through construction breakage. It asserts as well that Verizon's treatment of its loss of market share leads to the absurdity that the smaller its market share, the smaller the distribution fill factor.

In response, Verizon maintains that its 40% fill factor for loop distribution plant is supported by the Phase 1 estimates of its central engineering staff; by its quantitative analysis in this case, based on a series of adjustments to the 60% utilization level; and by the application of adjustments and corrections to the 50% factor adopted by the Commission in the First Proceeding. It contends that all three methods converge on a 40% figure. Verizon's quantitative analysis starts with a 60% utilization factor, reflecting two lines per zoned household in an ultimate demand construct and an actual household demand

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[199] Id., pp. 38-39.

[200] Breakage refers to what is otherwise termed the "lumpiness" of investment, i.e., the existence of minimum quantities of installable capacity, which makes it impossible to precisely match new installations with demand. For example, if the smallest piece of equipment that can be installed will serve five units of demand, a single unit of demand that cannot be served by existing facilities will require installation of five units of capacity.

of about 1.2 lines. It contends industry experience has shown a need to install sufficient distribution cable capacity at initial construction to accommodate the long-term potential peak demand in the distribution area; a failure to do so leads to continuing service problems, high operating costs, and costly capacity additions. It contends that two pairs per household is a reasonable ultimate demand allocation despite the advent of DSL- based technologies that can derive two or more lines from a single physical loop. Verizon contends further that actual demand will be reduced on account of undeveloped land, vacancies, and the fact that some customers will not use Verizon's infrastructure. On the basis of forward-looking estimates of those factors, it multiplied its 60% utilization factor by 90% to reflect unbuilt but zoned land, 95% for vacancies, 90% for customers who do not use Verizon's wire-line network, and 90% for breakage. The resulting figure was a fill factor of 41.6%, which Verizon considers consistent with the 40% estimated by its outside plant engineers in the First Proceeding. As noted, the Commission there adopted a 50% fill factor, but Verizon contends the Commission's analysis was flawed in several serious respects.[201]

Verizon disputes the charge of a mismatch in charging current customers for the spare capacity associated with ultimate demand, arguing that the cushion benefits current customers who, without it, would suffer degraded service. Future customers, it contends, will have their own level of demand and require their own cushion. It likewise sees no unfairness in charging CLECs for spare capacity they cannot use, given that the capacity is available for purchase by them if they need it; it contends that TELRIC requires carriers to bear the cost of facilities even if they are not immediately entitled to use them. It sees no speculation regarding how much demand will emerge at what time, and it contends that the FCC's rejection of ultimate demand was set forth in the context of

[201] Tr. 2,449-2,452.

determining relative, not absolute costs and included a statement by the FCC that the decision was not necessarily appropriate for UNE costing purposes. (It nevertheless disputes as well the substance of the FCC's conclusion, rejecting, once again, the notion that an ultimate demand analysis is speculative.) It likewise disputes the charge of double count between the breakage adjustment and ultimate demand analysis, explaining that the breakage adjustment means that some deployed pairs will not be needed even to serve ultimate demand, and it sees no absurdity in associating a lower distribution fill factor with a lower market share, contending that competition tends to increase the uncertainty confronted by planners and that uncertainty, in turn, tends to diminish utilization factors.

It is important to remember that in resolving this issue we are pursuing not truth so much as fairness and reasonableness. We are not trying to uncover the one "correct" fill factor, on the premise that we could identify it if only we had enough information; rather, we are attempting to select a fill factor that strikes a reasonable balance between the clear engineering need to design a system whose capacity exceeds the demand initially imposed on it and the equally clear regulatory need to avoid imposing on purchasers of a price-regulated good the costs of excess capacity beyond reasonable requirements. As is so often the case in regulation, therefore, there is a range of reasonable factors--this record suggests that range for distribution plant runs from something above 40% to something below 56%--and it is necessary to choose a point within that range. It is also necessary to consider the place of ultimate demand in the analysis.

Verizon correctly argues that the FCC has not ruled out the use of ultimate demand; and it seems clear that ultimate demand must be taken into account to ensure that the contemplated system will be properly sized. The more difficult question is how to spread the associated costs, and AT&T fairly argues that current customers should not bear the full cost of

serving demand that is not expected to eventuate for ten years. AT&T's method for assigning the costs of some estimate of average demand over the ten years is needlessly complex and cumbersome. A better alternative is to recognize ultimate demand by taking account of the net present value of the ten-year average demand, assuming annual growth of 3%.[202] The link cost calculator should be modified accordingly.

As for the distribution plant fill factor, Verizon derives its 40% figure by starting with a presumed actual household demand of 1.2 lines. That figure appears low, given the recent trend:

Average Residential Lines per Living Unit[203]

1997	--	1.18
1998	--	1.22
1999	--	1.25

In view of this trend, presumably attributable in large measure to growth in Internet usage, AT&T's estimate of 1.3 lines appears more reasonable as an estimate for 2002, and it will be used here for calculation purposes. (Updated data, if available, may be presented on exceptions and should be taken into account by the Commission in its decision.) The resulting factor, assuming use of two cable pairs per zoned residential unit (which, as Verizon suggests, remains a reasonable figure) is 65%.

Verizon then adjusts that factor (actually, its own 60% figure, reflecting 1.2 residential lines per living unit) by 75%, reflecting the combined effect on demand of vacancies (-5%), undeveloped parcels (-10%), and customers lost to competitors (-10%). These adjustments are all sound in concept--notwithstanding AT&T's objection to the latter two--but their net effect appears overstated. First, undeveloped parcels presumably will be developed in the future, and that development

[202] This is the midpoint of the 2%-4% annual growth that Verizon envisions. Tr. 2,445.

[203] Tr. 1,436 (citing ATT-BA-24).

should be recognized in an ultimate demand analysis. The adjustment therefore should be -5%, representing an averaging of the initial and end states. In addition, the effect of customers lost to competitors will be offset somewhat by the effect of customers acquired as undeveloped parcels are developed. As Verizon properly notes, it cannot be assumed that the freed-up lines will always be available where needed, and the offset should not be overstated. Still, a better adjustment for customers lost to competitors appears to be -5%. Applying these adjustments, along with the 90% breakage adjustment, suggests a distribution fill factor of 49.725%,[204] which should be rounded up to continue the fill factor of 50%.

2. Other Fill Factors[205]

Verizon proposed a fill factor of 84% for RT electronics, which it sought to justify as the 90% objective fill factor, adjusted downward to allow for growth (4%) and churn (2%). The CLEC Alliance and WorldCom urge a 90% factor, arguing, in effect, that churn and growth are adequately accounted for in the difference between 100% fill and 90% fill.

I recommend a fill factor of 88%. Verizon has explained why the objective fill factor of 90% does not in itself allow adequately for growth and churn, but it has not shown that its separate growth and churn factors are both necessary and reasonable. Recognizing again the goal of fairness as well as Verizon's burden of proof, it seems reasonable to allow a total of 2% for growth and churn.

For RT enclosures, the CLEC Alliance and WorldCom recommend a utilization factor of 84%, which they argue should

[204] The calculation is 65% x (100%-5%-5%-5%=85%) x 90%.

[205] The fill factors for house and riser cable, for interoffice transport, and for line sharing test units are discussed separately, under their respective headings.

be attainable on all routes in a forward-looking setting[206]; they contend that Verizon contemplated fill factors as low as 18%. Verizon responds that the 18% utilization factor involved an atypical design situation and that the average fill factor ranged up to 70.9% in the Manhattan zone. (The factors in the major cities and rest-of-state zones were 56.7% and 44.8%, respectively.[207]) Verizon sees no basis for the 84% factor, citing various breakage and location constraints that limit flexibility in choosing the size of RT enclosures and pointing to the need to allow for growth and churn.

Verizon has shown that the 18% fill factor cited by WorldCom witness Ankum was indeed anomalous, and it has identified various qualitative considerations that strongly suggest a fill factor of 84% is too high. But that is a different matter from a quantitative showing that its own fill factors are proper and forward-looking. Recalling once again that Verizon bears the burden of proof, and recognizing that there is considerable flexibility in designing RT enclosures (even if not as much flexibility as WorldCom and the CLEC Alliance would have it), I recommend that Verizon's proposed RT enclosure fill factor in each zone be adjusted upward by 15%.[208]

The utilization factor for central office terminals has already been alluded to, for it depends in large part on the number of RTs per COT. The CLEC Alliance and WorldCom recommend a factor of 90%, premised on maximizing the number of remote terminals per COT and on the ability to adjust COT equipment to an optimally efficient size. Verizon regards the 90% utilization factor as arbitrary, contending that the documents cited by the CLECs do not, in fact, support the claim that 90% is a reasonable factor. It cites the difficulty of augmenting

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[206] CLEC Alliance's Initial Brief, p. 98, citing exh. 355 (QSI Report), p. 75; WorldCom's Initial Brief, p. 23, citing Tr. 3,752, 3,753.

[207] Tr. 3,399.

[208] For example, the Manhattan fill factor would be 81.5%.

COTs on demand and the consequent need to include, on installation, all the capacity that will ultimately be needed.

Verizon argues persuasively that the CLECs misread the internal documents that they cite in support of the 90% fill factor.[209] But I have already noted that the COT fill factor should recognize Verizon's failure to show convincingly that more than two RTs per COT would be unacceptable. To take account of that possibility, and in recognition once again of Verizon's burden of proof, I recommend setting rates on the premise of a 15% increase in this fill factor as well.

OSS Costs

AT&T urges rejection of Verizon's proposed charge of 58¢ a month per loop for systems providing access to operation support systems. It suggests recovery of the costs is subject to the conditions set forth in the Commission's order approving the NYNEX/Bell Atlantic merger.

Verizon responds, correctly, that these are not cost onsets within the meaning of the Merger Order related to the development of OSS access systems; they are, rather, software maintenance costs and hardware carrying costs whose recovery is permitted.

Deaveraging Issues

1. Environmental Factor

To test its intuitive hypothesis that the amount of work required to install outside plant might vary by geographic area, Verizon analyzed its engineering and construction records information system (ECRIS) data to identify such variation and found higher costs in dense areas such as Manhattan.[210] The study compared, by geographic region corresponding to Verizon's nine

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[209] Verizon's Reply Brief, p. 92, n. 236.

[210] It should be recognized that previous deaveraging studies took account of differences in technology, equipment deployment and loop length in the different density zones. They did not take account of zone-specific differences in the amount of work required to install outside plant.

strategic business units (SBUs) and three density zones, the actual labor time required to perform outside plant work operations against the standardized time for the same work operations. The standardized times, developed by Verizon's consultant H. B. Maynard and Company, estimate "the standard, average time for performing the function, regardless of where in the State it is performed, except for minor differences in the travel time to and from the work site."[211] Actual and standard times alike take account of the types and amounts of plant that is placed, rearranged, or removed; but the actual time considers, as well, factors that depend on locale and density specific conditions. These include, among others, "traffic conditions at the work site; terrain requiring hand digging; locations requiring the removal and restoration of fences, posts, and other objects; locations requiring landscaping; locations requiring minimum two-person crews; locations requiring the removal of waste contaminants (with contractors); locations requiring security arrangements."[212] The analysis was performed by Verizon's statistical consultant NERA, which analyzed over 388,000 individual work operations associated with over 4,000 outside plant estimate jobs throughout the state. The study

[211] Verizon's Initial Brief, p. 137.

[212] Id., pp. 137-138, n. 313, citing Tr. 2,472-2,473.

found that the Manhattan had an actual-to-standardized-labor-time ratio of 1.59, the highest in the State, and that the statewide average ratio was 1.37. (Verizon explains a statewide average greater than 1.0 by noting that the ECRIS standardized times do not account for all the costs actually incurred in performing outside plant work, omitting the locale specific conditions that show up in actual work times.) Asserting that NERA's statistical analysis shows the differences in the ratios to be statistically significant, Verizon argues that these costs must be taken into account in determining loop costs.

CLECs object to the environmental factor. WorldCom contends that the ECRIS standard time increments are forward-looking (as Verizon itself had maintained in the First Proceeding in arguing for the TELRIC compliance of the studies it submitted there); that they were scientifically and objectively established by an independent consultant using the state-of-the-art analysis; and that they have been shown to be attainable in actual operations. It therefore regards the proposed adjustment as an $80 million retreat from forward-looking efficiency. WorldCom characterizes as unsupported speculation Verizon's attribution of the identified time differences to environmental conditions rather than inefficient work practices, and it notes that NERA's analysis of statistical significance made no effort to account for the time differences. In addition, WorldCom asserts, the ECRIS data themselves contain locale-specific costs, and there is no need for a further adjustment to recognize them.

AT&T similarly expresses confidence in the ECRIS standardized times (though it notes that even they do not consider the economies of scale that a new entrant building a new network would enjoy by reason of contiguous jobs) and regards the environmental factor as an attempt to impeach Verizon's own ECRIS data base. It alleges inconsistency between Verizon's reliance on its engineers with respect to network design and its refusal to rely on their expertise as reflected in the ECRIS data base. Z-Tel adds that Verizon has not shown

the recent outside plant activity here taken into account to be similar to the outside plant activity required, on average, to construct and rearrange all Verizon outside plant.

Verizon maintains in response that the CLECs are simply unwilling to accept evidence that costs may be higher in Manhattan than elsewhere. It denies that the adjustment impeaches the integrity of ECRIS, which works well for its intended purposes but is only enhanced as a UNE costing tool by application of this adjustment. It maintains that the work operations that were studied were completed over a period of almost two years and are representative of the relevant activity; and it asserts that TELRIC does not require assuming away such factors as traffic, illegally parked vehicles, or weather conditions.

Verizon's environmental factor appears to be a reasonable mechanism for achieving geographical rate deaveraging, taking account of empirically derived cost differences. But Verizon is less persuasive when it dismisses in a footnote the peculiarity that the statewide average actual-to-standardized ratio substantially exceeds unity, explaining that the ECRIS standardized times fail to include all pertinent costs. If that is so, Verizon is, in effect, impeaching its own ECRIS estimates, as the CLECs argue. Those estimates, however, are being accepted as the basis here for analysis, and the overall cost level they imply should not be increased in this manner. I recommend that Verizon be required to recalculate the environmental factor in a manner that assumes a statewide average of 1.0 and adjusts each regional environmental factor pro rata.

2. Manhattan's Unique Status

The CLEC Alliance contends that Verizon has failed to capture the economies of scale that can be achieved in high density areas such as the central business district of Manhattan. It compares the loop cost in downtown Chicago of $2.59 to Verizon's Manhattan cost of $17.12, asserting that "the

sheer magnitude of this disparity suggests a concerted effort to conceal [Verizon's] economies of scale by averaging many cost characteristics on either a statewide or service area wide basis."[213] In its view, the disparity with Chicago suggests that Verizon has overstated loop rates in the rest of the State as well.

Verizon does not specifically respond but, as noted, contends that there are factors in Manhattan that tend to increase costs as well as decrease them. That appears to be so; in any event, a bare comparison to a rate elsewhere does not warrant modification of a rate derived here on the basis of a sound process.

3. Deaveraging Zones

Verizon's three-zone deaveraging plan was described earlier. FairPoint proposed an alternative, revenue-neutral, deaveraging plan intended to foster local exchange competition in areas now constituting part of the "rural" region. It offered five proposals, all intended to insure "that the Rural rate band would . . . apply to truly rural areas and not to the downtown area of smaller cities and towns. Each proposal is grounded in the complementary principles that there is a strong correlation between population density and loop costs, and that areas with similar population density should be grouped into the same unbundled loop rate band."[214]

FairPoint's witness Dawson determined that population density was the predominant factor affecting loop costs. He reasoned that densely populated areas required shorter cables and shorter drop wires; permitted the use of more copper pairs per cable, thereby reducing unit costs; and warranted greater use of new technology. He then determined that density statistics for downtown areas of small cities now included in the rural zone resembled those of larger cities now included in

[213] CLEC Alliance's Initial Brief, p. 87.

[214] FairPoint's Initial Brief, p. 2.

the urban (non- Manhattan) zone. On that basis, he proposed separate bands for Manhattan, the urban zone, the suburban zone, and the rural zone. Actual threshold levels for each zone would be specified after further analysis by Staff, but the urban band would include portions of any city, not just large cities, having sufficiently high densities. Meanwhile, the rural band would be assigned only to areas that are truly rural. Mr. Dawson estimated the effect of his rate design, assuming no change in overall loop revenue requirement, to be maintenance of the Manhattan rate of $11.83; an increase in the urban rate from $12.49 to $13.00; and separation of the current rural zone, with its rate of $19.24, into a suburban zone with a rate of $17.00 and a rural zone with a rate of $25.00.[215]

Mr. Dawson offered four alternative proposals: relating loop costs more directly to the distance between the particular area and the central office; relating loop costs directly to loop length; retaining the current three-zone structure but redefining the bands so that more cities would be included in the urban band; and grafting on to Verizon's proposal a fourth rate band with a threshold of 150 access lines per square mile.

Verizon contended that the current rate zones are derived from TELRIC-compliant cost studies, but FairPoint stresses the Commission's discretion to design rates, on the basis of those studies, that take account of policy considerations. It alleges that such policy considerations led the Commission to adopt a low loop rate in Manhattan in order to jump start competition there, and it urges a similar initiative for other regions of the State. It contends that its proposal would benefit not just itself but all CLECs planning to serve smaller cities (and their customers); that increased UNE rates in the residual rural section will not impede the development of competition, given how little competition there is in the existing rural area; and that the Commission should choose among

[215] Id., p. 6.

FairPoint's proposals in part on the basis of which one would be easiest to administer.

Verizon responds that its own proposal was developed in cooperation with the CLECs and is opposed only by FairPoint. It contends that the plan would benefit FairPoint alone, does not reflect costs, "would be virtually impossible to administer,"[216] particularly if FairPoint is seeking to deaverage rates at a sub-central-office level, and would foreclose any possibility of competition in the rural parts of the State. It disputes FairPoint's expectation that the loop rate in the residual rural area would rise only to $25.00, suggesting that it might go as high as $36.00. Verizon questions the basic premise of FairPoint's proposal, noting that while loop cost may be correlated with population density at some level, the true predictor of costs is loop density, for which population density is only a surrogate. Beyond that, it maintains, it is necessary to distinguish between density in a central office serving area and density in a specific portion of that serving area, which may encompass a variety of population densities. In a large city, the high density area will cover a greater portion of the central office serving area than will be the case in a small city.

In response, FairPoint reiterates its policy arguments in favor of its proposal, stressing that it is now time to extend competition to a geographic segment that has not yet attracted it, and it says it does not object to Verizon's recovering the administrative costs of revising its rate structure in accordance with FairPoint's proposals.

FairPoint's concern for the development of local service competition in smaller cities is understandable, but Verizon has shown FairPoint's proposals, unsupported by any other party, to be flawed in both theory and practice. Among other things, there appears to be a very significant difference, not adequately recognized by FairPoint, between a densely

[216] Verizon's Reply Brief, p. 19.

populated area large enough to encompass an entire central office (or more) and one that constitutes only a portion of a central office that comprises as well areas of much lower density. I recommend rejection of FairPoint's proposals and continued use of three-zone deaveraging in the manner proposed by Verizon and seemingly acceptable to all other parties.

Land and Building Loading[217]

1. Double Count Adjustment

WorldCom witness Dr. Ankum identified a double count of Verizon investments in remote terminal huts, which were included not only as direct investments but also as building investments taken into account in calculating the land and building factor. Verizon acknowledged the double count, lacked the data needed to remove hut investment from the overall land and buildings factor, and therefore dealt with the double count by "zeroing out" hut investment in the link cost calculator.

Verizon also accepted, either specifically or in principle, two adjustments to the land and building factor proposed by CLEC Coalition witness Dr. Kahn. As Dr. Kahn recommended, it adjusted the denominator of the land and buildings factor to include collocation equipment; and it excluded from the L&B factor the portion of building investment recovered through direct collocation charges. These modifications reduced the L&B factor from 0.186788 to 0.173151 and the corrected factor was applied to all central office equipment investment.

In its brief, WorldCom argues that these adjustments should be expected to reduce costs but, as implemented by Verizon, turn out to increase loop costs by more than $1 a line, effectively replacing about $19 million in direct hut enclosure investment costs with almost $370 million in indirect land and buildings recovery. It adds that Manhattan, which never had any

[217] This is not specifically a loop cost issue, but the parties for the most part argued it as such and it therefore is considered here.

direct hut investment, is now burdened with an additional $85 million of indirect land and buildings investment.

WorldCom presents in detail the calculations that lead to this result,[218] alleging, in effect, that Verizon fundamentally (and without explicit notice) changed its costing method. Initially, it says, the land and building factor was not applied to loop investments other than COTs, for the factor is associated only with equipment housed in central offices and COTs are the only loop equipment so housed. In recalculating the factor, however, Verizon applied the L&B factor not only to COT investments but also to enclosures, tower equipment, common costs, and channel units, thereby adding $370 million of land and building investments. These changes, according to WorldCom, were not identified by Verizon in its testimony and can be detected only through careful scrutiny of Verizon's calculations. More substantively, the change introduces a new double count, between the right-of-way costs already added to outside plant investment for each remote terminal location and the L&B investment now loaded on the outside plant. And since hut investments were already recovered indirectly through the land and building factor, the additional land and building recovery associated with the new calculations effectively retains the initially identified double count.

In response, Verizon defends its calculations. It explains that it corrected not only the double count identified by WorldCom but also the mismatch between the inclusion of hut investment in the numerator of the land and buildings ratio and the exclusion from the ratio's denominator of the equipment enclosed in the hut. The mismatch could not be corrected by excluding hut investment from the numerator (for the same reason that the double count could not be corrected by removing hut investments from overall land and building costs), and Verizon therefore added remote terminal equipment investment to the denominator. That change transformed the factor into one

[218] WorldCom's Initial Brief, pp. 36-38.

applicable to equipment located in huts as well as in central offices, and it was therefore applied to RT equipment as well as to central office equipment. Verizon contends that the increased loop costs cited by WorldCom reflected not an increase in the total land and building costs recovered through UNE rates but was offset, via the reduction in the L&B factor, in the land and building costs recovered through rates for other UNEs, such as local switching. It contends that both approaches--application of the L&B factor to central office equipment only or to central office and hut-housed equipment alike--are equally valid. Nor does Verizon see any anomaly in applying the new L&B factor to RT equipment in Manhattan, noting that Manhattan's reduced hut requirements are properly reflected in the development of the L&B factor and that hut investment is neither over-recovered or under-recovered on a statewide basis. Calculation of a separate L&B factor for Manhattan, Verizon adds, would produce a higher figure due to the higher per-foot costs of building space.

WorldCom understandably characterizes the result it challenges here as counter-intuitive. But Verizon's reply brief reasonably explains, step-by-step, the result reached in the recalculation, and I see no basis for recommending any adjustment on this point. That conclusion, of course, rests in large part on Verizon's representation that total L&B costs recovered through UNE rates will not be increased, and that the increased loop costs will be offset by reduced recovery of L&B expense through rates for other UNEs. It says it will recalculate those rates as part of its compliance filing,[219] but it should instead do so sooner, in its brief on exceptions, and demonstrate there that the reductions in those rates are adequate to avoid any double count.

2. Collocation Equipment

[219] Verizon's Reply Brief, pp. 15-16, n. 33.

Ever since Module 2 of the First Elements Proceeding, there has been a concern, raised by some parties and recognized by the Commission, over possible double recovery of land and building costs through direct charges (recurring and nonrecurring) related to the space occupied by collocation equipment and the loading of land and building costs on UNE rates, retail rates, and certain collocation charges. In the present proceeding, the parties (on this point, primarily, the CLEC Coalition and Verizon) are in substantial agreement on how to correct for the problem through a downward adjustment to the land and building factor; the remaining disagreement concerns the magnitude of the adjustment.

Verizon proposes an offset of 1.1019%, based on the amount of space in its central offices for which there were pending or completed physical collocations as of May 1999. The CLEC Coalition sees a need for a forward-looking adjustment to that figure, given that the rates to be set will take effect sometime late in 2001 and will likely be in effect for several years. It cites evidence that the assignable floor space in Verizon's central offices has remained largely constant for the past two years; that the floor space occupied by collocators increased by 74% between May 1999 and May 2000; and that the central office space attributable to physical collocation continues to grow.[220] It proposes to take the most recent percentage (1.764) and project it through May 2002, assuming a conservative growth rate; that yields a proposed adjustment factor of 3.2616%, which the CLEC Coalition advocates.

Verizon objects to a linear projection on the basis of the growth from May 1999 to May 2000, given that one year of data provides an inadequate basis for projection and that there are a variety of uncertainties regarding future collocation demand. It asserts that its own figure is conservative, since it assumes that the space occupancy ratio of the 187 central

[220] CLEC Coalition's Initial Brief, p 12, citing Exhibits 449 (response to CC-VZ-169) and 410 (response to CC-VZ-146).

offices in which collocators are present can be extrapolated to all central offices.

Choosing the factor is difficult, because it requires projection on the basis of limited data. Verizon is right to express concern about a linear projection on the basis of a single year's growth; but its own figure, based on a single historical point, seems clearly too low, given the growth in collocation occupancy and the likelihood that it will continue. (Verizon suggests its figure is conservative in assuming that the occupancy rate for the 187 central offices housing collocators can be extrapolated to all central offices, but any such conservatism is seriously vitiated by the CLEC Coalition's observation that those 187 central offices account for more than 86% of the assignable space in all 525 central offices.[221])

Taking all of these factors into account, (and, in particular, the apparent on-going increase in collocation occupancy), I recommend a downward adjustment of 2.5%.

3. Application of a Forward Looking to Current Adjustment

In addition to endorsing WorldCom's arguments, AT&T objects to Verizon's application of an FLC adjustment to reduce the land and building factor's denominator (and consequently increase the factor) to reflect aggregate TELRIC investment. It surmises that Verizon's adjustment is premised on the smaller space requirements of forward-looking switches and suggests that the reduction therefore should be applied to building investment (the numerator) rather than switch investment (the denominator), thereby reducing the factor.

Verizon responds that there is no evidence that forward-looking switches occupy less space than those in place in 1998, when its study was done. In addition, the purpose of the FLC adjustment is simply to overcome the absence of data

[221] CLEC Coalition's Initial Brief, p. 12, n. 25, citing Ex. 390, p. 1 of 35.

that would permit direct computation of the aggregate TELRIC switching investment.

Verizon has shown the adjustment to be proper in concept. As with the FLC generally, however, the amount of the factor appears overstated; it should be adjusted in a manner consistent with the FLC adjustment above.

Link Cost Calculator

Verizon's link cost calculator pulls together the various loop cost inputs and calculates an overall result. The CLEC Alliance criticizes the calculator in concept, charging that it is unverifiable and convoluted and lacks design algorithms that guard against absurd results. It urges the Commission to require Verizon to apply safeguards to the calculator or at least validate its results.[222]

Verizon responds (in addition to denying the alleged absurdities) that the calculator is just that, not a costing model, and that "the intelligence underlying Verizon's studies lies elsewhere."[223] That is a fair description of the calculator's function, which appears to be purely ministerial; no process-related modification is needed.

AT&T alleged ten specific errors in the calculator's operation. Verizon's rebuttal testimony acknowledged and corrected for two of them (items A and B, as enumerated by AT&T[224]); the remainder (including one, item G, as to which Verizon acknowledged the error but applied a correction AT&T deems inadequate) are here discussed.

Item C. AT&T excluded network interface device (NID) investment in those circumstances where fiber was assumed to be run directly to the customer premises, obviating a NID, and replaced the associated cost with a $5.00 per line block terminal cost. Verizon accepted AT&T's argument in part but

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[222] CLEC Alliance's Initial Brief, pp. 63-64, 70-72.

[223] Verizon's Reply Brief, p. 95.

[224] AT&T's Initial Brief, pp. 66 et seq.

recalculated the adjustment by applying the environmental factor to the installation cost; AT&T claims there is no basis for doing so inasmuch as NID installation times are not derived from ECRIS, whose inadequacies are said to be remedied by application of the environmental factor. Verizon responds that the proper replacement for a NID is a KRONE block on backboard (an allegation AT&T regards as unsubstantiated; Verizon contends, however, that AT&T has suggested no alternative) and that application of the environmental factor is warranted inasmuch as NIDs are generally installed in conjunction with cables and terminals and it is therefore reasonable to assume that they are affected by the same factors.

The record supports the use of KRONE blocks and the application to their installation of the environmental factor (modified, of course, as recommended above). AT&T's $5.00 figure is unsupported and should be rejected.

Item D. AT&T adjusted the link cost calculator to eliminate the cost for copper riser cable in situations in which fiber is assumed to go directly to the customer premises. It sees no support for Verizon's assertion that a fiber-to-customer-premises arrangement does not mean that the RT is located precisely next to each customer's demarcation point, and it asserts that Verizon has failed to prove the need for the copper distribution riser investment reflected in its loop costs.

Verizon responds that the situation at issue is one in which the fiber goes directly to the customer's building but copper riser would still be needed to reach customers on upper floors; notes that this description was part of the sworn testimony of its panel[225]; and professes not to understand the additional substantiation that AT&T would regard as remedying the alleged failure of proof. It asserts that AT&T has not shown any alternative arrangement to be more efficient and characterizes as "self-evidently absurd" the implicit contention

[225] Tr. 3,368.

that an RT should be located on every floor in order to obviate riser cable.[226]

Verizon has adequately explained the need for copper cable in this type of situation. But while Verizon is fully persuasive in arguing that copper riser cable will be needed at least sometimes and perhaps most of the time, AT&T suggests as well that Verizon has failed to establish the frequency with which it is needed or to justify the amount of copper it assumes. Verizon should provide further detail in its brief on exceptions.

Item E. AT&T adjusted Verizon's calculations to replace the use of NEC DLC equipment with less costly Litespan equipment, contending that Verizon had failed to substantiate its assertion that only the Litespan prices were used in the calculator. Verizon responds that the price lists used in the link cost calculator included only the price of Litespan equipment, regardless of field engineering recommendations in favor of NEC that predated the policy of standardizing on the Litespan equipment. It suggests that AT&T misconstrues a generic term in the price table as referring specifically to the NEC product.

Verizon's response is adequate; no adjustment is needed.

Item F. AT&T substituted an average installed pole price of $417 (consistent with its own testimony) for Verizon's range of $385 to $765 per pole. It characterizes this cost as consistent with an FCC survey evaluated by the National Regulatory Research Institute (NRRI) showing total installed costs of $357 per pole, and it regards that as a more forward-looking estimate than a figure based on Verizon's own embedded costs.

Verizon contends it showed in rebuttal that AT&T's figures were based on a biased and misleading analysis of the survey data, focusing only on the low-end data points, and

[226] Verizon's Reply Brief, p. 98.

disregarding AT&T's own testimony on geographic variation in these costs.[227] It also charges that AT&T fails to explain why the forward-looking cost of a low-tech facility such as a pole should differ from actual current prices.

Verizon's rebuttal demonstrates both the propriety of not using a statewide average and the flaws in AT&T's analysis of the data it cites. Verizon's uncritical reliance on unadjusted embedded costs is troublesome, however; for even though poles are a low-tech facility, it is entirely possible that more efficient installation procedures, for example, could reduce installed costs. On exceptions, Verizon should present an analysis of recent trends in its own pole costs; for now, I recommend a 10% downward adjustment to Verizon's figures.

Item G. AT&T adjusted Verizon's figures to reflect equal sharing of poles outside Manhattan with electric utilities and, in the middle density zone, equal sharing of the telephone portion of pole investment between telephony and cable. Verizon acknowledged that it erred in not doing so, but AT&T contends in brief that Verizon in effect took back that concession by eliminating "an adjustment to the multiple sheaths between poles that [Verizon believed was] not appropriate in the distribution portion of the link."[228] AT&T contends that Verizon has not supported the change to AT&T's adjustment.

Verizon replies only that it corrected its error "using the same sharing factor as was used for feeder cable structure."[229]

While Verizon has the burden of proof in this proceeding, its opponents have the burden of going forward with evidence challenging particular aspects of Verizon's study. Verizon has not specifically shown why AT&T's multiple sheath adjustment is inappropriate, but given the posture of the issue, it had no need to, for AT&T never explained why the adjustment

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[227] Id., p. 99, citing Tr. 3,368-3,371.

[228] AT&T's Initial Brief, p. 72, citing Tr. 3,375.

[229] Verizon's Reply Brief, p. 100, citing Tr. 3,375.

was offered. AT&T simply called for sharing of investment,[230] and Verizon applied the sharing factor.[231] For now, that appears to end the matter, but AT&T may provide further explanation on exceptions for the aspect of its adjustment that Verizon did not adopt, and, if it does so, Verizon may respond.

Item H. AT&T eliminated the application of the 40% cable fill factor to pole investment, on the premise that the poles it costed out had ample space, after accounting for sharing, to accommodate additional cable strands. It disputes--or at least regards as unverifiable--Verizon's denial that a fill factor is applied to poles, citing Verizon's acknowledgement that "pole investment per working pair is determined by dividing pole investment per pair by the utilization rate for the supported cable," and it argues that if pole investment per pair was based on working pairs, application of the cable utilization rate would double count the fill factor.[232]

Verizon responds that its testimony, including the sentence preceding the one quoted by AT&T, makes clear that pole investment per pair was based not on working pairs but on the size of the supported cable, that is, on the total number of pairs in the cable. It charges that AT&T "contorts logic and plain English in the desperate search for some latent ambiguity that will support AT&T's claim that Verizon has not . . . [met] its burden of proof.[233]

Verizon's explanation is adequate; no adjustment is needed.

Item I. AT&T charges that Verizon in effect applies too low a fill factor to innerduct by first assuming that each conduit carries three innerducts, two of which are used and one of which serves as a spare, thereby establishing a tacit

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[230] Tr. 1,429, item G.

[231] Tr. 3,375.

[232] AT&T's Initial Brief, p. 73, citing Tr. 3,371.

[233] Verizon's Reply Brief, pp. 100-101.

utilization factor of 66.7%; and then applying a 60% utilization factor, reducing the effective factor to only 40%. AT&T would eliminate that second step. It contends that Verizon's rebuttal explanation, which relied on engineering judgment, has not been shown to be consistent with TELRIC costing and that Verizon's effective unused capacity of 60% "cannot be justified as either forward-looking or efficient."[234] In response, Verizon cites its rebuttal explanation that the 60% utilization factor accounts for the spare ducts in a duct bank rather than the spare innerduct in a duct, and it alleges no support for AT&T's challenge to the efficiency of these arrangements.[235]

Verizon's rebuttal describes in detail the calculations underlying its result but fails to disprove the reasonable allegation that it overstates costs through overlapping fill factors that provide more excess capacity than is needed. Verizon has not borne its burden of proving these arrangements reasonable, and AT&T's adjustment should be adopted.

Item J. As with respect to poles, AT&T eliminated application of a cable fill factor to conduit, charging that here, too, if Verizon's calculation of conduit cost per pair were based on working pairs, application of the 60% duct utilization factor would result in a double count of the fill factor. Verizon responds by citing its rebuttal testimony that it does not apply a cable utilization factor to conduit and that conduit investment per working pair is developed by dividing conduit investment by the number of working pairs in the cables supported by it, as a result of which conduit investment per working pair declines with cable size.[236]

Verizon's response is persuasive; no adjustment is needed.

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[234] AT&T's Initial Brief, p. 74.

[235] Tr. 3,372-3,373.

[236] Tr. 3,374.

Dark Fiber

"Dark fiber consists of a continuous fiber optic strand within an existing in-place fiber optic sheath . . . owned by Verizon but . . . not connected to electronic equipment needed to power the line in order to transmit information."[237] Verizon offers dark fiber only on an as-is, where-available basis, "where in-place spare facilities exist."[238] Rhythms/Covad accordingly argue that Verizon incurs no capacity costs associated with dark fiber and should be permitted to recover only the operation and maintenance costs of dark fiber actually used by CLECs. They argue as well that no fill factor should be applied to dark fiber inasmuch as fill factors are intended to compensate Verizon for the costs of spare, but most likely unused, capacity; but no spare dark fiber capacity need be provided. In addition, they contend that dark fiber is itself the product of installing spare capacity whose cost is already recovered through the fill factors applied to loops and interoffice facilities.

Verizon responds that even if it incurs little or no investment-related short-run cost in providing a spare facility, TELRIC requires allocating the total, forward-looking long-run cost among all users of the element, CLECs included. It contends as well that the utilization factor should apply to all fiber used by CLECs, regardless of whether it is dark or lit, inasmuch as there is no real distinction between the two sorts of cable and Verzion draws cable to fill dark fiber orders from the same pool that it uses to provision other types of fiber. In each case, it contends, the order means that there is one less spare available to provide a cushion for growth and churn. Rhythms/Covad reply that Verizon's proposed ability to recapture dark fiber from CLECs when necessary means that the purchaser will not have complete use of the facility as TELRIC

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[237] Verizon's Initial Brief, p. 155.

[238] Id., p. 156, citing Tr. 5,646 and Verizon's tariff PSC 916 §5.20.2.4.

contemplates, and that it is Verizon, not Rhythms/Covad, that departs from TELRIC in this regard.[239]

That dark fiber is provided only on an as-available basis would not in itself mean that CLECs purchasing it should pay no capacity costs. As Verizon reasonably argues, when all is said and done, the provision of a dark fiber cable would mean one less spare was available for other purposes, and the purchasing CLEC should bear the associated costs.

What may make an important difference, however, is the possibility that even after a dark fiber cable is provided, Verizon may be able to recapture the fiber if needed. That would mean that the available spare capacity had not been diminished, at least not to the same extent as if the fiber were irretrievable; and the capacity costs associated with providing the fiber would be correspondingly reduced or eliminated. The record is unclear on Verizon's ability to effect such a recapture,[240] and Verizon should clarify that situation in its brief on exceptions.

House and Riser Cable

"House and riser (H&R) is a communications path within a multi-story building that provides access to the network side of a customer's [network interface device] from a point of interconnection within the building (frequently in the basement)."[241] Verizon's study identified the investment cost of the riser cable itself and the material and labor costs associated with terminating it at each end--the basement point of interconnection and the end user's premises. House and riser rates comprise (1) house and riser access service--the element itself as leased--and (2) house and riser connection service, encompassing additional equipment needed to connect the

[239] Rhythms/Covad's Reply Brief, p. 19; Tr. 5,647-5,648.

[240] Rhythms/Covad cite the claim only to a New Jersey proceeding (Tr. 5,646, n. 68).

[241] Verizon's Initial Brief, pp. 160-161.

carrier's loop and Verizon's house and riser element as well as certain cross-connection charges.

1. House and Riser Access Service

In criticizing Verizon's proposed house and riser costs, AT&T notes, first, that they are as much as three times the costs claimed in the First Elements Proceeding, a change attributable to a reduction of the utilization factor from 65% to 40% and to application of the environmental factor previously discussed. With respect to the latter, AT&T would simply adjust house and riser rates by applying generally the modified ACFs it advocates. As for utilization, AT&T contends Verizon has tried to justify the reduced fill factor only on the grounds that it is the same as the factor used for loop distribution plant generally, but AT&T contends that utilization factors for multi-dwelling units could be expected to be higher because the serving area is of fixed size. AT&T would nevertheless apply the 56% fill factor it recommends for distribution plant generally. The CLEC Coalition, however, urges retention of the 65% fill factor proposed by Verizon and adopted in the First Proceeding,[242] contending that Verizon has not borne its burden of proving a lower factor warranted and citing its witness Kahn's testimony that "the incremental cost of reinforcing house and riser capacity is less than the cost of doing the same for either aerial or buried outside plant facilities. The utilization rate for riser cable would accordingly be greater than that for distribution facilities."[243]

The Federal Agencies similarly contend it is unreasonable for Verizon to be proposing rates that exceed those currently tariffed by two to three times, inasmuch as the tariffed rates reflect embedded costs and older technologies. They regard higher house and riser costs in Manhattan as anomalous inasmuch as the larger buildings should warrant larger

[242] See First Elements Proceeding (Phase 2), Tr. 4,352.

[243] Tr. 4,369.

cables with lower unit costs per wire pair. They note the importance of the issue to them inasmuch as most Federal offices in large cities are located in multi-story buildings.

Verizon responds that the currently tariffed house and riser rates are the TELRIC-based rates set in the First Elements Proceeding, and it cites its general explanations of why proposed rates exceed current rates and why environmental factors may lead to higher unit costs in Manhattan. It regards the 40% utilization factor as conservative, noting the practical and economic difficulties of adding cable inside a building in contrast to the modest cost of providing larger cables at initial installation.

AT&T also would reduce basement backboard investment by 50% and upper floor backboard investment by 75% to correct for what it regards as Verizon's understatement of backboard capacity. It contends that Verizon assumes that a backboard receives only two blocks and therefore has a maximum capacity of 100 pairs of cable; AT&T maintains the proper figures are four blocks and 200 pairs of cable. The situation is compounded on upper floors, where Verizon contemplates using a backboard to mount only one KRONE block.

Verizon disputes AT&T's adjustments, contending that even though one backboard can hold up to four blocks, two blocks are needed for each 50 pair cross-connection and that four blocks--and one complete backboard--are needed for each 100 pair cross-connection.[244]

Verizon has adequately explained its calculated backboard investment; no adjustment is warranted. With respect to fill factors, Verizon identifies countervailing factors that might offset those tending to increase house and riser cable fill factors in comparison with those for distribution cable generally; but it has not shown why it now proposes to apply the distribution fill factor to house and riser cable even though it proposed a 65% fill factor in the First Proceeding. Taking

[244] Verizon's Initial Brief, p. 165, citing Tr. 3,429-3,430.

account of all these considerations, I recommend a fill factor here of 60%

2. House and Riser Connection Service

AT&T contends that both offered alternatives--the "50 pair terminal charge" if the CLEC's loop is within cross-connect range of Verizon's house and riser terminations, and the "building set-up charge" if the loop is beyond--are excessive. In its reply brief, Verizon notes that the building set-up service rate and the associated service have been eliminated from its tariff; they are, accordingly, not further discussed.

With regard to the situation where the CLEC is within cross-connection distance, AT&T objects to Verizon's proposal to charge the CLEC for half a backboard, a 50-pair block, and connections to the block, contending that the use of the additional block is precluded by the FCC's requirement of a single point of interconnection. It characterizes the charge as violating competitive neutrality, inasmuch as Verizon itself would continue to have a direct connection to the existing basement terminals, without need of the additional equipment. AT&T urges an interim costing construct "that assumes the existence of multiple carriers, a single point of interconnection, and does not disadvantage CLECs by requiring them to pay for additional unneeded equipment."[245] A permanent arrangement would be pursued in a collaborative process. Verizon, however, sees no discrimination, contending that the CLEC can supply its own connection block, thereby avoiding the 50-pair terminal charge, and that its offering satisfies the single point of interconnection requirement. It states its willingness to negotiate other forms of single point of interconnection on a case-by-case basis.

From a costing point of view, it appears that a CLEC can avoid the charge at issue here, and no action in this proceeding is warranted. To the extent provisioning issues are

[245] AT&T's Initial Brief, p. 128.

presented, they should be dealt with in other contexts, general or specific.

Finally, AT&T urges rejection of the proposed house and riser asset inquiry charge, contending that requiring CLECs to bear the costs generated by historical inadequacies in Verizon's inventory records would violate forward-looking costing principles. Verizon notes that it maintains an ownership database that is available free of charge on its website and that the charge at issue is imposed only when the database fails to resolve an ownership question and intervention by engineers is needed. It contends these costs are incurred and are calculated on the basis of forward-looking work times.

Verizon argues that it has estimated these costs on a forward-looking basis and that it is not requiring CLECs to fund the development of a data base; but it fails to respond to the suggestion that these costs would not be incurred at all had its embedded record keeping system been designed with the provision of UNEs in mind. If that is so, a strict TELRIC construct might well require disallowing the costs even if Verizon had not acted imprudently, in the classical regulatory sense, in designing its system. At the same time, there is no showing of imprudence; the costs are real and calculated in a forward-looking manner; it seems likely that at least some of these costs would be incurred in connection with a database that contemplated provision of UNEs; and denying the costs outright would incur the risk of assuming a "fantasy" record keeping system. On balance, I recommend allowance of the costs.

SWITCHING COSTS

Introduction

Verizon proposed the following rate elements for local switching:

- Line Ports (analog, digital, and coin);
- Trunk Ports (digital); and

- Local Switch Usage (terminating and originating).[246]

The unbundled switching element includes all features that can be provided through the switch, which Verizon considers to be consistent with the FCC's definition of the switching element as including all features that the switch is capable of providing, except for those that require specific, unique hardware, which are separately priced. It also determined a "feature-free" switch usage rate that excludes all vertical feature costs.

To determine the material costs associated with local switching, Verizon used the switching cost information system (SCIS), a switch cost model created and maintained by Telcordia, Inc.[247] The SCIS/Model Office (SCIS/MO) module lets the user specify a model central office and determines the associated costs. Verizon requested its engineers to specify forward-looking model offices for each of the three geographic zones studied and for both of the switch types (Nortel DMS-100 and Lucent 5-ESS) used by Verizon. Switch vendor list prices are built into SCIS, and the discounts off list price offered to particular customers, a very controversial issue here, are supplied as inputs when SCIS is run. Verizon asserts that SCIS is an established and widely used costing tool whose results have been accepted in numerous regulatory proceedings and whose calculated material costs come within a reasonable approximation of those produced using the switch vendors' own pricing tools.

In addition to raising the vendor discount issue already noted, the CLECs challenged Verizon's switching study on other grounds including the relative proportions of Nortel and Lucent switches and the operation of SCIS. In addition, issues were raised concerning the allocation of switching costs between switch usage and non-usage sensitive ports. This section begins

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[246] Verizon's Initial Brief, p. 230.

[247] Telcordia is the successor to Bellcore, which, in turn, took over many functions performed, before the breakup of AT&T in 1984, by Bell Labs.

with the vendor discount issue, perhaps the most hotly contested in the entire proceeding.

Vendor Discounts and Switch Material Costs

1. Background

In Phase 1 of the First Elements Proceeding, the Commission expressed a lack of confidence in the costs suggested by the conflicting studies submitted by the parties, and it set rates on the basis of a Staff analysis. It noted, among other things, that in making an adjustment to capture the downward trend in switching costs, it "did not take account . . . of the atypically large discounts received by [Verizon] from its vendors after 1994 in connection with a major switch replacement program."[248] The Commission so decided in large part on the basis of Verizon's attribution of those large discounts to the switches' having been purchased as part of its program to replace analog switches with digital. Verizon argued that vendors were willing to offer unusually large discounts in connection with such replacement programs (to encourage upgrades that create a market for new software), but that the replacement program was nearly complete and the discounts therefore were unlikely to continue or recur. On rehearing, the Commission rejected both Verizon's broadbased critique of the Staff method for setting switching costs as well as WorldCom's claim that the price reduction factor was too low, finding that WorldCom had "offered no new reason for rejecting the fully explained premise that the unusually large discounts associated with analog to digital conversion would not be replicated."[249]

Later, in Phase 3 of the First Proceeding, evidence was presented suggesting that the deep discounts might, in fact, be available for all purchases of new switches, not only large-scale replacement programs. Several CLEC parties moved to reopen

[248] Phase 1 Opinion, p. 85, n. 1. See also a similar statement in Attachment C to that opinion, Schedule 2, page 1 of 3.

[249] Phase 1 Rehearing Opinion, p. 40.

Phase 1 to redetermine switch costs in light of the newly adduced evidence; Verizon objected on a variety of grounds including the alleged insignificance of the new evidence and the need to avoid selective updates that could produce unfairly skewed results. The Commission was unimpressed by Verizon's belittling, as "inadvertent misstatement," of its own assertion that the higher discounts were uniquely associated with the analog-to-digital replacements and by its suggestion that the new information lacked significance because of the manner in which switches are purchased.[250] The Commission nevertheless denied the motion to reopen, citing the risks of selective adjustments and adding that the new evidence, even if borne out, could not generate a simple arithmetic correction to its Phase 1 calculations. It went on to note as well the likely desirability of reviewing UNE rates in general before too long, and it therefore stated its intention to institute the present proceeding. Finally, in view of the uncertainties associated with the newly adduced evidence, it left switching rates temporary, subject to future refund or reparation, even thought all other UNE rates set in the First Elements Proceeding have become permanent.

It is against this background that the discount issue in the present proceeding must be considered. The parties dispute the qualitative issue of whether to posit new switch discounts or lower "growth" discounts, i.e., the discounts associated with adding capacity to existing switches; they also

[250] In the course of its discussion, the Commission pointed out that it had "no information suggesting that [Verizon's] errors were deliberate. But careless errors of this sort in a party's presentation are nonetheless distressing and disruptive of the process." (Case 95-C-0657 et al., Order Denying Motion to Reopen Phase 1 and Instituting New Proceeding [issued September 30 1998] p. 9, n. 1.) Because Verizon's motivation and culpability are again raised by its opponents in this proceeding, I should note that I continue to share the Commission's impression then: the evidence newly adduced in Phase 3 suggested distressing and disruptive carelessness but not deliberate misconduct.

pose quantitative issues regarding the calculation of the discount.

2. Arguments

Verizon contends, generally, that the use of pure growth discounts, rather than the higher new switch discounts, is more consistent with fundamental TELRIC principles.[251] Citing the FCC's statement in the Local Competition Order that TELRIC-based rates must capture the "incremental costs that incumbents actually expect to incur in making network elements available to new entrants,"[252] as well as the Commission's use, for purposes of costing other elements, of material prices based on the latest Verizon/vendor contracts for that material, Verizon contends that the discount it will actually receive when purchasing new switching equipment now and in the future is the growth discount. It reasons that digital switches are already fully deployed and will never be replaced by new digital switches--inasmuch as the next level of technology will become available by the time replacement is necessary--and that switch installations will be needed only to accommodate growth. It argues as well that the switch vendors inflate their new-switch discounts in the interest of creating good will, secure in the knowledge that they will never actually be used, and that, even if TELRIC is understood to require determining the costs of purchasing, all at once, an entire new network, there is no meaningful way to determine the price of doing so. Indeed, it adds, the price for total network replacement would likely exceed the currently prevailing price, given the need to strain resources to produce equipment much more

[251] Though asserting this principle, Verizon acknowledges that the point has never been resolved by the Commission. It cites my contrary view in the Phase 3 Recommended Decision (at p. 35) and notes that its exception to my conclusion there was never ruled on by the Commission, which decided the issue on other grounds. (Verizon's Initial Brief, p. 240, n. 555).

[252] Verizon's Initial Brief, p. 241, citing Local Competition Order ¶685.

speedily than it would otherwise be needed. Verizon argues further that even if TELRIC pricing must contemplate replacement of the entire network, any such replacement would likely be done not in one fell swoop but through the retirement of old assets and the addition of new ones; and that the installation of total needed switching capacity all at once, without contemplation of growth purchases, would incur additional costs in view of the need to provide the needed excess capacity at the outset. Finally, Verizon argues that if incumbent LECs purchased new switches only, their prices would be higher, inasmuch as the deep discounts are offered by the vendor in the hope of making money on growth additions--a prospect ruled out by the hypothetical.

Verizon maintained that the actual level of discounts to be applied must be based on its existing contracts with its vendors. Because those contracts are complex and do not readily permit calculation of the discount for a particular purchase, it conducted the "vendor pricing exercise," in which it described to its vendors the switch configurations used in the model offices it studied and asked them to price out, on the basis of the current contracts, the overall growth discount that would be applied. It stressed that the pricing exercise was simply a device for calculating discounts applicable to a particular switch configuration in accordance with the existing contracts and that it was not a cost model that could be expected to generate the actual prices it would pay.

AT&T contends that because Verizon does not assume new- switch discounts, its study failed to model a reconstructed local network as required by TELRIC and thereby substantially inflated its switching costs. It maintains that the actual process by which Verizon upgrades and adds capacity to its existing switches on a piecemeal basis is irrelevant to a TELRIC analysis, and it notes the testimony of Verizon witness Curbelo in Phase 1 of the First Proceeding that he would change the numbers in his switching cost study if it turned out, contrary to his then-existing belief, that the aggressive switch purchase

discounts were available from vendors.[253] It charges that Verizon nonetheless excluded new-switching discount data from its presentation in this proceeding, even though it had obtained such data from its vendors as part of the switch pricing exercise.

AT&T points as well to a decision by the United States District Court for the District of Delaware rejecting Verizon's argument against the use of new switch discounts and citing Verizon witness Taylor's testimony that the FCC's Local Competition Order requires total reconstruction of the entire system.[254] Against this background, it characterizes Verizon's use of growth rather than new switch discounts as "inexplicable, except as a bold and deliberate attempt to substantially inflate [its] claimed switching costs."[255] It urges use of its restatement of Verizon's cost study, which uses the higher new-switch discounts. It suggests that those discounts may, in fact, be conservative inasmuch as actual competition for Verizon's business in the situation contemplated might produce prices better than those in the preexisting contracts.

In criticizing the vendor pricing exercise, AT&T disputes at considerable length Verizon's statement, in its rebuttal testimony, that its latest contract with Lucent modified the discount initially taken into account in the pricing exercise.[256] Verizon responds that AT&T's analysis bears out the complexity of the contract, which led it to undertake the vendor pricing exercise in the first place, and that Lucent shares Verizon's understanding of the contract rather than AT&T's.[257] In its reply brief, AT&T reiterates its claim that Verizon is ignoring TELRIC's long-run requirement by focusing only on the

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[253] AT&T's Initial Brief, p. 83, citing Tr. 1,490 and First Elements Proceeding, Tr. 3,006.

[254] AT&T's Initial Brief, pp. 85-86, citing Bell Atlantic-Delaware, Inc. v McMahon, 80 F. Supp. 2nd 218 (D. Del. 2000).

[255] AT&T's Initial Brief, p. 86.

[256] Id., pp. 88-104.

[257] Verizon's Reply Brief, p. 133, citing Tr. 3,465.

short-term growth of existing switches; and it disputes the relevance of Verizon's assertion that the next generation of new switching equipment will not be based on today's architecture. It characterizes as "semantic game playing"[258] Verizon's argument that it would be unrealistic to assume one-time replacement of its existing switching network, contending that that is the premise of TELRIC and that TELRIC analysis is not deterred by the prospect that costs might change in the market if the forward-looking efficient TELRIC network actually had to be constructed tomorrow. AT&T disputes as well Verizon's argument that even switching equipment purchased at the new-switch discount will have to be replaced in transactions using the growth discount, contending that technological obsolescence is a depreciation issue already accounted for; and it characterizes as "absurd"[259] the contention that the pricing exercise was intended to identify discounts rather than prices.

WorldCom argues to similar effect, alleging as well that the SCIS model is a closed black box highly dependent upon proprietary pre-processing but that it is clear that the use of growth discounts--contrary to TELRIC principles, the Delaware District Court Decision, and the FCC's finding that the price of new switches represents efficient switching costs and that the price of growth additions does not--has contributed to the substantial overstatement of Verizon's switching costs. As a result, WorldCom contends, Verizon's unbundled switching rates are out of line with those in other states that have made local competition possible. It contends the proper discounts far exceed the growth discounts Verizon used and that "the impact on the rates that Verizon charges its competitors is severe enough to threaten competition in New York if the Commission does not reject Verizon's proposal and set UNE switching rates by employing the initial switch discounts."[260] Z-Tel offers similar

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[258] AT&T's Reply Brief, p. 30.

[259] Id., p. 31.

[260] WorldCom's Initial Brief, p. 71.

arguments, noting Verizon's claim that the new-switch discount cited by vendors is unrealistically low because the vendors do not anticipate that it will be actually used and suggesting that Verizon's switch pricing exercise may likewise fail to generate a least cost price inasmuch as it is an exercise rather than a serious and competitive bid.

In response, Verizon cites a recent decision of the United States District Court for the Northern District of New York, in which the court stated that forward-looking cost determinations "must be based on the incremental costs that an incumbent local service provider actually incurs or will incur."[261] Verizon contends this means use of the growth discount, consistent with the incremental way in which networks are totally replaced in the long run. It maintains that without the prospect of growth additions at a higher price, steeply discounted new switch prices would not exist; contends that the Delaware decision cited by the CLECs is neither controlling here nor representative and "is, quite simply, badly reasoned and wrongly decided";[262] disputes the suggestion that the Commission, in its order instituting this proceeding, already decided the issue in favor of the new-switch discount; and contends that the earlier testimony of its witnesses cited by AT&T says nothing about the discount assumptions to be made for pricing purposes. Verizon defends as well its vendor pricing exercise, reiterating that its sole purpose was to obtain an assessment from the vendors of the price that would be charged under existing contracts. In Verizon's view, that is the sole non-speculative basis for determining a relevant price.

3. Discussion

As Verizon recognizes, I stated my general view on switching discounts in the Phase 3 recommended decision,

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[261] MCI Telecommunications Corp. v. New York Telephone Co., No. 97-CV-1600, slip opinion, p. 25 (NDNY March 7, 2001).

[262] Verizon's Reply Brief, p. 130.

rejecting Verizon's position. The Commission had no need to resolve the discount issue then, since it disallowed the switching costs there under review on other grounds,[263] but my comments in the recommended decision remain pertinent, though not dispositive:

> It remains necessary, of course, to identify a level of vendor discounts to recognize in determining any Phase 3 switching costs that might be properly allowed. [Verizon] contends that the proper level is the growth discount, given that most of its purchases will be incremental to its existing switches, and it characterizes as bizarre the assumption that it would in effect purchase new digital switches to replace its existing ones. But that "bizarre assumption" is, in fact, central to proper application of the TELRIC construct to switching costs. By definition, a TELRIC study examines the cost of providing a particular increment of output: the increment from a zero level of output to the current level of demand. In the switching context, TELRIC identifies the costs that would be incurred by an efficient firm in purchasing, combining, and processing inputs (given the best available technology) to produce the amount of its product(s) currently demanded. "Growth" discounts thus are not applicable in a TELRIC switching cost study. Accordingly, to the extent it is necessary to factor vendor discounts into an estimate of Phase 3 switching costs, the new switch discount should be used.[264]

Two and one-half years later, and with the benefit of abundant and forceful argument on both sides, I continue to believe that conclusion to be valid in theory, at least under what may be termed a "strong" TELRIC approach. But several factors preclude its adoption here and now.

First, while the FCC rule remains in effect pending review, the law on TELRIC is developing. As discussed above,

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[263] Phase 3 Opinion, pp. 23-26.

[264] Phase 3 Recommended Decision, pp. 34-35 (footnote omitted).

the uncertainty does not warrant suspending the case, but we should not disregard the extent to which application of a purely new-switch discount, on the premise that a hypothetical new network designed to serve the full increment of demand was dropped into place instantaneously, could be problematic under the Eighth Circuit's decision. And while we are not, of course, subject to the Eighth Circuit's direct authority, (and its decision in any event has been stayed), the decision was relied on by Judge Kahn in MCI v. New York Telephone. Judge Kahn's statement, in light of the Eighth Circuit's decision, that "price determinations made on forward-looking cost calculations cannot be based on the forward-looking costs of an 'idealized network,' but must be based on the incremental costs that an incumbent local service provider actually incurs or will incur"[265] may not support Verizon's position to the extent Verizon claims in citing it. But it certainly calls into question the propriety of an exclusively new-switch discount assumption premised on an instantaneously installed hypothetical network.

A further, factual problem, independent of the legal one and perhaps more important here, is the difficulty of ascertaining what the new-switch discount would be in the hypothetical situation of an instantaneously installed new system. Verizon argues persuasively that the existing new-switch discount is set partly in contemplation of additional sales to which only the growth discount would apply. A hypothetical in which there were no growth-discount sales might well be one in which the new-switch discount differed from its current level. Any decision to rely on the new switch discount would require adjusting it on at least that account.

None of which is to say that switching costs should be determined, as Verizon urges, solely on the basis of the growth-switch discount as determined through its vendor pricing exercise. Among other things, it seems likely that discounts are negotiated between Verizon and its vendors in light of the

[265] MCI v. New York Telephone, supra, slip op. p. 25.

particular purchases contemplated, and there is no reason to assume that a forward-looking construct in which an entire network was being installed (even over time rather than instantaneously) would have produced the contracts on the basis of which Verizon's discounts were calculated. It is entirely possible that the prospect of such an extensive series of purchases could have generated discounts substantially higher than those under the existing contracts, and a forward-looking analysis must take account of that prospect.

When all is said and done, this is an issue on which the parties have fought hard and reached a stalemate: each has shown the other's position to be untenable. Regardless of the decision ultimately to be reached on the FCC's rule, this record simply establishes no "right" level of discount to use--in part, as noted, because the very act of assuming a switch purchase pattern would affect the data on the record regarding the level of the respective discounts.[266] Discounts will depend on a host of factors, including the contracts negotiated between vendor and purchaser, and we have no reason to believe that Verizon's existing, complex contracts, relied on by both sides as the basis for the radically different discounts they advocated, would, in fact, read the same had they been negotiated in the various contexts that TELRIC or other forms of long-run forward-looking costing might lead us to posit.

In these circumstances, the best course of action appears to be to try again to find some surrogate means of estimating switching investment. The record-based parameters of the exercise, reflecting each party's position on the discount issue, are Verizon's statewide average figure of approximately

[266] The difficulty is analogous to those posed by situations, known in both physics and the social sciences, in which outcomes are influenced by the mere fact of observation.

$128 per line[267] and AT&T's average HAI input figure of $95 per line.[268] The arithmetic mid-point between those parameters is about $111; and that point is close to the results of two disinterested studies discussed by the FCC in its July 1997 Notice of Proposed Rulemaking in the Universal Service Proceeding: the FCC staff estimated, on the basis of ILEC depreciation studies, a per-line cost of $110, and a majority of the state members of the Joint Board recommended a per-line cost of $113.[269] In its ensuing decision, the FCC adopted a per-line cost of about $95,[270] based on a regression analysis of historical data that took account of foreseeable trends. Outright adoption of that figure, favored by AT&T, is properly disputed by Verizon, which stresses the FCC's observation that the principles used in the Universal Service Proceeding cannot necessarily be transferred to UNE pricing. Nevertheless, it provides warrant

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[267] Calculated from the zone-specific estimates set forth in Exhibit 323, Workpaper B-2, §4 (3rd revision October 19, 2000). Verizon's October 19 revisions to its initially filed exhibit, which generally reduced its proposed rates, were submitted with its October 19, 2000 rebuttal testimony and are part of Exhibit 332 (333-P for the proprietary version). The workpapers underlying that update were omitted from the filing, but no party complained of that omission or, as far as I am aware, requested the workpapers. In undertaking the computations associated with this recommended decision, Staff last month requested the workpapers, and they were submitted to Staff electronically. Verizon should make them similarly available to any party now requesting them.

[268] Exhibit 314, Inputs Portfolio, p. 117, taking the $87 per line variable cost and adding to it the relevant fixed cost, thereby producing a figure comparable to Verizon's $128.

[269] Universal Service Proceeding, Further Notice of Proposed Rulemaking (rel. July 18, 1997) ¶¶130, 128. Each of those figures is estimated in the manner described in the preceding footnote.

[270] Universal Service Proceeding, Tenth Report and Order ¶296 (rel. November 2, 1999), again estimated in the manner described earlier. This figure is the basis for AT&T's HAI input.

for a figure somewhat below the midpoint of the parameters previously identified.

Taking all these factors into account, I recommend for now an estimate of per-line switching costs of $105. The parties are free, as always, to challenge that result on exceptions; but another course of action they may wish to consider would be to convene a settlement conference aimed at stipulating to the number here suggested or to some other number that both sides could accept. If the parties wish to do so, they should consult with each other and notify me within ten days of the issuance date of this recommended decision. I anticipate that another judge would serve as neutral at any such settlement conference, so that parties could speak freely without concern about compromising their positions in any further litigation on exceptions.

Finally, it is necessary to extend this discussion to the costs of tandem switching. The same issues related to vendor discounts are posed here, and they warrant reducing Verizon's cost estimate by a percentage equal to that resulting from the reduction recommended above for end-office switches. There is, however, the added factor of Verizon's inadequately explained premise that the vast majority of its tandem switches will be supplied by one of its two vendors, in contrast to Verizon's premise of an equal mix with regard to end-office switches. In a dispute made moot by the recommended resolution on switch discounts, WorldCom challenged that equal mix, urging that it be weighted more toward the less expensive vendor, and Verizon defended the equal mix (in my judgment largely persuasively) on the basis of strategic diversity and the benefits of being able to pit one vendor against the other.[271] In the tandem context, however, Verizon defends a decidedly lopsided mix on the basis of "the total number of trunks

[271] Verizon's Initial Brief, p. 234. The details of this issue, including the evidence on which of the two vendors was the less costly, are proprietary.

provided by each [vendor's] technology."[272] That claim offers no basis for finding that the mix is optimal from a cost perspective or for justifying so great a departure from the equal mix persuasively advocated by Verizon for end-office switches. In view of Verizon's burden of proof, and to impute more cost-conserving purchasing practices, I recommend that tandem switching costs be reduced by an additional 10%, after adjustment to reflect the cost conclusion reached above. Here, too, the parties are free to modify that result through negotiated stipulation.

EF&I Factor

AT&T contends that Verizon's 43.5% switch "engineer, furnish, and install" (EF&I) factor is overstated, exceeding by 72% the factors used by other telephone companies. It proposes a 25% factor, comprising what it calculates to be Verizon's own average 15% factor for vendor engineering and installation, to which it adds 10%, representing the average of the 8%-to-12% range of other companies' telephone company engineering and installation. Verizon claimed, among other things, that the components of AT&T's analysis reflect different investment bases, but AT&T maintains that it relied solely on forward-looking investments: the 15% component was derived by running SCIS using forward-looking investments, and the other data in its calculation were those proposed for use in the FCC's Universal Service Proceeding, which involved the determination of forward-looking investments.

AT&T argues as well that in an FCC proceeding, Sprint concurred that an 8% EF&I factor was reasonable, and it disputes Verizon's claim that the 8% factor covers only engineering, allowing a mere 2% for installation. It asserts that separate engineering and installation factors were not identified in the FCC proceeding and that the input at issue was the HAI Model's switch installation multiplier, which covers both engineering and

[272] Tr. 2,548.

installation. Overall, AT&T contends that Verizon has not borne its burden of proof on the EF&I factor.

Verizon argues that the 8% to 12% estimate for telephone company installation and engineering cited by AT&T was calculated on the basis of rural telephone companies, which, unlike Verizon, do not incur the costs of dealing with multi-story central office buildings. It maintains as well that lower switch prices imply a higher EF&I factor (since the EF&I factor expresses the ratio of installation costs to material costs) and that rural telephone companies, which are unlikely to enjoy Verizon's vendor discounts and consequently pay more for their switches, could be expected to have a lower EF&I factor. Verizon adds that its own EF&I factor is based on actual data regarding material and installed costs for the relevant category of plant, and that AT&T, in response to an interrogatory, could provide no specification of its claim that increased capabilities of digital switches would reduce the amount of labor required to engineer and install them.[273]

In its reply brief, Verizon renews its argument that AT&T has misrepresented Sprint's position in the FCC proceeding and has failed to provide "any convincing explanation of why the Commission should rely on a mélange of data from dissimilar companies when it has available detailed data on Verizon's actual current EF&I costs and switching investments."[274] AT&T, meanwhile, replies only that Verizon's effort to distinguish its own engineering and installation costs from those of rural telephone companies on the basis of its need to deal with multi-story central office buildings should be disregarded as extra-record as well as on the grounds that any such additional costs would be offset by Verizon's economies of scale and scope.

Verizon would prove too much with its disparaging reference to reliance on "a mélange of data from dissimilar companies" when its own actual data are available; its comment

[273] Verizon's Initial Brief, pp. 257-258.

[274] Verizon's Reply Brief, p 138.

suggests that we should simply set rates to recover Verizon's actual costs, whatever they may be. Verizon has certainly drawn distinctions between itself and the companies that generated the data cited by AT&T, but, as AT&T argues, the distinctions can cut both ways: installation costs may be higher in Manhattan than in rural areas, but Verizon is (or should be) more likely than rural companies to enjoy economies of scale. Meanwhile, despite its burden of proof, Verizon has shown no reason other than its own actual experience to adopt its much higher figure.

AT&T's 10% figure is not well supported and seems unduly low, but in view of the record and Verizon's burden of proof, a telephone company engineering and installation factor of 15% appears fair and reasonable, making for an overall EF&I factor of 30% rather than Verizon's proposed 43.5%.[275]

Switching Cost Allocation and Rate Design

1. Allocation to Usage-Sensitive and Non-Usage-Sensitive Switch Components

Verizon allocated switching material investment costs to three components: line ports, trunk ports, and usage. Several parties, primarily Z-Tel, asserted that Verizon incurs no usage-sensitive costs in providing unbundled local switching to itself or competitors and that switching costs therefore should be recovered on a non-usage-sensitive basis, through monthly recurring port charges.[276]

Z-Tel argues, on the basis of testimony by its witness Gillan, that the SCIS model is designed, among other things, to produce usage-based retail rates on the assumption that all switching costs not associated with a line or trunk port are

[275] The 30% factor should be computed with reference to Verizon's claimed switching material costs. There is no basis for assuming that the lower material cost I am recommending will result in lower EF&I costs in absolute terms, so the EF&I percentage, computed with reference to the recommended material costs, will be higher than 30%.

[276] AT&T offered testimony supporting a similar proposal but did not pursue it in its initial brief.

usage related. But, that assumption, it says, is inapplicable in the wholesale context, and its use would violate the FCC's requirement that costs be attributed on a cost-causative basis.[277] Z-Tel explains that the switching network element "is the proportional purchase on a per-port basis of all the capacity in a switch, including all the features and functions of the switch. The price of each port should reflect the cost of the committed capacity. A number of carriers may share the switching facility in accordance with each carrier's ports. Therefore, the relevant increment of costing switching resources is the line port, not usage."[278] Citing testimony by Verizon in the First Proceeding, Z-Tel disputes the premise that switches are installed before processors are exhausted, which would suggest that fixed common costs should be allocated on a usage-sensitive basis, and maintains that switches are installed not because of processor exhaust, but to add additional lines.

Z-Tel contends further that the costs of features and annual right-to-use (RTU) fees for software associated with vertical features should not be applied on a usage sensitive basis, characterizing Verizon's effort to do so as "outrageous" in view of its argument, in the Reciprocal Compensation Reexamination Proceeding, that vertical switching features should be excluded from the costs subject to reciprocal compensation. The Commission declined to adopt Verizon's proposal but referred the matter here,[279] and Z-Tel urges rejection of any recovery of RTU fees through usage-sensitive charges. Z-Tel adds that the Commission has authority to impose flat-rate switching charges under the FCC rules[280] and asserts that the Illinois Commerce Commission did just that. Finally,

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[277] Z-Tel's Initial Brief, pp. 6-7, citing Local Competition Order ¶691 and 47 C.F.R. §51.507(a).

[278] Z-Tel's Initial Brief, pp. 7-8.

[279] Case 99-C-0529, Reciprocal Compensation Reexamination, Opinion No. 99-10 (issued August 26, 1999),(Reciprocal Compensation Opinion) p. 56.

[280] Citing 47 CFR §51.509(b).

Z-Tel argues that a usage-sensitive charge has greater potential to over- or underrecover switching investment than does a flat-rate, per-port charge.

WorldCom argues to similar effect, citing the testimony of Z-Tel's witness and the Illinois decision. Its conclusion, however, is somewhat more tentative: "To the extent the Commission believes that switching costs are more appropriately incurred not on a usage-sensitive basis but instead on a per-port basis, this Commission, [like the Illinois Commission], should consider adopting a flat-rated per-port switch cost."[281]

Verizon, for its part, contends that the costs treated by SCIS as usage-sensitive include those directly driven by usage volumes as well as shared costs representing resources used in the processing of calls; it contends that the most equitable way to recover the latter is through usage rates applied to the customer making those calls. (AT&T responds that "equitable" as used here is a code word for an arbitrary allocation.[282]) It argues that Z-Tel's proposal would violate cost causation inasmuch as some switch functionalities are associated exclusively with usage, including the routing of calls through the switch fabric and the operation of the switch processor. While additional minutes of usage will not necessarily require the purchase of new processors or switch fabric, switches are designed with a particular level of usage in mind and may have to be augmented, even if the number of ports remains constant, if that level of usage is exceeded--a result consistent with, rather than contradicting the testimony of its witness in the First Proceeding that switches are configured to "handle all the minutes of use that the ports are forecasted to deliver in the normal peak period."[283] Verizon disputes as well the premise that flat-rate charges are less

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[281] WorldCom's Initial Brief, p. 73.

[282] AT&T's Reply Brief, p. 35.

[283] Verizon's Reply Brief, p. 136.

likely to over- or underrecover costs, contending that accurate recovery of costs on a flat rate structure requires the unwarranted assumption that usage per line will remain stable.

Verizon's proposal would allocate, overall, 36% of switch investment to ports and 64% to usage,[284] and Verizon argues, persuasively, that switching capacity requirements are not totally severed from usage demands, especially in the long run. But though Verizon's arguments preclude adoption of totally non-usage-sensitive rates, Z-Tel makes a strong case for recovering a greater portion of those costs on a non-usage-sensitive basis, in view of the purchase by a UNE user of all of the switching capacity, including features and functions, associated with a port.

To structure these rates it is necessary, first, to identify the portion of switch investment that is associated exclusively with usage and therefore sized to meet peak busy-hour demand. In the First Proceeding, Verizon witness Vanston presented an analysis of switching costs that would warrant allocating only 34% to usage (comprising processor/memory costs at 29% and switching fabric costs at 5%)[285]; and I see no reason, given Z-Tel's arguments, not to move to an allocation along those lines here. Recognizing that data may have changed since the presentation in the First Proceeding was prepared, I recommend a rate structure that assigns no more than 40% of switching costs to usage. In addition, all RTU costs should be recovered on a non-usage-sensitive basis, through the port charge, as Z-Tel proposes.

The switching costs assigned to usage are associated almost exclusively with peak busy-hour usage, but it would be

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[284] The allocations vary by switch manufacturer and by zone: the assignment to ports is 43% in Manhattan, 38% in the major cities zone, and 27% in the rest-of-state zone. (Tr. 4490; Exhibit 323, Workpaper Part B-2, section 4, page 1 of 3.)

[285] First Elements Proceeding, Exhibit 184, (Exhibit Referred to in the Direct testimony of L.K. Vanston Ph.D.), Part F, page 108.

impracticable and unreasonable to try to recover them exclusively from the usage rate for that peak busy hour. The alternatives are to recover them over all usage, as Verizon proposes, or on a non-usage-sensitive basis, through port charges, as Z-Tel proposes. The record suggests that peak busy-hour usage is more closely correlated with total usage than with ports,[286] suggesting that the costs at issue should be recovered over all usage. Accordingly, Verizon should present, in its brief on exceptions, a rate design that recovers the reduced level of usage-sensitive switching costs recommended here through usage rates.

2. Calculation of Usage-Sensitive Rate

Z-Tel argues as well that if the Commission does adopt usage-sensitive pricing, it should adjust Verizon's proposal by spreading switch investment over 365 calendar days, rather than Verizon's suggestion of 251 business days, and should reject time-of-day adjustments to switching usage. It contends that dividing switch investment by 251 business days rather than 365 calendar days overstates charges by about 22.7% and that the only justification Verizon offered for excluding that much traffic was that the data sample it collected did not include weekend and holiday usage. Z-Tel argues as well that there is no cost-causative basis for Verizon's proposed time-of-day adjustments, which it regards as "arbitrary allocations . . . lacking any economic or modeling validity."[287] Verizon responds that the use of 251 business days is correct inasmuch as the switch must be designed to handle peak traffic, and peak traffic is realized only on business days. Taking account of weekend

[286] That conclusion reflects a comparison between Verizon's actual measured traffic data (referred to at Tr. 2,529) and publicly available residential and business line count data (Exhibit 314-[RAM4]).

[287] Z-Tel's Initial Brief, p. 12.

and holiday traffic volumes in computing the average would result in a figure too low to handle peak load traffic.[288]

Verizon's arguments are misdirected, for the issue here is not how to size the switch but how to spread the costs of a properly sized switch over its usage. Verizon's proposal would totally disregard weekend usage, which, though usually less than business day usage (and hence contributing less to peak load), should nonetheless bear a portion of these costs. To recognize both the reality of weekend traffic and its lower volume, I recommend WorldCom witness Ankum's proposal[289] to spread these costs over 308 days a year, a figure derived by treating each weekend day as one-half of a day.

Verizon does not respond specifically to Z-Tel's criticism of its time-of-day adjustments.[290] Parties may address those adjustments in their exceptions, in light of the other results recommended here on switching rate structure.

Port Additives

Verizon's initial brief defended, against criticisms in AT&T's testimony, Verizon's calculations of the costs of various optional switching features (port additives). AT&T contends, in its reply brief, that the passage in Verizon's initial brief "simply ignores the substantial record evidence that demonstrates that Verizon has not substantiated its claims for feature cost additives."[291] It asserts that properly adjusted port additive rates would be reduced by 89% and urges that they be set no higher than that adjusted level; it suggests they should be set at zero, since the administrative costs of collecting them might exceed the adjusted cost level.

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[288] Tr. 3,487-3,489.

[289] Tr. 3,772-3,774.

[290] Its reply brief (p. 137) cites Tr. 3,487-3,489 as its response to Z-Tel's challenges on both the business day assumption and the time-of-day adjustments. The passage, however, is directed primarily at the former.

[291] AT&T's Reply Brief, p. 34, citing Tr. 1,496-1,504.

AT&T's 89% adjustment represents the proportional reduction applied by AT&T to the switch digital line port UNE to correct for its view of the proper vendor discount and EF&I factor. It would apply that same ratio to port additive rates because the record lacks data on specific vendor discounts related to port additives. That approach seems reasonable, though the amount of the adjustment should of course be recalculated on the basis of my recommendations above with respect to vendor discounts and EF&I. It seems unlikely that the resulting rates would be too low to be worth the administrative costs of collecting them, but the parties may consider that on exceptions.

Refunds

As noted, the switching rates set in the First Proceeding have remained temporary, subject to refund or reparation. AT&T urges that the Commission, after setting new switching rates here, require Verizon "to refund all switching rates paid by CLECs in excess of Verizon's forward-looking economic costs for switching retroactive to April 1, 1997."[292] Verizon does not respond.

Whether to require refunds when temporary rates are reduced is a matter within the Commission's discretion. AT&T has offered no argument in support of its simple request for refunds, and Verizon has not addressed the issue in brief at all. The parties should consider the matter further on exceptions, taking account not only of whether refunds should be required but also of how they should be implemented if required.

[292] AT&T's Initial Brief, p. 80.

INTEROFFICE TRANSPORT

Interoffice transport facilities comprise large-capacity cables and associated electronic equipment used to carry calls between switches. Verizon states that they encompass dedicated transport, common or shared transport, dark fiber transport, and two-way trunking and that multiplexing is an additional component of interoffice transport. This section considers the issues that have been raised with regard to dedicated transport--which refers to a facility purchased and used entirely by one CLEC--and shared transport, involving facilities used by more than one carrier, each of which pays for its share on a usage basis.

Dedicated Transport

Verizon's dedicated transport cost study assume 100% deployment of what Verizon regards as forward-looking interoffice transport technology: synchronous optical network (SONET) transport rings with 100% fiber facilities. Several parties, primarily AT&T and the CLEC Alliance, offer challenges to Verizon's study.

1. Ports Per Node

Each SONET ring provides 48 DS3 connections. AT&T contends that Verizon has understated the number of ports that must be used at each SONET node to provide the 48 DS3s, thereby overstating its investment per DS3 and, in turn, the cost of dedicated interoffice transport. More specifically, AT&T calculates, on the basis of Verizon's assumptions, that each node must have on average approximately 26 ports. (The figure is based on the need for 96 ports to support 48 DS3s, since each DS3 enters the ring at one node and departs it at another. Verizon asserts there are 3.76 nodes per SONET ring,[293] implying approximately 26 ports per node.) Verizon's study, however, assumes only 16 ports per node, thereby substantially overstating the investment per DS3.

[293] Exh. 323, Workpaper part C1, §1.0, p. 8 of 85, line 372.

AT&T contends the error has a significant effect on costs because the bulk of the cost associated with SONET rings is the fixed cost of physically establishing the node. Beyond that, the overstatement of costs affects rates for dedicated transport at lower speeds (DS1 and DS0), which are based on the DS3 study.

In rebuttal, Verizon acknowledged the inconsistency, but it maintains that while its current network in fact has 3.76 nodes per SONET ring, its cost study network assumed six nodes per ring. AT&T contends, however, that Verizon has not analyzed the effect of its correction and has failed to bear its burden of proving AT&T's adjustment on its basis incorrect. The CLEC Alliance argues to similar effect, asserting more generally that Verizon's costs are so overstated that CLECs "could obtain access at <u>considerably</u> less cost by purchasing transport at <u>retail</u> from special access tariffs."[294]

On the latter observation, Verizon responds that transport purchased at retail would not be cheaper than the UNE if mileage as well as fixed charges were taken into account, as they must be.[295] With respect to the specific adjustment at issue, Verizon contends that it properly resolved the inconsistency and that its forward-looking network design contemplated six nodes per ring, yielding the 16 DS3 terminations per node used in the cost calculation. The figure of 3.76 nodes per ring characterizes its existing network, which does not conform to the forward-looking design, but Verizon used that figure only to calculate fiber costs (thereby understating them) but not to calculate SONET costs.[296]

Verizon's explanation is satisfactory; no adjustment is needed.

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[294] CLEC Alliance's Initial Brief, p. 103 (emphasis in original; footnote omitted).

[295] Verizon's Reply Brief, p. 139, n. 355.

[296] Verizon's Initial Brief, p. 266, citing Tr. 3,496-3,497.

2. Optional Digital Cross Connect System

AT&T objects to Verizon's inclusion of a digital cross connect system (DCS) on most dedicated transport circuits regardless of whether the CLEC wishes to purchase it. It maintains the FCC has allowed CLECs to order dedicated transport and DCS separately and charges that Verizon improperly declines to address the issue when it contends that this case concerns costs, not its unbundling obligation. According to AT&T, "if DCS is to be available on an unbundled basis (and Verizon does not argue that it should not be), it needs to be costed and priced."[297] In its brief, Verizon reiterates its contention that its unbundling obligation is not within the scope of this proceeding, and it points out that its studies do not purport to analyze the costs of an unbundled DCS product, which no CLEC has yet requested.[298]

Regardless of whether any CLEC has requested an unbundled DCS, the costs of such a product should be identified here, for the reasons AT&T states, unless Verizon can show a conclusive determination that it need not offer the product. If that issue remains open, and Verizon wishes to argue against any such offering, it remains free to do so in other fora.

3. Fill Factors

The CLEC Alliance contends that the 75% utilization factors assumed in Verizon's interoffice transport cost study are uniformly too low. It maintains that the fill factor for DS1-to-DS0 multiplexing should be 100%, inasmuch as the CLEC ordering such multiplexing purchases the entire capacity of the equipment regardless of the number of channels it actually uses. More generally, it maintains that even though the equipment installed to accommodate traffic growth may be utilized only at a 75% rate, the density and volume of the New York City telecommunications market suggests that existing facilities

[297] AT&T's Initial Brief, p. 115.

[298] Verizon's Initial Brief, pp. 268-269.

accommodating existing traffic are likely at full capacity, and that the overall fill factor therefore ought to exceed 75%. It contends as well that the instantaneously installed TELRIC network can be designed to take advantage of the modularity and varied sizes of SONET facilities in such a way as to insure most efficient utilization; that Verizon has failed to account for the sharing of fiber in the feeder with fiber in the interoffice transport network; and that fill factors should reflect not the rate of utilization at the time the facility is installed but, rather, the utilization of facilities over their entire economic life, taking into account increased demand over that period. The CLEC Alliance witnesses recommended fill factors of between 80% and 90% for dedicated transport.

Verizon's reply brief on this point refers the reader to its initial brief, which treats the issue not in the context of the CLEC Alliance's arguments but rather those of WorldCom witness Dr. Ankum.[299] Verizon argues that Dr. Ankum's case for higher fill factors fails to recognize that network engineering is intended not to insure full capacity utilization but to meet customer service requirements at the lowest possible life cycle cost. To that end, Verizon asserts, SONET rings are never loaded beyond 50% of their line capacity, a criterion needed to insure continuous liability in the event of a line failure. It points in this regard to WorldCom's complaints over Verizon's asserted slowness in meeting unforecasted trunk capacity requirements. Nor does it see any basis for Dr. Ankum's specific fill factor recommendations, renewing its charge that he lacks pertinent experience and expertise.

Verizon properly refers to the need for adequate capacity to ensure a prompt response to orders. Still, the CLEC Alliance's arguments strongly imply a fill factor higher than Verizon proposes; once again, it is important to remember not only that Verizon bears the burden of proof but also that in a forward-looking analysis, its own experience provides the

[299] Verizon's Initial Brief, pp. 267-268.

starting point but not the conclusion. I recommend a fill factor here of 80%.

4. Deaveraging

The CLEC Alliance urges that transport costs be deaveraged, asserting that the greater traffic volume in zones 1 and 2 will result in higher fill factors and the placement of more cables and larger terminals in locations with more traffic, thereby reducing transport costs. In addition, it contends, distances between nodes will differ among the geographic regions, and shorter SONET ring lengths will result in lower costs in the more densely populated areas.

Verizon, again responding in its initial brief to WorldCom witness Ankum's advocacy of deaveraging, sees no basis for doing so but contends that if a separate Manhattan rate were established, it would have to reflect not only the lower costs associated with shorter transport distances but the added costs associated with the high complexity circuit design characteristic of Manhattan.

Verizon properly notes the need to reflect upward as well as downward cost variation in any deaveraging effort. But it should include, in its brief on exceptions, an estimate of a deaveraged Manhattan dedicated interoffice transport rate, so a judgement can be reached on whether costs differ enough to warrant deaveraging.

Shared Transport

AT&T contends that shared transport costs are overstated insofar as they are based on the assertedly overstated costs of dedicated transport. Beyond that, it believes Verizon overstated the weighted average distance between its wire centers. Contending that it is not clear how Verizon developed its distance between wire centers, AT&T surmises--alleging a lack of clarity in Verizon's presentation--that Verizon relied on the estimated distance of 3.4 miles between one of its end offices and its tandem, but, it says,

most common transport traverses the much shorter distance between two end offices. It adds that Verizon responded in rebuttal only by saying "AT&T is not correct."[300] AT&T says it lacks the information needed to calculate a weighted average distance, but notes experience in other jurisdictions suggests a reasonable weighted average distance is approximately 12 miles.[301]

Verizon maintains that AT&T's favored method for developing the weighted average--minutes of use carried over each route--would be impractical because the specific routing of each minute of use is not recorded. That may well be so; but Verizon has not shown AT&T's concern to be invalid in principle, nor has it borne its burden of showing its own mileage estimate to be reasonable. In the apparent absence of a better-supported figure, I recommend use of AT&T's 12 miles.

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[300] AT&T's Initial Brief, p. 117, citing Tr. 3,498.

[301] Tr. 1,532.

DSL COMPATIBLE LOOPS AND LINE SHARING

Introduction

Digital subscriber line (DSL) technology entails the use of specialized electronics that permit the transmission over copper telephone lines (as distinct from more advanced optical fiber) of high-speed data signals while at the same time allowing the customer to make ordinary voice calls. The technology takes several forms, collectively referred to as xDSL; of particular pertinence here are asymmetric DSL (ADSL) and high-bit-rate DSL (HDSL).[302]

"Line sharing," meanwhile, refers to an arrangement under which a CLEC is able to provide DSL data service over a loop that is also used by the incumbent carrier to provide retail voice grade service. The voice traffic is transported in the low frequency (0 to 4kHz) range of the loop; the data traffic is transported in the higher frequency spectrum above 4kHz.

Some rates for DSL and line sharing offerings were considered in two earlier accelerated tracks of this proceeding. In Opinion No. 99-12 (issued December 17, 1999)(the DSL Opinion), the Commission set rates for the nonrecurring charges and one recurring charge that Verizon had proposed for DSL loops. The rates were set on a permanent basis, in the legal sense of not being subject to refund or reparation, but the Commission characterized them as "interim," inasmuch as they were expressly set for further examination here. Later, in Opinion 00-7 (issued May 26, 2000) (the Line Sharing Opinion), the Commission set rates for line sharing. Those rates were

[302] More specifically, ASDL uses a twisted-pair copper loop; the asymmetry refers to its ability to support a much higher transmission speed to the customer than from the customer. Its use thus permits rapid downloading by a customer of information from the internet or other databases. HDSL uses either a two-wire or a four-wire copper loop; transmission speeds (which are the same in both directions) are much higher when the four-wire version is used. Verizon's tariff includes rates for ADSL loops and for two-wire and four-wire HDSL.

made temporary, but "only with respect to quantitative matters that depend on the yet to be admitted [in Module 3] material. To the extent qualitative judgments regarding the applicability of various rate elements to line sharing [could] be made on the basis of the existing record their rate implications [were made] permanent."[303]

Among the issues under this heading is the propriety of Verizon's having priced DSL loops and line sharing on the basis of an all-copper loop architecture. The CLECs attacked that concept on the premise that doing so was internally inconsistent with the basing of all other UNE costs on a forward-looking all-fiber feeder architecture and, relatedly, that it was an unlawful violation of TELRIC requirements. Verizon argued that the use of copper was correct, inasmuch as DSL was an inherently copper-based technology that would not be needed in an all-fiber environment. The Commission generally agreed with Verizon in the DSL Opinion and the Line Sharing Opinion, and Verizon insists that those decisions represent the "law of the case," warranting rejection of the renewed arguments to the contrary by Rhythms/Covad and the CLEC Alliance.[304]

DSL Network Design Generally

Rhythms/Covad charge that Verizon, in effect, studied two separate networks--one including copper for nonrecurring charges imposed on DSL providers and one without copper, for all other purposes, including recurring charges for DSL loops. As a result, it failed to take account, in its overall loop study, of the demand for DSL service or of the need, imposed by TELRIC, to determine the "lowest cost network configuration for meeting the total demand for all the products, services, and functionalties under study."[305] Because of the demand for DSL loops,

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[303] Line Sharing Opinion, p. 17.

[304] Verizon's Initial Brief, p. 169.

[305] Rhythms/Covad's Initial Brief, p.7, citing Tr. 4,147 (emphasis in original).

Rhythms/Covad continues, the most efficient network configuration might be one that includes some copper feeder, and the efficient, forward-looking network might be a mix of all copper and copper/fiber loops. Verizon's failure to consider that possibility compromises its studies' compliance with TELRIC and warrants adoption of DSL loop rates established on the basis of the HAI Model, which contemplates the provision of voice and advanced services on an integrated basis.

Beyond that, Rhythms/Covad contend that Verizon's DSL study overstates the cost of its copper-based construct, for Verizon is installing no new copper, and the cost should be only that of maintaining the loops already in place. They argue as well that Verizon's method improperly requires a DSL provider to pay for fiber and DLC electronics even when the loop it purchases does not include them (as when the DLC electronics, normally found in an RT, are located in the central office and the DSL provider requires nothing more than access to the copper loop as it enters the central office).[306]

Verizon insists there is no inconsistency between the network construct used for DSL recurring and nonrecurring costs; rather, the difference is between the architecture used for voice grade loops (premised on all-fiber feeder) and that used for the nonrecurring charges for DSL-compatible and shared loops. It contends the Commission has recognized the propriety of that distinction in its earlier orders, inasmuch as voice grade loops on the one hand and DSL compatible and shared loops on the other are provisioned differently in a forward-looking environment. It goes on to cite references to copper in the FCC's definition of the line sharing element and in its discussion of DSL-compatible loops, noting, among other things, the FCC's statement that "xDSL cannot work over fiber, and it

[306] Rhythms/Covad's Initial Brief, pp. 9-10.

generally requires a 'clean' (i.e., conditioned) copper loop."[307] According to Verizon, the most efficient technology currently available for DSL transmission and for line sharing comprises copper cables. Verizon acknowledges that there are various ways of accessing a DSL compatible or shared copper loop facility, some of which may entail use of a fiber feeder, but it insists that "only the 'home-run', end-to-end-copper arrangement is at issue here."[308] It adds that both provisioning arrangements being considered in the pending DSL collaborative (Case 00-C-0127) assume an all-copper loop, and Verizon therefore focused on the costs of that arrangement; the possible need to measure the costs of other arrangements that may be identified in no way impairs the forward-looking nature of the only two provisioning arrangements defined to date.

"The law of the case," as Verizon puts it, indeed contemplates copper-based DSL. The Commission fully explained that decision when it made it, and nothing presented here warrants a change, given the facts as they then existed. Those facts continue to be reflected in the provisioning arrangements considered in the Commission's DSL collaborative as of the time Verizon presented its studies, and its premise of copper-based DSL configurations was proper.

Technology, of course, continues to evolve and the configurations costed by Verizon cannot be assumed to be the last word. Alternatives to copper-based DSL are being examined in the DSL collaborative and at the FCC. They present, for most part, provisioning issues not properly before me; but I cannot ignore their implications for costing. The best way to deal with this fluidity is to revisit the matter a year from now (or

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[307] Verizon's Initial Brief, p. 171, citing Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Third Report and Order and Fourth Notice of Proposed Rulemaking (rel. November 5, 1999) (UNE Remand Order) ¶204, n. 390. Loop conditioning is explained below.

[308] Verizon's Initial Brief, p. 172.

sooner if developments in the DSL collaborative or the broader DSL market so warrant), at which time Verizon should be required to present cost studies on newly available DSL alternatives and should bear the burden of proving that it is offering DSL in the most cost-effective manner possible. For now, DSL rates should be set on the basis proposed by Verizon, adjusted to the extent discussed below; those rates should be permanent in the legal sense, subject to change only prospectively.

Loop Conditioning and
Qualification Charges

The charges examined under this heading arise because copper loops often are equipped with devices that preclude their use to support DSL. Some of these devices ("load coils") were installed to enhance the ability of longer loops (usually in excess of 18,000 feet) to transmit voice signals; others ("bridged taps") were added to increase the number of locations that a single loop could serve. All of them are incompatible, to varying extents, with use of the loop for DSL. Providing a loop capable of supporting DSL, accordingly, entails a process of determining whether the loop is equipped with any such devices ("loop qualification") and, if it is, removing them ("loop conditioning").

In confirming that incumbent LECs, regardless of whether they themselves offer DSL, were obligated to provide CLECs wanting to offer DSL access to conditioned loops, the FCC reaffirmed as well its earlier determination that CLECs would be obligated to compensate ILECs for the cost of loop conditioning; and it suggested that incumbents should be able charge for conditioning loops shorter than 18,000 feet even though networks built today would not include load coils on such loops. But, the FCC added,

> We recognize . . . that the charges incumbent LECs impose for conditioned loops represent sunk costs to the competitive LEC and that these costs may constitute a barrier to offering xDSL services. We also recognize incumbent LECs may have an incentive to

> inflate the charge for line conditioning by including additional common and overhead costs, as well as profits. We defer to the states to insure that the costs incumbents impose on competitors for line conditioning are in compliance with our pricing rules for nonrecurring costs.[309]

Issues are presented with respect to both the loop conditioning charge and the loop qualification charge. As nonrecurring charges, their specific levels are affected by the questions pertaining to nonrecurring charges generally, discussed separately below. This section considers qualitative issues related to recovery in principle of these costs.

1. Conditioning Charges

Verizon contends that the FCC has authorized recovery of loop conditioning costs on at least three occasions and, pointing to the passage previously cited, has authorized recovery of load coil removal costs even where placement of the coils would not be called for under current standards.[310]

Rhythms/Covad charge that the proposed conditioning charges are anticompetitive and set so high that they exceed "by many multiples" the entire forward-looking cost of a new loop.[311] They urge a conditioning charge of zero, arguing, first, that a forward-looking, TELRIC-compliant, all-fiber-feeder network would impose no need to condition loops and that recovery of loop conditioning costs, accordingly, is at odds with TELRIC. Moreover, applicable design standards for copper networks have obviated the installation of load coils and excess bridged tap for 20 or 30 years, and plant complying with those standards likewise should require no conditioning. Rhythms/Covad cite a decision by the Utah Commission disallowing conditioning costs as inconsistent with TELRIC, and they argue that while the FCC has recognized the right to recover the cost of providing

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[309] UNE Remand Order ¶¶193-194.

[310] Verizon's Initial Brief, p. 175, and cases cited there at n. 408.

[311] Rhythms/Covad's Initial Brief, p. 10, citing Tr. 4,181-4,182.

conditioned loops, "it has consistently limited recovery to the efficient forward-looking cost of conditioning," as set forth in 47 CFR 51.507(e).[312]

Again raising the issue of inconsistency between recurring and nonrecurring charges, Rhythms/Covad contend as well that Verizon is seeking to recover, through recurring charges based on a fiber network, the cost of a network from which load coils and excessive bridged tap have been eliminated, while also recovering, through nonrecurring conditioning charges, the cost of eliminating those devices. Citing decisions by the California, Massachusetts, and Illinois Commissions, they warn against the risk of allowing double recovery by using different network constructs for the calculation of recurring and nonrecurring charges. The CLEC Alliance argues to similar effect, citing, among other things, the Massachusetts Commission's finding that Verizon had misinterpreted the FCC's position and that the FCC's authorization of loop qualification and conditioning costs applies only to states that have assumed copper feeder for purposes of calculating TELRIC.[313]

Verizon, meanwhile, contends that the CLECs unreasonably understand the FCC as having given with its left hand (the authorization of conditioning charges) what it then immediately took back with its right hand (by precluding such charges under TELRIC). It points out that current guidelines do not call for immediate elimination of bridged taps and load coils and are not violated by the network continuing to have that equipment. While the CLECs cite cases from other jurisdictions, it says, the precedent in New York call for allowing the costs, as do the FCC and other states not cited to

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[312] Rhythms/Covad's Initial Brief, p. 12. The FCC rule provides, in pertinent part, that "nonrecurring charges . . . shall not permit an incumbent LEC to recover more than the total forward-looking economic cost of providing the applicable element."

[313] CLEC Alliance's Initial Brief, p. 136.

by the CLECs. Verizon recognizes that some regulatory decisions do support the CLECs' position, but it urges the Commission to reject them.

In their reply brief, Rhythms/Covad again dispute the premise that DSL implies a copper construct, citing a recent FCC ruling that, in their view, eliminates any doubt that fiber loop facilities are included within the line sharing UNE.[314] They do not dispute Verizon's argument that current network standards do not require immediate removal of load coils and bridged tap, but contend simply that Verizon's competitors should not pay for that removal as it goes forward. The CLEC Alliance suggests that it would improperly discriminate between classes of customers using the same loop to set charges on the basis of the purpose--DSL or not--to which the loop is to be put.

Once again, I see no basis for recommending changes in the Commission's earlier determinations. The FCC seems clearly to have contemplated recovery of reasonable loop conditioning charges, including in situations where load coils would not have been installed under current design guidelines. The Massachusetts decision cited by Rhythms/Covad seeks to overcome the inconsistency alleged by the CLECs by inferring a limitation on the FCC's authorization of conditioning cost recovery, but it seems to me that any such limitation, if intended by the FCC, ought to have been stated more explicitly. Subject to the quantitative adjustments required by other aspects of this recommended decision and to possible prospective change in light of the reexamination of DSL provisioning technology discussed in the preceding section, I recommend allowance in concept of Verizon's loop conditioning charges.

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[314] Rhythms/Covad's Reply Brief, p. 8, citing in the Matter of Deployment of Advanced Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, Third Report and Order on Reconsideration, (rel. January 19, 2001)(Line Sharing Reconsideration Order) ¶10.

2. Loop Qualification Charges

Loop qualification refers to the process by which it is determined whether a particular loop can be used for DSL transmission. The dispute revolves around the CLECs' access to information needed to make that determination.

Verizon's "mechanized loop qualification" service affords basic information on loop qualification by querying an electronic database. CLECs wishing additional information are offered "manual loop qualification" and "engineering query," which involve "checking other databases, performing automated MLT tests on loops, and checking paper outside plant records (known as 'cable plats')"[315] These additional services incur additional charges.

Rhythms/Covad and the CLEC Alliance maintain that Verizon's proposal fails to meet the FCC's requirement that CLECs be provided all loop qualification information that exists anywhere in the incumbent's system and that the price for such access be based on the use of efficient forward-looking technology.[316] Rhythms/Covad contend that mechanized loop qualification queries a database that was installed, for the most part, over 20 years ago to serve Verizon's own needs as a retailer and that lacks the information--which should have been installed under Verizon's own internal procedures as well as industry standards--that the CLECs need. According to Rhythms/Covad, manual loop qualification "masks the detailed loop makeup information that a CLEC needs to determine whether a loop will support [its] services, and again provides as a chief output an indication of whether the loop will support [Verizon's] affiliated data service."[317] To obtain further information, CLECs must use manual loop qualification and engineering query, both of them slow and expensive manual

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[315] Verizon's Initial Brief, p. 180.

[316] Rhythms/Covad's Initial Brief, pp. 18-19, citing UNE Remand Order ¶430 and Local Competition Order ¶685.

[317] Rhythms/Covad's Initial Brief, p. 21.

processes. In Rhythms/Covad's view, Verizon would, in effect, require CLECs to cover the costs of correcting its own failure to develop a proper loop database, and a forward-looking, TELRIC-compliant cost study would assume, in contrast, a market in which Verizon's network took account of the needs of its CLEC customers. They therefore urge that Verizon "provide CLECs direct electronic access to the loop makeup information contained in [its databases]. To meet the requirement of pricing based on forward-looking, efficient technology, the charge for this access should be minimal."[318] Rhythms/Covad and the CLEC Alliance cite decisions in other jurisdictions holding that the proper rate for loop qualification information is zero inasmuch as a forward-looking network would impose no need to qualify loops for xDSL service.

Verizon contends that direct access to the existing databases will be of little benefit to the CLECs inasmuch as the databases lack much of the loop makeup information the CLECs need; and it disputes the premise that any information not in the databases should, in fact, be there. It explains that the databases are populated not all at once but only as loops are updated or replaced; to do otherwise would be inefficient. If such a database were prepared, its users--including the CLECs--should be responsible for its cost, something they decline to recognize: "By rooting a purportedly forward-looking analysis in historical arguments about what Verizon should have done in the past, CLECs are seeking to avoid <u>any</u> contribution to loop qualification or make-up costs."[319] In reply, Rhythms/Covad deny that they are demanding immediate implementation of a fully populated database; rather, they contend, the FCC entitles them to the same loop makeup information that is available to Verizon and the cost of access to that information must be forward-looking. In their view, moreover, compliance with Verizon's initial guidelines and industry standards would already have produced a fully populated database.

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[318] <u>Id.</u>, p. 23.

[319] Verizon's Initial Brief, p. 182 (emphasis in original).

Whether to allow CLECs direct access to the database is a provisioning issue not properly posed here; and I see, in any event, little basis for questioning Verizon's claim that affording such access would do little to reduce the costs incurred by the CLECs, given that the database lacks much of the information they would need. The question then becomes one of how to treat the loop qualification costs that result from the limited ability of the automated database to provide the needed information.

The issue resembles the one posed by Verizon's house and riser inventory records. Here, too, a database designed with competitors' needs in mind might well have contained much more of the needed information; a strict TELRIC construct therefore might assume the existence of such a database; yet adopting that construct incurs the risk of assuming a "fantasy" record keeping system. As in the case of house and riser records, accordingly, the better course in principle appears to be to allow these costs, subject, like loop conditioning costs, to generally applicable adjustments and prospective revision in light of new technological assumptions.

One additional factor should be recognized here, however. Rhythms/Covad witness Riolo credibly suggests that compliance with Verizon's own guidelines related to its databases would have resulted, over the past 20 years, in more of the pertinent information being included, given the frequency of plant additions and rearrangements.[320] Verizon's response stresses the soundness of its historical procedures for developing its databases--and does so persuasively--but affords no assurances regarding the extent to which those procedures were in fact complied with. In view of that failure of proof, and to provide additional incentive to develop the database as a tool that meets the CLECs' needs as well as Verizon's own needs as a retailer, I recommend a downward adjustment of 25% in Verizon's loop qualification charges. (The adjustment should be

[320] Tr. 4,245.

in addition to those flowing from other, general, recommendations regarding Verizon's cost study.)

3. Recurring vs. Nonrecurring Charges

Citing the FCC's observation that nonrecurring charges associated with loop conditioning could raise barriers to entry,[321] the CLEC Alliance urges use of recurring, rather than nonrecurring charges for the recovery of any conditioning and qualification costs that may be allowed. It contends that recurring charges would be consistent as well with the accounting methods ordinarily used by telecommunications carriers, inasmuch as conditioning expenses, which render a loop DSL-compatible indefinitely, should be seen as a capital expense no different from that associated with initial installation of the loop. It points to SBC's use of a recurring charge for recovery of conditioning costs.

Verizon, however, maintains that the costs are incurred on a nonrecurring basis and that a nonrecurring charge therefore better reflects cost causation principles; comports with standard accounting procedure, which treats these costs as expenses; ensures cost recovery; and associates the costs with the CLEC causing it rather than with hypothetical future users.

Verizon's interest in ensuring that its costs are recovered would not alone warrant use of nonrecurring charges if recurring charges were otherwise proper. But the other factors cited by Verizon--primarily cost causation and standard accounting principles--suggest the use of nonrecurring charges to recover these clearly nonrecurring expenses.

Line Sharing

As already explained, "line sharing" refers to an arrangement in which a CLEC is given access to the DSL transmission capability of a copper loop that is also used by Verizon to provide retail voice grade services. The voice

[321] UNE Remand Order, ¶194, quoted above.

traffic is transported in the lower frequency range and the data traffic in the higher frequency range; the voice and data traffic are routed to their respective switches through the use of devices referred to as splitters. Two scenarios for the provisioning of line sharing have been developed in the ongoing DSL collaborative and are considered in Verizon's cost studies. In scenario A, the splitter is located in the CLEC's collocation space in Verizon's central office; in Scenario C, it is mounted on a relay rack located in Verizon's central office space.

In the Line Sharing Opinion, the Commission resolved a variety of issues related to line sharing costs. Some of those determinations spawned additional issues to be considered here.

1. Wide Band Testing Service Rate

In the line sharing track of the proceeding, Verizon proposed to recover the cost of the metallic test access unit (MTAU) and associated equipment and support for wide band testing (WTS), arguing that the addition of electronic devices to the loop and the advent of line sharing meant that the previously adequate metallic line test (MLT) would no longer suffice. It maintained that the additional costs associated with WTS would be offset by the savings associated with a reduced number of field dispatches to diagnose problems. CLECs objected to the charge, arguing that they were entitled under FCC regulations[322] to deploy their own testing systems and that TELRIC precluded allowing Verizon to charge CLECs for functions that the CLECs would perform for themselves. The Commission determined that CLECs wishing to deploy their own testing systems should not be required to pay for Verizon's testing service, and it accordingly made the charge optional. It noted, however, that CLECs would be required to bear the cost of additional service dispatches that might be necessitated by Verizon's not performing WTS on the loops in question.[323]

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[322] 47 CFR §51.319(h)(7).

[323] Line Sharing Opinion, pp. 25-27; Line Sharing Rehearing Order, p. 4.

In the present module of the proceeding, Verizon acknowledges (at least at the briefing stage) that the charge will be optional.[324] Issues are posed, however, regarding the level of the charge to be imposed on CLECs electing the service.

Equipment Refund. Rhythms/Covad contend, first, that Verizon will be receiving a refund related to testing equipment and that CLECs should benefit from the refund to the same extent as Verizon.[325]

Verizon notes that the refund relates to the vendor's failure to integrate the WTS into DSLAM equipment that Verizon was then planning to use for its retail service, and it argues that even if such an arrangement were optimally efficient for a retail service, that would not be the case in a wholesale environment in which each DSL provider could choose its own splitter and DSLAM equipment. It insists that DSLAM/WTS integration is possible only for retail testing and is irrelevant to the present issue.[326] Rhythms/Covad do not respond.

Although Rhythm/Covad attempt to attribute at least a part of the WTS costs Verizon seeks to recover to the transactions that gave rise to the refund, Verizon has shown those transactions to relate solely to retail operations. I see no basis for recommending sharing of the refund.

Demand for WTS. In view of the Commission's determination to make WTS optional, Verizon reduced the forecast demand for the service, thereby increasing the unit cost; it assumed that no unaffiliated CLEC would purchase the service inasmuch as most have claimed it was unnecessary. Rhythms/Covad

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[324] Verizon's Initial Brief, p. 187. Rhythms/Covad note Verizon's suggestion in testimony (Tr. 3,203) that the issue be revisited and objects to doing so; but Verizon does not pursue that request, which, in any event, would not be warranted.

[325] Rhythms/Covad's Initial Brief, pp. 26-27. The details of the refund and its background comprise proprietary information relating to transactions between Verizon and its equipment vendors.

[326] Verizon Initial Brief, pp. 192-193.

contend this means that if any CLEC actually does purchase the service, Verizon will overrecover and the CLEC will be significantly overcharged. Pointing out that Verizon has developed demand forecasts for other optional rate elements, they charge that Verizon has declined to address the demand issue here in a credible manner; they urge, therefore, that the Commission assume the level of demand originally proposed by Verizon. Verizon responds that retention of the original demand level would cause it to underrecover its costs and that the rate should be modified on a prospective basis as additional demand data become available.

Some adjustment for lower demand seems needed, but Verizon has shown no basis for its premise of zero. Still, what Rhythms/Covad see as the lack of seriousness in that premise does not provide a basis for disregarding the legitimate qualitative argument underlying it. It is impossible to forecast with any degree of confidence whether actual demand will be closer to zero or to Verizon's initial premise, and I recommend, as the most reasonable course of action in these circumstances, setting the unit rate on the basis of a demand midway between those parameters. The rate should be subject to prospective modification in one year on the basis of actual demand data.

Fill Factor. Rhythms/Covad contend that Verizon computed the 60% fill factor for Metallic Test Access Units (MTAUs) on the basis of a demand estimate lower than that used to compute unit costs, thereby understating it. It urges recalculation of the fill factor in a consistent manner. Verizon defends the 60% factor as conservative, inasmuch as the differing capacities of a DSLAM (576 lines) and a metallic testing unit (500 lines) depress MTAU utilization.

Although objecting on those grounds to Rhythms/Covad's proposal, Verizon nonetheless recognizes "that higher demand levels will drive this maximum utilization up."[327] It should,

[327] Verizon's Reply Brief, p. 108.

accordingly, recalculate the fill factor on the basis of the higher demand here recommended.

Land and Building Double Count. In the Line Sharing Opinion, the Commission reduced the WTS rate to avoid a double count of land and building costs. It reasoned that all land and building costs were already recovered through the network element rates set in the First Proceeding and that extending the L&B factor to a new item before it was adjusted in Module 3 would permit overrecovery. Rhythms/Covad maintain that Verizon failed to adjust the L&B factor in a manner that took account of all network elements--in particular, line sharing was excluded from the recalculation--and that the Commission's determination therefore continued to require exclusion of the factor from WTS rates. Verizon contends, however, that the Commission misunderstood the purpose of the L&B factor, which does not seek to recover an identified level of current or historical cost but to use historical ratios to estimate the forward-looking land and building costs associated with a given level of investment. Incremental investments have incremental costs associated with them.

Rhythms/Covad counter that it is Verizon that misunderstands the Commission's mandate, and that Verizon has never tried to demonstrate that the L&B costs associated with WTS are additional costs in the manner it suggests. Under Verizon's logic, applying the factor to any investment would identify additional forward-looking costs. They assert that "the Commission truly had the stronger logic on this point when it recognized that the L&B factor must be calculated using the universe of investment and then applied to determine forward-looking L&B costs for that universe."[328] They add that the L&B factor is flawed in its reliance on historical investment-to-investment ratios, which may result in the allocation of greater land and building costs to WTS than would be incurred on a forward-looking basis that takes account of more compact equipment.

[328] Rhythms/Covad's Initial Brief, p. 31.

Verizon responds that the validity of applying a factor to a particular equipment item does not depend on whether the item was included in the development of the factor but only on whether the factor was appropriately calculated for the class of equipment to which the item belongs. It insists there is no double recovery, inasmuch as the previous application of the factor to non WTS equipment makes no allowance for the land and building requirements associated with the WTS equipment. It adds that the attack on the use of historical data in developing the factor has already been rejected by the Commission.

Verizon argues, in essence, that the double counting of land and building costs is impossible a priori. It sees the issue not as one of fact--whether the costs proposed to be recovered already have been recovered elsewhere--but as one of definition; in its view, the L&B factor is not a mechanism for recovering a measurable body of costs, but a ratio defining the costs to be associated with each increment of equipment, however many.

The Commission, however, has made it clear that the issue is one of fact. In the Line Sharing Opinion, it clearly contemplated a measurable body of costs to be spread over the proper number of elements: "All land and building costs are already recovered in the network element rates set in the First Network Elements Proceeding, and to extend the factor to a new item before it is adjusted in Module 3 would permit overrecovery of the costs."[329] Soon after, in its opinion in the collocation module of the proceeding, the Commission again held that it is necessary to consider the amount of land and building costs to be recovered, not merely the amount of investment to which the factor is to be applied:

> To the extent collocation-related land and building costs are incremental to those recovered through the Phase 1 CCF--[Verizon's] premise--there indeed would be

[329] Line Sharing Opinion, pp. 27-28 (footnote omitted).

> no double count. But the incremental land and building costs associated with collocation...have not been shown to be anything but minimal, accounting for less than 1% of incremental land and building investment since 1994, and that result is consistent with the premise that collocation arrangements, in large part, are housed by making additional use of existing space. On that basis it can be concluded that nearly 100% of currently recognizable land and building costs already are recovered through existing UNE rates, and that extension of the land and building CCF to collocation, without commensurately adjusting the factor in a way that will not be done until Module 3 is decided, would over-recover those costs.[330]

The issue thus comes down to whether the L&B factor has been recomputed in a manner that satisfies the precondition set in the Line Sharing Opinion for its application to WTS. Inasmuch as all UNE rates are now being set simultaneously, it appears that the L&B loading is being consistently spread over all units to which it should apply, and the precondition therefore has been met.

2. Recovery of Line Sharing OSS Costs

In the Line Sharing Opinion, the Commission adopted Verizon's proposal to set as yet unknown operation support system (OSS) costs related to line sharing at zero, subject to true-up once the costs could be better estimated. Verizon initially proposed continuation of that arrangement. In its supplemental testimony, however, it identified a portion of the relevant OSS costs, equal to 22¢ per line per month, and it asks that recovery of that cost be approved now but that the rate remain temporary to permit further adjustment.

[330] Opinion No. 00-8 (issued June 1, 2000)(Collocation Opinion), pp. 10-11 (footnotes omitted).

Rhythms/Covad object, citing the FCC's stated concern that OSS development was seldom driven by unbundling considerations alone and that incumbent LECs should not be permitted to attribute an unreasonable portion of their OSS development costs to line sharing unbundling.[331] They maintain that Verizon has failed to meet its evidentiary burden of distinguishing the portion of the costs incurred to benefit CLECs from that incurred to benefit Verizon's own operations and add that partial recovery of the costs now will complicate their analysis. Verizon responds that it has submitted detailed information on the rationale for the rate at issue, including the purpose, justification, and cost of the OSS enhancements involved.[332]

I recommend adoption of Verizon's proposal. Its testimony fully describes the costs it proposes to recover, and they appear unrelated to any of its retail activities. As it suggests, the rate element should remain temporary, to permit further adjustment; but it should be clear that any such adjustment could be not only upward, to reflect reasonable additional costs, but also downward, to capture any newly adduced savings.

3. Splitter Administration and Support Charges

Verizon proposed a "splitter maintenance" charge, said to recover actual splitter maintenance costs along with wholesale marketing support costs related to line sharing. In the Line Sharing Opinion, the Commission held that the charge could not be applied to line sharing scenario A, inasmuch as the

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[331] Rhythms/Covad's Initial Brief, p. 33, citing Deployment of Wire Line Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket 96-98 (released December 9, 1999)(Line Sharing Order) ¶106.

[332] Verizon's Reply Brief, p. 109, citing Tr. 3,208-3,212.

splitter would be located in the CLEC's collocation space and Verizon would incur no maintenance costs. Verizon sought rehearing and proposed a reduced charge for scenario A, which excluded the actual splitter maintenance costs, leaving only the other costs sought to be recovered through the imprecisely named charge. The Commission denied the petition, holding that there might indeed be no reason to distinguish scenario A from scenario C with respect to the non-maintenance costs recovered through the reduced charge, but that it was less clear whether that meant that the costs should be recovered in scenario A or, instead, removed from the scenario C charge. It allowed Verizon to submit supplemental testimony on the issue.[333]

Verizon's supplemental testimony proposes two charges. For scenario A, the charge would be limited to those recovered through the wholesale marketing ACF and those recovered through the other Support ACF. For scenario C, it would include those costs along with maintenance costs recovered through the network ACF. Verizon contends that each item represents a cost properly incurred with line sharing.

Rhythms/Covad object to imposition of even the reduced charge on scenario A CLECs, contending that Verizon has failed to provide the required "detailed explanation of how the costs involved are associated with CLEC splitters and of the extent to which those costs go unrecovered through other charges."[334] They argue, first, that Verizon has shifted some 46% of its original network ACF (the application of which to scenario A was rejected) to the other support ACF, thereby attempting to recover under a different name charges already disallowed. They maintain further that their own equipment suppliers perform product management, advertising, and customer interfacing functions with respect to the splitters and that Verizon is not involved in those processes. Nevertheless, Verizon's proposed

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[333] Line Sharing Opinion, pp. 33-34; Line Sharing Rehearing Order, pp. 4-7.

[334] Line Sharing Rehearing Order, p. 7.

charge would have the CLECs bear those costs as well as costs (in the wholesale marketing ACF) of Verizon's retail advertising in competition with CLECs and litigation expenses that can hardly be deemed marketing costs.

Rhythms/Covad allege further that the charge violates Verizon's own costing method, which is to apply ACFs to its own revenue producing investments; in the case of a splitter, there is no Verizon investment and no Verizon revenue, and the amount of the charge is based on a hypothetical estimate of the costs that Verizon would have incurred had it purchased a splitter. They warn of double recovery, inasmuch as Verizon recovers the costs at issue by applying the wholesale marketing ACF and the support ACF to the collocation space and other investments attributable to line sharing. With respect to the actual maintenance charges that would be imposed in scenario C, Rhythms/Covad contend that splitters are passive devices requiring little if any maintenance and that Verizon has not borne its burden of showing the contrary. Finally, they complain that the charge is anticompetitive, noting that the scenario A charge is $37.32 per month for the very first line sharing customer signed up, compared with Verizon's affiliate's retail line sharing service charge of $39.95.

Verizon responds that the components shifted from the network ACF to the support ACF relate not to maintenance costs as such but to support-related costs incurred even when the splitter is located in the CLEC's cage.[335] It denies any double recovery, explaining that application of the ACFs to collocation space, tie cables, and terminal block investments simply recover the costs associated with those items but not with the splitter. It contends there is no reason to relieve CLECs of the costs they impose on Verizon simply because they incur costs of their own; that the record shows that there are indeed maintenance costs associated with splitters[336]; that Verizon incurs wholesale

[335] Tr. 3,641-3,642.

[336] Tr. 3,250-3,251.

marketing and wholesale product management costs in providing the services that CLECs require and that these services are required for line sharing to at least the same extent as for other UNEs; and that these costs are not recovered through other UNE rates. It reiterates its view that ACFs are intended not to recover a particular incurred level of expense but to identify a relationship between investment level and anticipated expense level and that once the ACF ratio is computed, it should be applied to all forward-looking investment. On that premise, it says, it is reasonable to determine the charge at issue by applying the ACF to splitter investment even if Verizon does not own the splitter--"splitter investment is being used by Verizon not as a cost to be recovered in its own right, but as a base for the estimation of line sharing related [administration and support] cost."[337]

In their reply brief, Rhythms/Covad insist Verizon has shown no basis for recovering historical advertising costs incurred in a retail context, and they reiterate their claim that Verizon's wholesale marketing organization spends considerable resources in opposing competitors in regulatory litigation such as this proceeding, which would not exist in a forward-looking competitive wholesale environment. The costs of such litigation, they say, should not be imposed on the very competitors against whom it is directed.

Many of the arguments on this issue echo more generic concerns about ACFs and, in particular, about whether Verizon has adequately removed costs associated with its own retail activities that are not incurred to benefit--and, indeed, may be incurred to compete against--Verizon's wholesale customers. Those arguments are addressed by the recommended adjustments to ACFs generally, which should be applied here as well.

The question unique to splitters is whether ACFs should be applied to an item of hardware in which Verizon itself has no investment. Verizon maintains the CLEC's splitter

[337] Verizon's Initial Brief p. 202.

investment is simply a surrogate base to which the ACF can be applied, and that it is proper to do so because line sharing entails real costs that should not go unrecovered simply because the principal piece of hardware associated with the service is not owned by Verizon. The CLECs insist that doing so is fundamentally at odds with the theory underlying the construction of ACFs.

It seems to me that the CLECs have the better of this argument. What is at stake is not consistency for its own sake--i.e., the claim that ACFs are applied to Verizon's investment and therefore should not be applied to CLECs' investment--but the possibility that the ACFs would have been calculated differently had the historical investment base included investment other than Verizon's own. In that event, the denominator of the ACF ratio would have been greater and the ACF correspondingly lower. But applying the existing ACFs to investment not owned by Verizon entails a clear risk of overrecovery.

This is not to say that Verizon incurs no costs in connection with line sharing of the sort recovered through the ACFs at issue. Its testimony shows that the costs (once those related to retail activities are properly removed) are real, though care must be taken to eliminate as well all costs related to relationships with equipment vendors. But despite its burden of proof, it has not proposed a reasonable way to identify and recover those costs; and recovery therefore should be disallowed.

Finally, with specific reference to the maintenance costs proposed to be recovered from Scenario C CLECs, Rhythms/Covad have not shown splitter maintenance costs to be de minimis. If Verizon can devise and present on exceptions a better cost estimation and recovery mechanism, those costs should be allowed.

4. Line Sharing SAC Charges

Verizon's collocation service access connection (SAC) charge recovers the cost of providing the physical connection between a CLEC's collocated equipment and Verizon's network, through a connection point in a point of termination (POT) bay. For line sharing scenario A, Verizon proposed to apply two SAC charges, one for each of the connections from the POT bay to its main distribution frame. In scenario C, it initially proposed three charges--one between the POT bay and the splitter's data port and two between the splitter and the frame--but it agreed to apply only two charges, treating the POT-bay-to-splitter-to-frame series of connections as covered by a single SAC charge. In the Line Sharing Order, the Commission noted CLEC arguments that the charges were overstated, in that typical collocation arrangements involve longer cable runs than those required by line sharing, and it held that Verizon's proposed rates might be adjusted here not only on the basis of Module 3 results overall but also on the basis of average cable lengths used in the line sharing connections between Verizon and its DSL affiliate (then BANDI, now VAD).[338]

In support of its proposal to apply two SAC charges, Verizon submitted an analysis of 11 wire centers in which splitters had been provisioned for CLECs and for which cable length data for both VAD and collocators were readily available. It claims the survey to have shown that the average total length of cable needed for a line sharing arrangement was more than double the average cable length associated with a conventional collocation arrangement, and that the relationship applied to both unaffiliated CLECs and VAD.

Rhythms/Covad dispute the significance of the survey, charging that it shows only that Verizon had implemented line sharing in a manner that requires excessive cabling. They see no showing that the installations reflected efficient network design. They note as well that in Phase 3 of the First Proceeding, the Commission rejected Verizon's 258-foot estimate

[338] Line Sharing Order, pp. 36-37.

of the cabling required by a conventional collocation arrangement and instead used a figure of 165 feet, derived from the AT&T/WorldCom collocation cost model that the Commission there determined should be used as a starting point for analysis. They charge on this basis that Verizon's survey results are unreasonable on their face and urge that Verizon be required to price line sharing on the basis of a more efficient arrangement, using shorter cabling. They suggest the SAC charge for line sharing should be equal to a single SAC connection reflecting a cabling distance of 165 feet, the same as the Commission adopted for standard collocation.

Verizon observes that the Commission may have adopted the 165-foot figure for purposes of setting the collocation SAC charge, but that the figure is irrelevant to the comparison of actual line sharing cable length (556 feet) with actual conventional collocation (258 feet).

Verizon has established that line sharing requires enough cabling to warrant the imposition of two SAC charges, but it has shown no basis for modifying the Phase 3 determination that the SAC charge should be premised on 165 feet of cable. The charge here should be computed accordingly--two SAC charges, each set on the basis of 165 feet of cable.

5. Cooperative Testing

Cooperative testing refers to a joint effort by a Verizon technician and a CLEC technician to ensure, on the installation of a line sharing arrangement, that it is properly installed and working. Verizon proposed a charge of $37.15 per loop for cooperative testing, which it contends recovers the legitimate costs associated with the effort.

Rhythms/Covad contend that the charge (and the underlying activity) are attributable to Verizon's inability to deliver a loop properly and that CLECs should not be required to pay for work and then to pay for testing to make sure that the work was actually performed; they contend "that is silly and

certainly results in double recovery for [Verizon]."[339] Asserting that CLECs incur and bear their own costs in connection with cooperative testing and that Verizon's proposed rate requires them to bear Verizon's costs as well, they note that the Massachusetts Commission has adopted a rate of zero for cooperative testing. At a minimum, they suggest, the Commission should require Verizon to waive the charge wherever it is Verizon's fault that a loop fails to work and to bear the burden of identifying those instances in which it may be entitled to recover the charge.

Verizon contends that no party has challenged the level of the charge and that the costs, like others, are necessarily and efficiently incurred in the course of carrying out its obligation to provide access to UNEs. It characterizes cooperative testing as simply another quality assurance procedure and sees no difference between these costs and all others.

In contrast to a stand-alone DSL installation, which involves the installation and testing of a new line, line sharing involves use of a line already known to be carrying dial tone. That tends to negate at least one possible source of trouble that may be attributable to Verizon. In these circumstances, it seems reasonable to allow imposition of the cooperative testing charge; to provide for its waiver if the trouble is attributable to Verizon; but to require the CLEC to bear the burden of showing a waiver to be warranted.

NONRECURRING CHARGES

Introduction

Nonrecurring costs (NRCs; the abbreviation refers as well to the nonrecurring charges intended to recover those costs) have been defined by Verizon as "one time costs that are incurred in responding to a carrier's request for the initiation, change, or disconnection of service."[340] To state the

[339] Rhythms/Covad's Initial Brief, p. 24.

[340] Verizon's Initial Brief, p. 288.

matter most generally, the costs are determined by estimating the work times needed to perform the required activities and multiplying them by the appropriate labor rates. NRCs have been a nettlesome issue since Phase 2 of the First Proceeding and continue to be controversial here; the issues are both complex and important, inasmuch as CLECs regard NRCs as upfront impediments to market entry.

In Phase 2 of the First Proceeding, the Commission found that Verizon had failed to meet its burden of proof with regard to NRCs and that the record could have justified rejecting its NRC presentation in toto. Doing so, however, would have been tantamount to finding that the costs at issue were zero, clearly an incorrect conclusion, and the Commission therefore set reasonable placeholder NRCs at a level approximately 57% below Verizon's proposals.[341] Verizon's failures of proof related to both the forward-looking nature of its study and its method for estimating work times.

In Phase 3, Verizon proposed additional NRCs. The Commission found that Verizon's estimating methods had been improved in some respects, and it approved several of the new NRCs. It rejected others, as to which the new estimating method had not been applied. It also strengthened the procedure used to ensure that NRCs did not double recover costs already recovered through carrying charge factors.

In the present proceeding, Verizon claims to have presented studies designed to satisfy the earlier criticisms. Most of the studies were based on the nonrecurring cost model (NRCM); of the nine studies that did not rely on the NRCM, none are specifically controverted.[342] As a final introductory matter,

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[341] The basis for the 57% adjustment is set forth in the Phase 2 Opinion, pp. 53-54; in general, the adjustment represented the average effect of applying, in each work function for which Verizon had conducted a task oriented costing (TOC) analysis, the minimum rather than the mean TOC data point.

[342] Verizon's Initial Brief, p. 289, n. 689, listing the nine non-NRCM studies.

NRCs related to DSL matters pose separate issues and are discussed below under a separate heading.

Summary of Verizon's Study

Verizon summarizes the operation of its NRCM as follows:

> In order to calculate NRCs, the NRCM used detailed lists of work activities that were developed through careful analysis of work flow in all work groups that are involved in responding to CLEC requests for UNEs. The work flow analyses were developed by Verizon's Service Costs personnel, working closely with personnel from the groups actually involved in performing this work on a day-to-day basis. This effort ensured that the studies provided a comprehensive list of the individual work steps that could be involved in responding to particular types of CLEC requests. The NRCM uses time estimates for the individual work activities that were based upon either surveys or special studies, to arrive at the costs of particular activities. The NCRM allows these time estimates to be adjusted to reflect estimates of the frequency with which particular activities will be performed in both the current and in the future environment. Thus, the NRCM permits identification of forward-looking NRCs.[343]

Verizon said it first determined work times using today's methods of operations and then adjusted those results to reflect the effects of planned mechanization efforts. It therefore contends that the study is forward-looking, resulting in NRCs that often are substantially less than current costs. Verizon explains further, however, that some activities will continue to require manual, rather than mechanized, work effort and that its studies allow for that.

With two exceptions (studies of the telecom industry services operating system [TISOC] and mechanized loop assignment center [MLAC]), Verizon developed the work times in its NRCM studies by surveying personnel involved in the studied activities. It describes the process by which it developed

[343] Verizon's Initial Brief, pp. 289-290.

survey questionnaires on the work activities identified as pertinent and its effort to obtain as many survey responses as possible from throughout the former Bell Atlantic region.[344] The survey results were then reviewed for reasonableness by a panel of 18 experts familiar with the processes involved. The panel of experts also adjusted the survey results to reflect forward-looking OSS and other mechanization efforts. In addition, Verizon engaged NERA to "investigate the precision of the study"[345]; NERA calculated a 95% confidence interval.

For TISOC activities, Verizon used a time-and-motion study developed by Anderson Consulting on the basis of actual observations of the processing of over 800 service orders in the Boston and New York TISOCs. The results were adjusted downward to reflect the forward-looking effects of OSS electronic interfaces. Time estimates for MLAC activities were based on a monthly productivity report, which was used to develop the average time taken by an assignment clerk to resolve cable and pair assignment per line for those assignments that cannot flow through the mechanized loop facility assignment center system (MLFACS). Only 4% of MLAC cost per assignment is reflected in the cost studies, however, on the premise that 96% of orders would flow through on a mechanized basis.

AT&T and the CLEC Alliance challenge various aspects of Verizon's NRC studies. General issues related to TELRIC compliance are considered first, followed by specific concerns regarding study method and components.

Compliance with TELRIC and Network Model

1. Arguments

AT&T sees as the "most glaring flaw" in the NRC study its grounding in Verizon's existing embedded network rather than in the forward-looking network modeled for recurring rates.[346]

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[344] Id., pp. 292-293 and record citations therein.

[345] Tr. 2,684.

[346] AT&T's Initial Brief, p. 178.

AT&T contends that Verizon justifies that approach on reasoning pressed and rejected in Phase 2 of the First Proceeding, citing Verizon's testimony that the starting point for its NRC study was its existing and known network,[347] and it asserts that Verizon's forward-looking adjustments merely pay lip service to TELRIC requirements. It cites the Commission's statement, in the Phase 2 Opinion, that Verizon "insists it has carried that burden [of showing that its claimed costs reflect a least-cost forward-looking system] by showing how its existing processes will be changed by foreseeable mechanization; but it thereby assumes, instead of proving, that the result of that process will be the desired, least-cost forward-looking system."[348] Contending that the Commission has since reaffirmed that rationale, AT&T maintains that it requires rejection of the present study in its entirety as well.

The CLEC Alliance argues to similar effect, characterizing Verizon's forward-looking adjustments to its backward-looking study as "a chimera that cannot possibly salvage the fundamentally flawed assumptions underlying the model," and arguing that to produce TELRIC compliant NRCs, Verizon would have to totally abandon its study and develop a new one using the same forward-looking network construct as is used in studying recurring costs.[349] Among other things, the CLEC Alliance notes that while the recurring costs study assumed 100% fiber feeder with electronics in both the field and the central office, the NRCs for CLEC customers assume manual cross-connections at the main distribution frame.

In response, Verizon contends that the network assumed for purposes of NRC studies differs from the current network in its reflection of the full impact of all planned mechanization efforts and that the resulting costs are below Verizon's current costs. It maintains further that the studies incorporated a

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[347] Tr. 3,539.

[348] Phase 2 Opinion, p. 47.

[349] CLEC Alliance's Initial Brief, p. 121.

forward-looking system, potential cost reductions from which were captured by the use of the panel of experts familiar with Verizon's network modernization plans. It notes that the Commission has recognized that in conducting a TELRIC study, it is reasonable to start the analysis with a firm understanding of current conditions.[350] In reply, AT&T stresses that Verizon has simply adjusted its baseline assumptions to reflect its own planned upgrades to its current network and that this is a different matter from using the forward-looking network design contemplated by Verizon's recurring cost calculations.

In a related, more specific criticism, AT&T and the CLEC Alliance contend that the network construct assumed for purposes of the NRC study is different from the forward-looking network used in the recurring cost study. The forward-looking network contemplates electronic cross-connections in digital form and does not include a main distribution frame requiring costly analog connections. The NRC study, however, entails just such manual analog connections rather than the more efficient electronic cross-connections that would be made in a truly forward-looking network. In its reply testimony, AT&T offers a demonstration of how such a forward-looking network would be configured. In AT&T's view, "no amount of tinkering, or 'adjustments' by Verizon can overcome this fundamental violation of TELRIC."[351]

Verizon contends that its cost studies properly reflect the continuation into the TELRIC future of a variety of different technologies and that it is necessary to recognize the coexistence with IDLC-based architecture of UDLC-based architecture incorporating copper. The NRCs associated with the latter will require manual, copper interconnections, imposing higher costs; and a failure to allow for their recovery "would deny Verizon its right to recover the costs that it will incur in the future, a result prohibited by the 1996 Act, the Local

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[350] Verizon's Initial Brief, p. 304.

[351] AT&T's Initial Brief, p. 185.

Competition Order and the Public Service Law."[352] AT&T responds that Verizon fails to explain why recurring and nonrecurring future costs should be based on different architectures, contending that if ULDC technology is consistent with TELRIC concepts, its recurring cost model should reflect that; if it is not consistent, it should not be used as a basis for recovering nonrecurring costs. AT&T charges that Verizon is attempting to assume the network construct that increases recurring costs along with the different network construct that increases nonrecurring costs.[353] It cites the Commission's observation that TELRIC does not require allowance of actual costs based on the existing network infrastructure, and therefore sees no reason to allow nonrecurring charges associated with existing UDLC technology.

2. Discussion

Although I cannot locate, either in my Phase 3 recommended decision or the Commission's ensuing opinions, any reference in so many words to the "great" strength of Verizon's Phase 3 studies,[354] I did find in Phase 3 that Verizon had "made a credible effort to produce a forward-looking study of its nonrecurring costs, consistent with the demands of the Phase 2 Opinion."[355] The Commission accepted my recommendation, and the only NRCs that were disallowed in Phase 3 were those whose computational methods remained inadequate.

The situation here is substantially the same; if anything, Verizon's efforts to study its NRCs on a forward-looking basis represent a further improvement beyond Phase 3. As noted earlier, the fact that the studies use existing systems and costs as a starting point does not in itself vitiate their forward-looking nature, and the key is whether adequate steps

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[352] Verizon's Initial Brief, p. 301.

[353] AT&T's Reply Brief, p. 98.

[354] Verizon's Initial Brief, p. 291, citing Tr. 2,663.

[355] Phase 3 Recommended Decision, pp. 49-50.

have been taken to adjust that starting point to reflect reasonable forward-looking assumptions. Verizon's evidence details those steps, and they appear generally sufficient.

One point of concern, however, is the continued reflection of UDLC technology, which is as troublesome in the NRC context as it was in the establishment of recurring loop rates. The procedure I recommend for recurring charges should be extended to NRCs as well; they may be set for now in a manner that reflects continued use of UDLC, but they should be reduced in a year to a level consistent with IDLC alone unless Verizon can show that step to be unreasonable.

Survey Method

AT&T contends that Verizon's work time estimates are substantially overstated, citing, in its brief, a 7.49 minute interval applied to each order for the "two-wire new initial" item and noting that there may be ten orders in a work package, meaning that the time allocated to waiting for printouts would be 74.9 minutes even though a list of ten jobs is generated in less than ten minutes. It cites other instances of alleged inconsistencies in work times, including a situation in which it appears to take less time to place a four-wire cross-connect than to place a two-wire cross-connect.[356]

The CLEC Alliance challenges Verizon's survey and statistical sampling techniques, citing Verizon's witness panel's concession that NERA's calculation of a 95% confidence interval simply meant that the survey responses were similar to each other and shed no light on whether they accurately captured forward-looking costs.[357] It points as well to the Commission's decision in the DSL track of this proceeding to reject similar surveys and reduce NRCs by 70% because of Verizon's failure to insure the absence of bias in the surveys. Noting, among other

[356] AT&T's Initial Brief, pp. 187-188.

[357] CLEC Alliance's Initial Brief, pp. 123-124, citing Tr. 5,401, 5,405.

things, that the survey recipients knew that the results would be used by Verizon in litigation, it alleges opportunity for bias sufficient to taint the entire study. Beyond that, the sample was taken from throughout the Bell Atlantic region, and Verizon failed to show that it was representative of New York operations.

In response, Verizon defends its survey method, noting the absence of actual evidence of bias; the routine use of surveys as a means of determining costs; the omission of respondents' names from survey forms, precluding reward or punishment; and the review of survey results by a panel of experts. In response to AT&T, it notes, among other things, that a two-wire connection may indeed take more time than a four-wire connection given the more frequent use there of tie cables wired across distant central office locations.[358] AT&T responds that knowing how Verizon reached inconsistent numbers does not explain the differences between them.

Again as in Phase 3, Verizon has largely cured the deficiencies of its Phase 2 NRC studies. It has documented its process, compiled extensive data, and refuted the allegations of bias. While the NERA analysis of its results does not, of course, confirm their accuracy, it does assuage any concerns about the statistical validity of the study. On the basis of this record, it appears to me that Verizon has presented a reasonable study of its NRC work times.

Other NRC Issues

1. OSS Efficiency

AT&T and the CLEC Alliance charge that Verizon's study assumes backward-looking rather than forward-looking and efficient exchange of information between companies in the service ordering process. They contend, first, that Verizon assumes too high a level of manual intervention, in contrast to the less costly "flow through" of orders on an automated basis.

[358] Verizon's Initial Brief, p. 307, citing Tr. 3,563.

AT&T asserts, for example, that Verizon has reflected in its study substantial manual labor costs for its TIOSC work group, sometimes as much as 160 minutes of manual labor per order, when the actual task would be performed by the OSS itself or only minimal manual labor would be needed to return to the CLEC an order that cannot be processed. AT&T contends that Verizon returns erroneous service orders electronically in the retail environment, and that similarly efficient processes should be available in the wholesale context.

AT&T and the CLEC Alliance also contend that the "fallout" rate--that is, the percentage of orders that cannot be processed electronically--contemplated by the study is excessive. As a threshold matter, AT&T asserts that Verizon's projected fallout rates are not clearly stated and must be calculated from other data; AT&T calculated a fallout rate of 25% for a two-wire loop.[359] It argues that these high fallout rates are responsible for the frequency with which certain work activities are required, and it contends that in a properly designed system, the OSS should detect the error and automatically return the order to the originator, leaving a low fallout rate not in excess of 2%. The CLEC Alliance notes that the 2% figure has been adopted in Connecticut and Massachusetts. Finally, AT&T contends that Verizon compounds the problem by assuming not only excessive levels of fallout, but also a need for significant manual labor in multiple departments to process the anticipated fallout.

Verizon responds that this study reflects the effect of planned future mechanization efforts and that it does not merely assume levels of manual intervention but estimates them on the basis of expert opinion that AT&T has not called into question. It sees no basis for the 2% across-the-board fallout rate advocated by AT&T and the CLEC Alliance, contending that fallout rates will vary by activity, though for most UNEs, its studies reflect a 4% rate.

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[359] AT&T's Initial Brief, p. 192.

In its reply brief, AT&T advocates adoption of the 2% fallout rate which, it says, the Massachusetts Commission adopted on the basis of a record similar to the one here.[360]

While Verizon contends its fallout rate is extremely optimistic, the record does not show it to have borne its burden of proving that to be the case. Fallout rates can be expected to decline as experience is gained with more efficient OSS, and it is important that rates here be set on the premise of minimal fallout. Overall, I recommend the 2% level advocated by AT&T.

2. Alleged Inclusion of Recurring Costs

AT&T contends that Verizon has included the cost of recurring activities in its nonrecurring charges, thereby recovering those costs a second time. It asserts that in provisioning a CLEC's request, Verizon may have to perform activities that benefit its network, and the costs of such activities should be classified as recurring and recovered through recurring rates. As an example, AT&T cites field installation activities that are needed for construction of outside plant and should not be recovered through NRCs, inasmuch as they will benefit not only the first customer placing the order but future customers on subsequent orders as well. Moreover, AT&T continues, some one-time costs--such as those of capital assets--should not be seen as nonrecurring costs.

Verizon responds that it addressed the situations raised by AT&T in its rebuttal testimony. It insists that the costs are in fact nonrecurring and that they are incurred as a direct result of a request by a CLEC for service.[361]

Verizon's response is persuasive; no adjustment is needed on this account.

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[360] AT&T's Reply Brief, pp. 103-105.

[361] Verizon's Initial Brief, pp. 302-303.

3. Inclusion of Disconnection Costs

The CLEC Alliance objects to the inclusion in some connection-related NRCs of the costs of future disconnection. It contends Verizon should recover disconnection costs only if and when the actual disconnection occurs, citing decisions to that effect in various other jurisdictions. It adds that disconnection costs are normally quite low, given OSS efficiencies, and that charging the CLEC at the outset puts it at a cost disadvantage relative to the incumbent.

Verizon contends that up-front recovery of the disconnection costs is consistent with the practice in New York and elsewhere for retail and wholesale rates alike and recognizes the realities that it is difficult to recover costs once service is disconnected. Since recovery of these costs in initial rates is standard practice, it says, the CLEC can include the cost in its own initial rate to its customers without suffering a competitive disadvantage. Verizon sees no reason why it should bear the risk that these costs would not be paid when disconnection takes place.

Recovery of disconnection costs in the manner proposed by Verizon appears to be standard practice, and no persuasive reason has been presented for changing it. I recommend that Verizon's proposed treatment of the costs be approved.

4. Expedited Processing

Verizon calculated separate NRCs for standard interval installation and expedited interval installation; the costs for expedited service reflect the need to pay premium wage rates for work outside normal work shifts. The CLEC Coalition contends that the labor costs for expedited provisioning contemplate excessive non-productive overtime hours and urges that the costs for expedited service provisioning be determined on the premise that all overtime is productive.[362]

[362] CLEC Coalition's Initial Brief, p. 37.

Verizon contends that non-producing overtime--the term it favors over non-productive overtime, inasmuch as it refers not to wasted time but to time spent in necessary activities, such as travel and training, that do not provide an additional unit of service--amounted to less than 1% of total overtime hours.[363]

Whether the time at issue is characterized as non-producing or non-productive, the amount appears to be de minimis. No adjustment is needed.

NRCs for DSL Service

Issues related to the recoverability in principle of Verizon's proposed DSL costs have already been considered. This section considers more specific issues related to the computation of the loop conditioning charge.[364]

Rhythms/Covad contend that Verizon's study overstates work times by asking respondents to estimate the time it takes to perform the activity in question rather than the time it ought to take. It characterizes the survey results as "far out of bounds" in the view of other experts in the field and contends, in some instances, that the numerical range of the responses was "ridiculously broad."[365] They disparage Verizon's effort to validate its study results by comparing them to the average cost of 23 purported conditioning jobs related to ISDN service, contending that cross-examination showed, among other things, that some of the jobs were not conditioning jobs at all, that some included costly items of equipment, and that some included multiple conditioning operations.[366] Rhythms/Covad attribute much of Verizon's alleged overstatement of costs to

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[363] Verizon's Initial Brief, p. 289, n. 688.

[364] No computational issues specifically related to loop qualification are presented.

[365] Rhythms/Covad's Initial Brief, p. 16, citing Tr. 4,047-4,053; Tr. 4,175-4,176.

[366] Tr. 5,503-5,505.

the assumption that conditioning work must proceed one loop at a time instead of through a more efficient process of deloading multiple loops. They urge the Commission, if it allows conditioning charges to be imposed at all, to use the conservative time estimates proposed by witness Donovan.[367]

The CLEC Alliance likewise asserts that in some instances up to 50 pairs could be conditioned at once. That Verizon rarely receives a request to condition more than one loop at a time does not mean that it should not do so; and Verizon has submitted no evidence in support of its claim that it may be unfeasible to condition more than one loop at a time or that doing so would be tantamount to random removal of load coils that could result in degraded service. The CLEC Alliance cites decisions in other jurisdictions that rejected the one-loop-per-trip assumption.[368] Like Rhythms/Covad, the CLEC Alliance urges that if conditioning costs are allowed, they be based on the recommendations of witnesses Donovan and Riolo.

In response, Verizon asserts that Messrs. Riolo and Donovan had only limited experience in loop conditioning, and it contrasts that experience to the day-to-day involvement of the experts who participated in its survey. It maintains that even if its analysis of ISDN conditioning jobs were adjusted in a manner consistent with the issues raised on cross-examination, it would still confirm the conservative nature of its loop conditioning studies. As for conditioning multiple loops, it maintains that decisions in other jurisdictions are irrelevant and that it has shown that multiple conditioning, given the characteristics of Verizon's network, would pose service problems and significantly increase costs.[369]

In their reply brief, Rhythms/Covad note that Verizon declined to cross-examine the witnesses who questioned the

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[367] Tr. 4,048-4,053.

[368] CLEC Alliance's Initial Brief, p. 139.

[369] Verizon's Initial Brief, p. 313, citing Tr. 2,796; p. 318, citing Tr. 3,098-3,099, 3,586.

reasonableness of its study, point to what they characterize as outrageously exaggerated work times--for example, 7.31 minutes for monitoring a phone line to determine whether it is in use--and note the widely varying figures for work times associated with some tasks. They maintain that Verizon simply cites the wide variety of circumstances encountered by its employees on a day-to-day basis and contend that "if competitors were forced to afford [Verizon's] technicians time to deal with every eventuality under the sun, the loop conditioning process would never end and, to [Verizon's] delight, the associated charges would quickly put competitors out of business as they paid over and over for [Verizon's] 'worst case' assumptions."[370] They therefore urge reliance on Mr. Donovan's time estimates, which they consider to be more reasonable.

The record on this issue leads inexorably neither to approval of Verizon's numbers nor to any specific alternative. Witnesses Riolo and Donovan are less expert, perhaps, than Verizon's engineers, but they are by no means totally lacking in pertinent expertise. Verizon may have successfully rebutted some of their specific criticisms of its study, but their overall analysis seriously calls Verizon's results into question. Their critique may fail to take account of all the varied situations Verizon must deal with on the ground; but it is far from clear that CLECs should bear all the associated costs. Deloading loops in batches of 25 or 50 may risk degrading service or increasing costs in the manner warned of by Verizon; but deloading only one loop at a time does not appear absolutely essential to system integrity or cost minimization, and might itself jeopardize system integrity by requiring more frequent opening of enclosures.[371]

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[370] Rhythms/Covad's Reply Brief, p. 12.

[371] Without intending to belittle concerns about service quality, I cannot help but note that such warnings have a long history of overstatement, going all the way back to pre-divestiture AT&T's objections to competitive customer premises equipment.

To state the matter differently, Verizon has not borne its burden of proof with respect to its proposed charges, but it has shown ample qualitative reason why the charges should not be reduced to a level consistent with the worktimes advanced by Rhythms/Covad. To reflect the state of the record before me, I conclude that Verizon recompute its worktimes on the premise that loops are deloaded on average in batches of ten, thereby capturing some of the efficiencies that may be available through multiple deloadings while recognizing the difficulty of extending that premise too far. Loop conditioning charges should be set on that basis.[372]

RECIPROCAL COMPENSATION ISSUES

"Reciprocal compensation" refers to an arrangement between two local exchange carriers in which each compensates the other for the transport and termination on the second carrier's network facilities of calls originating on the first carrier's facilities. Under the 1996 Act (and earlier decisions by the Commission), reciprocal compensation consists of mutual reimbursement of termination costs; the rates are set on a TELRIC basis, with reference to the incumbent's costs.

Verizon presented in this proceeding reciprocal compensation rates (which it called "derived rates") based on its calculated costs for transport and switching. It describes the rates as those it charges for accepting traffic from a CLEC and delivering it to a Verizon end user.[373] The two principal

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[372] These recomputations should be set forth in Verizon's brief on exceptions. I should note as well that the record makes it difficult to compare Verizon's worktimes with Rhythms/Covad's; see, for example, the table at Tr. 5,627, where Rhythms/Covad cites what it characterizes as Verizon's worktimes to a Verizon exhibit in which it is not readily apparent how the figures appear. Parties addressing the issue on exceptions should present, to the extent possible, the parties' conflicting positions in comparable terms.

[373] Further background on reciprocal compensation and its legal context is set forth in the Reciprocal Compensation Opinion, pp. 1-10.

derived rates are termed "Meet Point A," which compensates Verizon for traffic delivered to an end user through and end office switch, and "Meet Point B," which compensates Verizon for delivering tandem-routed traffic. The Meet Point A rate is equal to the sum of the rates for switch usage and a common trunk port; the higher Meet Point B rate is equal to the sum of the rates for a tandem trunk port, end office to tandem common trunking and associated trunk port costs, tandem switch usage, and end office switch usage.

AT&T raised a number of issues regarding the calculation of derived rates. In addition, Verizon again presented its geographically relevant interconnection point (GRIP) proposal, which the Commission rejected in the Reciprocal Compensation Reexamination proceeding, subject to further consideration here.

Derived Rates Generally

1. Use of Feature-Free Switch Usage Rate

AT&T objects to calculation of derived rates (Meet Point A, Meet Point B, and the Unbundled Telephone Company Reciprocal Compensation Charge (UNRCC, based on the same formula used to calculate the Meet Point A rate) on the basis of a switching rate that excludes the costs of vertical features and is accordingly lower than the average switch usage rate. It contends that Verizon is interested in lowering reciprocal compensation rates because it is a net payer of reciprocal compensation and that there is no reason to treat switch costs differently in a UNE context and in a reciprocal compensation context. It would base reciprocal compensation on the unaltered average local switching rate.

Verizon cites the Commission's determination, in the Reciprocal Compensation Opinion, that removal of vertical feature costs from reciprocal compensation rates "makes considerable sense in the abstract."[374] It contends that

[374] Verizon's Initial Brief, p. 272, citing Reciprocal Compensation Opinion, pp. 58-59 [sic; should be 55-56].

providing feature functionality is not part of transport and termination service, for which reciprocal compensation is paid, and that including feature costs in reciprocal compensation rates is therefore inappropriate.

The Commission determined in the Reciprocal Compensation Reexamination Proceeding that vertical costs should be excluded in principle from reciprocal compensation but declined to do so there because they had not been calculated. That calculation now having been done, there appears to be no reason not to exclude them.

2. UCRCC

The unbundled CLEC reciprocal compensation charge (UCRCC) is intended to compensate Verizon in situations where it receives certain types of calls from the CLEC for hand off to a second CLEC and must make reciprocal compensation payments to that second CLEC. Verizon calculated the charge on the basis of average actual payments in the period September 1999 through December 1999.

AT&T challenges the use of the 1999 data to develop forward-looking costs, noting that the rate at issue had dropped from September to December and that decisions made in this case with regard to switching costs can be expected to reduce reciprocal compensation rates even further. It regards as inadequate Verizon's proposal to recalculate the UCRCC on a quarterly basis and urges that the rate be set on the basis of the meet point A rate.

In response, Verizon cites once again the Commission's determination that forward-looking cost estimates may be based on historical costs. It reiterates its offer to recalculate the element prospectively on a quarterly basis, given the difficulty of knowing the direction in which reciprocal interconnection charges will move, and it disputes the premise that intercarrier compensation charges are necessarily based on Meet Point A rates, noting that negotiated agreements often require payment of Meet Point B or blended rates.

While forward-looking costs can be based on adjusted historical data, it seems unreasonable to do so on the basis of so small a sample and one that itself suggests a declining trend. Verizon should recalculate the rate in its brief on exceptions, on the basis of a longer period terminating at a point closer to the present.

GRIPs

Some customers, primarily internet service providers (ISPs) ask their local exchange carriers to assign them "virtual local numbers," that is, numbers associated with each of the local calling areas in which their users might be located regardless of whether the ISP itself or the carrier serving it has facilities in those areas. The ISPs do so to make it convenient and cheap for their customers to place calls with long holding times. In the Reciprocal Compensation Reexamination Proceeding, Verizon contended (as it again contends now) that these arrangements, though not unlawful, can result in the carrier serving the ISP (usually a CLEC) passing on to another carrier (usually the originating ILEC) the cost of transporting the virtual local call from the ISP's customer's local calling area to the area in which the ISP is physically located. For example, Verizon says, if a call is originated on Verizon's network and directed to an ISP served by a CLEC, and the CLEC declines to provide Verizon a point of interconnection (POI) within the originating local calling area, Verizon must carry the call (and install the facilities needed to do so) to the local area in which the CLEC has a POI "even though it receives only local usage rates from the originating end user and nothing at all from either the CLEC or the ISP. (Indeed, far from being compensated by the CLEC for transporting its call, Verizon is actually required to pay the CLEC intercarrier compensation for the privilege of transporting its interexchange call for free, and is being prevented by the CLEC's numbering practices from being compensated by its end user through toll charges)."[375]

To remedy what it regards as the unfairness of the situation, Verizon proposes that each LEC be required to establish, upon the request of any interconnected LEC, a geographically relevant interconnection point in every rate center in which it assigns telephone numbers, unless the parties

[375] Verizon's Initial Brief, p. 276 (emphasis in the original).

agree otherwise. The requirement could be fulfilled by establishing an actual, physical interconnection point or by purchasing dedicated UNE transport, at Commission approved rates, which would obviate the deployment of allegedly uneconomic new transport facilities.

In the Reciprocal Compensation Reexamination Proceeding, the Commission determined that Verizon had made "a good case for the fairness of its proposal, which is designed to spare it the cost of, in effect, subsidizing a CLEC's use of virtual NXX's." It rejected as well the CLECs' argument that its hands were tied by federal law allowing CLECs considerable discretion with regard to selecting points of interconnection and requiring originating carriers to bear the cost of hauling traffic to them. Nevertheless, it saw no need to adopt the GRIP proposal, finding that "any additional benefits to [Verizon] would be relatively minor, and the unintended effects on access to the Internet from remote areas could be substantial."[376]

In again presenting the proposal, Verizon disputes the premise that its benefits would be relatively minor; it provides calculations showing, on the basis of 1999 data, that its non-compensated transport costs exceed $2 million annually.[377] Verizon likewise sees no need for concern over effects on internet access, noting that CLECs would remain free to assign telephone numbers that could be reached on a local usage rate basis; that they would not be required to install facilities; and that alternatives such as virtual GRIPs could be negotiated.[378]

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[376] Reciprocal Compensation Opinion, p. 59.

[377] Verizon's Initial Brief, pp. 278-279.

[378] A virtual GRIP entails the establishment of a collocated interconnection point by a CLEC at a Verizon tandem switch or at host end offices, obviating the concern that the interconnection point would have to be located within the rate center in which the CLEC assigns telephone numbers. Verizon's Initial Brief, p. 280, n. 666.

AT&T, the CLEC Alliance, WorldCom, and Cablevision Lightpath criticize the GRIP proposal on various legal and policy grounds. Citing the FCC's observation that the 1996 Act allows competing carriers "to deliver traffic terminating on an incumbent LEC's network at any technically feasible point on that network, rather than obligating such carriers to transport traffic to less convenient or efficient interconnection points,"[379] AT&T contends that the GRIP proposal would impose just such an anticompetitive requirement on CLECs, requiring them to deploy statewide networks to achieve multiple interconnections. It charges that the proposal would transfer to the CLECs transport costs both for originating and terminating local calls, thereby taking "the 'reciprocal' out of reciprocal compensation,"[380] and it cites the Massachusetts Commission's rejection of a similar proposal. AT&T regards the virtual GRIP proposal as, in effect, a willingness on Verizon's part to negotiate alternative interconnection point arrangements with CLECs, and it argues that the better way to deal with the problem is through negotiation, without the GRIP proposal being treated as the default arrangement.

The CLEC Alliance argues to similar effect, adding that if the GRIP proposal is approved, the Commission should require Verizon to compensate CLECs for the additional transport that would be required, "because in this context [Verizon] is the customer and the CLEC is the wholesale provider of call termination functionality."[381] It argues as well that many CLECs have already designed their networks in reliance on existing arrangements that do not require GRIPs and that approval of the proposal would harm CLECs by requiring them to reconfigure their networks and to incur additional costs and delays. It urges rejection as well of the virtual GRIP proposal, disputing Verzion's claim that it is competitively neutral and alleging

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[379] Local Competition Order, ¶209.

[380] AT&T's Initial Brief, p. 134.

[381] CLEC Alliance's Initial Brief, p. 115.

that it assumes, incorrectly, that CLECs have the same ubiquitous presence that Verizon has.

WorldCom observes that Verizon's proposal would vitiate a CLEC's bargaining power over interconnection points by enabling Verizon to refuse the carrier's choice of interconnection point in favor of the default GRIP option. It urges the Commission to endorse real negotiations as the best way to decide interconnection points.

Lightpath, devoting its entire brief to this issue, contends the GRIP proposal would undermine the Commission's efforts to enhance competition as well as violate federal law. Lightpath describes itself as a full-service, facilities-based CLEC whose ability to serve its customers depends critically on efficient interconnection with Verizon's network. Pointing to its negotiated interconnection arrangements with Verizon, it contends that the GRIP proposal would undermine such arrangements and enhance Verizon's bargaining strength in future negotiations. It charges that the proposal violates the FCC rule barring a LEC from assessing charges to deliver traffic to another carrier and, even under the virtual GRIP variation, unlawfully reserves to the LEC the ability to decide where and how often a CLEC must interconnect. It cites, in this regard, the FCC's statement in its Texas §271 proceeding that "a competitive LEC has the option to interconnect at only one technically feasible point in each LATA."[382]

Beyond the legal issue, Lightpath contends the proposal contravenes sound public policy by hindering the development of alternative, more efficient networks, shifting the cost of transport to CLECs, and impairing the CLECs' ability to negotiate equitable interconnection arrangements. While Verizon regards the cost shifting as appropriate, Lightpath contends it is at odds with New York's procompetitive policies and cites as

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[382] Application by SBC Communications, Inc., et al. pursuant to §271 of the Telecommunications Act of 1996 to Provide In-Region InterLATA in Texas, CC Docket No. 00-65, Memorandum Opinion and Order (rel. June 30, 2000) ¶78.

well the Massachusetts Commission's rejection of GRIPs on that basis. It sees no reason for the Commission to alter its previous conclusion that GRIPs are unnecessary in view of the remedy adopted in the Reciprocal Compensation Reexamination Proceeding for imbalances created by convergent traffic. Finally, it contends that the record on GRIPs and virtual GRIPs is ambiguous, raising a variety of issues regarding just what Verizon is proposing.[383]

In response, Verizon defends the lawfulness of its proposal, contending that it is not attempting to avoid its obligation to provide interconnection at any technically feasible point but only to deal with who will bear the costs for delivering a local call from its point of origin to the interconnection point selected by the CLEC. It cites the FCC's statement that a CLEC wishing "a 'technically feasible' but expensive interconnection would, pursuant to [the 1996 Act], be required to bear the cost of that interconnection, including a reasonable profit."[384] It points as well to the statement in Local Competition Order ¶209, omitted by the CLECs in citing it, that "because competing carriers must usually compensate incumbent LECs for the additional costs incurred by providing interconnection, competitors have an incentive to make economically efficient decisions about where to interconnect." With respect to policy, Verizon contends CLECs should bear the costs they impose in offering their customers the benefits of wide area local calling and that the 1996 Act does not require the incumbent to subsidize those benefits. It reiterates its claim that GRIPs would not require construction of facilities and denies that establishing a generic rule that would prevail in the absence of an agreement would have an effect on negotiated agreements. It cites at length a decision of the

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[383] Lightpath identifies the issues at its Initial Brief, p. 12.

[384] Verizon's Reply Brief, p. 140, citing Local Competition Order, ¶199.

South Carolina Commission rejecting AT&T's argument against GRIPs.[385]

Lightpath's reply brief reiterates its legal and policy arguments, adding that ¶199 of the Local Competition Order does not undermine the rule that each carrier is responsible for delivering its own traffic to the other carrier's network. It argues as well that the costs transferred to CLECs would be passed on to their customers, including ISPs that would, in turn, pass the costs on to their users, thereby bearing out the Commission's concern about the effect of GRIPs on internet access in remote areas. Lightpath adds that Verizon's study purporting to show that its uncompensated transport costs exceed $2 million per year is both extra-record and flawed. The CLEC Alliance disputes the premise that the physical location of the CLEC customer receiving the call affects Verizon's transport obligations, contending that Verizon's transport cost is determined solely by the distance from the originating point (i.e., Verizon's customer) to the interconnection point and that any legitimate transport costs incurred by Verizon from originating traffic to CLEC designated interconnection points are already recovered through the price of UNEs and from Verizon's own retail customers. It adds that the CLEC industry has shown a willingness to work cooperatively with incumbent LECs in resolving these issues. It suggests that the proposal benefits Verizon primarily through its anticompetitive features.

The concerns that Verizon cites in support of GRIPs cannot be dismissed, and the proposal continues to enjoy a prima facie appearance of fairness. But the objections raised by the CLECs--including the relative impacts of the proposal on Verizon and its competitors, as well as the potential effect, noted by the Commission, on ISP access in remote areas--are likewise significant; and points of interconnection, when all is said and done, are among the matters to be thrashed out between the parties to interconnection agreements. Verizon acknowledges as

[385] Verizon's Reply Brief, pp. 143-145.

much but nonetheless suggests that GRIPs should be adopted as the default arrangement to be applied in the absence of some other agreement between the parties. But the adoption of any such default arrangement would skew the negotiations, significantly strengthening Verizon's hand, and Verizon's suggestion to the contrary[386] appears unrealistic.

It appears to me that the better alternative is for the Commission to reaffirm its recognition of Verizon's concerns and its willingness to have them taken into account in any interconnection agreement arbitrations in which these issues may be posed or through other dispute resolution mechanisms. But the issues should be decided, in the first instance, through negotiation, and disputes that then remain should be resolved case-by-case.

OTHER ISSUES

Operator Services/Directory Assistance

Verizon proposed to price Operator Services/Directory Assistance above the level of TELRIC costs, given the FCC's determination that incumbent LECs were not required to offer unbundled access to (or TELRIC pricing for) OS/DA, as long as they offer customized routing (as Verizon does).[387] It cites the FCC's finding that there was a wholesale market in the provision of OS/DA services along with opportunities for CLECs to provision them on their own, and that a CLEC's ability to offer telecommunications services would not be materially diminished if OS/DA service were not offered as a UNE. In view of that decision, Verizon proposes a range of flexible rates for each OS/DA service, which could be changed on ten days' notice; the price range would use the TSLRIC of providing the service as a floor (though in view of the inability at this point to calculate TSLRIC, TELRIC would be used as a surrogate) and the market value of high quality OS/DA as a ceiling. Verizon notes

[386] Verizon's Reply Brief, pp. 142-143.

[387] Verizon's Initial Brief, citing UNE Remand Order, ¶¶439-465.

in this regard that other providers of wholesale OS/DA services do not tariff their services and are free to charge what the market can bear, and that the prevailing market rates for OS/DA services offered by other providers fall within its proposed range.

The Federal Agencies object to Verizon's proposal, contending that even though the FCC no longer requires TELRIC pricing of OS/DA, the Commission is free to impose it if it considers conditions in New York to warrant it and may designate UNEs in addition to those designated by the FCC. They maintain that Verizon's enormous market power within New York, as evidenced by its providing more access lines than ever to both residential and business subscribers, warrants TELRIC pricing of OS/DA services.

Verizon responds that the Commission may not designate OS/DA as a UNE, inasmuch as the FCC has determined that the service does not meet the standards for designation and that state commissions "must comply with the standards set forth in [that rule] when considering whether to require the unbundling of additional network elements."[388] It adds that market power in the offering of UNEs generally does not equate to market power in the offering of wholesale OS/DA services, and only the latter is relevant to pricing of those services. In their reply brief, the Federal Agencies allege an inconsistency between Verizon's request to treat OS/DA services as unregulated for pricing purposes and as regulated insofar as it seeks to recover the costs of providing those services in its UNE rates.[389]

Verizon's proposed treatment of this service seems reasonable and is recommended. The FCC has determined that OS/DA need not be treated as a UNE and priced at TELRIC, and the Federal Agencies have provided no persuasive policy reason for

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[388] Verizon's Reply Brief, p. 146, citing 47 CFR §51.317.

[389] Federal Agencies' Reply Brief, p. 13, citing the CLEC Alliance's Initial Brief, p. 18.

doing so, given the competitive nature of the service.[390] Their allegation of inconsistency in Verizon's treatment of these costs is likewise unpersuasive; as discussed above, Verizon seeks to recover OS/DA costs only from CLECs electing to take the service from Verizon.

Collocation Security Costs

In the Collocation Module (Module 2) of this proceeding, the Commission disallowed 25% of Verizon's claimed costs of security for cageless collocation but invited the parties to propose, in the present module, alternative ways of dealing with the concerns that underlay that decision. The primary basis for the disallowance was Verizon's having based its security cost presentation on its existing central offices, rather than on a TELRIC-based construct designed with collocation in mind. (The Commission had found use of the latter construct proper and for that reason used as the starting point for its analysis the Collocation Cost Model (CCM) that had been sponsored in that module by AT&T and WorldCom.) In addition, the Commission saw a need to avoid the risk of "gold-plating" inherent in traditional, cost-based regulation. The Commission summed up its decision as follows:

> Taking all these [previously noted] considerations into account, we will adopt [Verizon's] estimate of security costs (which is not unreasonable as a matter of calculation, if one disregards its non-TELRIC premise) but disallow some portion of those costs--primarily to respond to the failure to present a proper, TELRIC-based estimate, but also to guard against gold-plating and to recognize that CLECs are not the only beneficiaries. The record lacks any clear indication of the proper

[390] There is, accordingly, no need to reach the legal issues that might be posed by a state designating as a UNE a service that did not meet the FCC's criteria.

> disallowance or share to be assigned to [Verizon]--using a floor space allocator, as some CLECs suggest, may unfairly assign the lion's share of the costs to [Verizon]--and we will, for now, disallow 25% of [Verizon's] estimated security costs. The parties may propose different solutions, to be applied prospectively, in Module 3.[391]

In the ensuing rehearing order, the Commission reaffirmed that decision, elaborating to some extent on its basis.[392]

In the present module, Verizon claims to have developed security costs based on the configuration of the CCM's central office. It says it contemplated the same security measures as it did in Module 2, which had not been questioned by the Commission, and that its mix of security measures is efficient. It believes it met the requirements of the Module 2 decision, and that its costs--$171.05 per bay per month--should be allowed.

Rhythms/Covad object, contending that Verizon failed to explain how it developed its mix of security measures, which include wire mesh partitions and security cameras in every collocation arrangement, and that there is no way for the Commission to evaluate Verizon's assumptions. Noting that the costs claimed here in fact exceed those sought by Verizon in Module 2, they charge Verizon with blatantly disregarding the Commission's directive to assign itself some portion of the costs and with doing nothing to assuage the Commission's concerns about gold plating. For all these reasons, they assert Verizon has failed to bear its burden of proof, and they urge that the rate be set, consistent with their proposal to allocate costs on the basis of floor space in the CCM central office, at $2.37 per bay per month.[393]

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[391] Collocation Opinion, p. 30.

[392] Case 98-C-1357, Order Denying Petitions for Rehearing of Opinion No. 00-08, (Collocation Rehearing Order) pp. 6-7.

[393] Rhythms/Covad's Initial Brief, p. 46.

Verizon responds that it fully explained its security cost calculation[394] and that Rhythms/Covad declined to cross-examine on the subject. It maintains that it used the same installed security investments used in Module 2-- which, it repeats, the Commission did not question--and applied them to the CCM central office configuration. It thereby complied with the Commission's Module 2 determination, and it sees no basis for challenging its result simply because it produces higher rates than those sought in Module 2. Verizon denies any violation of the Commission's directive to allocate security costs to itself, contenting that Rhythms/Covad misunderstand the Module 3 disallowance, which was premised on the failure, now remedied, to base costs on the CCM central office configuration. Finally, it disputes Rhythms/Covad's floor-space allocation formula, asserting that it effectively allocates security costs to space that does not benefit from the cageless security measures, including caged collocation areas.

Verizon has remedied its failure to base security costs on a forward-looking construct, which was the primary basis for the Commission's Module 3 disallowance. But I cannot disregard the Commission's concern, reiterated in the Module 3 Rehearing Order, about possible gold-plating, which it described as

> a risk that has long been recognized in cost-based regulation (sometimes disparaged on that account as "cost-plus" regulation) and that accounts, in part, for the movement more recently to incentive regulation.[395]

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[394] Citing Tr. 3,218-3,219.

[395] Collocation Rehearing Order, p. 7.

Verizon relied entirely on its Module 2 presentation with regard to the nature of its security measures,[396] contending the Commission did not call them into question and that they accordingly may be assumed here. But that overstates the case. The Commission noted the difficulty and impracticability of evaluating specific security measures and then concluded:

> while we should not assess particular security measures, we must take care that [Verizon] be denied any opportunity to gold-plate its security systems at the CLECs' expense. One way to do so is to require [Verizon] to bear a portion of the costs at issue, thereby vitiating any incentive to gold-plate.[397]

Consistent with that observation by the Commission, and recognizing that Verizon has adequately addressed the TELRIC issue that concerned the Commission as well, I recommend that 10%, rather than 25%, of Verizon's currently claimed cageless collocation security costs be disallowed.

CONCLUSION

Verizon's UNE rates should be set in a manner consistent with the conclusions in this recommended decision. Switching investment adjustments are summarized in Appendix B. The principal UNE rates that result from the recommendations made here are set forth, with their derivations, in Appendix C.[398]

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[396] Contrary to Rhythms/Covad, Verizon provided more than a vague two-sentence explanation of how it calculated its costs. But the explanation pertained to how the security measures had been applied to the CCM central office, not to how the security measures to be used had been determined.

[397] Collocation Opinion, p. 29.

[398] Switching rates are set forth on a zone-by-zone basis, as in Verizon's cost presentation. In its brief on exceptions, Verizon should recalculate a statewide average rate on this basis.

Verizon should include, in its brief on exceptions, recalculated rates for all UNEs. If necessary, Staff will be available to consult with Verizon (and other parties) on the processes to be followed.

JAL:gds
May 16, 2001

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VERIZON NEW YORK INC.
Summary of Switching Investment Adjustments
To Verizon's Cost Studies

Links Per Density Zone

	Zone 1A	Zone 1B	Zone 2	Total
Verizon Part A-1 Section 8.1 Page 2	2,960,461	6,274,583	3,155,223	12,390,267
	23.89%	50.64%	25.47%	100.00%

Verizon Part B-2, Section 4, Page 1 of 3
3rd Revision 10-19-00

	Zone 1A	Zone 1B	Zone 2	Average
Total Local Switch – SCIS	$7,473,825	$6,132,768	$5,734,682	$6,351,818
Lines Per Switch	61,000	56,500	33,525	
Investment Per Line	$122.52	$108.54	$171.06	$127.80
Total Non Traffic Sensitive (NTS)	$3,233,855	$2,311,632	$1,531,904	$2,333,422
NTS Allocation	43.27%	37.69%	26.71%	
Total Traffic Sensitive (TS)	$4,239,970	$3,821,136	$4,202,778	$4,018,396
TS Allocation	56.73%	62.31%	73.29%	

RD Per Line Investment

	Zone 1A	Zone 1B	Zone 2	Average
Total Local Switch Investment	$6,405,000	$5,932,500	$3,520,125	$5,431,077
Lines Per Switch	61,000	56,500	33,525	
RD Per Line Investment	$105.00	$105.00	$105.00	$105.00
Total Non Traffic Sensitive (NTS)	$4,227,300	$3,915,450	$2,323,283	$3,584,511
NTS Allocation	66.00%	66.00%	66.00%	
Total Traffic Sensitive (TS)	$2,177,700	$2,017,050	$1,196,843	$1,846,566
TS Allocation	34.00%	34.00%	34.00%	

VERIZON NEW YORK INC.
Summary of Switching Investment Adjustments
To Verizon’s Cost Studies

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
LINKS:			
2-Wire Analog Link DS-O-Density Zone 1 a	$15.90		$10.65
2-Wire Analog Link DS-O-Density Zone 1 b	$19.31		$12.69
2-Wire Analog Link DS-O-Density Zone 2	$26.39		$17.43
2-Wire Analog Link DS-1 -Density Zone 1 a	$10.77	$4.18	$7.29
2-Wire Analog Link DS-1 -Density Zone 1 b	$15.31	$7.70	$10.21
2-Wire Analog Link DS-1 -Density Zone 2	$21.99	$18.84	$14.70
2-Wire Digital Link DS-O-Density Zone 1 a	$21.84		$14.55
2-Wire Digital Link DS-O-Density Zone 1 b	$29.71		$17.69
2-Wire Digital Link DS-O-Density Zone 2	$39.94		$24.35
2-Wire Digital Link DS-1 -Density Zone 1 a	$17.16		$11.69
2-Wire Digital Link DS-1 -Density Zone 1 b	$24.64		$15.12
2-Wire Digital Link DS-1 -Density Zone 2	$34.33		$21.48
4-Wire Analog Link DS-O-Density Zone 1 a	$41.84		$27.82
4-Wire Analog Link DS-O-Density Zone 1 b	$50.97		$29.66
4-Wire Analog Link DS-O-Density Zone 2	$63.89		$37.77
4-Wire Analog Link DS-1 -Density Zone la	$28.90		$20.21
4-Wire Analog Link DS-1 -Density Zone 1 b	$37.81		$23.34
4-Wire Analog Link DS-1 -Density Zone 2	$50.18		$31.16
4-Wire Digital Link DS-1 -Density Zone la	$122.32	$28.61	$82.87
4-Wire Digital Link DS-l-Density Zone 1 b	$146.65	$43.32	$87.44
4-Wire Digital Link DS-l-Density Zone 2	$197.39	$69.24	$120.85
ADSL Copper Link	$32.66		$32.66
HDSL Capable Density Zone la		$1.53	
HDSL Capable Density Zone 1 b		$7.69	
HDSL Capable Density Zone 2		$23.41	
ADSL Capable Density Zone la		$1.20	
ADSL Capable Density Zone 1 b		$6.39	
ADSL Capable Density Zone 2		$19.02	
HDSL 2 Capable Density Zone la		$1.16	
HDSL 2 Capable Density Zone 1 b		$5.92	
HDSL 2 Capable Density Zone 2		$18.01	
ADSL Equipped Density Zone la		$12.40	
ADSL Equipped Density Zone 1 b		$15.78	
ADSL Equipped Density Zone 2		$26.25	
HDSL Capable Density Zone la		$28.61	
HDSL Capable Density Zone 1 b		$43.32	
HDSL Capable Density Zone 2		$69.24	
Wideband Access Testing	$1.99		$2.02
2-Wire Ground Start CSS Link Density Zone la	$3.22		$2.93
2-Wire Ground Start CSS Link Density Zone 1 b	$3.20		$2.91
2-Wire Ground Start CSS Link Density Zone 2	$3.21		$2.92

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
LINKS (Continued From Previous Page)			
2-Wire Reverse Battery CSS Link Density Zone la	$5.22		$4.71
2-Wire Reverse Battery CSS Link Density Zone 1 b	$5.18		$4.67
2-Wire Reverse Battery CSS Link Density Zone 2	$5.19		$4.68
2-Wire EBS (P Phone) CSS Link Density Zone la	$17.70		$15.82
2-Wire EBS (P Phone) CSS Link Density Zone 1 b	$17.58		$15.72
2-Wire EBS (P Phone) CSS Link Density Zone 2	$17.62		$15.75
2-Wire Coin CSS Link Density Zone la	$2.99		$2.73
2-Wire Coin CSS Link Density Zone 1 b	$2.97		$2.71
2-Wire Coin CSS Link Density Zone 2	$2.97		$2.72
House and Riser			
Floor Access-Density Zone 1 a	$0.03		$0.02
Floor Access-Density Zone 1 b	$0.03		$0.02
Floor Access-Density Zone 2	$0.02		$0.01
Building Access-Density Zone 1 a	$1.51		$0.88
Building Access-Density Zone 1 b	$1.46		$1.27
Building Access-Density Zone 2	$1.15		$1 .oo
Building Set-up Charge Density Zone la	$857.31		$810.71
Building Set-up Charge Density Zone 1 b	$727.57		$688.02
Building Set-up Charge Density Zone 2	$637.04		$602.41
Terminal Connection Charge Density Zone 1 a	$328.70		$310.83
Terminal Connection Charge Density Zone 1 b	$276.86		$261.81
Terminal Connection Charge Density Zone 2	$241.59		$228.46
Network Interface Device			
2-Wire NID-Density Zone la	$1.64		$1.39
2-Wire NID-Density Zone 1 b	$1.56		$1.34
2-Wire NID-Density Zone 2	$1.39		$1.19
4-Wire NID-Density Zone la	$3.14		$2.66
4-Wire NID-Density Zone 1 b	$1.65		$1.42
4-Wire NID-Density Zone 2	$0.98		$0.84
DS1 NID-Density Zone la	$8.85		$7.52
DS1 NID-Density Zone 1 b	$8.70		$7.48
DS1 NID-Density Zone 2	$7.96		$6.83
Entrance Facilities			
OC-12 Fixed per Month	$3,833.67		$3,665.07
OC-12 per 1/4 Mile per Month	$8.18		$6.40
OC-3 Fixed per Month	$1,569.10		$1,506.05
OC-3 per 1/4 Mile per Month	$8.13		$6.37
STS1 Fixed per Month	$900.04		$880.91
STS1 per 1/4 Mile per Month	$10.90		$8.54
DS3 Fixed per Month	$903.19		$891 .00
DS3 per 1/4 Mile per Month	$10.90		$8.54

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
LINKS **(Continued From Previous Page)**			
EEL Testing Costs			
Density Zone 1 a			
2-Wire Analog EEL (DS1) Density Zone 1 a	$0.36		$0.27
2-Wire Analog EEL (DSO) Density Zone 1 a	$0.54		$0.38
2-Wire Digital EEL (DS1) Density Zone la	$0.58		$0.43
2-Wire Digital EEL (DSO) Density Zone 1 b	$0.75		$0.55
4-Wire Analog EEL (DS1) Density Zone 1 a	$0.99		$0.76
4-Wire Analog EEL (DSO) Density Zone 1 b	$1.49		$1.06
4-Wire Digital EEL (DS1) Density Zone la	$4.23		$3.13
Density Zone 1 b			
2-Wire Analog EEL (DS1) Density Zone 1 b	$0.48		$0.36
2-Wire Analog EEL (DSO) Density Zone 1 b	$0.67		$0.48
2-Wire Digital EEL (DS1) Density Zone 1 b	$0.75		$0.56
2-Wire Digital EEL (DSO) Density Zone 1 b	$0.94		$0.69
4-Wire Analog EEL (DS1) Density Zone 1 b	$1.15		$0.88
4-Wire Analog EEL (DSO) Density Zone 1 b	$1.66		$1.19
4-Wire Digital EEL (DS1) Density Zone 1 b	$4.82		$3.57
Density Zone 2			
2-Wire Analog EEL (DS1) Density Zone 2	$0.67		$0.50
2-Wire Analog EEL (DSO) Density Zone 2	$0.87		$0.63
2-Wire Digital EEL (DS1) Density Zone 2	$1.03		$0.77
2-Wire Digital EEL (DSO) Density Zone 2	$1.24		$0.90
4-Wire Analog EEL (DS1) Density Zone 2	$1.49		$1.11
4-Wire Analog EEL (DSO) Density Zone 2	$2.01		$1.44
4-Wire Digital EEL (DS1) Density Zone 2	$6.41		$4.71
Sub-Loop Unbundling			
LINKS:			
2-Wire Digital Designed Metallic (18-30kft)			
Engineering Work Order	$881.73		$661.30
Engineering Work Order-Expedite	$1,243.70		$932.78
Removal of 1 Bridged Tap	$363.25		$267.58
Removal of 1 Bridged Tap-Expedite	$504.23		$374.99
Removal of Multiple Bridged Taps	$887.32		$656.31
Removal of Multiple Bridged Taps-Expedite	$1,242.45		$918.84
Removal of Load Coils (up to 21 kft)	$1,061.73		$786.26
Removal of Load Coils (up to 21 kft)-Expedite	$1,486.65		$1,100.77
Removal of Load Coils (up to 27kft)	$1,410.92		$1,045.33
Removal of Load Coils (up to 27kft)-Expedite	$1,975.58		$1,463.46
LINKS **(Continued From Previous Page)**			
2-Wire ADSL Compatible (less than 18kft)			
Engineering Work Order	$881.73		$661.30

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	R R
A	B	C	D
Engineering Work Order-Expedite	$1,243.70		$932.78
Removal of 1 Bridged Tap	$363.25		$267.58
Removal of 1 Bridged Tap-Expedite	$504.23		$374.99
Removal of Multiple Bridged Taps	$887.32		$656.31
Removal of Multiple Bridged Taps-Expedite	$1,242.45		$918.84
2-Wire ADSL Compatible (less than 12kft)			
Engineering Work Order	$881.73		$661.30
Engineering Work Order-Expedite	$1,243.70		$932.78
Removal of 1 Bridged Tap	$363.25		$267.58
Removal of 1 Bridged Tap-Expedite	$504.23		$374.99
Removal of Multiple Bridged Taps	$887.32		$656.31
Removal of Multiple Bridged Taps-Expedite	$1,242.45		$918.84
2-Wire HDSL Compatible (less than 12kft)			
Engineering Work Order	$881.73		$661.30
Engineering Work Order-Expedite	$1,243.70		$932.78
Removal of 1 Bridged Tap	$363.25		$267.58
Removal of 1 Bridged Tap-Expedite	$504.23		$374.99
Removal of Multiple Bridged Taps	$887.32		$656.31
Removal of Multiple Bridged Taps-Expedite	$1,242.45		$918.84
4-Wire HDSL Compatible (less than 12kft)			
Engineering Work Order	$881.73		$661.30
Engineering Work Order-Expedite	$1,243.70		$932.78
Removal of 1 Bridged Tap	$363.25		$267.58
Removal of 1 Bridged Tap-Expedite	$504.23		$374.99
Removal of Multiple Bridged Taps	$887.32		$656.31
Removal of Multiple Bridged Taps-Expedite	$1,242.45		$918.84
2-Wire Digital Designed with ISDN Loop Electronics on Metallic			
Engineering Work Order	$881.73		$661.30
Engineering Work Order-Expedite	$1,243.70		$932.78
Removal of Load Coils (up to 21 kft)	$1,061.73		$786.26
Removal of Load Coils (up to 21 kft)-Expedite	$1,486.65		$1,100.77
Removal of Load Coils (up to 27kft)	$1,410.92		$1,045.33
Removal of Load Coils (up to 27kft)-Expedite	$1,975.58		$1,463.46
Addition of ISDN Loop Extension Electronics	$999.50		$876.75
Addition of ISDN Loop Extension Electronics-Expedite	$1,009.44		$885.57
2-Wire Analog Link With Line Sharing			
Residential Service Contribution Rate Element-Density Zone la*	$2.69		$1.82
Residential Service Contribution Rate Element-Density Zone 1 b*	$3.83		$2.55
Residential Service Contribution Rate Element-Density Zone 2*	$5.50		$3.67
POT Bay Termination (per 100 VG/month)	$2.00		$2.00
POT Bay Termination (per 100 VG-NRC)	$244.64		$244.64
Cable and Frame Termination (per 100 VG/month)	$14.35		$14.35

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	R R
A	B	C	D
LINKS (Continued From Previous Page)			
Cable and Frame Termination (per 100 VG/NRC)	$1,499.35		$1,499.35
Bay/Relay Rack for Splitters (per arrangement/month)	$1.23		$1.23
Land and Building for Splitter Bay (per arrangement/month)	$3.55		$3.55
Maintenance of Splitter Equipment (per splitter/month)	$51.52		$17.91
Wideband Test Access (per line/month)	$1.99		$2.02
Splitter Installation Cost (serving 96 lines-NRC)	$1,369.60		$1,278.82
Line Sharing			
Line Sharing Conversion Non-Recurring Costs			
Service Order	$9.59		$9.59
Service Order-Expedite	$14.88		$14.88
Central Office Wiring initial	$41.53		$41.53
Central Office Wiring Initial-Expedite	$59.40		$59.40
Central Office Wiring Additional	$20.66		$20.66
Central Office Wiring Additional-Expedite	$29.55		$29.55
Provisioning	$0.27		$0.27
Provisioning-Expedite	$0.40		$0.40
Field Installation Dispatch	$121.35		$121.35
Field Installation Dispatch-Expedite	$170.92		$170.92
Manual Intervention Surcharge	$28.26		$28.26
Manual Intervention Surcharge-Expedite	$43.86		$43.86
Misdirected Trouble Report Dispatch In	$46.33		$46.33
Misdirected Trouble Report Dispatch In-Expedite	$67.87		$67.87
SWITCHING:			
Local Switching			
Analog Line Port-Density Zone la	$2.70		$2.68
Analog Line Port-Density Zone 1 b	$2.62		$3.16
Analog Line Port-Density Zone 2	$3.27		$3.18
Digital Line Port-Density Zone la	$1.17	$0.70	$1.35
Digital Line Port-Density Zone 1 b	$1.38		$1.83
Digital Line Port-Density Zone 2	$1.84		$1.94
Analog Coin Port-Density Zone la	$3.22		Not In RD
Analog Coin Port-Density Zone 1 b	$3.15		Not In RD
Analog Coin Port-Density Zone 2	$3.80		Not In RD
Digital Coin Port-Density Zone la	$1.27		Not In RD
Digital Coin Port-Density Zone 1 b	$1.48		Not In RD
Digital Coin Port-Density Zone 2	$1.95		Not In RD
Digital Trunk Port-Density Zone la	$125.82	$1.95	Not In RD
Digital Trunk Port-Density Zone 1 b	$135.24		Not In RD
Digital Trunk Port-Density Zone 2	$127.17		Not In RD
E911 Dedicated Port Density Zone la	$125.82		Not In RD
E911 Dedicated Port Density Zone 1 b	$135.24		Not In RD

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
SWITCHING (Continued From Previous Page)			
E911 Dedicated Port Density Zone 2	$127.17		Not In RD
Digital Tandem Port (Dedicated)	$235.40	$2.05	Not In RD
TOPS Trunk Port (Dedicated)	$35.16		Not In RD
Analog ISDN BRI Port-Density Zone la	$15.45		Not In RD
Analog ISDN BRI Port-Density Zone 1 b	$17.24		Not In RD
Analog ISDN BRI Port-Density Zone 2	$17.86		Not In RD
Digital ISDN PRI Port-Density Zone la	$153.84		Not In RD
Digital ISDN PRI Port-Density Zone 1 b	$177.05		Not In RD
Digital ISDN PRI Port-Density Zone 2	$169.97		Not In RD
Analog ISDN BRI Port-Density Zone la	$15.45		Not In RD
Analog ISDN BRI Port-Density Zone lb	$17.24		Not In RD
Analog ISDN BRI Port-Density Zone 2	$17.86		Not In RD
Digital ISDN BRI Port-Density Zone la	$2.92		Not In RD
Digital ISDN BRI Port-Density Zone 1 b	$3.60		Not In RD
Digital ISDN BRI Port-Density Zone 2	$4.19		Not In RD
ISDN PRI Port-Density Zone la	$124.57		Not In RD
ISDN PRI Port-Density Zone 1 b	$143.99		Not In RD
ISDN PRI Port-Density Zone 2	$137.78		Not In RD
Features			
Centrex			
Centrex Intercom-Density Zone la	$0.61		Not In RD
Centrex Intercom-Density Zone 1 b	$0.52		Not In RD
Centrex Intercom-Density Zone 2	$1.15		Not In RD
Centrex Announcement-Density Zone la	$1.05		Not In RD
Centrex Announcement-Density Zone 1 b	$1.05		Not In RD
Centrex Announcement-Density Zone 2	$1.05		Not In RD
3-Way Conference-Density Zone 1 a	$0.30		Not In RD
3-Way Conference-Density Zone 1 b	$0.30		Not In RD
3-Way Conference-Density Zone 2	$0.30		Not In RD
Automatic Callback-Density Zone 1a	$0.42		Not In RD
Automatic Callback-Density Zone 1 b	$0.42		Not In RD
Automatic Callback-Density Zone 2	$0.42		Not In RD
Distinctive Ringing-Density Zone 1 a	$0.03		Not In RD
Distinctive Ringing-Density Zone 1 b	$0.03		Not In RD
Distinctive Ringing-Density Zone 2	$0.03		Not In RD
Loudspeaker Paging-Density Zone la	$8.97		Not In RD
Loudspeaker Paging-Density Zone 1 b	$8.97		Not In RD
Loudspeaker Paging-Density Zone 2	$8.97		Not In RD
Meet-Me Conference-Density Zone 1 a	$0.19		Not In RD
Meet-Me Conference-Density Zone 1 b	$0.19		Not In RD
Meet-Me Conference-Density Zone 2	$0.19		Not In RD

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	R R
A	B	C	D
SWITCHING **(Continued From Previous Page)**			
Selective Call Acceptance-Density Zone 1 a	$0.05		Not In RD
Selective Call Acceptance-Density Zone 1 b	$0.05		Not In RD
Selective Call Acceptance-Density Zone 2	$0.05		Not In RD
Selective Call Forwarding-Density Zone 1 a	*$0.02*		Not In RD
Selective Call Forwarding-Density Zone 1 b	*$0.02*		Not In RD
Selective Call Forwarding-Density Zone 2	*$0.02*		Not In RD
Selective Call Rejection-Density Zone 1 a	*$0.31*		Not In RD
Selective Call Rejection-Density Zone 1 b	*$0.31*		Not In RD
Selective Call Rejection-Density Zone 2	*$0.31*		Not In RD
Six Way Conference-Density Zone 1 a	*$1.13*		Not In RD
Six Way Conference-Density Zone 1 b	*$1.13*		Not In RD
Six Way Conference-Density Zone 2	*$1.13*		Not In RD
Station Message Detail Record-Density Zone 1 a	*$19.12*		Not In RD
Station Message Detail Record-Density Zone 1 b	$19.12		Not In RD
Station Message Detail Record-Density Zone 2	$19.12		Not In RD
Individual Line Features			
Three-way Calling-Density Zone 1 a	$0.30		Not In RD
Three-way Calling-Density Zone 1 b	$0.30		Not In RD
Three-way Calling-Density Zone 2	$0.30		Not In RD
Remote Call Forwarding-Density Zone 1 a	$0.98		Not In RD
Remote Call Forwarding-Density Zone 1 b	$1.18		Not In RD
Remote Call Forwarding-Density Zone 2	$1.40		Not In RD
Calling Number Delivery-Density Zone la	$0.07		Not In RD
Calling Number Delivery-Density Zone 1 b	$0.07		Not In RD
Calling Number Delivery-Density Zone 2	$0.07		Not In RD
Calling Number & Name-Density Zone la	$0.13		Not In RD
Calling Number 8 Name-Density Zone 1 b	$0.14		Not In RD
Calling Number & Name-Density Zone 2	$0.15		Not In RD
Call Waiting Display Number-Density Zone la	$0.00		Not In RD
Call Waiting Display Number-Density Zone 1 b	$0.00		Not In RD
Call Waiting Display Number-Density Zone 2	$0.00		Not In RD
Call Waiting Display Name-Density Zone 1 a	$0.00		Not In RD
Call Waiting Display Name-Density Zone la	$0.00		Not In RD
Call Waiting Display Name-Density Zone la	$0.00		Not In RD
Anonymous Call Rejection-Density Zone 1 a	$0.08		Not In RD
Anonymous Call Rejection-Density Zone 1 b	$0.08		Not In RD
Anonymous Call Rejection-Density Zone 2	$0.08		Not In RD
Automatic Recall (Call Return)-Density Zone la	$0.42		Not In RD
Automatic Recall (Call Return)-Density Zone 1 b	$0.42		Not In RD
Automatic Recall (Call Return)-Density Zone 2	$0.42		Not In RD

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
SWITCHING (Continued From Previous Page)			
ISDN Features			
Circuit Switched Voice Intercom-Density Zone 1 a	$14.68		Not In RD
Circuit Switched Voice intercom-Density Zone 1 b	$12.48		Not In RD
Circuit Switched Voice intercom-Density Zone 2	$27.58		Not In RD
Circuit Switched Voice Announce-Density Zone 1 a	$13.29		Not In RD
Circuit Switched Voice Announce-Density Zone 1 b	$13.29		Not In RD
Circuit Switched Voice Announce-Density Zone 2	$13.29		Not In RD
Six-way Conference Calling-Density Zone 1a	$0.68		Not In RD
Six-way Conference Calling-Density Zone 1 b	$0.68		Not In RD
Six-way Conference Calling-Density Zone 2	$0.68		Not In RD
Three-way Calling-Density Zone la	$0.30		Not In RD
Three-way Calling-Density Zone 1 b	$0.30		Not in RD
Three-way Calling-Density Zone 2	$0.30		Not In RD
Calling Number Delivery-Density Zone 1 a	$0.00		Not In RD
Calling Number Delivery-Density Zone 1 b	$0.00		Not In RD
Calling Number Delivery-Density Zone 2	$0.00		Not In RD
Calling Name Delivery-Density Zone la	$3.02		Not In RD
Calling Name Delivery-Density Zone 1 b	$3.26		Not In RD
Calling Name Delivery-Density Zone 2	$3.53		Not In RD
Voice Dialing	$1.49		Not In RD
Callability	$0.19		Not In RD
SMDI Port-Density Zone la	$207.25		Not In RD
SMDI Port-Density Zone 1 b	$207.25		Not In RD
SMDI Port-Density Zone 2	$207.25		Not In RD
Local ***Switch Usage***			
Originating-AHD (usage)-Density Zone 1 a	$0.003246	***$0.000800***	***$0.001082***
Originating-AHD (usage)-Density Zone 1 b	$0.002477		***$0.000833***
Originating-AHD (usage)-Density Zone 2	$0.005001		***$0.001589***
Terminating AHD (usage)-Density Zone 1 a	$0.002949		***$0.000982***
Terminating AHD (usage)-Density Zone 1 b	$0.002417		***$0.000813***
Terminating AHD (usage)-Density Zone 2	$0.004957		***$0.001576***
Common EO Trunk AHD (usage)-Density Zone la	$0.000603		***$0.000345***
Common EO Trunk AHD (usage)-Density Zone 1 b	$0.000603		***$0.000345***
Common EO Trunk AHD (usage)-Density Zone 2	$0.000523		***$0.000299***
Common Transport	$0.000455		***$0.000301***
Tandem and TOPS Usage (shared)			
Tandem Switch - AHD (usage)	***$0.000873***		$0.000409
Common Tandem Trunk - AHD (usage)	***$0.000967***		$0.000553
Common TOPS Trunk (MOU)	$0.000158		$0.000090

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
SWITCHING **(Continued From Previous Page)**			
Local Switch Usage w/o Features			
Terminating Usage w/o Features Density Zone 1 a	$0.002590		Not In RD
Terminating Usage w/o Features Density Zone 1 b	$0.001640		Not In RD
Terminating Usage w/o Features Density Zone 2	$0.002345		Not In RD
Switch - Miscellaneous			
Two-Way Trunking	$3.10		Not In RD
BACost Feature Study - Sample			
3-Way Conference-Density Zone 1 a	$0.42		Not In RD
3-Way Conference-Density Zone 1 b	$0.42		Not In RD
3-Way Conference-Density Zone 2	$0.42		Not In RD
TRANSPORT:			
IOF			
DS-0 Fixed	$34.02	$15.06	$28.12
DS-0 Mileage	$0.11		$0.08
DS-1 Fixed	$68.39	$109.51	$53.99
DS-1 Mileage	$0.11		$0.08
DS-3 Fixed	$888.74	$586.80	$701.52
DS-3 Mileage	$19.15		$14.98
STS-1 Fixed	$889.44		$702.08
STS-1 Mileage	$19.16		$14.99
OC-3 Fixed	$2,812.87		$2,220.34
OC-3 Mileage	$61.85		$48.40
OC-12 Fixed	$4,166.46		$3,288.79
OC-12 Mileage	$113.88		$88.23
0C-48 Fixed	$4,511.93		$3,561.49
OC-48 Mileage	$14.31		$10.49
CO ***Multiplexing***			
I/O Multiplexing (Common Equipment per Month)	$210.81		$166.40
1/0 Multiplexing (per Plug-in per Month)	$6.79		$5.36
3/1 Multiplexing	$560.47		$442.41
Dark Fiber			
Loop			
Central Ofice Fixed Cost per Month	$11.09		$9.34
Customer Premises Cost per Month	$4.69		$5.12
Mileage Cost per Month	$65.41		$54.16
Unusable Cost per Mile per Month	$56.11		$46.42
IOF			
Fixed Cost per Month	$22.18		$18.67
Mileage Cost per Month	$67.59		$53.21

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	R R
A	B	C	D
TRANSPORT (Continued From Previous Page)			
SIGNALING SYSTEMS & DATABASES:			
STP Port	$339.27	$263.65	$262.00
LIDB Query	$0.000130	$0.000805	$0.000091
800 Query	$0.000183	$0.000425	$0.000128
Signaling Link (fixed per Month)	$34.01	$14.46	$28.12
Signaling Link (per Mile per Month)	$0.11		$0.08
E911 Common (shared) Port per Access Line/Month	$0.022		$0.019
OPERATOR SERVICES:			
OPH: Sent Paid, Pass Through, Calling Card/Sec	$0.014083		$0.013127
OPH: Sent Paid, Pass Through, Calling Card/Req	$0.387090		$0.360748
OPH: Calling Card per Request	$0.498951		$0.465103
OPH: Collect & Bill to 3rd Party per Request	$1.065170		$0.992500
Busy Line Verification (per second)	$0.014431		$0.013385
Busy Line Verification (per request)	$0.742613		$0.688781
Busy Line Verification/Interrupt (per second)	$0.014431		$0.013385
Busy Line Verification/Interrupt (per request)	$0.770753		$0.714881
Calling Card (Mechanized)/ Req	$0.178709		$0.136387
Collect and 3rd # Billing (Mechanized)/ Req	$0.178256		$0.137056
Directory Assistance per Request	$0.320366		$0.291863
Call Completion Additive/Req	$0.024595		$0.020737
Intercept per Request	$0.005935		$0.004674
Intercept per Line per Month	$0.021522		$0.016951
Branding per Call	$0.000752		$0.000620
Automated Coin Toll Service (ACTS) per Request	$0.010962		$0.008659
MISCELLANEOUS:			
Access to OSS per Loop or Resold Line per Month	$0.58		***$0.54***
ATLAS Display of Listings (DLA) per Request	$0.217		***$0.205***
Product and Service Availabilty (PSA) per Year	$8,082		***$7,643***
Street Address Guide (SAG) per Year	$7,049		***$6,666***
Daily **Usage** File (DUF) per Record	$0.001065		***$0.000994***
Daily Usage File (DUF) per Magnetic Tape	$23.09		***$21.56***
Electronic Customer Service Record Retrieval (CSR)	$0.001		$0.001
N -R urring Costs (NRCs)			
2-Wire New Initial Link			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$41.53		$39.31
Central Office Wiring-Expedite	$59.40		***$56.23***
Provisioning	$0.27		***$0.12***
Provisioning-Expedite	$0.40		***$0.18***

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	R R
A	B	C	D
NRCs (Continued From Previous Page)			
2-Wire New Additional Link			
Central Office Wiring	$20.66		$19.48
Central Office Wiring-Expedite	$29.55		$27.87
Provisioning	$0.27		$0.12
Provisioning-Expedite	$0.40		$0.18
2-Wire Hot Cut Initial			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$72.94		$68.95
Central Office Wiring-Expedite	$104.33		$98.63
Provisioning	$122.28		$107.29
Provisioning-Expedite	$180.22		$158.62
2-Wire Hot Cut Additional Link			
Central Office Wiring	$46.40		$43.71
Central Office Wiring-Expedite	$66.37		$62.52
Provisioning	$94.86		$81.52
Provisioning-Expedite	$139.60		$120.46
4-Wire New Initial			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$42.07		$39.85
Central Office Wiring-Expedite	$60.17		$57.00
Provisioning	$0.27		$0.12
Provisioning-Expedite	$0.40		$0.18
4-Wire New Additional Link			
Central Office Wiring	$24.57		$23.24
Central Office Wiring-Expedite	$35.15		$33.24
Provisioning	$0.27		$0.25
Provisioning-Expedite	$0.40		$0.37
4-Wire Hot Cut (Analog only) Initial			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$70.44		$66.64
Central Office Wiring-Expedite	$100.75		$95.33
Provisioning	$118.65		$110.96
Provisioning-Expedite	$175.67		$164.27
4-Wire Hot Cut (Analog only) Additional			
Central Office Wiring	$50.47		$47.59
Central Office Wiring-Expedite	$72.19		$68.07
Provisioning	$106.12		$99.26
Provisioning-Expedite	$157.12		$146.96

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurrma Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
ADSUHDSL New Initial			
Service Order	$11.64		$10.87
Service Order-Expedite	$18.06		$16.87
Central Office Wiring	$41.51		$39.32
Central Office Wiring-Expedite	$59.37		$56.24
Provisioning	$0.27		$0.12
Provisioning-Expedite	$0.40		$0.18
ADSUHDSL New Additional Link			
Central Office Wiring	$17.25		$16.26
Central Office Wiring-Expedite	$24.68		$23.26
Provisioning	$0.27		$0.12
Provisioning-Expedite	$0.40		$0.18
Switching			
End Office Line Port			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$27.75		$26.35
Central Office Wiring-Expedite	$39.69		$37.69
Provisioning	$7.60		$3.98
Provisioning-Expedite	$10.66		$5.57
End Office Trunk Port			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$28.88		$27.46
Central Office Wiring-Expedite	$41.30		$39.28
Provisioning	$553.88		$525.91
Provisioning-Expedite	$715.42		$679.22
Tandem Trunk Port			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$29.86		$28.43
Central Office Wiring-Expedite	$42.71		$40.66
Provisioning	$486.44		$461.96
Provisioning-Expedite	$647.98		$615.27
TOPS Trunk Port			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$30.49		$29.00
Central Office Wiring-Expedite	$43.62		$41.47
Provisioning	$598.18		$567.90
Provisioning-Expedite	$759.72		$721.21

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge A	Verizon Proposed B	ATT/MCI Proposed C	RD D
NRCs (Continued From Previous Page)			
Add or Change Features			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
End Office IDLC Port			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$37.43		$35.51
Central Office Wiring-Expedite	$53.53		$50.79
Provisioning	$486.74		$461.48
Provisioning-Expedite	$666.66		$632.00
Switched DS-1 Port			
Service Order	***$65.57***		$61.22
Service Order-Expedite	***$101.78***		$95.03
Central Office Wiring	***$31.61***		$30.03
Central Office Wiring-Expedite	***$45.22***		$42.95
Provisioning	***$447.56***		$425.02
Provisioning-Expedite	***$608.66***		$578.02
SMDI Trunk Port			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$37.51		***$35.58***
Central Office Wring-Expedite	$53.65		***$50.89***
Provisioning	$417.64		***$396.44***
Provisioning-Expedite	$578.15		***$548.88***
UNE-Platform (UNE-P)			
2-wire UNE-Platform New-Initial			
Service Order	***$1.03***		$0.96
Service Order-Expedite	***$1.60***		$1.49
Central Office Wiring	***$0.00***		$0.00
Central Office Wiring-Expedite	***$0.00***		$0.00
Provisioning	***$10.35***		$2.95
Provisioning-Expedite	***$14.51***		$4.14
2-wire LINE-Platform New-Additional			
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$10.12		***$2.83***
Provisioning-Expedite	$14.19		***$3.98***

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
P-wire UNE-Platform Conversion-Initial			
Service Order	$1.03		$0.96
Service Order-Expedite	$1.60		$1.49
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$5.76		*$2.86*
Provisioning-Expedite	$8.08		*$4.02*
2-wire LINE-Plafform Conversion-Additional			
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	*$5.53*		$2.75
Provisioning-Expedite	*$7.77*		$3.86
Interoffice Facilities (IOF)			
IOF Voice Grade			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$34.98		$33.21
Central Office Wiring-Expedite	$50.01		$47.50
Provisioning	$106.85		$100.14
Provisioning-Expedite	$158.19		$148.26
IOF DS-1			
Service Order	**$65.57**		$61.22
Service Order-Expedite	**$101.78**		$95.03
Central Office Wiring	**$35.66**		$33.87
Central Office Wiring-Expedite	**$51 .01**		$48.45
Provisioning	**$115.84**		$109.21
Provisioning-Expedite	$167.96		$158.35
IOF DS-3			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$49.95		$47.43
Central Office Wiring-Expedite	$71.45		$67.84
Provisioning	$165.47		$155.70
Provisioning-Expedite	$223.35		$210.28
IOF STS-1			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$49.95		$47.43
Central Office Wiring-Expedite	$71.45		$67.84
Provisioning	$165.47		$155.70
Provisioning-Expedite	$223.35		$210.28

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
/OF Optical (OC-3, OC-12, OC-48)			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$55.23		$52.38
Central Office Wiring-Expedite	$79.01		$74.93
Provisioning	$201.78		$189.61
Provisioning-Expedite	$277.11		$260.47
Entrance Facility DS-1			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$35.66		$33.87
Central Office Wiring-Expedite	$51.01		$48.45
Provisioning	$115.84		$109.21
Provisioning-Expedite	$167.96		$158.35
Entrance Facility DS-3			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$49.95		$47.43
Central Office Wiring-Expedite	$71.45		$67.84
Provisioning	$165.47		$155.70
Provisioning-Expedite	$223.35		$210.28
Entrance Facility STS-1			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$49.95		$47.43
Central Office Wiring-Expedite	$71.45		$67.84
Provisioning	$165.47		$155.70
Provisioning-Expedite	$223.35		$210.28
En trance Facility Optical			
Service Order	$65.57		$61.22
Service Order-Expedite	$101.78		$95.03
Central Office Wiring	$49.95		$47.43
Central Office Wiring-Expedite	$71.45		$67.84
Provisioning	$165.47		$155.70
Provisioning-Expedite	$223.35		$210.28

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
Multiplexing DS-3 ***to DS-1***			
Service Order	***$65.57***		$61.22
Service Order-Expedite	***$101.78***		$95.03
Central Office Wiring	***$28.88***		$27.46
Central Office Wiring-Expedite	***$41.30***		$39.28
Provisioning	***$170.76***		$160.81
Provisioning-Expedite	***$231.18***		$217.84
Multiplexing DS-1 to DS-0			
Service Order	***$65.57***		$61.22
Service Order-Expedite	***$101.78***		$95.03
Central Office Wiring	***$28.88***		$27.46
Central Office Wiring-Expedite	***$41.30***		$39.28
Provisioning	***$122.85***		$115.98
Provisioning-Expedite	***$178.35***		$168.37
Channel Activation per DS-0 Channel			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$102.65		$93.05
Provisioning-Expedite	$151.16		$137.33
Signalling Tansfer Point (STP) Port			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$94.59		$88.92
Central Office Wiring-Expedite	$135.31		$127.19
Provisioning	$738.87		$701.31
Provisioning-Expedite	$924.09		$876.86
AIN Activation			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Query ***Back Charge***			
Service Order	$15.38		$14.36
Service Order-Expedite			$22.29

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
Manual Intervention Surcharge			
Manual Surcharge-Loop	$28.26		$26.39
Manual Surcharge-Loop Expedite	$43.86		$40.96
Manual Surcharge-Digital	$30.95		$28.90
Manual Surcharge-Digital Expedite	$48.04		$44.86
Manual Surcharge-Special	$73.82		$68.93
Manual Surcharge-Special Expedite	$114.58		$106.99
Manual Surcharge-UNE Platform	$12.76		$11.92
Manual Surcharge-UNE Platform Expedite	$19.81		$18.50
Misdirected Troubles			
Misdirected Troubles In	$46.33		$43.26
Misdirected Troubles In-Expedite	$67.87		$63.37
Misdirected Troubles Out	$129.64		$121.05
Misdirected Troubles Out-Expedite	$184.89		$172.64
TC Not Ready			
TC Not Ready	$77.77		$72.62
ADSL Conditioning			
Manual Loop Qualification	$135.49		$126.51
Manual Loop Qualification Expedite	$194.50		$181.61
Engineering Query	$180.47		$168.52
Engineering Query Expedite	$257.95		$240.86
Installation Dispatch			
Dispatch Initial Loop	$121.35		$113.31
Dispatch Initial Loop-Expedite	$170.92		$159.59
Dispatch Additional Loop	$41.22		$38.49
Dispatch Additional Loop-Expedite	$58.06		$54.21
Dispatch Initial T-l	$157.45		$147.01
Dispatch Initial T-l-Expedite	$221.76		$207.06
Dispatch Additional T-l	$83.19		$77.67
Dispatch Additional T-l -Expedite	$117.16		$109.40
Other Miscellaneous Non-Recurring Studies			
House and Riser			
House and Riser Inquiry Charge	$52.22		$48.63
Line Port Traffic Study			
Set-Up	$22.51		$20.99
Weekly Charge	$9.73		$9.08
Cooperative Testing			
Cooperative Testing	$37.15		$37.15
Cooperative Testing Expedite	$52.43		$52.43
Mechanized Loop Qualification	$0.69		$0.68

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
Customer Specified Signalling			
S-wire CSS Loop-Initial			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$43.23		***$40.36***
Central Office Wiring-Expedite	$61.83		***$57.73***
Provisioning	$0.27		***$0.25***
Provisioning-Expedite	$0.40		***$0.37***
Field Installation	$161.05		***$150.38***
Field Installation-Expedite	$226.84		***$211.80***
P-wire CSS Loop-Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	**$23.83**		***$22.25***
Central Office Wrring-Expedite	**$34.09**		***$31.83***
Provisioning	**$0.27**		***$0.25***
Provisioning-Expedite	**$0.40**		***$0.37***
Field Installation	**$88.59**		***$82.72***
Field Installation-Expedite	**$124.78**		***$116.51***
I-wire CSS Loop-Initial			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90
Central Office Wiring	$49.00		***$45.75***
Central Office Wrring-Expedite	$70.08		***$65.44***
Provisioning	$0.27		***$0.25***
Provisioning-Expedite	$0.40		***$0.37***
Field Installation	$185.39		***$173.10***
Field Installation-Expedite	$261.11		***$243.80***
4-wire CSS Loop-Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	***$33.64***		$31.41
Central Office Wiring-Expedite	***$48.12***		$44.93
Provisioning	***$0.27***		$0.25
Provisioning-Expedite	***$0.40***		$0.37
Field Installation	***$106.29***		$99.25
Field Installation-Expedite	***$149.71***		$139.79
IDLC Loops			
2-wire IDLC Loops New-Initial			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.90

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	***$4 86***		***$4 54***
Provisioning-Expedite	***$6.82***		$6.37
Field Installation	***$121.35***		$113.31
Field Installation-Expedite	$170.92		$159.59
2-wire IDLC Loops New-Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	***$4.86***		***$4.52***
Provisioning-Expedite	***$6.82***		***$5.96***
Field Installation	***$41.22***		***$41.22***
Field Installation-Expedite	***$58.06***		***$50.72***
Cwire IDLC Loops New-Initial			
Service Order	$9.59		$8.95
Service Order-Expedite	$14.88		$13.04
Central Office Wiring	$0.00		$4.54
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$4.86		$4.54
Provisioning-Expedite	$6.82		$5.98
Field Installation	$157.45		$147.01
Field Installation-Expedite	$221.76		$194.23
#-wire IDLC Loops New-Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	***$4.86***		***$4.54***
Provisioning-Expedite	***$6.82***		***$6.37***
Field Installation	***$83.19***		***$72.86***
Field Installation-Expedite	$117.16		***$102.62***

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
Dark Fiber			
Service Order	$73.82		$68.93
Service Date Change Charge	$15.38		$14.36
Service Delivery Engineer (SDE)-47TA 1st 1/2 hour	$28.11		$28.11
Service Delivery Engineer (SDE)-47TA each 114 hour	$14.06		$14.06
Network Transport Engineer (NTE)-3170 1 st 1/2 hour	$29.54		$29.54
Network Transport Engineer (NTE)-3170 ea. 1/4 hour	$14.77		$14.77
Network Transport Engineer (NTE)-3210 1st 1/2 hour	$29.63		$29.63
Network Transport Engineer (NTE)-3210 ea. 1/4 hour	$14.82		$14.82
Outside Plant Operations (Splicing) 4220 1st 1/2 hour	$20.89		$20.89
Outside Plant Operations (Splicing) 4220 ea 1/4 hour	$10.44		$10.44
Central Office Frame (COF)-4350 1st 1/2 hour	$23.69		$23.69
Central Office Frame (COF)-4350 each 114 hour	$11.85		$11.85
Subloop Unbundling			
2-wire New Initial			
Service Order	$9.59		$8.92
Service Order-Expedite	$14.88		$13.94
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$0.27		$0.12
Provisioning-Expedite	$0.40		$0.18
Field Installation	$94.30		$87.65
Field Installation-Expedite	$132.81		$123.46
2-wire New Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$0.27		$0.12
Provisioning-Expedite	$0.40		$0.18
Field Installation	$34.08		$87.65
Field Installation-Expedite	$48.00		$123.46
l-wire Loop Through Initial			
Service Order	$9.59		$8.92
Service Order-Expedite	$14.88		$13.94
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$103.38		$96.07
Provisioning-Expedite	$153.06		$143.33
Field Installation	$111.04		$104.70
Field Installation-Expedite	$155.46		$147.47

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurrma Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
2-wire Loop Through Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	***$77.36***		$71.85
Provisioning-Expedite	$114.53		$107.20
Field Installation	$51.33		$48.40
Field Installation-Expedite	$71.87		$68.17
I-wire New initial			
Service Order	$9.59		$8.92
Service Order-Expedite	$14.88		$13.94
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$0.27		$0.25
Provisioning-Expedite	$0.40		$0.37
Field Installation	$112.91		$104.96
Field Installation-Expedite	$159.03		$147.83
4-wire New Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	***$0.27***		$0.25
Provisioning-Expedite	***$0.40***		$0.37
Field Installation	***$58.97***		$54.81
Field Installation-Expedite	***$83.05***		$77.21
I-wire Loop Through Initial			
Service Order	$9.59		$8.92
Service Order-Expedite	$14.88		$13.94
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$103.80		$96.46
Provisioning-Expedite	$153.68		$143.91
Field Installation	$115.24		$107.12
Field Installation-Expedite	$162.31		$150.89

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRcs (Continued From Previous Page)			
4-wire Loop Through Additional			
Service Order	$0.00		$0.00
Service Order-Expedite	$0.00		$0.00
Central Office Wiring	$0.00		$0.00
Central Office Wiring-Expedite	$0.00		$0.00
Provisioning	$91.11		***$84.65***
Provisioning-Expedite	$134.90		$126.29
Field Installation	$51.74		***$48.10***
Field Installation-Expedite	***$72.88***		***$67.75***
NID to NID			
Service Order	***$9.59***		***$8.95***
Initial 1/2 hour	***$56.45***		***$52.71***
Initial 1/2 hour Expedite	***$79.51***		***$74.24***
Additional 1/4 hour	$10.13		***$9.47***
Additional 1/4 hour Expedite	$14.28		***$13.33***
Signalling System 7			
SS7 Signaling Modifications per STP Pair			
Re-Home "D- Link'	$247.90		***$231.47***
"A-Link" to "D-Link" Conversion	$185.92		***$173.60***
Change in Hub Providers	$123.95		$115.73
STP Tranlations for SS7 Features			
A-LINKS			
Program translations for Basic Set-up less ISUP	$75.27		$71.56
Program A-Link translations for ISUP and TCAP	$61.77		$58.70
Translations for 800 DB/LIDB, CLASS Features, Calling Name, AIN DB Query Access Queries	$67.52		$64.33
Program A-Link for CLEC to CLEC EO access	$61.77		$58.70
STP Tranlations for SS7 Features			
D-LINKS			
Program translations for Basic Set-up less ISUP	$46.34		$43.95
Program translations with ISUP and TCAP.	$46.34		$43.95
Translations for 800 DB/LIDB, CLASS Features, Calling Name, AIN DB Query Access Queries	$54.09		$51.19
Program for CLEC to CLEC end office access	$46.34		$43.95
Subsequent Connections to BA Pr/orig pt code	$61.97		$57.87
NPA-NXX (for CLASS Features only) per 10 (ten) originating NPA/NXX input to STP Table	$30.99		$28.93
End Office translations (CLASS Features only) per BA end office switch & originating pt code	$10.51		$9.84

VERIZON NEW YORK, INC.
Summary of Proposed and Recommended Rates

Element/Nonrecurring Charge	Verizon Proposed	ATT/MCI Proposed	RD
A	B	C	D
NRCs (Continued From Previous Page)			
ESAC-Testing Setup Per CLEC Switch Type			
MTP: Levels 2&3	$578.43		$540.09
ISUP	$578.43		$540.09
800 DB Queries, CLASS, Calling Name	$72.30		$67.51
ESAC-Testing Per CLEC Switch Type			
MTP: Levels 2& 3	$903.45		***$843.57***
ISUP	$1,355.18		***$1***,265.35
800 DB Queries	$112.93		***$105.45***
LIDB Queries, CLASS Features, Calling Name	$56.47		***$52.72***

VERIZON NEW YORK INC.
Summary of Recommended Adjustments
To Verizon's Cost Studies

ANNUAL COST FACTORS (ACF)

1. Correct Workpaper Part H Section 2.2 Page 3 of 34, Line 15, "Total Digital Circuit ACF, Columns D to K to include Line 14, "Marketing and Other Support."

2. Increase the productivity factors for maintenance and non-network related expenses from 2% and 10%%, respectively, to 3% and 12%.

3. Bell Atlantic/GTE merger expense savings are to be submitted in Verizon's Brief on Exceptions and should be reflected in Workpaper Part H, Section 3.15 with Bell Atlantic/NYNEX merger expense savings.

4. Increase the Forward Looking to Current Factor (FLC) from 70% to 75%, which reduces the ACF's the FLC is applied to.

5. Reduce "M" dollars in the Outside Plant Network ACF calculations by 30%.

6. Increase the 10% new estimate for repeat repairs considered in the of copper repair adjustment factor (CRAF) in the Network ACF calculations to 25%.

7. Disallow 85% of advertising expenses considered in the Wholesale Marketing ACF calculation.

8. Remove the Special Pension Enhancement (SPE) factor from the Common Overhead ACF.

9. Y2K expenses should be eliminated from the Common Overhead ACF by reducing the Information Management Expenses reflected on line 1 of Workpaper, Part H, Section 3.14.10.

10. Revise the Depreciation ACFs to reflect the rates adopted in Opinion No. 97-2.

VERIZON NEW YORK INC.
Summary of Recommended Adjustments
To Verizon's Cost Studies

11. Adjust the Return, Interest and Federal Income Taxes ACF's to reflect the following cost of capital.

	%	cost	Rate of Return
Debt	35%	7.4%	2.6%
Equity	65%	12.2%	7.9%
Total	100%		10.5%

LOOPS

1. Increase the concentration ratio of Remote Terminals (RT) to Central Office Terminals (COT) from 3:1 to 4:1.

2. Base the cost per loop on ultimate versus current demand by using the average net present value of demand over a 10-year period assuming growth at 3% per year.

3. Adjust the fill factors as follows:

   a Increase distribution from 40% to 50%.
   b Increase RT Electronics from 84% to 88%.
   c Increase by 15% in each zone for RT enclosures and COT.
   d Increase innerduct from 40% to 66.7%.

4. Decrease the Land and Buildings loading factor by 2.5%.[1]

5. Reduce the installed cost of poles by 10%.

House and Riser Cable

1. Increase the fill factor from 40% to 60%.

Switching Costs

1. Decrease the cost of end office switch material from $128 per access line to $105.

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[1] In addition to loops, this adjustment impacts all other unbundled network elements that consider the land and building factor.

VERIZON NEW YORK INC.
Summary of Recommended Adjustments
To Verizon's Cost Studies

2. Reduce tandem switch material costs by the percentage reduction to end office switch material resulting from adjustment 1 (17%) plus an additional 10%.

3. Decrease the Engineer, Furnish and Install (EF&I) loading factor for digital switches from 43.5% to 30%.

4. Spread the total cost of the switch over 308 days versus 251.

5. Allocate total switch costs between usage and ports as recommended.

6. Revise costs for local switching, rates for Meetpoint A and B reciprocal compensation, tandem transient service rates and UCTC rates.*

Interoffice Transport

1. Reduce the fill factor for Dedicated Transport from 75% to 80%.

2. For Shared Transport, use a weighted-average distance of 12 miles between wire centers.

Digital Subscriber Loops (DSL)

1. Decrease the proposed Loop Qualification Charge by 25% (in addition to the impacts of other recommendations impacting Verizon's DSL cost study).

Line Sharing

1. Adjust the demand assumed for Wide Band Testing (WTS) halfway between zero and Verizon's original proposal.

2. Eliminate charges from applying marketing and other support ACFs for Splitters.

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[2] Staff could not calculate the statewide costs with the data on the record. Thus, Verizon should provide with its Brief on Exceptions.

VERIZON NEW YORK INC.
Summary of Recommended Adjustments
To Verizon's Cost Studies

3. Set Service Access Connection (SAC) charges based on 165 feet of cable for each.

Non Recurring Charges (NRC)

1. Adjust the fallout percentage of orders that cannot be processed electronically contemplated by Verizon's study to 2% to reflect efficiency resulting from the use of its Operation Support System (OSS).

Collocation

1. Disallow 10% of cageless collocation security costs.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

Note – Staff will provide a CD-ROM to all requesting parties that fully links all of Verizon's updated exhibits, workpapers and models as well as and reflects the following adjustments. Please contact Charles Reubens of Staff if you would like a copy of the CD-ROM. His telephone number is 518-474-8053. There is a proprietary and non-propriety version of the CD-ROM. Only parties that have signed the protective order may obtain the proprietary version.

ANNUAL COST FACTORS (ACF)

1. **Adjustment** – Correct workpaper part H section 2.2 page 3 of 34, line 15, "Total Digital Circuit ACF, columns D to K to include line 14, "Marketing and Other Support."

   Application – The formulas in the applicable cells of the spreadsheet is corrected.

2. **Adjustment** – Increase the productivity factors for maintenance and non-network related expenses from 2% and 10%, respectively, to 3% and 12%.

   Application – The revised factors are reflected on line 1 of sections 3.9 and 3.10 of workpaper, part H.

3. **Adjustment** – Bell Atlantic/GTE merger expense savings are to be submitted in Verizon's Brief on Exceptions and should be reflected in workpaper part H, section 3.15 with Bell Atlantic/NYNEX merger expense savings.

4. **Adjustment** – Increase the Forward Looking to Current Factor (FLC) from 70% to 75%, which decreases the ACFs the FLC is applied to.

   Application – The revised factor is reflected on line 6 of exhibit, part H, section 3, page 1.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

5. **Adjustment** - Reduce "M" dollars in the Outside Plant Network ACF calculations by 30%.

   Application - The following amounts in the Part Workpapers were reduced by 30%.

   Section 2.1
   Line 1 on pages 14, 16, 18, 20, 22, 24, 26, 28, 30 & 32.

   Section 2.2
   Lines 35*, 38, 41, 47 & 50 on pages 24 & 25.
   Lines 55, 58, 61, 64, 67, 70, 73 and 76.

   * A special adjustment was made to consider pole revenues.

6. **Adjustment** - Increase the 10% new estimate for repeat repairs considered in the of copper repair adjustment factor (CRAF) in the Network ACF calculations to 25%.

   Application - The change is reflected on line of workpaper part H, section 3.7.

7. **Adjustment** - Disallow 85% of advertising expenses considered in the Wholesale Marketing ACF calculation.

   Application - Lines 590 to 597 of workpaper part H, section 3.12.1, page 4 were reduced by 85%.

8. **Adjustment** - Remove the Special Pension Enhancement (SPE) factor from the Common Overhead ACF.

   Application - The SPE loading factor on line 2, column D of workpaper part H, sections 3.11 and 3.12, page 1 was eliminated.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

9. **Adjustment -** Y2K expenses should be eliminated from Information Management Expenses in the Common Overhead.

Application - Not reflected. Verizon is to provide the amount in its Brief on Exceptions, which should be reflected by reducing the amount on line 1, column D of workpaper, part H, section 3.14.10.

10. **Adjustment -** Revise the Depreciation ACFs to reflect the rates adopted in Opinion No. 97-2.

Application - The depreciation lives and future net salvage percentages used by Staff to derive the rates adopted in that Opinion are reflected on lines 11-25 of workpaper, part H, section 2.3, page 1.

To reflect the impact on the Other Support ACF, Staff obtained the "Support Capital Cost Model" and reflected the Opinion 97-2 lives and net salvage percentages in the "Input Values" section. The results of that model are linked to the "Capital Factors" reflected on lines l-12 of workpaper, part H, section 3.14.2.

11. **Adjustment -** Adjust the Return, Interest and Federal Income Taxes ACF's to reflect the following cost of capital.

	%	cost	Rate of Return
Debt	35%	7.4%	2.6%
Equity	65%	12.2%	7.9%
Total	100%		10.5%

Application - The cost of capital factors in the chart are reflected on line 1, column D of workpaper part H, section 3.3. The workpapers detailing their calculation are in the "part L" folder on the CD-ROM.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies
LOOPS

1. **Adjustment –** Increase the concentration ratio of Remote Terminals (RT) to Central Office Terminals (COT) from 3:1 to 4:1.

   Application – The amounts in the "CKT/Card" column of page 155 of workpaper, part A-l, sections l-4, "COT Prices" were divided by three and then multiplied by four.

2. **Adjustment –** Base the cost per loop on ultimate versus current demand by using the average net present value of demand over a lo-year period assuming growth at 3% per year.

   Application – This adjustment is reflected in the "Monthly Cost Summary" sheet of the Link Cost Calculator (workpaper part A-l, sections 1-4) in cells G70 to 093.

3. Adjust the fill factors.

   a **Adjustment –** Increase distribution from 40% to 50%.

   Application – This change is reflected in column C of lines 181-186 of workpaper, part A-l, sections 1-4, "Copper Distribution Investments" as well as line 11 workpaper Part ABP, page 2 for Wideband Testing.

   b **Adjustment –** Increase RT Electronics from 84% to 88%.

   Application – This changes is reflected on lines l-242, column 214 of the "Feeder Route Data" tab of the Link Cost Calculator, which is pages 114, 134 and 192 of workpaper A-l, sections l-4.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

c **Adjustment** - Increase by 15% in each zone for RT enclosures and COT.

Application - This amounts reflected on all lines of columns 156, 160, 164, 168, 172, 176, 180, 184, 188, 192, 196, 200 and 204 in "Feeder Route Data" tab of the Link Cost Calculator were increased by 15%. This information is reflected on pages 108-113 of workpaper A-l, sections l-4.

d **Adjustment** - Increase innerduct from 40% to 66.7%.

Application - This changes is by changing the 60% line 2, column C on page 93 of workpaper A-l, sections l-4, "Structure Costs".

4. **Adjustment** - Decrease the Land and Buildings loading factor by 2.5%.[1]

Application - The amounts in column d of exhibit, part H, section 1, lines l-8 were multiplied by 97.5%.

5. **Adjustment** - Reduce the installed cost of poles by 10%.

Application - This changes is reflected by multiplying the amount in cell 4P in the "Investment by Feeder Route" tab of the Link Cost Calculator provided for workpaper part A-l, sections l-4. It does not appear Cell 4P is included with exhibits on the record.

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[1] In addition to loops, this adjustment impacts all other unbundled network elements that consider the land and building factor.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies
House **and Riser Cable**

1. **Adjustment –** Increase the fill factor from 40% to 60%.

   Application – Changing the utilization factor reflected on lines 4 & 16 of pages 1, 3 and 5 as well as lines 26 & 41 of pages 2, 4 and 6 of workpaper, part A-2, section 1.

Switching Costs

1. **Adjustment –** Decrease the cost of switch material from $127 per access line to $105.

   Application – The total local switch investment on line 23 of workpaper part B-2, section 4, page 1, line 23 was changed to equal the product of $105 per line and the number of lines per switch from workpaper part B-2, section 4, page 2, line 12.

2. **Adjustment –** Reduce tandem switch material costs by the percentage reduction to end office switch material resulting from adjustment 1 (17%) plus an additional 10%.

   Application – The blended tandem total non-traffic sensitive (NTS) and total traffic sensitive (TS) investments shown on lines 9 and 10 of workpaper part B-2, section 5, page 1 were multiplied by one minus the sum of the switch material adjustment (17%) plus an additional 10%.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

3. **Adjustment** – Decrease the Engineer, Furnish and Install (EF&I) costs to reflect decrease in loading factor for digital switches from 43.5% to 30%.

Application-Exhibit part H, section 1, page 1, line 17 was revised to 30%. The factor was applied to the traffic sensitive material investments on workpaper B-2, section 2 pages 1 and 2 as follows. The traffic sensitive material investments from Verizon's 10-19-00 filing were divided by the busy hour minutes of use. The resultant material investment per busy hour minute of use was multiplied by the revised 30% digital switch EF&I factor in order to produce an installation cost per busy hour minute of use. This installation cost per busy hour minute of use was then added to the quotient of the RD's traffic sensitive material investment divided by the busy hour minutes of use. Similarly, the factor was applied to the non-traffic sensitive material investments on workpaper B-l, sections 1 and 2, pages 1, 2 and 3 as follows. The non- traffic sensitive material investments from Verizon's October 19, 2000 filing were divided by the appropriate line utilization adjustment factors. The resultant monthly material investment per port was multiplied by the revised 30% digital switch EF&I factor to produce a monthly installation cost per port. This installation cost per port was then added to the quotient of the RD's non-traffic sensitive investment divided by the appropriate line utilization adjustment factor.

4. **Adjustment** – Spread the total cost of the switch over 308 days versus 251.

Application – The number of average business days on line 4 of workpaper part B-3, section 3, page 2 was changed from 251 to 308.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

5. **Adjustment** - Allocate total switch costs between usage and ports as recommended.

   Application - The non traffic sensitive local switch investments on line 24 of workpaper part B-2, section 4, page 1, equal the product of multiplying the revised total local switch investments on line 23 by 66%. The traffic sensitive switch investments on line 25 equal the line 23 total switch investments less non-traffic sensitive investments on line 24.

6. **Adjustment** - Remove RTU costs from usage sensitive end office switching charges and add to the non-traffic sensitive port charges.

   Application - The annual total RTU cost per switch on workpaper part B-2, section 6, page 1, was divided by the statewide average number of lines per end office. The statewide average number of lines per end office was determined by using the number of links per density zone from workpaper part A-l, section 8.1 page 2 to weight the number of lines per model end office shown on workpaper part B-2, section 4, page 2, line 12. A monthly total RTU cost per line was calculated by dividing the annual total RTU cost per switch by the product of 12 and the statewide average number of lines per switch. The annual RTU costs per busy hour minutes of use on line 19 of workpaper part B-2, section 1, page 1, were changed to zero. The monthly total RTU costs per line was added to the total TELRIC monthly cost shown on line 19 of workpaper part B-l, section 1, pages 1-3 and line 19 of workpaper part B-l, section 2, pages l-3.

6. **Adjustment** - Revise statewide costs for local switching, rates for Meetpoint A and B reciprocal compensation, tandem transient service rates and UCTC rates proposed in exhibit part K.

   Application - Staff could not calculate the statewide costs with the data on the record. Thus, Verizon should provide with its Brief on Exceptions.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

Interoffice Transport

1. **Adjustment –** Reduce the fill factor for Dedicated Transport from 75% to 80%.

   Application – The change is reflected on:
   a Lines 357-368 except 361 on page 8 of workpaper, part C-1, section 1.
   b Line 16 of page 1 and line 6 of page 3 of workpaper, part c-4, section 2.

2. **Adjustment –** For Shared Transport, use a weighted-average distance of 12 miles between wire centers versus 33.4 miles.

   Application – This change is reflected on Line 19 of workpaper, part B-2, section 3, pages 1 and 2.

Digital Subscriber Loops (DSL)

1. **Adjustment –** Decrease the proposed Loop Qualification Charge by 25% (in addition to the impacts of other recommendations impacting Verizon's DSL cost study).

   Application – The amounts in lines l-6, column c & d of exhibit part M, section 1 are reduced 25%.

Line Sharing

1. **Adjustment –** Adjust the demand assumed for Wide Band Testing (WTS) halfway between zero and Verizon's original proposal.

   Application – The derivation of this adjustment is reflected on lines 12-15 of workpaper Part AB, page 5P, which is included in part a-l on the CD-ROM.

VERIZON NEW YORK INC.
How Recommended Adjustments Are
Applied To Verizon's Cost Studies

2. **Adjustment –** Eliminate charges from applying marketing and other support ACFs for Splitters.

   Application – The ACF on line 9 workpaper part N, section 1, page 2 only reflects the network ACF.

3. **Adjustment –** Set Service Access Connection (SAC) charges based on 165 feet of cable for each.

   Application – Staff could not reflect this adjustment because exhibit part N, section contains data referenced to Opinion No. 99-4, Appendix B that Staff cannot trace to that source. Verizon should explain the discrepancy in its Brief on Exceptions.

Other Non Recurring Charges (NRC)

1. **Adjustment –** Adjust the fallout percentage of orders that cannot be processed electronically contemplated by Verizon's study to 2% to reflect efficiency resulting,from the use of its Operation Support System (OSS).

   Application – The percentages in column D in the "RCMAC" and "MLAC" sections of tabs 1-40 of the wholesale NRC model submitted with the Part G workpapers were adjusted so when column C is multiplied by column D a 2% fallout rate results. The adjustment is also reflected with the NRC model submitted with Part 3.7. Staff could not determine if the adjustment is applicable to the NRCs for IDLC, CCS and cooperative testing because Verizon's workpapers did not include the complete NRC model for those items. Verizon should submit the complete models to Staff and any other part that requests them.

Collocation

1. **Adjustment –** Disallow 10% of cageless collocation security costs.

   Application – Line 1, column of exhibit part AF was reduced 90%.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

SUPPLEMENTAL RECOMMENDED DECISION
ON PRICING OF DUCTS AND CONDUITS BY
ADMINISTRATIVE LAW JUDGE JOEL A. LINSIDER

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

NOTICE OF SCHEDULE FOR FILING EXCEPTIONS

(Issued June 18, 2001)

Attached is the Supplemental Recommended Decision on Pricing of Ducts and Conduits of Administrative Law Judge Joel A. Linsider in Module 3 of this proceeding, together with a copy of the Commission's rules governing the procedures to be followed. Briefs on exceptions will be due in hand to the undersigned and all active parties on July 9, 2001 and briefs opposing exceptions will be due in hand to the undersigned and may be mailed to all active parties on July 24, 2001.

(SIGNED) JANET HAND DEIXLER
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

SUPPLEMENTAL RECOMMENDED DECISION ON PRICING OF DUCTS AND CONDUITS

BY

ADMINISTRATIVE LAW JUDGE JOEL A. LINSIDER

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STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

APPEARANCES: See Appendix A to Recommended Decision Issued May 16, 2001

JOEL A. LINSIDER, Administrative Law Judge:

INTRODUCTION

As anticipated in my recommended decision issued May 16, 2001, this supplemental recommended decision considers issues raised in Module 3 of this proceeding related to duct and conduit rentals. The procedural history of the case is set forth in the May 16 recommended decision, as are pertinent definitions of terms and identification of parties; the additional item that needs to be noted here is CTTANY's motion, dated March 22, 2001, to strike a portion of Verizon's reply brief or, in the alternative, to accept CTTANY's response to it.

CTTANY's motion challenges the procedural propriety of what CTTANY characterizes as Verizon's argument, in its reply brief, that the calculation method used by CTTANY witness Kravtin "is inconsistent with a specific algebraic approach" said to have been offered for the first time at footnote 309 of Verizon's reply brief "and surrounding pages 116-120."[1] Arguing that Verizon has misused its reply brief to introduce new material, CTTANY urges that the new material be stricken or, in the alternative, that CTTANY be allowed to submit a response to Verizon's allegedly new argument, as set forth in an attachment to the motion.

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[1] CTTANY's Motion, p. 2

Verizon responded to CTTANY's motion on March 28, 2001, denying that it improperly used its reply brief and maintaining that it simply offered a more detailed discussion of the issue in a proper response to material in CTTANY's own initial brief. It therefore urges that CTTANY's motion be denied.

As a practical matter, Verizon's answer to the motion also sets forth a detailed substantive rejoinder to the response that CTTANY would have me entertain as an alternative to granting its motion to strike. Having reviewed all of the material submitted by both parties, I believe Verizon's reply brief is procedurally unobjectionable in its scope but that the additional argument offered by both sides provides useful clarification of the issue. CTTANY's motion to strike accordingly is denied; its alternative request to submit the attachment to its motion is granted; and the substantive arguments made by Verizon in its reply to the motion will be taken into account as well.

Conduit rentals differ from nearly all of the other products considered in Module 3 of this proceeding in that they are not classified as unbundled network elements pursuant to the Telecommunications Act of 1996 (the 1996 Act) and are not required by federal law to be priced in accordance with TELRIC. Indeed, the FCC method for pricing conduit (which is not binding on the states) is based on historical costs, and CTTANY urges its use. Verizon, in contrast, urges that conduit rentals, like UNE rates, be set on a forward-looking TELRIC basis, a proposal that would increase the rates very substantially from their present levels, set in 1970 on the basis of historical costs. In addition to these general disagreements, the parties dispute the manner in which their respective methods would be applied.

Before turning to the parties' arguments, it is important to set forth in greater detail the state and federal regulatory context for this issue.

BACKGROUND AND LEGAL CONTEXT

Section 224(a)(4) of the Communications Act of 1934 as amended (47 U.S.C. §224(a)(4)) defines a "pole attachment" as "any attachment by a cable television system or provider of telecommunications service to a pole, duct, conduit, or right-of-way owned or controlled by a utility"; a "utility" is defined in paragraph 1 of that subdivision to include, among other things, "a local exchange carrier" such as Verizon. Section 224 goes on to grant the FCC authority over pole attachment rates, terms, and conditions except where such matters are regulated by a state in accordance with certain conditions specified in the statute.[2] In exercising its authority, the FCC has several times determined that rates for pole attachments, ducts, and conduits should be set on the basis of the utility's historical costs.[3] The FCC's Reconsideration Order also reaffirmed several specific elements of the FCC's costing method that are at issue in this proceeding.

As noted, the statute creates the following exemption from FCC jurisdiction:

> Nothing in [47 U.S.C. §224] shall be construed to apply to, or to give the Commission jurisdiction with respect to rates, terms, and conditions or access to poles, ducts, conduits and rights-of-way as provided in subsection (f), for pole attachments in any case where such matters are regulated by a State.[4]

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[2] 47 U.S.C. §224(b), (c).

[3] See Implementation of §703(e) of the Telecommunications Act of 1996, CS Docket No. 97-151, Report and Order (rel. February 6, 1998)(the Telecom Order); Amendment of Rules and Policies Governing Pole Attachments, CS Docket No. 97-98, Report and Order (rel. April 3, 2000)(The Fee Order); and, most recently, Amendment of Rules and Policies Governing Pole Attachments and Implementation of §703(e) of the Telecommunications Act of 1996, CS Dockets No. 97-98 and 97-151, Consolidated Partial Order on Reconsideration (rel. May 25, 2001)(the Reconsideration Order). The Reconsideration Order was brought to my attention, without comment, in an e-mail sent by counsel for CTTANY on May 29, 2001, with a copy to counsel for Verizon.

[4] 47 U.S.C. §224(c)(1).

Each state that regulates pole attachments is required to certify to the FCC that it does so and that

> in so regulating such rates, terms, and conditions, the state has the authority to consider and does consider the interests of the subscribers of the services offered via such attachments, as well as the interests of the consumers of the utility services.[5]

New York State has asserted jurisdiction over pole attachments through both legislative and regulatory actions.

Section 119-a of the Public Service Law, enacted in 1978, provides as follows:

> The commission shall prescribe just and reasonable rates, terms and conditions for attachments to utility poles and the use of utility ducts, trenches and conduits. A just and reasonable rate shall assure the utility of the recovery of not less that the additional cost of providing a pole attachment or of using a trench, duct or conduit nor more than the actual operating expenses and return on capital of the utility attributed to that portion of the pole, duct, trench, or conduit used. With respect to cable television attachments and use, such portion shall be the percentage of total usable space on a pole or the total capacity of the duct or conduit that is occupied by the facilities of the user. Usable space shall be the space on a utility pole above the minimum grade level which can be used for the attachment of wires and cables.

With specific reference to pole attachments, the Commission determined, in 1997, that New York should exercise its authority over pole attachments by adopting the FCC's approach to pole attachment rates, which called for the use of historical costs rather than the forward-looking incremental costs pertinent to the pricing of unbundled network elements.[6] In so doing, the Commission said:

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[5] 47 U.S.C. §224(c)(2)(B).

[6] Case 95-C-0341, Pole Attachment Issues, Opinion No. 97-10 (issued June 17, 1997).

> Since the enactment of the Telecommunications Act of 1996 there has emerged a clear need for cooperative federalism in this and other areas of telecommunications so as to provide consumers the full benefits available from the development of competitive markets.
>
> By embarking on this course, we hope to make it easier for service providers to do business by eliminating unnecessary variation in regulatory requirements. Also, by exercising our authority in this manner, we make it possible for firms operating nationally to compare favorably New York's practices and those followed elsewhere. Of course, we shall retain our primary jurisdiction over pole attachments and continue to evaluate such matters. If ever there were reason to depart from the federal approach, in order to protect the public interest, we would consider such action.[7]

Verizon later argued, in connection with the proposed inclusion of duct and conduit pricing in Phase 3 of the First Network Elements Proceeding, that the Commission's adoption of the FCC's historical-cost method for pole attachments applied to ducts and conduits as well.[8] As noted, Verizon now urges rejection of the FCC's method and adoption, instead, of forward-looking pricing; it acknowledges the change in its position since 1998, explaining that its "current views have emerged from the comprehensive review and re-evaluation of costing and pricing issues that we undertook in this proceeding."[9]

Finally, it should be noted that ducts and conduits in Manhattan and the Bronx are owned not by Verizon but by its wholly owned subsidiary, Empire City Subway, Limited. Empire City Subway, which offers conduit space to Verizon and other

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[7] Id., p. 6.

[8] Cases 95-C-0657 et al., First Network Elements Proceeding, Ruling on Consideration in Phase 3 of Ducts, Conduits, and Rights-of-Way (issued March 9, 1998), citing Verizon's (then New York Telephone's) March 3, 1998 Motion for Clarification, p. 2.

[9] Verizon's Initial Brief, p. 219, n. 501.

carriers on a nondiscriminatory basis, is regulated not by the Commission but by the New York City Department of Information Technology and Telecommunications.

OVERVIEW OF PARTIES' POSITIONS AND COSTING METHODS

Verizon

Verizon asserts that its current rate of 75¢ per foot per year is grossly understated inasmuch as it was set in 1970 on the basis of even earlier costs and has not been changed since; it notes that the rate is far below the corresponding rates in other states within its footprint.

Verizon proposed a forward-looking costing method that takes account of the current cost of construction for new conduit systems. Along with the investment, it allocates known tax and maintenance costs among conduit users to derive an annual rental cost per foot and apportions unusable or spare space through application of a utilization factor.[10] To determine conduit construction costs, Verizon used current contract prices applied to a hypothetical construction project. It deaveraged costs into values representing the major cities and rest-of-state zones; that process did not include Manhattan and the Bronx, where conduit is provided by Empire City Subway.

The rates resulting from Verizon's study (and the current rates for comparison purposes) are as follows:

	Conduit Rates (per duct-foot)		
Proposed	Current Rate (Statewide)	Proposed Major Cities	Proposed Rest-of-State
Main Conduit[11]	$0.75	$6.22	$5.41
Subsidiary Conduit	$1.40	$9.49	$7.68

[10] Verizon's Initial Brief, pp. 222-223, citing Tr. 2,497-2,512.

[11] Main conduit and subsidiary conduit are defined below.

In its rebuttal testimony, Verizon offers three alternative methods in the event the Commission declines to adopt its primary, TELRIC-based proposal. Two of the alternatives involve modifications to the FCC's formula; the third would simply apply an inflation factor (the change in the Telephone Plant Index) to the rates set in 1970. That method results in a main duct rental of $3.03 per for per year and a subsidiary duct rental of $5.65 per foot per year.[12]

Verizon objects to CTTANY's suggestion, discussed below, that the Commission assert jurisdiction over Empire City Subway's rates.

CTTANY

CTTANY offers an analysis based on the FCC's historical cost method. It begins with embedded costs reported in publicly available ARMIS data, from which it calculates a net (of accumulated depreciation and accumulated deferred taxes) conduit investment figure. It divides that net figure by the total system conduit length to arrive at the net linear cost of conduit, and it multiplies that cost by a carrying charge factor to translate investment costs into annual costs. It multiplies that result by a measure of the percentage of conduit capacity occupied by an attacher in order to calculate the maximum rate.

In calculating net linear cost, CTTANY proposed to use not ARMIS data, which it regarded as unreliable, but information available from Verizon's continuing property records (CPR). On the basis of that analysis, CTTANY calculated a maximum rate per foot of 80¢.

Characterizing the Empire City Subway situation as an "historical accident,"[13] CTTANY urges the Commission to recognize Verizon's control over Empire City Subway and assert jurisdiction over the subsidiary.

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[12] Tr. 3,446.

[13] CTTANY's Initial Brief, p. 45.

HISTORICAL VERSUS FORWARD-LOOKING COSTING

As already noted, CTTANY urges that ducts and conduits continue to be priced on the basis of historical costs, consistent with the FCC's method and, in its view, as required by New York Law. Verizon, maintaining that forward-looking costing is superior for a wide range of policy reasons, offers a different reading of the New York statute, stresses the federal deference to states that have undertaken to regulate duct and conduit pricing on their own, and disputes the reasoning underlying the FCC's continued endorsement of historical cost pricing. For the reasons described below, I recommend that the Commission continue to price conduits and ducts on the basis of historical costs.

Arguments

1. Verizon

Its general objections to TELRIC notwithstanding, Verizon believes that if the standard is used for the pricing of UNEs, it should be applied to conduit as well for the sake of fairness--use of TELRIC should not be limited to situations where it produces lower costs--and of economic logic and methodological consistency, to ensure economically efficient decisions between leased conduit and full unbundled loops (which are to an extent economic substitutes for each other). Noting that the FCC's decisions on conduit pricing are not binding on the Commission, Verizon nevertheless goes on to dispute the reasons cited by the FCC in support of its decision to price conduit on the basis of historical costs:

- The FCC cited stability and simplicity in support of maintaining the status quo; Verizon sees no reason to exempt conduit from the rate changes contemplated in this proceeding and sees no reason for simplicity to be a decisive consideration.
- The FCC noted the complicated procedures that would be needed to develop a new, forward-looking ratemaking formula; Verizon points out that this proceeding has already done so.

- The FCC held that the advantages of forward-looking pricing were likely to be less pronounced in the pole attachment context; Verizon regards that contention as baseless, arguing that even though conduit facilities are not built or replaced on a unit-by-unit, as needed basis, new conduit does need to be built as demand expands.

- The FCC noted the absence of any congressional directive to deviate from the use of historical costs; Verizon reiterates its point that the FCC's regulations are not binding here.

- The FCC noted that its notice has not specifically raised the possibility of moving to forward-looking costing; Verizon notes that this procedural objection likewise is inapplicable here.

With respect to state law, Verizon argues that the final two sentences of PSL §119-a (set forth above), which suggest reference to historical costs, apply only to "cable television attachments and use" and have no bearing on the pricing of conduit made available for telecommunications purposes, the subject of the present inquiry. In its view, the pertinent wording is the second sentence, defining a "just and reasonable rate," and it contends that the reference there to "actual" costs does not limit recovery to historical costs: "historical costs are costs that Verizon has incurred in the past; forward-looking costs are costs that it incurs in the present and will incur in the future to replace or augment its network, and both are 'actual' if they are correctly computed."[14] Verizon recognizes the Commission's determination, in Opinion No. 97-10, to adhere to the FCC pricing formula for poles in the interest of "cooperative federalism," but it contends that the UNE rates set in this proceeding will differ from those set in other states and that there is more need for consistency between UNE pricing and conduit pricing than there is to conform state rates to a federal model.

[14] Verizon's Initial Brief, p. 220 (footnote omitted).

Verizon disputes the relevance of CTTANY's emphasis, described below, on the bottleneck nature of conduit; it contends that its own method would apply to conduit pricing the regime that the FCC has mandated for network elements that meet the statutory requirements for unbundling. Verizon adds that CTTANY's members should not be charged a sub-compensatory rate "simply as a reward for purchasing a supposed monopoly product."[15] It likewise disputes CTTANY's argument, also discussed below, that historical costs should be relied on because conduit facilities are well below exhaust level and a request for conduit will not necessarily trigger a need to deploy new facilities. It argues that this is just as true for loops and that the existence of spare capacity "is essentially irrelevant to TELRIC analysis," which assumes proper allocation over the entire demand of the entire element level of forward-looking investment. Verizon suggests, therefore, that CTTANY is criticizing TELRIC more than drawing a distinction between conduits and loops.[16] Verizon notes as well that any claim that the existence of spare capacity means that conduit has an incremental cost of zero would be based on short-run incremental cost, which no party advocates as a basis for prices.[17]

2. CTTANY

CTTANY argues generally that conduits are an essential bottleneck facility and that incumbent local exchange carriers "have long sought to maximize their leverage control over pole and conduit resources to protect their stranglehold in their core voice telephony business, and to facilitate their entry into the cable television and broadband communications markets."[18] CTTANY contends that federal and state regulation of poles and conduit was designed to ensure access to those facilities, and it

[15] Verizon's Reply Brief, p. 114.

[16] Id., pp. 114-115.

[17] Verizon's Initial Brief, pp. 221-222.

[18] CTTANY's Initial Brief, p. 3.

disputes what it characterizes as Verizon's suggestion that cable operators are no longer fledgling businesses requiring that regulatory protection.

CTTANY presents a detailed account of the history of historical cost pricing under federal law, going back to the enactment of 47 U.S.C. §224 in 1978 and continuing through the FCC's adoption of the Fee Order in April 2000.[19] It contends as well that PSL §119-a calls for pricing on the basis of historical costs, charging that Verizon asks the Commission to disregard that statute and asserting that the statute does not distinguish between cable operators that provide video services and those providing dialtone as well. It cites an FCC determination that the term "cable system" is not limited to a facility that provides only cable service and includes those providing other communication services as well and contends that "accordingly, at a minimum Section 119-a governs rates for telecommunications services provided by cable operators over cable systems, and cannot be ignored in this proceeding."[20] (As noted, Verizon in its response stresses that the sentence of §119-a at issue begins "with respect to cable television attachments and use." It argues that it therefore does not apply to telecommunications services and that there is no basis for asserting that a CLEC that happens to be a cable television provider should be entitled to a lower rate than a CLEC that is not.[21])

CTTANY goes on to cite the Commission's support of historical cost pricing in Opinion No. 97-10, stressing the Commission's recognition of the need for "cooperative federalism"[22] and asserting that its reasoning applies to conduit rental just as much as to pole attachments. It suggests that

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[19] As noted above, in an action taken after briefing in this proceeding was completed, the FCC in the Reconsideration Order reaffirmed the use of historical costs.

[20] CTTANY's Initial Brief, p. 14.

[21] Verizon's Reply Brief, p. 121.

[22] CTTANY's Initial Brief, p. 15, citing Opinion No. 97-10, p. 6.

Verizon's earlier endorsement of the FCC formula may be attributed to the pendancy of its §271 application, and that its change of position, and its efforts now to seek much higher rates on the basis of forward-looking costs, result from the application having been granted. Finally, CTTANY asserts that adoption of the FCC method for costing pole attachments and conduits is consistent with the market-opening purposes of the 1996 Act.[23]

CTTANY contends as well that forward-looking pricing--which it refers to as "reproduction cost pricing"--should not be applied to conduit inasmuch as it is constructed solely for Verizon's needs, generates no additional capital cost when it is rented out to third parties, and constitutes a long-lived asset unlikely to be reproduced. Verizon is not obligated to install new conduits to meet new demand, and it recovers the cost associated with modifying conduit to accommodate additional facilities--termed "make ready" costs--through a separate charge. It notes that Verizon's existing conduit is nowhere near exhaust, that main conduit has an average service life of 80 years, and that conduit requires no ongoing reinvestment in innovative technologies. CTTANY adds that the use by third parties of Verizon conduit in fact increases Verizon's conduit capacity inasmuch as Verizon typically requires cable operators to pull "inner duct"--that is, small pipes or tubes placed inside a conventional duct to allow the installation of multiple wires or cables--in order to create additional pathways within a conduit that is made available. CTTANY characterizes this requirement as "akin to a forced capital contribution by the renter that increases the capacity and useful life of Verizon's plant. . . . Verizon retains title to the inner duct and may use or lease the duct space that is not used by the cable operator."[24] (Verizon characterizes the argument that capacity is increased as "contrary to common sense, not to mention the laws of physics,"

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[23] CTTANY's Initial Brief, p. 17.

[24] Id., p. 11.

and asserts that by pulling inner duct, a CLEC merely preempts use of a smaller portion of the total conduit than it otherwise would, but does not increase the space that was available to Verizon before the CLEC's occupancy.[25])

CTTANY disputes Verizon's claim that conduit should be priced on the same basis as network elements in order to promote economically efficient choices between the two modalities. It contends that cable operators--"the single most promising source of facilities-based competition in New York"[26]--are already in the conduit and will not abandon facilities-based service in favor of UNE leasing. Citing the reasons offered by the FCC for reaffirming its method, CTTANY emphasizes the predictability and reliability of the method and again sees no basis for distinguishing conduit from poles. It charges that Verizon "flatly ignores the substantial body of federal and state laws that recognize and regulate both poles and conduits as essential facilities critical to the success of facilities-based competition," asserts that "the overwhelming majority" of states have joined the FCC in rejecting forward-looking pricing here, and cites Ameritech's proposal to use the FCC method in an Illinois Commerce Commission proceeding.[27] Finally, CTTANY emphasizes the Commission's endorsement of the FCC method in Opinion No. 97-10, Verizon's strong endorsement of the FCC method in the First Network Elements Proceeding, and Staff's rejection over the years of Verizon's (then New York Telephone's) earlier interest, preceding its position in the First Element Proceeding, in pricing pole attachments and conduit usage on a forward-looking basis.[28]

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[25] Verizon's Reply Brief, p. 114, n. 299.

[26] CTTANY's Reply Brief, p. 4.

[27] Id., pp. 6-7.

[28] CTTANY recognizes that the Commission never formally rejected a forward-looking method for pricing conduits, noting that New York Telephone withdrew its proposals each time it met with resistance from Staff. Verizon, for its part, discounts the importance of this history, characterizing as irrelevant

Discussion

Verizon is correct in arguing that the Commission is not bound by the FCC's decisions with regard to conduit pricing and that PSL §119-a need not be read to require basing prices on historical costs.[29] But it is far less persuasive in arguing that the Commission should use its discretion here to depart from the FCC's pricing method.[30]

Essentially, Verizon insists on the need for consistency between the pricing of conduit rentals on the one hand and of UNEs on the other. But the FCC, the author of TELRIC pricing for UNEs, appears to see no need for that consistency, having very recently reaffirmed historical-cost-based pricing of poles and conduits; and this Commission, as a matter of discretion, has deferred to the FCC in this regard, at least with respect to pole attachments. I see no reason why conduits, whose function is analogous so that of poles, should be treated any differently from them, and the Commission's decision in Opinion No. 97-10 seems controlling here. That, indeed, was Verizon's own position in the First Elements Proceeding, and its attribution of its changed position only to its "comprehensive review and re-evaluation of costing and pricing issues" inevitably suggests a degree of result orientation.

Staff's attitude on this issue in the 1980s and early 1990s and urging that the matter be decided in light of the law and facts here set forth. Verizon's procedural point is well taken.

[29] That said, it seems odd for Verizon to argue that the reference in §119-a to actual costs does not preclude TELRIC pricing when it has argued elsewhere that TELRIC is flawed by its failure to allow recovery of actual costs.

[30] References in this section to "the FCC's method" are to the use, in general, of historical costs. How that method should be applied, and whether CTTANY has done so properly, are taken up in the next section.

Beyond that, it does not appear that forward-looking duct and conduit technology differs all that much from historical. In contrast to the UNE situation, this is not a case where TELRIC pricing is needed to avoid imposing on CLECs the costs associated with the incumbent's embedded plant (and embedded inefficiencies). Verizon's plea for consistency between UNE pricing and duct and conduit pricing fails to take account of the differences between the two products.

Accordingly, I see no basis for recommending what would be, in effect, a reversal of Commission precedent. Consistent with the Commission's earlier determination with respect to pole attachments, rates for duct and conduit rentals should be set, following the FCC's method, on the basis of historical costs.

In view of that recommendation, there is no need to consider here CTTANY's specific critique of Verizon's costing method. But before turning to Verizon's specific critique of CTTANY's application of the FCC method, it is necessary to take up Verizon's alternative proposals.

VERIZON'S ALTERNATIVE PROPOSALS

Verizon offered three pricing proposals for the Commission's consideration in the event the Commission wished to consider alternatives to the FCC's approach that stopped short of moving to fully TELRIC-based pricing. The first two proposals would modify the FCC's method to incorporate alternative ways of reflecting the asserted costs of usable and unusable space. Verizon and CTTANY dispute the details of both methods and Verizon successfully refutes some of CTTANY's specific criticisms.[31] But Verizon ultimately misstates the issue when it says "what CTTANY fails to demonstrate is that Verizon's approaches are in any way inferior to the FCC

[31] CTTANY's Initial Brief, pp. 37-42; Verizon's Reply Brief, pp. 124-126.

methodology."[32] Much more significantly, Verizon has failed to demonstrate that its methods are in any way superior to the FCC method, which the Commission has already determined should be adopted for pole attachments, or that its proposed modifications correct any flaws in that method other than its production of a rate that Verizon deems too low.

Verizon's third alternative would apply to the existing rate, as set in 1970, an inflation factor equal to the change in the Telephone Plant Index (TPI) for the conduit account since 1970. CTTANY argues that the acceptance of this method requires granting that the rate was correctly developed in 1970, something no longer possible to verify, and it suggests that the 1970 rates might well have been inflated in view of Verizon's monopoly control over pole and conduit plant. Notwithstanding the supposed simplicity of the method, CTTANY sees no reason to hypothesize investment using an inflation adjuster when the real data are readily available in ARMIS.

Verizon responds that the 1970 rate was based on a cost study submitted by New York Telephone and approved by the Commission and that there is no reason to assume that that review would have accepted an inflated rate. It contends as well that the real data available in ARMIS comprise data on booked, depreciated investment rather than on the current cost of constructing conduit.

[32] Verizon's Reply Brief, p. 124.

Applying an inflation factor to a 30-year-old rate might be warranted as a stop-gap measure if it were impossible, for some reason, to directly calculate a rate now. That is not the case, and the record provides ample basis for a new rate determination. And even if an inflation factor were to be applied, it would not be the unadjusted TPI; it would be necessary to recognize, among other things, an offset for productivity improvement.

Accordingly, I recommend that Verizon's alternative methods be rejected and that rates be set on the basis of the FCC method, the details of which are next addressed.

APPLICATION OF THE FCC METHOD

Cable Television Attachments v. Telecommunications Attachments

As a threshold matter, Verizon suggests that CTTANY improperly used the FCC formula applicable to cable television attachments rather than the method applicable to telecommunications providers, which produces a higher rate. CTTANY responds that the theoretical difference between the two methods is the inclusion, in the telecommunications formula, of a component related to unusable space and that the FCC has now clarified that there is no unusable space, effectively making the two methods equivalent.[33]

CTTANY is correct; in its most recent pronouncement on the matter, the FCC said that "essentially the lack of any unusable capacity in a conduit makes the practical application of the Pole Attachment Act formulas the same for both cable attachers and telecommunications attachers both before and after February 8, 2001."[34]

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[33] Verizon's Initial Brief, p. 228; CTTANY's Reply Brief, pp. 11-12.

[34] Reconsideration Order, ¶88 (footnotes omitted).

Use of CPR Data Rather Than ARMIS

The principal dispute between the parties over CTTANY's application of the FCC formula relates to CTTANY's resort to CPR data, rather than ARMIS data, to determine the number of duct-feet over which net conduit investment should be spread, and to the manner in which it used those CPR data. Before considering this issue, reference must be made to some pertinent definitions:

> Conduits are structures that provide physical protection for cables and allow new cables to be added inexpensively along the pathway or route. A conduit consists of one or more ducts, which are the enclosures that carry the cables. Often, when a cable operator's or telecommunication carrier's cables are placed in a duct, three or more inner duct are inserted into the duct allowing "one duct to be treated more like conduit."[35]
>
> "Duct" feet refers to the total length of conduit ductwork in the network. "Trench" feet refers to the total length of the trenches in which the conduit is buried. The relationship between conduit feet and duct feet depends on the average number of ducts buried in each trench.[36]

In other words, the number of duct-feet will be equal to or greater than the number of trench-feet, depending on whether the number of ducts in the conduit is one or greater than one.

Finally, "main conduit" refers to a bank of conduit that directly connects two manholes or a central office vault and a manhole, along with certain associated equipment. Subsidiary conduit refers to conduit extending from manholes to poles or buildings (other than central office buildings) that is required to extend underground cables to connections with either aerial or block cables.

On the basis of its ARMIS data, Verizon calculated a total of 265.5 million duct-feet. That figure, together with net

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[35] Reconsideration Order, ¶87.

[36] Verizon's Reply Brief, p. 116, n. 303. Verizon adds that "CTTANY's brief refers to trench feet as 'conduit' feet."

conduit investment of about $903 million,[37] produces a net investment per duct-foot of about $3.40.

CTTANY, however, regarded Verizon's duct-to-conduit ratio of 3.8, based on ARMIS data, as out of line with the ARMIS-based duct-to-conduit average ratio of 5.74 in the remainder of the former Bell Atlantic footprint. It therefore turned to Verizon's continuing property records, a detailed physical inventory system that it regarded as likely to be more accurate than ARMIS, noting that the FCC approach generally relied on publicly available reports such as ARMIS but permitted use of more accurate data when available. Verizon's CPR data showed the average number of ducts per main conduit to be 7.91. CTTANY's witness Kravtin reduced that figure to 7.21 ducts per conduit to reflect the lower number of ducts to be found in subsidiary conduit. The adjustment was based on Verizon's evidence that there were two ducts in subsidiary conduit, a figure that witness Kravtin then weighted on the basis of the ratio of main to subsidiary duct derived from Verizon's CPR.[38]

Verizon objects both to CTTANY's reference to the CPR data and to the manner in which it used those data. It notes that the CPR data as used by CTTANY produce a duct-foot to trench-foot ratio that is about as far above the Bell Atlantic footprint average as the ratio based on ARMIS data is below it; that a lower average level of ducts per trench in New York than in other parts of the footprint may be attributable to local conditions, such as the considerable amount of relatively small cross-section conduit systems in suburban areas[39]; and that, in any event, there is no discrepancy between the CPR data and the ARMIS data if the CPR data are correctly used to simply determine the total duct-footage over which the investment should be spread.

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[37] Gross investment of $1.336 billion, reduced for depreciation and deferred taxes. (Verizon's Reply Brief, p. 116.)

[38] CTTANY's Initial Brief, pp. 21-24 and record citations there referenced.

[39] Verizon's reply to CTTANY's motion to strike, p. 5, n. 11.

The discrepancy arises, Verizon continues, because of what it sees as CTTANY's misapplication of the CPR data to produce a weighted average of 7.21 duct-feet to conduit-feet. That figure, it maintains, is based on weighting the number of duct-feet of main and of subsidiary conduit, which overstates the effect of the mainline conduit, which has a substantially greater number of ducts per conduit. That calculation thereby increases the weighted average and reduces the investment per duct-foot. Verizon suggests that the correct way to compute the weighted average would be to do so on the basis of the number of mainline and subsidiary trench-feet, a calculation that would produce a result equal to the result produced by simply dividing net investment by total duct-feet.[40] In its reply to CTTANY's motion to strike, Verizon presents a numerical example showing that CTTANY's weighting method produces a cost per duct-foot that, when multiplied by the total number of duct-feet, yields a cost figure well below the figure initially posited.[41]

Verizon objects further that trenching entails substantial fixed costs that do not vary with the number of ducts and that subsidiary conduit systems with smaller number of ducts per trench therefore have a significantly higher cost per duct than mainline systems. The average cost per duct therefore is understated by CTTANY's understatement of the contribution made by subsidiary ducts.[42]

In response, CTTANY maintains that Verizon has failed to explain the discrepancy between its New York duct-to-conduit

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[40] It is this calculation, set forth in alegebraic terms at p. 119, n. 309 of Verizon's reply brief, that is central to CTTANY's motion to strike. As noted above, I am denying the motion to strike and entertaining both CTTANY's further reply appended to its motion and Verizon's surreply incorporated in its response to the motion. Verizon's reply brief was in no way improper, but each of the ensuing pleadings further clarifies the issue.

[41] Verizon's response to CTTANY's motion, p. 7, n. 14.

[42] Verizon's Reply Brief, p. 120.

ratio and those in other parts of its footprint. It disputes Verizon's charge that it has overstated the contribution of mainline conduit, noting that its ratio of main to subsidiary conduit is derived from Verizon's own CPR data and that Verizon has not offered an alternative weighting. It suggests that Verizon is abandoning the ratio in its CPR "because of the results produced by its application in the FCC formula,"[43] and it notes that its members rent almost exclusively mainline conduit and that the rate would have been even less than its witness calculated had the number of ducts per mainline conduit been used.

Verizon's challenge to CTTANY's adjustment is persuasive. In effect, CTTANY is double-counting the greater number of ducts in main conduit: once to determine the weighting to be afforded main conduit and once to determine the number of ducts to which the weighting is to be applied. The proper weighting would be on the basis of main and subsidiary trench- feet, and that weighting would then be applied to the larger number of ducts in main conduit, thereby recognizing that larger number only once. As Verizon has shown, that correct weighting produces, as would be expected, a cost per duct-foot identical to the one produced by simply dividing net investment by the number of duct-feet. Accordingly, I recommend that the rate be set on the basis of the FCC method, using a cost per duct-foot calculated by dividing net investment by the number of duct-feet shown in the ARMIS data, and without reference to the CPR data.

Half-Duct Presumption

To facilitate calculation of a rate reflecting the percentage of conduit capacity occupied by an attachment, the FCC adopted in the Fee Order and the Telecom Order, and reaffirmed in the Reconsideration Order, a rebuttable presumption that the

[43] CTTANY's supplement to its reply brief, as attached to its motion to strike, unnumbered second page.

attacher occupies one half of a duct.[44] In other words, unless the presumption is rebutted, the attacher is charged a rate based on one-half of the calculated cost per duct-foot. The FCC added that "when the actual percentage of capacity occupied is known, it can and should be used instead of the one half duct presumption," and that "the presence of inner duct is adequate rebuttal. Where inner duct is installed, either by the attacher or in a previous installation, the maximum rate will be reduced in proportion to the fraction of the duct occupied. That fraction will be one divided by the actual number of inner ducts in the duct."[45]

In light of those provisions, CTTANY presented rates for a full duct, a half duct, one-third of a duct, and one-quarter of a duct, to be applied depending on the number of inner ducts installed. Verizon objected, contending that the half-duct premise should be applied inasmuch as "Verizon would not, except in extraordinary circumstances, occupy the same duct as a CLEC."[46] In its own study, Verizon calculated rates for a whole duct and a half duct only. CTTANY contends, however, that where inner duct is used, the attacher typically occupies less than half of the duct and that the FCC's process for rebutting the half-duct presumption recognizes that reality.

Although Verizon contends that CTTANY ignores Verizon's testimony that it would not typically occupy the same duct as a CLEC, that testimony does not really undermine the basis for the FCC's conclusion that the presence of inner ducts rebuts the half-duct presumption. Verizon's witness went on to acknowledge on cross-examination that it retains custody of the inner ducts not used by the attacher along with the option to lease that capacity out to another attacher.[47] There is, accordingly, no reason to question the FCC's premise that the

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[44] Reconsideration Order, ¶¶95-98 and history there cited.

[45] Reconsideration Order, ¶98.

[46] Verizon's Reply Brief, p. 120, citing Tr. 5,756-5,757.

[47] Tr. 5,757.

presence of inner duct rebuts the presumption and warrants assigning the attacher a correspondingly lower proportion of the total cost. I recommend, accordingly, adoption of CTTANY's proposal to set the rate on the basis of the number of inner ducts present.

ACCESS TO RIGHTS-OF-WAY

Verizon proposed to continue charging on an individual case basis (ICB) for access to private rights-of-way that it owns or controls. In effect, it would flow through, on a prorated basis, the fee that it itself pays; that fee will vary widely, given the diverse nature of the real property interests involved.

CTTANY notes that most right-of-way expenses are incorporated into the conduit rent itself, and it infers from cross-examination of Verizon's witness Brant that Verizon "only intends to use ICB pricing in the most unusual circumstances where Verizon is not in the public right of way but instead is on private property and the costs have not been internalized into the conduit rental."[48] It asks the Commission to clarify that this is the case and to express its willingness to entertain complaints about such pricing if the parties cannot reach agreement.

Verizon responds that its ICB proposal does not apply at all to rights-of-way associated with conduit rental but only to "'naked' rights-of-way, i.e., to rights-of-way that a CLEC seeks to 'sublet' from Verizon for the deployment of its own conduit. . . . It would not apply to the rates for facilities such as loop or conduit that already incorporate relevant right of way costs through the application of [annual cost factors]."[49] Verizon adds that there is no distinction to be drawn in this regard between public and private rights-of-way.

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[48] CTTANY's Initial Brief, p. 44.

[49] Verizon's Reply Brief, p. 127 (emphasis in original).

Verizon's clarification of its proposal is adequate; naked rights-of-way, whether public or private, should continue to be priced on an individual case basis.

CONDUIT OWNED BY EMPIRE CITY SUBWAY

As noted at the outset, conduit in Manhattan and the Bronx is owned by Verizon's wholly owned subsidiary, Empire City Subway, an entity regulated by the New York City Department of Information Technology and Telecommunications rather than by the Commission. CTTANY asks the Commission to assume jurisdiction over these rates or to declare that the FCC has plenary jurisdiction over them inasmuch as the City of New York has not certified to the FCC that it has assumed jurisdiction.

CTTANY argues that Verizon owns and controls Empire City Subway. It is irrelevant, in its view, that title to the conduit resides in the subsidiary, inasmuch as an ILEC's obligations with regard to conduit access depend on control rather than on ownership. CTTANY contends as well that as part of its §271 application, Verizon acknowledged that Empire City Subway is governed by the 1996 Act and its market opening obligations and asserts "it would be intolerable to allow Verizon into the long-distance business based on an unbundling representation that it is now breaking."[50]

CTTANY further alleges that Verizon's practices with respect to Empire City Subway rates charged to itself violate the FCC's affiliate transaction rules and that Verizon pays Empire City Subway a rental far less than what it proposes to charge third parties. Acknowledging the 1982 court decision holding that the Commission did not have jurisdiction over Empire City Subway,[51] CTTANY suggests that such "accidental advantages of incumbency" were supposed to be overturned by the

[50] CTTANY's Initial Brief, p. 47.

[51] New York State Cable Television Association v. PSC, 87 A.D. 2nd 288 (3rd Dep't, 1982).

1996 Act. It asserts Verizon is attempting to exempt Empire City Subway form the jurisdiction of the FCC and this Commission on the basis of "the fiction that the companies are separate entities."[52]

In response, Verizon notes the Commission's past disclaimer of jurisdiction over Empire City Subway's rates and the Third Department's holding to the same effect. It suggests that "CTTANY's efforts to persuade the Commission to assume jurisdiction notwithstanding the court's ruling (and its own prior determination) are, quite simply, an invitation to lawlessness" and should be disregarded.[53] Verizon adds that CTTANY's charge with respect to the FCC's affiliate transaction rules is beyond the Commission's jurisdiction and, in any event, is unfounded inasmuch as the transactions may be accounted for at tariffed rates, and Empire City Subway's rates are tariffed with New York City. Similarly, it contends, the FCC's authority over Empire City Subway's rates is beyond this Commission's jurisdiction.

Verizon's arguments on this point are well taken. CTTANY's proposal would have the Commission disregard its own long-standing precedent as well as the determination of the courts and should not be further considered.

SUMMARY OF RECOMMENDATIONS

Rates for ducts and conduits should be set on the basis of the FCC's method without the adjustment proposed by CTTANY. Those rates are calculated in the Appendix.

Rights-of-way should continue to be priced on an individual case basis.

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[52] CTTANY's Initial Brief, p. 48.

[53] Verizon's Reply Brief, p. 128.

The Commission should continue to recognize that the rates of Empire City Subway Limited are not within its jurisdiction.

JAL:gds
June 18, 2001

Verizon New York Inc.
Derivation of Recommended Duct and Conduit Rates per RD

Line #	Item	Source	Amount
1	Gross Conduit Investment	1999 ARMIS	$1,335,713,000
2	Accumulated Depreciation for Conduit	1999 ARMIS	401,098,000
3	Accumulated Deferred Income Taxes for Conduit	1999 ARMIS	31,534,212
4	Net Conduit Investment	(L1-L2-L3)	903,080,788
5	System Duct Length (Feet)	1999 ARMIS	265,472,494
6	Net Conduit Investment per Duct Foot	L4/L5	3.40
7	Carrying Charge Factor	1999 ARMIS	43.97%
8	Maximum Rate Per Full Duct Foot	L6*L7	$1.50
9	Rate Per Half Duct	L8/2	$0.75
10	Rate Per Third Duct	L8/3	$0.50
11	Rate Per Quarter Duct	L8/4	$0.37

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on January 23, 2002

COMMISSIONERS PRESENT:

Maureen O. Helmer, Chairman
Thomas J. Dunleavy
James D. Bennett
Leonard A. Weiss
Neal N. Galvin

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

ORDER ON UNBUNDLED NETWORK ELEMENT RATES

(Issued and Effective January 28, 2002)

BY THE COMMISSION:

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INTRODUCTION AND PROCEDURAL HISTORY

In September 1998, we announced our intention to undertake, beginning in January 1999, a comprehensive reexamination of the unbundled network element (UNE) rates of Verizon New York Inc. f/k/a Bell Atlantic-New York,[1] as set in the First Network Elements Proceeding. (That case is referred to as "the First Elements Proceeding" or, simply, "the First Proceeding.")[2] This ensuing case has had a long and complex procedural history, including various interim measures and extensions of deadlines in response to pertinent federal court decisions and a delay of several months in the aftermath of the September 11 attack on New York and of settlement efforts described below. Only the broad outlines of that history will be recounted here.

On the basis of an initial collaborative process facilitated by Department of Public Service Staff, the proceeding was divided into three modules: Directory Database (DDB); Collocation; and Unbundled Network Elements (UNEs) generally.[3] The first two modules culminated in decisions issued

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[1] Cases 95-C-0657 et al., First Network Elements Proceeding, Order Denying Motion to Reopen Phase 1 and Instituting New Proceeding (issued September 30, 1998). Except where clarity otherwise requires, Verizon is referred to as such throughout this order, even in references to matters that predate the name.

[2] The First Elements Proceeding comprised four phases, designated "Resale" and Phases 1, 2, and 3, as follows. Resale: Opinion No. 96-30 (issued November 27, 1996). Phase 1 (network elements generally): Opinion No. 97-2 (issued April 1, 1997); rehearing, Opinion No. 97-14 (issued September 22, 1997). Phase 2 (primarily Operations Support Systems and Nonrecurring Charges): Opinion No. 97-19 (issued December 22, 1997); rehearing, Opinion No. 98-13 (issued June 8, 1998). Phase 3 (various issues, including collocation): Opinion No. 99-4 (issued February 22, 1999); rehearing, Opinion No. 99-9 (issued July 26, 1999). The phases and their opinions are referred to as "Phase 1," "Phase 2 Rehearing Opinion," etc., without further specification.

[3] Case 98-C-1357, Ruling on Scope and Schedule (issued June 10, 1999).

during the first half of last year.[4] During the course of the proceeding, special expedited tracks were established for consideration of certain digital subscriber line (DSL) rates and line sharing rates; those, too, have been concluded.[5] In several instances, issues raised in those earlier modules and tracks gave rise to matters considered further here.

Initial testimony in Module 3 was originally scheduled to be filed in December 1999, with hearings to begin in February 2000. For a variety of reasons, including the broad scope of the proceeding, the need to take account of actions by the FCC and of a federal court decision, and the strike by Verizon employees during August 2000, that schedule was extended on several occasions, and hearings were ultimately held in December 2000. The only one of these factors that warrants specific note here is the decision of the United States Court of Appeals for the Eighth Circuit to vacate 47 C.F.R. §51.505(b)(1), a portion of the FCC's rules central to the requirement that UNEs be costed and priced on the basis of Total Element Long-Run Incremental Cost (TELRIC).[6] (That decision is now stayed pending Supreme Court review; these matters are discussed further in the next section.)

In view of the Eighth Circuit's ruling and the uncertainty it was said to create with regard to the proper costing standard, Verizon urged suspension of the proceeding. All other parties opposed any suspension; they questioned, among

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[4] Module 1 (DDB): Case 98-C-1357, Opinion No. 00-2 (issued February 8, 2000); Order on Petitions for Rehearing (issued June 29, 2000). Module 2 (Collocation): Case 98-C-1357, Opinion No. 00-8 (issued June 1, 2000); Order Denying Petitions for Rehearing of Opinion No. 00-08 (issued January 4, 2001).

[5] DSL: Case 98-C-1357, Opinion No. 99-12 (issued December 17, 1999); Order Denying Petitions for Rehearing (March 17, 2000). Line Sharing: Case 98-C-1357, Opinion No. 00-7 (issued May 26, 2000); Order Denying Petition for Rehearing (issued October 3, 2000).

[6] Iowa Utilities Bd. et al. v. FCC, 219 F.3d 744(8th Cir. 2000).

other things, the import of the court's decision in jurisdictions beyond the Eighth Circuit and argued (contrary to Verizon's view) that Verizon in any event remained bound to TELRIC pricing by conditions imposed by the FCC in approving the merger of its predecessor companies.[7] Administrative Law Judge Joel A. Linsider declined to suspend the proceeding, citing "(1) the time it likely will take for [the] uncertainties to be resolved, (2) the effect of the FCC's merger conditions[[8]] during that interval, and (3) the Eighth Circuit's sustaining of forward-looking pricing [as a matter of principle, despite its rejection of the specific version of forward-looking pricing embodied in the rule it had vacated]."[9]

Verizon sought reconsideration of that ruling, in part on the grounds that the FCC had recently construed its earlier order approving the NYNEX/Bell Atlantic merger in a manner assertedly suggesting that the Bell Atlantic/GTE Order likewise did not require TELRIC pricing as a merger condition.[10] The Judge declined to reconsider, noting the significant difference in wording between the two merger orders and seeing no need to change his conclusion that "what the [Bell Atlantic/GTE] order means may ultimately be a matter for the FCC and the courts to decide, but for present purposes [it] provides an adequate basis for concluding that Verizon remains obligated, notwithstanding

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[7] CC Docket No. 98-184, GTE Corporation and Bell Atlantic Corporation, Memorandum Opinion and Order (rel. June 16, 2000), FCC 00-221 (GTE/BA Order).

[8] This referred to conditions imposed by the FCC on the earlier NYNEX/Bell Atlantic merger as well as the Bell Atlantic/GTE merger just noted.

[9] Case 98-C-1357, Ruling on Module 3 Schedule (issued August 24, 2000), p. 7.

[10] Verizon cited the FCC's dismissal of complaints that Verizon had violated such a commitment made in connection with the NYNEX/Bell Atlantic merger. File No. E-98-05, AT&T Corporation v. Bell Atlantic Corporation, and File No. E-98-12, MCI Telecommunications Corporation et al. v. Bell Atlantic Corporation, Memorandum Opinion and Order (rel. August 18, 2000).

the Eighth Circuit's decision, to continue pricing UNEs on a TELRIC basis and will remain so obligated at least until the Eighth Circuit's decision is sustained or becomes non-appealable."[11] The proceeding went forward on that basis.

Initial testimony was filed (on February 7, 2000 and, with respect to some issues, on February 22, 2000[12]) by Verizon, jointly by AT&T and WorldCom, Inc., jointly by Covad Communications Company and Rhythms Links Inc., and by FairPoint Communications Corp. Responsive testimony, due June 26, 2000, was filed by Verizon, AT&T (alone), WorldCom (alone), AT&T/WorldCom (jointly), Rhythms/Covad (jointly), the CLEC Coalition,[13] the CLEC Alliance,[14] Z-Tel Communications, Inc., Cablevision Lightpath, Inc., the Cable Television and Telecommunications Association of New York, Inc. (CTTANY), and the United States Department of Defense and all Federal Executive Agencies (Federal Agencies). Rebuttal testimony, due October 19, 2000, was filed by Verizon, AT&T/WorldCom, Rhythms/Covad, the CLEC Coalition, FairPoint, and DOD/FEA. In addition to these principal filings, supplemental or supplemental responsive or rebuttal testimony on particular

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[11] Case 98-C-1357, Ruling Denying Request for Reconsideration (issued September 18, 2000), p. 4. The FCC staff has since stated its view that the merger condition has this effect. Letter from Dorothy T. Attwood, Chief, Common Carrier Bureau, to Michael Glover, Verizon Communications, Inc. (September 22, 2000).

[12] Portions of the February 22 testimony were admitted as part of the line sharing track previously referred to.

[13] The CLEC Coalition comprises Allegiance Telecom of New York, Inc.; Intermedia Communications Inc; and XO New York, Inc., f/k/a NEXTLINK New York, Inc. Allegiance did not participate in the Coalition's brief on exceptions, but the brief notes that Allegiance's decision not to participate should not be construed as disagreement with the Coalition's exceptions.

[14] At the time testimony and briefs to the Judge were filed, the CLEC Alliance comprised CoreComm New York, Inc.; CTSI, Inc.; Mpower Communications, Inc.; Network Plus, Inc.; RCN Telecom Services, Inc.; and Vitts Networks, Inc. The Alliance filed no brief on exceptions, but its reply brief on exceptions identifies its members as RCN and Focal Communications, Inc.

issues was submitted by Verizon (May 23, September 11, September 25, November 8, November 22, and December 5), Rhythms/Covad (November 13), and CTTANY (November 29).

An attorneys' prehearing conference was held in New York City on November 30, 2000 for the purpose of introducing pre-filed testimony into the record via affidavit, subject to later cross-examination of witnesses as to whom cross had not been waived. Hearings were held before Judge Linsider in Albany on December 7, 8, 12, 13, 15, 19, and 20, and an on-the-record post-hearing attorneys' teleconference was held on December 21. Following the hearings, Staff of the Department of Public Service posed a series of questions to Verizon and AT&T; their responses have been admitted as exhibits 457 and 458 respectively.

The record comprises 4,954 pages of stenographic transcript (numbered 1,150-6,103) and 159 exhibits (numbered 301-459). The following pages of the transcript have been provisionally designated as proprietary: 1620-1877 (public version at 1362-1617), 2067-2216 (public version at 1917-2065), 3110-3189 (public version at 2832-2911), 3813-3958 (public version at 3666-3811), 3984-4008 (public version at 4009-4032) 4059-4135 (public version at 4137-4204A), 4255-4302 (public version at 4206-4253), 4432-4453 (public version at 4456-4476), 4558-4576 (public version at 4541-4557), 5674-5746 (public version at 5599-5672), 4911, 5453-5456. Provisionally proprietary exhibits are 317P, 320P, 324P, 326P, 328P, 330P, 333P, 339P, 358P, 367P, 370P, 375P, 381P-389P, 392P, 411P, 412P, 414P, 417P, 418P, 448P, 453P, and 455P. Judge Linsider's ruling on the final status of the provisionally protected material is pending.

Initial briefs, due February 16, 2001, were filed by Verizon, AT&T, CTTANY, Lightpath, the CLEC Alliance, the CLEC Coalition, the Federal Agencies, FairPoint, Rhythms/Covad, and Z-Tel. Reply briefs, due March 14, 2001, were filed by those parties except for Z-Tel.

In a recommended decision issued May 16, 2001, Judge Linsider treated all issues in the case other than duct and

conduit rentals; the latter were the subject of a supplemental recommended decision issued June 18, 2001. (The two documents are referred to in this order as the "recommended decision" and the "supplemental recommended decision.")

Briefs on exceptions to the recommended decision have been submitted by Verizon, AT&T, WorldCom, Rhythms/Covad, the CLEC Coalition, FairPoint, Z-Tel, Focal Communications, Inc., Metropolitan Telecommunications (MetTel), Broadview Networks, Inc., and the New York State Attorney General.[15] Reply briefs on exceptions have been submitted by those parties except for Focal, FairPoint, and Broadview, and by the CLEC Alliance.[16] On July 18, 2001, Verizon moved to strike, as improper response, certain portions of the reply briefs on exceptions of Z-Tel and AT&T and to submit further argument on certain points made by those parties and by WorldCom; AT&T, WorldCom, and Z-Tel replied to the motion. We consider it in connection with the specific issues to which it pertains.

Briefs and reply briefs on exceptions to the supplemental recommended decision have been submitted by Verizon and CTTANY. RCN Telecom Services, Inc. (RCN) has submitted a late reply brief on exceptions with a request for leave to file it; that request is granted.

Following the September 11 attack, we invited comment from the parties on its implications, if any, for this proceeding. In general, Verizon cited a variety of factors that, in its view, made the existing record outdated and required further consideration; the CLEC parties saw no implications for the proceeding whatsoever and urged prompt decision on the basis of the existing record. Later, Department of Public Service Staff, as a party to our proceeding examining

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[15] Several of these parties had not previously participated actively in the proceeding. Consistent with 16 NYCRR 4.3 (c)(2), the Judge authorized their late intervention on the condition that they be bound by the record developed to that point.

[16] As noted, the CLEC Alliance now comprises RCN and Focal.

future regulatory arrangements for Verizon,[17] filed a motion in that proceeding and this, urging us to hold the decision in this proceeding in abeyance and to consider UNE rates in the Incentive Plan proceeding, where they might become part of an overall, integrated negotiated outcome. We granted Staff's motion on November 30, 2001,[18] imposing a 60-day limit on the negotiation effort, directing the parties and the settlement judge to report within 30 days on their progress, and noting that we would then consider alternatives in the event the negotiations were not proving productive.

It is now some 60 days since negotiations began, and no agreement incorporating UNE rates has been reached. Nor do we see any need to delay decision with respect to UNEs for the reasons urged by Verizon in its comments on the implications of the September attack. That event, though vast in its overall impact, has at most a marginal effect on the TELRIC analysis of forward-looking costs being conducted here. Verizon argues that the disaster shows a need for greater infrastructure redundancy, to be achieved either through modification of its own network or through partial duplication of that network by facilities-based competitors (concerns echoed in comments filed by Lightpath); but those considerations, even if sound, are too inchoate to be taken into account here. Even if the September 11 attack turns out to warrant changes in network design, that process will take time, and its results cannot be anticipated. The associated uncertainty does not warrant delaying the decision in this case; for we live in a world of constant change, where decisions must be made on the basis of the best information available at a given time. Later events (relating to network design, the legal status of TELRIC, or a host of other matters) may warrant revisiting those decisions, but if they are deferred pending the pursuit of an elusive certainty, they will never be made. And

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[17] Case 01-C-1945, Verizon New York Inc. - Cost Recovery and Future Regulatory Framework, also known as the Verizon Incentive Plan proceeding.

[18] Cases 01-C-1945 and 98-C-1357, Order Granting Staff Motion (issued November 30, 2001).

while Verizon properly cites the benefits of facilities-based competition, we have long recognized those benefits; and the UNE rates we are adopting here should not impede its development. Meanwhile, we have a responsibility under the 1996 Act to set proper UNE rates and avoid allowing unwarrantedly high UNE rates to impede the development of competition, and we accordingly proceed to set those rates on the basis of the extensive record here before us.

LEGAL CONTEXT; THE STATUS OF TELRIC

This case, like the First Elements Proceeding, has been litigated on the basis of the Federal Communications Commission's total element long-run incremental cost (TELRIC) standard despite the legal cloud cast over the standard by a federal court decision. Because of the importance of the standard, we begin with a review of its background, nature, and current status.

Under §252(d)(1) of the Telecommunications Act of 1996 (the 1996 Act),

> Determinations by a State commission of the just and reasonable rate ... for network elements ...--
>
> (A) shall be--
>
> (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the ... network element... and
>
> (ii) nondiscriminatory, and
>
> (B) may include a reasonable profit.

In its regulations and order implementing the 1996 Act,[19] the FCC determined that these pricing provisions should be carried out by setting prices on the basis of each element's TELRIC, along with a reasonable allocation of forward-looking common costs.

In Phase 1 of the First Elements Proceeding, we described TELRIC in the context of other costing methods.[20] We noted that TELRIC was a term coined by the FCC to describe the version it was adopting of the more familiar total service long-run incremental cost (TSLRIC) method. An analysis of TSLRIC amounts to an estimation of long-run incremental cost (LRIC) where the increment of service that is studied is the total demand for the service. LRIC, in turn, measures incremental cost (i.e., the cost of producing an additional quantity of a good or service) over a period long enough so that all of the firm's costs become variable or avoidable.

All of the foregoing costing methods are forward-looking, taking account of the costs to be incurred in the future, rather of than embedded, historical costs. In defining the TELRIC method, the FCC added the specification that costs "should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent [local exchange carrier's] wire centers."[21] This is the so-called "scorched node" premise, which takes as a given only the location of the incumbent local exchange carrier's (ILEC's) existing wire centers and otherwise contemplates a network designed in accordance with the most efficient technology available, regardless of the technology actually deployed.

After the start of the First Proceeding, the FCC's TELRIC rules were stayed and ultimately vacated by the Eighth

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[19] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket Nos. 96-98 and 95-105, First Report and Order (rel. August 8, 1996)(the Local Competition Order).

[20] Phase 1 Opinion, pp. 9-15.

[21] 47 C.F.R. §51.505(b)(1).

Circuit Court of Appeals on the grounds that the FCC had exceeded its authority in adopting them.[22] The case nonetheless proceeded to decision on a TELRIC basis, inasmuch as all parties' studies had been based on TELRIC; even Verizon, which objected to TELRIC and reserved its rights to submit other studies if TELRIC were overturned, had submitted a TELRIC study in view of the FCC's regulations. We noted that "TELRIC is certainly a reasonable approach to use, though just as certainly not the only one; and, as [Verizon] recognizes, as a practical matter there is no alternative other than the very unattractive one of temporary rates while a lengthy new case is litigated."[23]

The United States Supreme Court eventually reversed the Eighth Circuit on the issue of FCC authority, reinstated the rules, and remanded for consideration of the substantive challenges that had been raised to TELRIC pricing.[24] That remand eventuated in an Eighth Circuit decision that again overturned portions of the FCC's rules, including the TELRIC definition in §51.505(b)(1), cited above, this time on the grounds that it was inconsistent with the provisions of the 1996 Act requiring UNE prices to be based on the cost of providing the elements. In the Eighth Circuit's judgment, "Congress was dealing with reality, not fantasizing about what might be," and basing prices on the hypothetical network of TELRIC violated Congress's intent that the costs to be taken into account are those of "providing the actual facilities and equipment that will be used by the competitor (and not some state of the art presently available technology ideally configured but neither deployed by the ILEC nor to be used by the competitor."[25] The Eighth Circuit added, however, that it did not reject the use of forward-looking costs in the setting of UNE rates; and it declined to reach the claim that TELRIC rates would amount to an unconstitutional taking of the ILEC's property, regarding that claim as unripe for decision

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[22] Iowa Utilities Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997).

[23] Phase 1 Opinion, p. 15.

[24] AT&T Corp. v. Iowa Utilities Bd., 525 U.S. 366 (1999).

[25] Iowa Utilities Bd. v. FCC, 219 F.3d 744 (8th Cir. 2000).

until actual rates could be evaluated. The Supreme Court has agreed to review the Eighth Circuit's determination, and the TELRIC rule at issue remains in effect pending that review.

Following the Eighth Circuit's decision last summer, Verizon moved to stay this proceeding in view of the uncertainty over the costing standard that would ultimately apply; CLECs generally opposed the motion. As recounted above, the Judge denied the motion and its later renewal, and the proceeding went forward on a TELRIC basis. In its brief to the Judge, Verizon continued to stress the uncertainty associated with the TELRIC standard pending Supreme Court review and urged deferral of any decision, but the Judge saw no more need to recommend deferral than he did earlier to cut off the litigation. He noted that "the TELRIC rules remain in force, and the proceeding has gone forward on a TELRIC basis; the Supreme Court's decision cannot be predicted and is unlikely to be rendered before the end of the year at the earliest; and the issues in the case are ripe for decision. That decisional process should go forward."[26]

On exceptions, Verizon again urges that decision be deferred pending Supreme Court review of the TELRIC standard. It cites the uncertainty and administrative costs associated with frequent rate changes--as would be needed if the Supreme Court rejected TELRIC soon after a TELRIC-based decision were reached here--and it sees the impossibility of predicting the Supreme Court's ultimate decision as warrant for deferring a decision, not for going forward. It adds that the Supreme Court's decision is no longer as far in the future as it was, noting that oral argument in the TELRIC case was scheduled to be held in early October.[27] If new rates nevertheless were to be set now, Verizon would make them temporary until new rates were set in accordance with the Supreme Court's mandate, seeing "no

[26] R.D., p. 10.

[27] Argument was held as scheduled; the Court's decision is pending.

other way to avoid injustice if the Supreme Court ultimately rules that the current TELRIC standard is unlawful."[28]

Several CLECs object to any delay in our decision, stressing the substantial reduction in UNE rates that would follow from adoption of the Judge's recommendations and asserting a need to accomplish that reduction promptly. They object as well to making rates temporary until they are set in accordance with a Supreme Court decision. WorldCom, for example, charges that Verizon is seeking delay so that it may continue to overcharge for UNEs, and it argues that the Supreme Court will likely not decide the case until early 2002, at which time a lengthy remand to the FCC could ensue. It notes that Verizon objected to delaying a New Jersey UNE proceeding pending Supreme Court review, attributing Verizon's interest in prompt decision there to the fact that it has not yet received §271 approval in that state. The CLEC Alliance notes that regardless of the Eighth Circuit's decision, we retain a statutory responsibility to ensure that rates are just and reasonable, and it argues that the recommended decision shows that they are not. It adds, among other things, that there is a strong public interest in prompt decision, pointing to the FCC's emphasis, in its New York §271 decision, on our active review of Verizon's UNE rates.

In a motion filed August 23, 2001, Verizon renews its request that we postpone decision in the case until after the Supreme Court rules. In the alternative, it would have us reopen the record to take account of a statement in the FCC's reply brief to the Supreme Court. According to Verizon, the statement endorses a TELRIC rate of return that takes greater account of competitive and regulatory risks than did the Judge. Various CLECs respond that Verizon overstates the significance and misrepresents the import of the FCC's statement and is merely seeking, once again, to delay the proceeding.

We see no more need than did the Judge to withhold or postpone decision in this case pending Supreme Court action.

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[28] Verizon's Brief on Exceptions, p. 10.

TELRIC remains the standard that must be applied; we cannot say when the Supreme Court will reach its decision, what that decision will be, or when the ensuing dust will settle; the Eighth Circuit, though rejecting aspects of TELRIC, did not reject forward-looking pricing in principle; and the parties are entitled to a decision on the basis of the comprehensive record that has been compiled. Rates need not be held temporary, given that TELRIC is now the law whatever may be its future fate; and there is no need to reopen the record, as Verizon requests in its recent motion. The statement in the FCC brief cited by Verizon simply explicates the TELRIC standard as it has been in place from the start and applied in this proceeding. It embodies no new policy pronouncement (and, as some CLECs suggest, could not properly do so given its nature and context). Verizon's August 23 motion is denied, and we proceed to decision on the substantive issues before us.

One further aspect of the TELRIC background should be briefly noted. Section 254 of the 1996 Act directed the FCC to establish a universal service support system to ensure the delivery of affordable telecommunications services. In the ensuing proceeding (the Universal Service Proceeding), the FCC ultimately adopted a forward-looking cost model to be used in determining an eligible carrier's level of universal service support. The FCC adopted its cost model in two stages: in the first stage, it adopted the Model Platform, which contains the fixed aspects of the model[29]; in the second stage, it selected the input values for the Model Platform.[30] The presentations and analysis in the Universal Service Proceeding can sometimes be instructive; but it is important to keep in mind the FCC's caution that its model "was developed for the purpose of determining federal universal service support, and it may not be

[29] Federal-State Joint Board on Universal Service et al., CC Docket Nos. 96-45, 97-160, Fifth Report and Order (rel. October 28, 1998).

[30] Id., Tenth Report and Order, (rel. November 2, 1999).

appropriate to use nationwide values for other purposes, such as determining prices for unbundled network elements."[31]

OVERVIEW OF COST STUDIES, RECOMMENDED DECISION, AND EXCEPTIONS

Cost Studies and Recommended Decision

Two comprehensive analyses of UNE costs and prices were submitted in the proceeding: Verizon's own cost studies, and the HAI 5.2-NY Model (HAI Model) jointly sponsored by AT&T and WorldCom. To state the matter most generally,[32] Verizon's studies began with the investment associated with each network element, determined by identifying the pertinent material cost, applying a utilization factor to develop a material cost per unit, and applying investment loadings to capture certain additional costs. It then used annual cost factors (ACFs)--representing the calculated relationships between expenses and investments, other expenses, or total revenues--to translate investments into monthly costs. In a separate process, Verizon developed nonrecurring charges by estimating relevant labor costs and applying certain ACFs to them. Verizon's study relies, in large part, on its actual historical data and estimates by its engineers, adjusted in a manner intended to reflect TELRIC assumptions. The HAI Model, meanwhile, develops UNE costs in a bottom-up manner, by modeling the construction of a telecommunications network on the basis of demand quantities, network component prices, and costs and expenses.

The parties offered arguments, among many others, based on the inherent reasonableness of the results produced by each study, but the Judge rejected them, finding that "if the costs are reasonably and fairly calculated, the price chips should be allowed to fall where they may."[33] He went on to find

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[31] Id., ¶32.

[32] For a more comprehensive description of the two analyses, see R.D., pp. 20-25. Additional background on aspects of Verizon's study at issue on exceptions is provided below, where pertinent.

[33] R.D., p. 32.

that the HAI Model continued to suffer from many of the same flaws that we identified in its predecessor Hatfield Model submitted in the First Elements Proceeding, and he used the Verizon study, which was sounder in concept despite its need for substantial adjustment, as the starting point for analysis. He summed up his conclusion by noting that "as a matter of theory, HAI is a ponderous tool that is too far removed from the reality of Verizon's circumstances to be used when there is an alternative better grounded in real data. As a practical matter, Verizon's study lends itself to adjustment in a manner that appears able to produce a sound result."[34]

Most of the recommended decision, accordingly, was devoted to adjusting Verizon's studies. The resulting UNE prices were, in general, well below not only Verizon's proposals but also the prices currently in effect. The adjustments will be discussed in this order only to the extent raised on exceptions; for purposes of this overview, we note only the determination on the vigorously argued issue of switching costs. The Judge there found that the parties had argued to a stalemate on the question of what vendor discounts to impute in estimating switching investment and recommended use of a surrogate method, not requiring selection of a discount figure, to determine those costs. Verizon and its opponents alike except to both the surrogate method in principle and to its manner of implementation.

Verizon's Exceptions

As noted, Verizon continues to advocate, as its primary position, deferral of any determination in this proceeding until after the Supreme Court has decided the fate of TELRIC; until that time, its existing UNE rates, set in the First Elements Proceeding, would remain in force. Beyond that, it sees "fundamental errors" in the recommended decision and alleges that adoption of the Judge's recommended rates would violate the statutory requirement that rates be cost-based and

[34] R.D., p. 34.

"would effect an uncompensated taking of Verizon's property for the benefit of competitors, would violate federal law by requiring Verizon to provide UNEs at below-cost rates, and would disserve the Commission's pro-competitive policies by further deterring the development of facilities-based competition."[35] It expresses special concern about substantial recommended reductions in its proposed rates related to the UNE Platform[36] (UNE-P), noting, for example, that the non-recurring provisioning charge was reduced by over 70% and contending that the overall effect of the UNE-P price changes would be to reduce revenues very substantially. More specifically, it excepts to recommended reductions of about two-thirds in local switch usage rates, which it attributes to a series of errors regarding switching costs.

Recognizing that the Judge recommended use of its own studies rather than the HAI Model as the basis for analysis, Verizon criticizes the recommended adjustments to its study on a variety of grounds, both conceptual and computational. It objects in particular to a series of adjustments based on the Judge's finding that it failed to meet its burden of proof, charging that they lack any record basis, fail to credit unopposed evidence submitted by Verizon, and impose a burden impossible to meet. It contends as well that some adjustments would adversely affect service if Verizon's network were in fact designed in the manner contemplated by the adjustment. Finally, it contends that the recommended rates would contravene the public policy favoring the development of facilities-based competition, asserting that they "will provide CLECs with a direct subsidy from Verizon in the form of resale at fire-sale rates, that will eliminate any incentive for the development of competitive networks."[37]

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[35] Verizon's Brief on Exceptions, p. 1.

[36] The UNE Platform refers to an arrangement under which a CLEC orders, and Verizon provides, all the unbundled elements that make up a customer's local service.

[37] Verizon's Brief on Exceptions, p. 6.

CLECs' and Other Parties' Exceptions

Parties other than Verizon offer no overarching critique of the recommended decision, and none of them excepts to the Judge's rejection of the HAI Model. They generally support the recommended decision, but propose various specific modifications, urging us to "finish the job"[38] of moving all the way to properly TELRIC-based costing. Some CLECs characterize the recommended decision as confirming their view that current UNE rates are seriously overstated and point as well to lower UNE rates in other jurisdictions. They defend the Judge's use of burden of proof considerations, a matter requiring more detailed treatment before we turn to specific issues.

BURDEN OF PROOF

As noted, Verizon objects to a series of recommendations in which the Judge cited its failure to have met its burden of proof. Contending that adjustments were made on that basis even where Verizon had supported its presentation with substantial evidence and no party had submitted contrary evidence, it charges that "merely reciting the 'burden of proof' mantra, as the RD frequently does, cannot justify these disallowances and reductions."[39] It cites a series of Appellate Division cases finding error where an administrative agency refused to accept uncontradicted evidence presented by a party, even where the party had the burden of proof; and it contends the Judge's finding, for example, that its engineering judgment was insufficient evidence left it unable to meet the burden of proof that he imposed.

In response, several CLECs challenge the premise that Verizon's evidence often went unopposed, citing the testimony they submitted. Verizon may disagree with their evidence, they say, but that does not mean it does not exist. Beyond that, they dispute Verizon's legal argument, distinguishing the cases it cites and arguing that they are unrelated to the work of this

[38] AT&T's Brief on exceptions, p. 2.

[39] Verizon's Brief on Exceptions, p. 3.

agency. WorldCom notes, in contrast, the courts' recognition of our independent judgment and expertise in ratemaking, in which we are not confined to the presentations made by the parties. AT&T points to our endorsement, in the Phase 2 Opinion, of the Judge's suggestion that the ILEC in a UNE case bears a burden of proof higher than that of the utility in a traditional rate case.

Whether a party has borne its burden of proof can only be decided on an issue-by-issue basis, and one may disagree in some instances with the Judge's assessment of the record before him. But as a general matter, we are satisfied that the Judge used burden of proof as an analytical tool, not a mantra. Verizon's evidence, in many cases, is not so uncontroverted as Verizon would lead us to believe, and the CLECs are right to refer to our ability to use our independent expertise in assessing the state of the record and whether the party bearing the burden of proof has borne it. The cases cited by Verizon relate, for the most part, to questions of objective fact rather than of expert judgment to be applied to a range of reasonable alternatives, and they are distinguishable on that and other grounds.

It is worth recalling, in this regard, why the utility (or the ILEC) has the burden of proof. The Judge put it as follows:

> The utility's data and experience are a good source of information on what can be expected in the future, but the utility has a clear self-interest in erring on the side of high cost forecasts. For both reasons, it bears the burden of proof, and the regulator must ensure that only proven costs are allowed. In so doing, the regulator should avoid groundless speculation or what Verizon characterizes as "the Panglossian perspective of the CLECs, who seem to believe that all difficulties will magically dissolve in a sufficiently 'forward looking'

> environment."[40] But where a range of estimates is suggested by the record, regulators have always made reasonable adjustments that impel a utility to seek efficiencies, just as it would be impelled to do by a competitive market.[41]

It is also worth recalling how the burden of proof is administered, something pertinent to a number of issues. In the Phase 2 Recommended Decision, the Judge explained that in a traditional rate case,

> the regulated utility has the ultimate burden of proving, by clear and competent evidence, that its proposed rates, and the costs on which they are based, are reasonable; but a rebuttable premise of regularity attaches to activities conducted in the normal course of business, and the utility's initial presentation need not contain, for example, evidence that other ways of conducted all such activities were considered. But if another party discharges the burden of going forward with evidence showing that a claimed cost is unreasonable, then the utility has to persuasively rebut that evidence in order for the cost to be allowed.[42]

The Judge added, however, that because "the activities being reviewed [in a UNE case] are in some respects novel, the traditional premise of regularity is weakened, and it would be reasonable to require more of an affirmative showing that the [ILEC] proceeded reasonably."[43] These observations were and remain valid.

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[40] Verizon's Reply Brief, p. 75 (footnote in original).

[41] R.D., p. 87.

[42] Phase 2 R.D., p. 26.

[43] Id.

With these general comments as background, we turn to the specific issues presented on exceptions. Following the sequence used by both Verizon and AT&T in their briefs, we start with the important and hotly contested issue of switching costs.

SWITCHING COSTS

Introduction

The Judge recommended substantial reductions in Verizon's rates for unbundled switching. They result not only from his recommended treatment of switch material costs already noted, but also from his adjustments to installation costs and to the allocation of costs between usage and non-usage sensitive elements. Verizon argues, overall, that "the recommended reductions in local switching rates . . . have the most significant impact on Verizon's finances. Imposing this crushing financial burden on Verizon would be utterly unwarranted: There is simply no lawful basis for the adjustments to Verizon's proposed switching rates that are recommended in the RD."[44] Other parties argue, conversely, that the Judge did not go far enough in reducing these rates. WorldCom, for example, notes that the recommended rate would reduce the statewide average switching cost of approximately $0.003 per minute of use (MOU) to approximately $0.001 per MOU and would reduce the per-month per-line unbundled switching cost for CLECs providing service via the UNE platform from approximately $7.35 to approximately $2.74. It urges, however, that we go further and reduce the rates to what it sees as proper TELRIC levels, including a statewide average of $0.0008 per MOU.

Material Investment

1. Background and Recommended Decision

This issue has its roots in Phase 1 of the First Elements Proceeding, and its history, fully recounted by the Judge, provides important background here. In Phase 1, we

[44] Verizon's Brief on Exceptions, p. 10.

expressed a lack of confidence in the sharply conflicting cost estimates suggested by the parties' different studies, and we set rates on the basis of an analysis by our Staff. In so doing, we noted, among other things, that in making an adjustment to capture the downward trend in switching costs, we "did not take account . . . of the atypically large discounts received by [Verizon] from its [switch] vendors after 1994 in connection with a major switch replacement program."[45] That decision rested, in large part, on Verizon's attribution of those deep discounts to the switches' having been purchased as part of its program to replace analog switches with digital. Verizon argued that vendors were willing to offer unusually large discounts in connection with such replacement programs (to encourage upgrades that create a market for new software), but that the replacement program was nearly complete and the discounts therefore were unlikely to continue or recur. On rehearing, we rejected Verizon's broadbased critique of the Staff method for setting switching costs as well as WorldCom's claim that the price reduction factor was too low, finding that WorldCom had "offered no new reason for rejecting the fully explained premise that the unusually large discounts associated with analog-to-digital conversion would not be replicated."[46]

Later, in Phase 3 of the First Proceeding, evidence was presented suggesting that the deep discounts might, in fact, be available for all purchases of new switches, not only large-scale replacement programs. Several CLEC parties moved to reopen Phase 1 to redetermine switch costs in light of the newly adduced evidence; Verizon objected on a variety of grounds. We were unimpressed by Verizon's belittling, as "inadvertent misstatement," of its own assertion that the higher discounts were uniquely associated with the analog-to-digital replacements and by its suggestion that the new information lacked significance because of the manner in which switches are

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[45] Phase 1 Opinion, p. 85, n. 1. See also a similar statement in Attachment C to that opinion, Schedule 2, page 1 of 3.

[46] Phase 1 Rehearing Opinion, p. 40.

purchased. We nevertheless denied the motion to reopen, citing the risks of selective adjustment and adding that the new evidence, even if borne out, could not generate a simple arithmetic correction to our Phase 1 calculations. We went on to note as well the likely desirability of reviewing UNE rates in general before too long, and we therefore stated our intention to institute the present proceeding. Finally, in view of the uncertainties associated with the newly adduced evidence, we left switching rates temporary, subject to future refund or reparation, even though all other UNE rates set in the First Elements Proceeding have become permanent.

In the present case, the parties have disputed both the qualitative issue of whether to posit new switch discounts or the lower "growth" discounts (i.e., the discounts associated with adding capacity to existing switches) that would otherwise be available, and the quantitative issue of how each type of discount should be estimated. After reviewing the arguments in some detail, the Judge reiterated his view, first stated in his Phase 3 recommended decision, that, as a matter of theory, growth discounts were not applicable in a TELRIC study, which contemplated instantaneous installation of a new network. He nevertheless went on to hold that several factors precluded application of that theoretical result here and now. He noted, first, that "application of a purely new-switch discount, on the premise that a hypothetical new network designed to serve the full increment of demand was dropped into place instantaneously, could be problematic under the Eighth Circuit's decision" noted above.[47] The Judge recognized that we are not subject to the Eighth Circuit's direct authority (and that its decision in any event had been stayed), but he pointed out as well that the decision had been relied on by United States District Court for the Northern District of New York[48] in its decision in a case growing out of the First Elements Proceeding and other actions.

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[47] R.D., p. 132.

[48] MCI Telecommunications Corp. v. New York Telephone Company, No. 97-CV-1600, (N.D.N.Y., March 7, 2001).

The Northern District said, in light of the Eighth Circuit's decision, that "price determinations made on forward-looking cost calculations cannot be based on the forward-looking costs of an 'idealized network,' but must be based on the incremental costs that an incumbent local service provider actually incurs or will incur."[49] Judge Linsider suggested that statement "calls into question the propriety of an exclusively new-switch discount assumption premised on an instantaneously installed hypothetical network."[50]

Perhaps more important than the legal issue, in the Judge's view, was the factual one of ascertaining what a new-switch discount would be in the hypothetical situation of an instantaneously installed new system. The Judge credited Verizon's argument that the existing new-switch discount was set partly in contemplation of additional sales to which only the growth discount would apply, and he reasoned that the new-switch discount would differ from its current level in the hypothetical situation in which no growth-discount sales were anticipated. On the other hand, he continued, discounts are negotiated in light of the particular purchases contemplated, and "it is entirely possible that the prospect of . . . an extensive series of purchases [associated with installation of an entire network, even over time rather than instantaneously] could have generated discounts substantially higher than those under the existing contracts, and a forward-looking analysis must take account of that prospect."[51] In light of all of these factors, the Judge concluded that

> this is an issue on which the parties have fought hard and reached a stalemate: each has shown the other's position to be untenable. Regardless of the decision ultimately to be reached on the FCC's rule, this record simply establishes no "right" level of discount to use--in part, as noted, because the very act of assuming a switch

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[49] Id., slip opinion p. 25.

[50] R.D., p. 132.

[51] R.D., p. 133.

> purchase pattern would affect the data on the record regarding the level of the respective discounts.[52] Discounts will depend on a host of factors, including the contracts negotiated between vendor and purchaser, and we have no reason to believe that Verizon's existing, complex contracts, relied on by both sides as the basis for the radically different discounts they advocated, would, in fact, read the same had they been negotiated in the various contexts that TELRIC or other forms of long-run forward-looking costing might lead us to posit.[53]

Having reached that conclusion, the Judge went on to estimate switching costs on the basis of a surrogate analysis that used as its parameters the per-line switching costs estimated on the one hand by Verizon and the other hand by AT&T/WorldCom and looked as well to various estimates that had been presented to the FCC by the FCC's staff and a majority of the state members of an FCC/State Joint Board. Taking account of all of those factors, he recommended an estimate of per-line switching costs of $105, somewhat below the $111 arithmetic mid-point of the parameters. He invited the parties to convene a settlement conference at which they might stipulate to some other number that both sides could accept; neither party responded to the invitation.

On exceptions, parties challenge both the Judge's decision not to estimate a discount and the manner in which he conducted his surrogate analysis.

2. Estimating a Discount

Alleging that there is "no reasoned basis in the record"[54] for a decision that splits the difference between the

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[52] The difficulty is analogous to those posed by situations, known in both physics and the social sciences, in which outcomes are influenced by the mere fact of observation. (Footnote in original.)

[53] R.D., p. 133.

[54] Verizon's Brief on Exceptions, p. 11.

parties, Verizon challenges the premise that the parties have argued the issue to a stalemate. It disputes AT&T's contention that a forward-looking construct implies a one-time purchase of new switches, citing the FCC's statement that TELRIC-based rates must recover "the incremental costs that incumbents actually expect to incur in making network elements available to new entrants."[55] Pointing to precedent in the First Elements Proceeding as well as the Northern District's decision, it contends that the proper price to use is "the material price Verizon will actually pay, incrementally, in the foreseeable future, under in-place vendor contracts for the particular equipment being costed."[56] The discount associated with such purchases, it continues, is the growth discount, for digital switches are already deployed in Verizon's network and will never be replaced with new digital switches, inasmuch as the next generation of switching equipment will be available by the time existing switches are to be replaced. The existing installations will only grow, and, for that purpose, the growth discount is applicable. Verizon also notes, as did the Judge, that the new-switch discount would be different in a context in which no growth purchases were contemplated. It adds that a new-switch-only premise would require installing excess capacity to allow for growth and a higher depreciation rate to recognized more frequent switch replacements, and might increase switch prices by creating demand in excess of supply. WorldCom dismisses those arguments as red herrings that introduce assumptions inconsistent with TELRIC.

AT&T, meanwhile, renews its argument that the new-switch discount should be used. It sees no basis for treating switching costs differently from the other network components, all of which are presumed by the TELRIC construct to be part of an instantaneously installed new system and are, nevertheless, priced on the basis of currently available vendor prices. It urges use of a $51 per-line switch material investment--the

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[55] Local Competition Order, ¶685.

[56] Verizon's Brief on Exceptions, p. 12.

figure generated by its restatement of Verizon's cost study on the basis of what it takes to be available new switch discounts--and it suggests that the next generation of switching referred to by Verizon will likely be even cheaper.

WorldCom likewise argues that TELRIC necessarily assumes total reconstruction of the network through new rather than growth switches. It cites the FCC's decision to that effect in the Universal Service Tenth Report and Order and quotes at length from a decision by United States District Court for the District of Delaware endorsing the use of new switch discounts.[57] WorldCom argues that the Delaware District decision is entitled to greater weight than that of the Northern District, inasmuch as the latter was based on the erroneous evidence on switching discounts adduced in Phase 1 of the First Elements Proceeding. WorldCom points as well to the Judge's statement that use of new-switch discounts is valid in theory, contends that the recommended decision assumed an instantaneously installed hypothetical network throughout, and argues that there was no reason to depart from that assumption with regard to switching costs. It disputes the Judge's concern that the new switch discount might be different in a hypothetical situation that failed to contemplate subsequent growth purchases, contending that TELRIC requires just such an assumption.

The Attorney General also urges use of fully discounted switch prices, arguing that the Northern District's statement cited by the Judge constituted dicta--inasmuch as the rates there under review were not based on the cost of the "idealized network" questioned by the court--and that the Northern District had relied on an Eighth Circuit decision that was stayed pending appeal and inapplicable in New York. In any event, the Attorney General contends, the Northern District decision did not preclude use of new-switch discounts. Beyond that, the Attorney General cites the progress made in New York

[57] Bell Atlantic-Delaware, Inc. v. McMahon, 80 F. Supp. 2nd 218 (D. Del. 2000).

toward competitive telephone markets and argues that "UNE rates that allow Verizon to recover excess monopoly costs would not be just or reasonable in a regulatory regime moving toward competitive markets."[58] In addition, the Attorney General urges us to take into consideration the over-supply of telephone switch manufacturing capacity and the growing availabilty of surplus switches from financially troubled telecommunications companies.

In its reply, Verizon reiterates its view that the FCC's Universal Service decision is inapposite, given the FCC's admonition that the proxy model used there should not be used to price UNEs and its rejection, in the §271 proceeding, of the premise that UNE prices must be based purely on new-switch discounts. Recognizing the conflict between the Northern District decision and that of the Delaware District, it urges assigning greater weight to the former, which is more local, more recent, and more cogent. That the Northern District may have relied on flawed Phase 1 evidence is of no import, since the court's pertinent statement involves not an analysis of the evidence but the principle that we should be guided by what the ILEC will actually pay.

The arguments on exceptions add little to those that led the recommended decision, in Verizon's characterization, to throw up its hands.[59] But it is not throwing up one's hands to recognize that a particular line of inquiry shows a great likelihood of being unproductive and to seek an alternative means of achieving a fair result. That is what the Phase 1 Staff analysis of switching costs sought to do in the face of parties' estimates so far apart as to call both into question, and that is what the recommended decision sought to do here.

Verizon correctly notes that we never had occasion to rule on the Judge's observation, in his Phase 3 recommended decision, that growth discounts are not applicable in a TELRIC

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[58] Attorney General's Brief on Exceptions, p. 6.

[59] Verizon's Brief on Exceptions, p. 10.

study.[60] In the present recommended decision, the Judge has backed off from that observation, and he was right to do so. TELRIC contemplates a new, state-of-the-art network--including, for example, all-fiber feeder, without regard to what is now in place--but it does not necessarily follow that the new network is purchased and installed in a single transaction. And even if it did, any attempt to establish the vendor discounts that would apply in that transaction would be a hopeless exercise in speculation, if not "fantasy." The parties have argued long and hard over what discounts flow from Verizon's existing vendor contracts in their complexity; for the reasons described by the Judge, there is no way to arrive at a reasonable estimate of what those discounts would be under hypothetical contracts growing out of unknown transactions. Beyond that, Verizon has identified additional types of costs that could be expected to be incurred if the complete network were installed all at once, and we lack any reasonable estimate of the amounts of those costs.

To rule out exclusive use of the new switch discount, of course, does not mean that exclusive reliance on the growth discount is proper. For one thing, it has been clear since Phase 3 that relatively deep new-switch discounts are not limited to full-scale switch replacements, and there is no basis for agreeing with Verizon that incremental replacement of the system over time would entail growth discounts only. Beyond that, the Judge correctly noted here as well the difficulties that attend any effort to estimate the actual discounts that would be available: "It is entirely possible that the prospect of such an extensive series of purchases could have generated discounts substantially higher than those under the existing contracts, and a forward-looking analysis must take account of that prospect."[61]

Having determined that the discount to be applied cannot be estimated directly from the existing contracts, we

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[60] Verizon's Reply Brief on Exceptions, pp. 2-3, n. 3.

[61] R.D., p. 133.

might attempt to somehow estimate the discount indirectly, such as by melding new-switch and growth-switch discounts in an effort to capture the real forward-looking cost, independent of vendors' marketing strategies. Alternatively, we can bypass any effort to determine the discount and proceed to estimate the per-line switching costs themselves through some surrogate means, as the Judge did. The latter process appears preferable, for there is no reason to believe that an indirectly estimated discount level will be more accurate than an indirectly estimated cost figure; and the intermediate step of indirectly estimating a discount will not enhance the ultimate result. The goal of the effort then becomes to find a surrogate means of estimating a switch cost that is reasonable, fair, and grounded in the record as a whole, and that is what the Judge sought to do. We therefore turn to the specifics of his method, to determine whether the parties' exceptions warrant any adjustments.

3. Surrogate Calculation

Both sides challenge the specifics of the Judge's surrogate method for estimating per line switching costs. Verizon objects to his having taken account of the FCC's conclusions in its Universal Service Tenth Report and Order, noting the FCC's statement that the Universal Service proxy model was not appropriate for UNE costing; that the FCC had stated, in its New York §271 proceeding, that the inclusion of growth discounts did not violate TELRIC; and that Verizon's data on actual costs substantially exceeded the FCC's cost estimates. It also alleges an error in computations underlying the recommended decision's statement that the FCC's Model's per-line cost was $95; correcting that error (to reflect the fact that switching nodes in Zone 2 are not remotes but, rather, a cluster of one host and three remotes) produces a figure of $100.65.

Other parties offer adjustments that would reduce the outcome of the surrogate analysis. AT&T contends, first, that the lower parameter of the range identified by the Judge should be not the $95 HAI input figure but a $51 figure set forth in

AT&T's June 2000 restatement of Verizon's cost study to take account of available new switch discounts as adduced on the record of this case. Applying the algorithm it sees as implicit in the Judge's analysis (i.e., a downward adjustment of 5.4% applied to the midpoint between the parameters) produces a statewide average switching material investment of $84 per line rather than the recommended decision's $105 per-line figure. In addition, AT&T asserts that while Verizon's $128 per-line figure (used by the Judge as the upper parameter) reflects material investment only, the FCC-based $95 per-line figure used as his lower parameter is a fully installed price, and the comparable Verizon figure (using the installation cost factor allowed by the recommended decision, discussed below) would be $178. Again applying the algorithm implicit in the Judge's analysis, AT&T calculates a fully installed switching cost of $129 per line, which would obviate any separate allowance for installation costs and result in switching usage and digital line port rates that are about 26% and 18% below the levels calculated in the recommended decision.[62] WorldCom likewise contends that the lower parameter should be $51 rather than $95. It points as well to a filing by Ameritech-Illinois showing switching costs below those recommended by the Judge and to still lower rates approved in Michigan.

Z-Tel, which does not object strongly to the surrogate approach in principle, also notes that the Judge's parameters improperly compare a materials-only figure with a fully loaded one and suggests that the lower parameter should be reduced from $95 to $73 per line by removing installation costs computed on the basis of the recommended decision's factor. It also urges recognition of AT&T's material investment figure of $51 per line as well as the possibility that Verizon's $128 figure might be subject to change on the basis of the recommended decision's treatment of cost of capital. Taking account of these data, it suggest the record supports a per-line switching investment of $75-$85.

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[62] AT&T's Brief on Exceptions, p. 13.

Verizon responds, first, that the $51 figure computed by AT&T in its rebuttal testimony should be disregarded, for it was based on an error in information supplied by a switch vendor that was later corrected. Use of the corrected vendor data produces a per-line price, reflecting the new switch discount, of $101, higher than the $95 lower bound used by the Judge.[63] It likewise would disregard the FCC's $95 figure; it agrees that the figure includes loadings and sees the difficulty of accounting for that as an added reason to disregard the figure. It disputes Z-Tel's suggestion that the $105 figure should be adjusted to reflect the recommended cost of capital, noting the figure is an investment unaffected by cost of capital. Finally, it objects to reliance on rates set in other jurisdictions, where circumstances and methods of analysis may differ in ways unknown.

Several of the parties' specific comments are clearly sound and need to be taken into account. Verizon's increase of the Judge's $95 lower parameter to $100.65 is correct, as is the CLECs' observation that that figure is fully loaded and cannot be used as the lower parameter when the higher parameter is not fully loaded. (That observation would apply equally to the corrected $100.65 figure.) Other comments are in error; the CLECs' proposal to use $51 as the lower parameter is clearly misplaced, for the reasons identified by Verizon. Indeed, the errors responsible for the $51 figure reinforce the conclusion that attempting to estimate a proper discount is an exercise in futility.

If a figure of $100.65 less loadings were used as the lower parameter, the midpoint between the parameters would be below the figure identified by the Judge. But there is, of course, nothing magical about the midpoint; and we would in any event have little confidence in a result much below the estimates of $110 and $113 identified by the FCC staff and the majority of state members of the Joint Board, for it is

[63] Verizon's Reply Brief on Exceptions, p. 7; the calculations said to support the $101 figure are set forth in a proprietary attachment to that brief.

significant that two disinterested entities arrived at such close results. When all is said and done, we are satisfied that the Judge reached a reasonable result on the basis of the record in this proceeding, and we deny the exceptions.[64]

EF&I Factor

As already explained, estimating the cost of a fully installed switch requires application to the switch material cost of an "engineer, furnish, and install" (EF&I) factor. Verizon used a factor of 43.5%. AT&T contended that factor was overstated, far exceeding those used by other telephone companies, and it proposed a 25% factor, comprising what it calculated to be Verizon's own average 15% factor for vendor engineering and installation, plus 10%, representing the average of the 8%-12% range of other companies' telephone company engineering and installation. The Judge found that Verizon had shown no reason other than its own actual experience for adopting its higher-than-average figure for telephone company engineering and installation. He held AT&T's 10% figure to be unsupported and unduly low and recommended, as fair and reasonable, a telephone company engineering and installation factor of 15%. Adding that to the 15% for vendor engineering and installation, he recommended an overall EF&I factor of 30%.[65]

Verizon excepts, seeing no basis for substantially reducing its actual costs other than "the 'burden of proof' shibboleth."[66] It asserts the data cited by AT&T relate to rural telephone companies presumably having smaller central offices

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[64] It is worth noting, moreover, that while we have not used an analysis of discounts to reach the $105 per-line cost, the record with respect to discounts would in no way preclude that result.

[65] The Judge noted that the 30% factor was to be computed with reference to Verizon's claimed switching material costs; the resulting dollar amount, applied to the reduced material costs recommended by the Judge, would imply a factor higher than 30%.

[66] Verizon's Brief on Exceptions, p. 17.

and therefore lower installation costs than Verizon as well as higher per-line material costs (because the discounts enjoyed by Verizon are unavailable to them) and a corresponding lower installation cost percentage. Disputing the Judge's suggestion that the differences between companies cut both ways, given the greater likelihood that Verizon can enjoy economies of scale, Verizon contends that, "in effect, the RD rejected probative, unchallenged, reliable data on Verizon's actual switch EF&I costs, preferring instead to rely on hearsay evidence as to the installation costs purportedly experienced by a sample of unidentified rural companies that clearly are not comparable to Verizon. The premise that this reliance on less relevant, less well-documented data makes the estimated EF&I factor more 'forward looking' is simply perverse."[67]

AT&T responds that Verizon's denial of the record basis for the Judge's adjustment would have us disregard the evidence on which the Judge relied. It contends as well that Verizon relies too heavily on costs associated with its existing network--such as the increased costs associated with multi-story buildings--thereby violating the TELRIC premise of a new network incorporating buildings efficiently designed to accommodate forward-looking switches.

Although actual costs are not the end point of a TELRIC analysis, the evidence presented by AT&T--which Verizon has credibly distinguished from its own circumstances--does not support as substantial an adjustment to Verizon's costs as the Judge applied. On this record, a more conservative adjustment is warranted, and Verizon's EF&I factor will be reduced only to 40%. To that extent, Verizon's exception is granted.[68]

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[67] Id., pp. 16-17 (emphasis in original).

[68] In its reply brief on exceptions (p. 20), AT&T endorses Verizon's method for applying the Judge's adjustment, which develops a new EF&I factor applied against the Judge's recommended investment instead of applying the Judge's 30% factor to Verizon's original investment. The method appears reasonable and should be used with respect to the 40% factor we are adopting here.

Switching Cost Allocation and Rate Design

1. Usage- and Non-Usage-Sensitive Costs

Switching costs comprise traffic-sensitive and non-traffic-sensitive components; the latter do not vary with usage. Verizon proposed to recover non-traffic-sensitive costs through flat-rated port charges (for both line ports and trunk ports) and to recover traffic-sensitive costs through minutes-of-use (MOU) switch usage charges. Several other parties, primarily Z-Tel, asserted that Verizon incurs no usage-sensitive costs in providing unbundled local switching to itself or competitors and switching costs therefore should be recovered entirely on a non-usage-sensitive basis, through monthly recurring port charges.

The Judge concluded that while Verizon had argued successfully against totally non-usage-sensitive rates, Z-Tel had made a strong case for recovering a greater portion of switching costs on a non-usage-sensitive basis, inasmuch as a UNE user purchased all of the switching capacity, including features and functions associated with any given port. More specifically, the Judge noted that in the First Elements Proceeding, a Verizon witness had presented an analysis of switching costs that would warrant allocating only 34% to usage. Recognizing that data may have changed since then, he recommended a rate structure that assigned no more than 40% of switching costs to usage (rather than the 64% of costs assigned to usage in Verizon's study). The Judge went on to note that though the switching costs assigned to usage were associated almost exclusively with peak busy hour usage, they could not be recovered solely through the usage rate for the peak busy hour. The only alternatives were to recover them over all usage as Verizon proposed, or through non-usage- sensitive port charges as Z-Tel proposed. He recommended recovering them over all usage, inasmuch as the record suggested that peak busy hour usage was more closely correlated with total usage than with ports.

Verizon excepts, urging use of its 36% non-usage-sensitive/64% usage-sensitive allocation. It contends it has consistently treated switch port costs as non-usage-sensitive

and the remainder as usage-sensitive, noting that the allocation is easily administered inasmuch as port costs are separately identified by its Switching Cost Information System (SCIS). In addition, it says, that treatment is consistent with cost causation, inasmuch as the port is the only component that is needed when an access line is not being used, and every feature of the switch other than the port may require augmentation as the level of usage on a line increase. Verizon contends as well that the CLEC's purchase of all of the switching capacity associated with a port, including features and functions, is a matter of product definition that does not imply that the associated costs should be recovered through flat rates. It also disputes the Judge's reading of its Phase I presentation, contending that switch components beyond those comprising the 34% of investment said by the Judge to be usage-sensitive are, in fact, usage-sensitive.

AT&T responds that Verizon's past practice with respect to this issue is irrelevant; that the record shows the non-usage-sensitive nature of most switching costs; and that the only switching costs that are truly usage sensitive in Verizon's study are the Line CCS category, which average between 25% and 34%, depending on geographic zone, thereby demonstrating the reasonableness of the Judge's finding that 34% of switching costs are usage sensitive. AT&T urges use of that figure, rather than the 40% used in Verizon's rate recalculations; the latter figure reflected the Judge's recommendation that "no more than 40%" be assigned to usage.

WorldCom goes further in its reply, urging that switching costs be treated as entirely non-usage-sensitive and citing a decision by the Illinois Commission to that effect, reflecting an Ameritech-Illinois proposal. It disputes Verizon's complaint that the recommended rate structure produces rates that are too low, again pointing to results in other jurisdictions. Renewing the arguments for regarding switching costs as non-usage-sensitive, WorldCom suggests that Verizon's switch cost model had been designed to show the contrary. Finally, it argues that usage-sensitive pricing of unbundled

switching undermines fair competition by requiring CLECs to confront a rate structure different from the non-usage-sensitive way in which Verizon incurs its costs.

The Judge fully explained how his recommendation was grounded in the record and why it is reasonable to structure switching rates on the premise than no more than 40% of switching costs are usage-sensitive. The arguments on exceptions provide no compelling reason for modifying that adjustment in concept, and both Verizon's exception and WorldCom's request to move to flat rates are denied. But we are persuaded by AT&T's argument that the proportion of switching costs treated as usage-sensitive should be reduced from 40% to 34% and that the remaining 66% should be treated as non-usage-sensitive. That was the allocation in the study cited by the Judge, and there is no reason to depart from it. AT&T's exception to that effect is granted.

2. Calculation of Usage Sensitive Rates

a. Minutes of Use

Verizon calculated usage sensitive prices in a manner understood by other parties and the Judge to involve the spreading of switch investment over the 251 business days in a year, on the premise that the switch must be designed to handle peak traffic and peak traffic is realized only on business days. Z-Tel advocated spreading the investment over 365 calendar days. The Judge saw a need to take account of weekend usage but also to recognize its lower volume and therefore recommended spreading the costs over 308 days a year, a figure derived by treating each weekend day as one-half of a day; he noted that WorldCom's witness had offered such a proposal as well.

Verizon excepts, contending that the Judge's adjustment, unnecessary in principle, had the effect of imputing an unreasonably high number of minutes of use and a corresponding reduction in usage rates. It explains, in some detail, that it derived its per-MOU switch usage costs by dividing total usage-sensitive investment by busy hour MOUs, applying various loadings to the investment per busy-hour MOU,

and then applying a factor that converts the cost per busy-hour MOU to cost per MOU. The conversion factor is derived by dividing the ratio of busy-hour MOUs to total MOUs in a typical business day by 251, the number of business days in a year. It is that calculation alone that uses the figure of 251, and changing it to 365 or to 308 would require other, corresponding adjustments as well to ensure consistency. To state the matter differently, Verizon disavows any assumption that usage-sensitive costs should be spread only over business day MOUs and agrees that the usage rate must reflect the ratio of total usage sensitive costs to total billable MOUs; it claims to have used the number of business days only in properly calculating that ratio.

In addition, Verizon calculates that the recommended decision's figures imply 338 billion annual minutes of use, in contrast to the 275 billion MOUs implied by its own analysis. It contends its figure is supported by actual data for the year 2000, showing 280 billion Dial Equipment Minutes (DEMs), and it notes, by way of comparison, that the HAI Model input was only about 240 billion DEMs, based on 1998 data. Anticipating an objection to its reliance on data for 2000, it argues that if a higher projected figure were to be used for "forward-looking" purposes, switching investment would have to be increased as well.

In response, AT&T, WorldCom, and Z-Tel dispute Verizon's interpretation of its calculations and its reference to actual data. WorldCom and Z-Tel argue, with algebraic or arithmetic demonstration, that Verizon's computations fail to spread switching costs over all minutes of use. All three parties object to Verizon's reference to actual data, arguing

that it is irrelevant for TELRIC analysis.[69] Verizon disputes that premise, contending, among other things, that a TELRIC analysis must be based on current demand.

As argued on exceptions, this issue poses two separate though related questions: whether the Judge's adjustment was proper in theory; and whether, even if arguably sound in theory, it absurdly implies far too many minutes of use. On the theoretical point, Verizon correctly states that "the usage rate must be based on the ratio of total TS cost to total billable MOUs, whenever those MOUs occur. The issue is how properly to calculate that ratio."[70] But the Judge found, and WorldCom's and Z-Tel's arguments on exceptions confirm, that Verizon's calculations do not calculate that ratio properly and have the effect, Verizon's arguments to the contrary notwithstanding, of spreading switching costs only over business day MOUs, not total MOUs.[71]

Verizon objects as well that the Judge's adjustment implies a number of MOUs far in excess of the current demand, to which TELRIC requires us to refer. As a threshold matter, the discrepancy may be not be due entirely (or even in large part) to the Judge's adjustment and may be caused by other aspects of Verizon's calculations. More fundamentally, and as Verizon itself argues persuasively in the context of loop costs, discussed below, proper treatment of "current demand" has to

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[69] The portions of the reply briefs on exceptions containing this argument are among those Verizon challenges in its July 18 motion; it asks us to allow its sur-reply to this argument because it "did not anticipate that the CLECs would take this tack, and we thus have not yet had an occasion to address this argument in our briefs." (Verizon's motion, p. 2). That a reply brief on exceptions presents an unanticipated response to an argument made on exceptions hardly seems to require allowing a sur-reply; nonetheless, in the interest of a full airing of the issue, we have considered Verizon's submission.

[70] Verizon's Brief on Exceptions, p. 20.

[71] See, in particular, the demonstration at Z-Tel's Reply Brief on exceptions, attachment A. Additional calculations tending to confirm Z-Tel's result are set forth in Appendix B.

recognize "ultimate demand." The system must be sized in that manner to avoid lack of capacity, and rates must then be set, in fairness to both present and future customers, on a premise of levelized usage somewhere between "current" and "ultimate" levels. As discussed below, we do that explicitly in the loop context, through various adjustments related to demand level and fill factor; and it is hardly surprising, and certainly not evidence of error, that the results we reach on switching rates do so implicitly. Verizon suggests that the larger number of MOUs may imply a switching network larger than the one it costed out; but it is important to recognize that the network is sized primarily on the basis of peak busy hour demand, which is unaffected by the Judge's adjustment. The adjustment applies only to the mechanism for spreading the costs of meeting that demand over the number of MOUs throughout the year. For all these reasons, we are satisfied that the Judge's resolution of this issue was reasonable, and Verizon's exception is denied.

b. Time-of-Day Rates

In calculating its switching rates, Verizon also applied time-of-day adjustments that Z-Tel regarded as arbitrary. The Judge noted that Verizon had not responded specifically to Z-Tel's criticisms and invited parties to address the time-of-day adjustments on exceptions.

Z-Tel objects to time-of-day pricing on the grounds that a single rate is easier to deal with; that it offers no economic efficiency benefits, because the rating periods, in Z-Tel's view, are only loosely correlated with actual peaks and most local service in any event is flat rated; and that time-of-day adjustments create the illusion that the allocation of fixed switching investment is other than arbitrary. WorldCom argues to similar effect, stressing the difficulty of implementing time-of-day rates properly.

Verizon disavows some of Z-Tel's arguments but says it does not object to a rate structure without time-of-day deaveraging as long as it provides for recovery of total identified switch usage costs.

We, too, do not agree with all of Z-Tel's arguments, but we see no need to impose time-of-day pricing on the parties here.

Port Additives

"Port additives" are certain optional switching features whose costs Verizon separately calculated. AT&T contended that Verizon had not substantiated those cost claims and proposed to reduce Verizon's calculated costs by 89%, representing the proportional reduction applied by AT&T to the switch digital line port UNE to correct for AT&T's view of the proper vendor discount and EF&I factor. It suggested further that the rates be set at zero on the premise that the administrative costs of collecting them might exceed the port additive costs as so recalculated. The Judge found AT&T's proportional reduction reasonable but noted that the amount of the adjustment should be recalculated on the basis of the recommended decision's conclusions regarding switch material costs and EF&I. He considered it unlikely that the resulting rates would be too low to be worth collecting but invited the parties to consider that on exceptions.

Verizon excepts to the port additive adjustment "on the same grounds as it objects to the general switch cost adjustments that the RD would mirror in the port additive rates."[72] It expresses doubt that rates recalculated on the basis of the Judge's adjustments would be too low to be worth collecting.

Broadview excepts, acknowledging that the recommended reduction in the port additive rates is a move in the right direction but expressing some concern about the application of any charges for port additives. It suggests that the recommended reductions in loop rates and switching rates could be offset by port additive charges imposed on UNE platform

[72] Verizon's Brief on Exceptions, p. 22. It thus appears that Verizon does not specifically object to the concept of adjusting its port additive rates to reflect whatever adjustment might ultimately be made to switching rates.

customers. It urges that "all costs associated with UNE-P [be] carefully examined to insure that reducing one set of rate elements (i.e., switch usage rates) is not counterbalanced by an increase or additional set of new rate elements (i.e., features, port additives)."[73]

AT&T does not except, but submits various recalculations of the port additive rate, noting, among other things, that adoption of the Judge's recommendations on switching costs (to which AT&T excepts, for the reasons described above) results in a 44% reduction in Verizon's claimed port additive costs.

Verizon responds that Broadview offers no good reason for disallowing the charges, noting that the purpose of the proceeding is to set rates on the basis of its costs, not to ensure particular gains or losses to particular players. It adds that AT&T's recalculations treat the switching EF&I factor erroneously.

Broadview's exception is denied, for the reasons properly noted by Verizon. AT&T's recalculation is moot, given the further recalculations required by this order.

Tandem Switching

The Judge recommended that tandem switch rates be reduced by the same percentage as local switch rates, plus an additional 10% reduction to recognize Verizon's failure to explain why it assumed that the vast majority of its tandem switches would be purchased from one of its two vendors. (In the context of end-office switches, Verizon had successfully defended its premise of an equal mix.) Verizon notes that its exceptions with respect to local switch costs apply here as well.

Although Verizon objects to the reductions recommended by the Judge, it does not suggest that tandem switch rates should be treated differently from local, and there is no reason

[73] Broadview's Brief on Exceptions, unnumbered third page.

to do so. Tandem switch rates should be reduced from the level proposed by Verizon in the manner recommended by the Judge.

Refunds

Because of the uncertainty regarding vendor discounts and the associated switching costs, the switching rates set in the First Elements Proceeding were left temporary, subject to refund or reparation. In its brief to the Judge, AT&T urged us to require Verizon "to refund all switching rates paid by CLECs in excess of Verizon's forward-looking economic costs for switching retroactive to April 1, 1997."[74] Noting that AT&T had offered no argument in support of its request and that Verizon had not addressed the issue in brief at all, the Judge asked the parties to consider further on exceptions whether we should exercise our discretion to require refunds in the event the temporary rates were reduced.

On exceptions, AT&T again urges refunds, citing the substantial reduction in switching rates recommended by the Judge (which, it claims, would be even greater if rates were set on a proper TELRIC basis) and the consequent overpayment by CLECs to Verizon during the period the temporary rates have been in effect. Renewing a frequently advanced claim, it attributes these overpayments to Verizon's alleged "material misrepresentation of fact on new switch discounts" in Phase 1, and it urges us to "make AT&T partially whole for those vast anti-competitive overpayments" by ordering refunds retroactive to July 1, 2000.[75]

Z-Tel and Met-Tel also urge refunds. Z-Tel asks that the refunds be retroactive at least to September 30, 1998, the date we put the parties on notice we were aware of errors in Verizon's Phase 1 filing. It acknowledges our finding, reiterated by the Judge, that Verizon's errors in Phase 1 were

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[74] AT&T's Initial Brief, p. 80.

[75] AT&T's Brief on Exceptions, pp. 15-16. As Verizon notes in reply, AT&T does not explain why it modifies its position on exceptions and requests refunds back only to July 1, 2000 rather than to April 1, 1997.

likely careless rather than deliberate but it asserts that, in any event, the errors "were clearly made by Verizon, and Verizon alone should bear the cost of rectifying [them], particularly when considering the magnitude of the overpayments. . . . It is entirely unreasonable to require Z-Tel to forgo refunds of the millions of dollars overpaid solely as a result of Verizon's own carelessness (or recklessness and malfeasance)."[76] Z-Tel urges that the refunds be paid in cash with interest at 12.6%, the current yield on B2/B bonds. Anticipating a possible argument that the errors at issue were not responsible for the entire difference between the temporary rates and those set here, Z-Tel asserts that the benefits of identifying the portion of the difference attributable to the errors would be outweighed by the difficulty of performing the exercise. In the event such an attempt were made, however, Z-Tel would urge that the refund incorporate at a minimum the effects of Verizon's alleged errors in calculating the switch discount and in using 251 as the number of days over which switching costs should be spread. Finally, Z-Tel favors retroactive adjustment of Verizon's reciprocal compensation rates, inasmuch as the switching rate is a component of the reciprocal compensation rate.[77] Verizon responds, among other things, that any refund of reciprocal compensation payments should be mutual, encompassing those paid by Verizon as well as those received by it.

Met-Tel disputes the premise that refunds are discretionary, contending that both New York law and the Telecommunications Act of 1996 require refunds here. It adds that even if we conclude that refunds in general are a matter of discretion, they would be required in any instance where an

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[76] Z-Tel's Brief on Exceptions, p. 13.

[77] "Reciprocal Compensation" refers to an arrangement between two local exchange carriers in which each compensates the other for the transport and termination on the second carrier's network facilities of calls originating on the first carrier's facilities. Under present arrangements, it consists of mutual reimbursement of termination costs; the rates are set on a TELRIC basis, with reference to Verizon's transport and switching costs.

interconnection agreement between Verizon and the CLEC provide for a true-up. It suggests a procedure for determining the amount of refunds and urges that they be retroactive to April 1, 1997. Verizon responds that the one New York case cited by MetTel for the premise that refunds are mandatory in fact required reparations, to avoid confiscating a utility's property; that the 1996 Act does not address the subject of refunds; and that the interpretation of particular interconnection agreements is beyond the scope of this case.

In its own brief on exceptions, Verizon objects to any refund requirement. As a threshold matter, it suggests we lacked the power to set temporary rates in the circumstances of the First Elements Proceeding, which did not grow out of a utility request for a rate increase or satisfy other asserted requirements for temporary rates. As for refunds themselves, it maintains, like Met-Tel, that interconnection agreements containing pertinent provisions would govern. Beyond that, it contends refunds--a matter within our discretion--would be inappropriate here, inasmuch as the Judge's recommendations rely on cost study inputs, switching contracts, analyses, and FCC determinations post-dating the setting of temporary rates in May 1997. To order refunds, it suggests, would imply, improperly, that the factual premise for the rates recommended by the Judge existed then. According to Verizon, "there is simply no way of determining what rate would have been set in 1997 had the Commission been fully informed as to the discounts in effect at that time."[78] Finally, Verizon urges that if refunds are ordered, they apply as well to reciprocal compensation payments made by Verizon that were based on switching costs.

In response, AT&T suggests Verizon's objection to the setting of temporary rates is untimely, since the temporary rates were set four years ago and their temporary status was confirmed three years ago. It denies we lacked authority to set temporary rates here, arguing that Verizon reads the statute too narrowly. It points as well to Verizon's assertion, in a brief

[78] Verizon's Brief on Exceptions, p. 24.

to the court reviewing its FCC's §271 determination, that concerns about switching rates were moot because the rates were temporary and subject to refund if ultimately found excessive.[79]

WorldCom also opposes refunds, in view of "the length of time that the current rates have been in effect, the potential billing imbroglios [growing out of the complicated accounting issues that would be posed in connection with refunds], and the potential for market-impacting effects that the Commission did not intend when it ordered the current rates to remain temporary."[80] If refunds were ordered, WorldCom would limit them to those parties who specifically sought them in their briefs.

Verizon's suggestion that we lack the authority to require refunds here is untimely, inconsistent with positions it has taken elsewhere, and substantively in error. These rates were made temporary when set, and that status was confirmed more than three years ago, when we said that "because the new evidence on switching costs changes the state of the [Phase 1] record, we will direct that rates that include switching costs be kept temporary, subject to refund and reparations, until we evaluate this evidence and review the switching costs in the [present] proceeding."[81] Having failed to press a timely challenge to our authority to impose that condition on the rates then set, Verizon is barred from doing so now.[82]

In addition, Verizon itself has acknowledged and explicitly relied on the temporary and refundable status of these rates in defending against its competitors' motion for a stay of the FCC's decision granting it §271 approval. As AT&T

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[79] AT&T's Reply Brief on Exceptions, pp. 29-30.

[80] WorldCom's Reply Brief on Exceptions, p. 29.

[81] First Network Elements Proceeding, Order Concerning Petition for Reconsideration of Phase 1 Compliance Filing (issued November 6, 1998), p. 7 (emphasis supplied); a similar statement appears at Order Denying Motion to Reopen Phase 1 and Instituting New Proceeding (issued September 30, 1998), p. 12.

[82] See PSC v. Rochester Tel. Corp., 55 N.Y.2d 320 (1982).

points out, Verizon successfully argued to the United States Court of Appeals for the District of Columbia Circuit that there could be no irreparable injury associated with allegedly excessive switching rates, inasmuch as the rates would be subject to refund if proven to be excessive.[83] On that basis as well, Verizon cannot now be heard to challenge our decision to make these rates temporary.

Finally, Verizon's arguments against our authority are substantively flawed. It argues that the sources of our statutory authority to set temporary rates are inapplicable to the present case: PSL §§113(1) and 97(1) apply, in its view, only where the utility seeks a rate increase, which Verizon did not do here; PSL §113(2) deals with situations in which a utility receives a refund of amounts it had paid (such as taxes); and PSL §114 allows temporary rates pending the conclusion of a proceeding, but these rates have remained temporary long after the conclusion of Phase 1.[84]

Verizon reads our authority too narrowly. PSL §97(1) gives us broad authority to change rates "upon such terms, conditions or safeguards as [we] may prescribe," and it goes on to authorize temporary changes in rates. It is not limited to proceedings instituted by a utility filing, and, together with §§113(1) and 114, it establishes a comprehensive statutory structure that permits us to act promptly to set rates subject to later refund, reparation, or recoupment, as circumstances may warrant.[85] In this instance the circumstances so warranted: UNE rates needed to be set promptly; there were doubts about the record on the basis of which we were acting; and the best way to act promptly while protecting the interests of all parties was

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[83] AT&T's Reply Brief on Exceptions, pp. 29-30, citing Verizon's Brief in Opposition to AT&T's and Covad's Emergency Motion for a Stay, p. 14, fn. 12.

[84] Verizon's Brief on Exceptions, p. 23, fn. 56.

[85] The need for and breadth of that authority was recognized even before it was expanded by the enactment of §§113 and 114. See City of New York v. New York Tel. Co., 115 Misc. 262 (Sup. Ct., New York Spec. Term, 1921).

to set temporary rates subject to refund or reparation once the situation was further clarified. We clearly described what we were doing, and, as noted, no party has until now questioned our authority to do so.

That we have authority to direct refunds here, accordingly, is clear. Less certain, at this point, is whether and how we should exercise our considerable discretion over the use of that authority. In view of the many computational and other uncertainties, including the possible need for additional information on minutes-of-use, we are reserving judgment on the issue for now, and we encourage the parties to pursue a joint proposal for resolving the matter. If they are unable to reach agreement on a joint proposal, we will decide the matter after requesting and reviewing the additional information that may be needed.

INVESTMENT LOADINGS

In an early step of its cost analysis, Verizon applied to the material cost of its investment various investment loading factors to generate a total installed cost that includes engineering, furnishing and installation (EF&I) costs; land and building (L&B) costs; and power supply costs. Verizon, AT&T, and the CLEC Coalition except to various aspects of the recommended decision's treatment of the land and building factor, but before turning to those it is necessary to note two calculation matters raised by Verizon.

First, in connection with his adjustment to the switch EF&I factor, the Judge recognized that if the level of investment is reduced, the factor percentage level must be increased in order to recover the same level of expenses. Verizon notes the Judge's recognition of that point, and excepts to the recommended decision's failure to make similar adjustments to other investment loading factors as a corollary to its reduction in the level of material costs.

Verizon's point, to which no party responds,[86] is well taken. The loading percentages will be adjusted accordingly.

Second, in its adjustments to ensure that the L&B factor avoided double recovery of central office space used by collocators and separately paid for, the recommended decision estimated that 2.5% of Verizon's central office space would be used for collocation. (Verizon's estimate was 1.019%; the CLEC Coalition's estimate was 3.2616%.) Verizon notes on exceptions that the workpapers accompanying the recommended decision's rate calculations treated the 2.5% figure as a downward adjustment to the land and building factor itself, and it presents alternative calculations correcting that error. Verizon's point, to which no party responds, is well taken and the correction will be made.

Land and Building Investment Loading Factor

Verizon adjusted its initially calculated land and building factor to correct a number of errors identified by other parties. The result of these adjustments turned out to be an increase in loop costs instead of the anticipated decrease, and WorldCom charged that Verizon had produced these results by fundamentally changing its costing method. Verizon defended its calculations, arguing, among other things, that the increased loop costs were offset, via a reduced land and building factor, in the land and building costs recovered through rates for other UNEs; overall, total recovered L&B costs did not increase.

The Judge recommended no adjustment, finding Verizon's step-by-step explanation of its calculations reasonable; but he added that his conclusion "rests in large part on Verizon's representation that total L&B costs recovered through UNE rates will not be increased, and that the increased loop costs will be offset by reduced recovery of L&B expense through rates for

[86] The CLEC Coalition uses the opportunity to reiterate its opposition to the FLC (defined and discussed below and implicated in the calculation adjustments called for by Verizon) but takes no position on the adjustments themselves.

other UNEs."[87] Verizon had said that it would recalculate those UNE rates as part of its compliance filing, but the Judge directed it to do so in its brief on exceptions and to demonstrate that the reductions in other UNE rates were adequate to avoid any double count.

Verizon includes, with its brief on exceptions, calculations said to provide the required demonstration. It contends that L&B investment (net of land and buildings dedicated to administrative support) comes to approximately $1.36 billion, and that application of its proposed L&B factor to the UNE rates recommended in the recommended decision will recover only $1.32 billion. Accordingly, it says, there is no double recovery. Verizon recognizes that its initial filing in this proceeding recovered only about $900 million of L&B costs, but it attributes that to the errors corrected in its rebuttal testimony, arguing that the measure of double recovery should be the total forward-looking, non-administrative L&B cost of $1.36 billion.

AT&T responds that Verizon's calculation confirms the presence of a substantial increase in claimed land and building costs and urges disallowance of the $432 million difference between the costs here claimed and the $900 million initially sought. To Verizon's claim to have shown the absence of any double count, AT&T responds that the Judge did not refer to a "double count" but directed Verizon to show that "total L&B costs recovered through UNE rates will not be increased," a showing it has failed to make.

Although AT&T in its reply to exceptions emphasizes the concern over a net increase in costs, the double-count question figures prominently as well: the Judge concluded his direction to Verizon by requiring it to "demonstrate . . . that the reductions in [rates for other UNEs] are adequate to avoid any double count," and AT&T, in its own brief on exceptions, reserved the right to pursue the matter further "after having an opportunity to review Verizon's attempt to comply with the

[87] R.D., p. 109.

directive of the RD that it demonstrate no double recovery of costs."[88] The Judge assumed, in effect, that any increase in total L&B costs would be tantamount to a double count, inasmuch as all L&B costs had already been fully captured before the adjustments that initiated this dispute. Although the parties now portray the two issues--double count and overall increase--as distinct, each stressing one to the exclusion of the other, the Judge regarded them as identical.

In any event, what Verizon has shown is that it reduced the L&B factor as anticipated, but that the application of that reduced factor to additional RT investment (whose costs had previously been recovered directly) produces, without double count, an overall increase in total L&B costs recovered by applying the L&B loading factor. This appears to contradict its initial claim, which the Judge had asked it to substantiate, that "the increase in loop costs that was noted in WorldCom's [initial] brief [to the Judge], and that resulted from the application of the (restated) L&B factor to RT equipment investment, was <u>not</u> an increase in the total L&B costs that Verizon would recover through UNE rates. Rather, it was offset by the reduction in the L&B factor itself and the consequent reduction in the L&B costs that would be recovered through rates for other UNEs, such as local switching."[89]

According to our Staff's calculations, the three revisions made by Verizon to eliminate the double count had the net effect of increasing overall UNE costs by $60 million (loop costs went up by $73 million but other UNE costs declined by only $13 million). Verizon may have shown the absence of any double count, but it still has not explained why collecting the L&B costs at issue through the L&B loading factor rather than directly has resulted in an overall increase in UNE costs. Accordingly, we will apply only the adjustment to eliminate direct recovery of the L&B costs at issue; and rates should be

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[88] AT&T's Brief on Exceptions, p. 38.

[89] Verizon's Reply Brief, p. 15 (emphasis in original).

set on the premise of total L&B costs of about $900 million,[90] consistent with Verizon's initial claim.

Calculation of the L&B Factor

Noting the Judge's discussion of the application of the FLC (discussed above) in calculating the land and building factor, the CLEC Coalition argues that a double count results if the FLC is applied together with another adjustment, which it refers to as the "TPI adjustment" and Verizon terms the "Current Cost/Booked Cost" (CC/BC) ratio. The CLEC Coalition favors elimination of the FLC generally, but if that argument did not prevail, it would urge that the TPI adjustment be eliminated to avoid the double count.

Verizon replies that the two adjustments do not overlap. The CC/BC ratio, it explains, applies current prices to the embedded equipment reflected on Verizon's books. The FLC reflects ubiquitous deployment of forward looking technology, as required by TELRIC. The two together, Verizon asserts, convert book investments to forward-looking investments.

Verizon's response is persuasive, and the CLEC Coalition's exception is denied.

ANNUAL COST FACTORS

Introduction

As already mentioned, Verizon used annual cost factors to convert TELRIC investments into annual costs for UNEs and to develop nonrecurring charges. The factors are expressed as ratios whose numerator is pertinent expenses and whose denominator may be relevant investments, other expenses, or revenues. Six of the eight ACFs use an investment denominator; they are identified as (1) the depreciation ACF, (2) the return, interest, and federal income tax (RIT) ACF, (3) the ad valorem tax ACF, (4) the network ACF, (5) the wholesale marketing ACF, and (6) the other support ACF. The common overhead ACF is an

[90] The figure to be used is further specified and explained in Appendix C.

expense-to-expense ratio used to identify and allocate common overhead expenses, special pension enhancement payments, and savings associated with the Bell Atlantic/NYNEX merger. Finally, the gross revenue loading ACF, expressed as an expense-to-revenue ratio, allocates uncollectibles and Commission expenses.

To develop its ACFs, Verizon began with 1998 expenses, which it claimed to have adjusted (from $7.866 billion overall to $5.316 billion overall) to insure compliance with TELRIC, to reflect decisions in the First Elements Proceeding, and to capture an assumed level of productivity and savings. In addition, it asserted, the ACFs reflect no growth in costs since 1998, thereby sparing UNE customers the effects of inflation. Verizon contended that "the ACFs provide customers with the benefits of productivity gains, even when specific programs have not been identified to achieve these gains, while insulating customers from cost increases, even when the increases are known and certain."[91]

Verizon maintained that its ACFs had been developed in a manner largely consistent with that used to develop carrying charge factors (CCFs) in the First Proceeding.[92] It argued as well that substantial reductions in the expenses captured by the ACFs, as urged by some parties, would unlawfully and improperly deny it the opportunity to recover the costs it actually expects to incur in providing UNEs, thereby violating the statutory mandate that rates be just and reasonable and the FCC's requirement that UNE rates reflect "the incremental costs that incumbents actually expect to incur in making network elements available to new entrants."[93] Verizon explained as well that it applied three generic adjustments to its ACF calculations "in order to insure that the ACFs used in this proceeding accurately

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[91] Verizon's Initial Brief, p. 39.

[92] The differences between the two processes are described at Tr. 2,366-2,369; they are discussed here only to the extent they are controversial.

[93] Local Competition Order, ¶685.

reflected TELRIC assumptions."[94] The adjustments were said to exclude retail costs, account for inflation and productivity, and apply a forward-looking-to-current conversion.

The Judge resolved a series of objections to the ACFs. They are discussed here only to the extent they are raised by parties on exceptions.[95] Following the format of the recommended decision, we consider cost of capital issues separately as the next major heading.

Productivity

1. In General

In estimating the expenses to be allocated through the various ACFs, Verizon assumed productivity savings of 2% above inflation for network related expenses (primarily maintenance) and 10% above inflation for non-network-related expenses; it asserted that those were the figures we applied in Phase 1 of the First Elements Proceeding and elsewhere. The CLEC Coalition argued that application of the concepts we used in the First Proceeding required a substantial increase in imputed productivity. It argued that the 10% figure applied in the First Proceeding represented an annual rate of 5% applied over two years (1995, the base year for the data, to 1997, the year the prices were to take effect). Here, 1998 data are being used and the rates were expected to take effect in 2001, suggesting a productivity factor of at least 15% (5% over three years) or even 20% (if a fourth year is recognized).

The Judge regarded as insufficiently ambitious the 3.33% annual productivity figure implied by Verizon's proposal to apply a 10% adjustment over a three-year period but seriously questioned as well the 5% and higher annual productivity figures

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[94] Verizon's Initial Brief, p. 41.

[95] In several instances, parties allege errors in one another's rate calculations or in those prepared by Staff and appended to the recommended decision. Inasmuch as all rates require recalculation in light of our decisions, those allegations are discussed only in the event they raise substantive issues requiring resolution.

advocated by the CLEC Coalition. Noting, on the basis of Verizon's own presentation, that the average productivity factor used by regulators in price cap proceedings implied an annual productivity level of about 3.9%, the Judge applied that annual figure over a period somewhat in excess of three years and recommended an overall productivity adjustment of 12%. For maintenance, he recommended a productivity figure of 3%, using annual figures implicit in the Phase 1 adjustment but recognizing the longer interval in the present case. Parties on both sides of the issue except.

Verizon maintains there is no record basis for the Judge's recommendations. Noting that its expenses have actually increased, it argues that the Judge misread the precedents that he relied on for imputing, in the absence of evidence that they are achievable, productivity adjustments greater than those proposed by Verizon itself. It contends, among other things, that the annual productivity figures cited in the Phase 1 Opinion and relied on by the Judge had been used only to calculate the productivity improvements implied by the price reductions in Verizon's Performance Regulatory Plan (PRP) and did not represent productivity gains that were either achieved or achievable. It argues as well that the Judge failed to recognize the need to take account of inflation, estimates of which are included in the productivity figures cited by the Judge. Disputing the Judge's characterization of its 3.33% annual productivity improvement as too low, it explains that if inflation is taken into account, the annual figure becomes 5.88% in real terms, exceeding the productivity figures cited by the recommended decision. Finally, Verizon regards the productivity adjustment as particularly unreasonable given the Judge's recommendations that rates be adjusted to reflect savings associated with the Bell Atlantic/GTE merger and that no allowance be made for special pension enhancement (SPE) expenses. Arguing that mergers and workforce restructurings are two important ways to achieve productivity growth, Verizon charges "it is an unreasonable double count to increase the level of assumed productivity, disallow SPE costs, which must be

incurred to achieve these assumed gains, and then separately add on merger savings."[96]

AT&T and the CLEC Coalition respond that there is ample record basis for the Judge's recommendation, pointing to his discussion of the evidence submitted on both sides. They contend, among other things, that the recommendation is fully consistent with the decision in Phase 1, which Verizon itself relied on, and extends the logic of that decision to reflect the longer interval here between base year and rate year. They are untroubled by the gap between allowed and actual expenses, noting that actual expenses are not the standard used in a TELRIC analysis.

In its own exception, the CLEC Coalition maintains that the 3.95% annual productivity factor referred to by the Judge is too low. It argues that the implicit productivity factor in price cap proceedings in states formerly served by NYNEX is higher than the overall average in the survey submitted by Verizon and that that differential should be taken account of here. It also urges, in view of the timing of the new rates, that four years of productivity be recognized rather than three.

Verizon responds that the CLEC Coalition misstates the data with respect to other price cap proceedings and suggests that the longer interval referred to by the Coalition means, in effect, that Verizon will have to absorb even more unrecovered cost increases.

A productivity adjustment captures, in regulated rates, a reasonable degree of productivity improvement beyond what may be reflected through more specific adjustments. In applying it, we recognize that the specific adjustments do not exhaust the available cost savings, but we must take care as well that the savings not be unfairly overstated or double counted. As described below, we will reflect in the rates set

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[96] Verizon's Brief on Exceptions, p. 62. Special pension enhancement expenses refer to certain costs associated with offering enhanced retirement benefits to its employees in order to reduce the workforce; they are discussed further below.

here a placeholder estimate of savings associated with the Bell Atlantic/GTE merger, and recognition of those specific savings warrants tempering the Judge's general productivity adjustment, which is, again, simply a surrogate for specific savings that cannot be quantified. Verizon's exception on this point is granted, and general productivity will be reflected at the 10% and 2% rates proposed by Verizon.

2. Copper Distribution Facilities

The CLEC Coalition excepts as well to the Judge's rejection of its proposal to apply the higher, non-maintenance productivity adjustment to maintenance related to copper distribution facilities. The CLEC Coalition had contended that very little copper distribution plant is turning over and that the higher adjustment "properly reflects the improvement in maintaining whatever copper plant may be in place."[97] The Judge was persuaded by Verizon's rebuttal and concluded that the premise of no plant turnover had not been established. On exceptions, the CLEC Coalition concedes the Judge's point with respect to copper feeder facilities but disputes it with regard to copper distribution facilities. It therefore urges application of the overall productivity factor to maintenance expenses related to copper distribution facilities.

Verizon responds that copper distribution facilities are, in fact, being phased out; that there is no basis for a reduction in these costs beyond that effected by the CRAF, discussed below; and that, in any event, the pertinent accounts include both distribution and feeder facilities, precluding application of the adjustment to one but not the other.

Verizon's response is persuasive; the exception is denied.

Forward-Looking-to-Current Factor

According to Verizon, CCFs were traditionally calculated by finding the relationship between current expense

[97] CLEC Coalition's Initial Brief, p. 22.

and current investment and then applying the resulting ratio to convert the investment into customer charges that permit recovery of both investment and expenses. In a TELRIC context, the numerator of this factor--current expense--is significantly reduced to reflect forward-looking TELRIC assumptions, and unless the denominator is likewise reduced, the correspondingly lower factor, when applied to forward-looking TELRIC investment, will underrecover expenses to a degree not contemplated by the TELRIC method. Reducing the denominator is impractical, inasmuch as TELRIC investments cannot be determined before the end of the study process. Accordingly, Verizon proposed an adjustment, termed the forward-looking-to-current (FLC) factor, that would divide the ACF by .70, representing the approximate ratio of total incremental costs to the current level of those costs as calculated in the First Proceeding and in proceedings in Massachusetts and Pennsylvania.[98] It applied the FLC factor to the network, wholesale marketing, other support, and common overhead ACFs--those in which a reduction in investment could not be assumed to imply a comparable reduction in expenses. It did not apply the FLC to the depreciation, RIT, and ad valorem ACFs, which are directly related to investment levels, or to the gross revenue ACF, which directly reflects the level of expenses. Verizon noted that even with the FLC applied, its studies reflect only $5.316 billion in recognizable costs, in contrast to its claimed actual costs of $7.571 billion.

The FLC drew the fire of numerous parties, most of whom saw it, in AT&T's words, as "nothing more than a poorly disguised attempt by Verizon to recoup its embedded, inefficient operating costs. Such recovery would violate TELRIC . . . ."[99]

The Judge found the FLC to be sound in concept. He reasoned that in Phase 1, the CCFs had been calculated for the most part as the ratio of historical expenses to historical

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[98] Dividing the ACF by .70, of course, is the same as multiplying it by 1.43. Because the FLC is expressed as the result of the division, a smaller factor is equivalent to a higher cost.

[99] AT&T's Initial Brief, p. 47.

investment, and we were persuaded that application of that ratio to TELRIC investment would adequately capture pertinent forward-looking savings. Here, in contrast, the numerator of Verizon's proposed ACF is its forward-looking TELRIC expense yet the denominator remains historical investment; the ratio, accordingly, is lower than it would have been in Phase 1. Nevertheless, that lower ratio is applied to forward-looking TELRIC investment, "thereby in effect double counting the TELRIC adjustment, as Verizon argues. Seen in this light, the FLC does not convert TELRIC costs to embedded; it merely tries to restore a 'twice-TELRICed' cost calculation to one that recognizes TELRIC only once--as was the case initially in Phase 1."[100]

Although he found the FLC sound in concept, the Judge adjusted it from 70% to 75%, on the basis of Verizon's estimate of TELRIC investment, submitted in response to a post-hearing question from Staff. He noted as well that "use of the FLC to avoid double counting the effects of TELRIC requires being sure that the remaining 'single count' is not understated. To that end, expense adjustments should be rigorously applied where warranted."[101]

Verizon does not except to the Judge's modification to the FLC, noting only that further adjustments are needed to reflect changes in TELRIC investment resulting from the Judge's other recommendations; it recalculates the figure as 66%. Several CLECs continue to object in concept to the FLC.

Noting the FLC's significant effect on cost factors, AT&T contends the Judge overstated the distinction between the Phase 1 CCFs and the ACFs proposed here. It argues that the forward-looking adjustments applied to the expenses forming the numerator of the ACF (and cited by the Judge as the basis for concluding that the FLC is needed to avoid any risk that the cost calculations might be "twice-TELRICed") are, for the most part, the same as the adjustments to the CCF calculation that we ordered in Phase 1. Verizon's proposed CCFs in Phase 1 used

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[100] R.D., p. 43.

[101] R.D., pp. 43-44.

current expense as the numerator, but the CCFs actually applied in setting rates incorporated forward-looking adjustments that we required, including the elimination of avoided retail costs, recognition of productivity improvements, elimination of special pension enhancement expenses, recognition of merger savings, and recognition of savings resulting from forward-looking plant improvements. On that basis, AT&T renews its claim that the FLC is nothing more than Verizon's effort to take back the forward-looking cost savings it has purported to offer. In its reply brief on exceptions, AT&T objects to what it considers to be Verizon's uninvited recalculation of the FLC on the basis of extra-record information.

WorldCom argues to similar effect, contending that the FLC is an improper attempt to recover embedded costs through UNE prices, in violation of TELRIC principles. The CLEC Coalition likewise objects to any FLC adjustment, adding that the adjustment, if nevertheless adopted, should be calculated on an account-specific basis. It disagrees with the Judge's observation that such specific adjustments, though desirable, would be impracticable and contends that the information needed

to apply account-specific adjustments is available from Verizon.[102]

Verizon responds that the CLECs have merely restated arguments correctly rejected by the Judge, asserting that "their fulminations do nothing to bring into question the RD's finding that the adoption of a FLC is required to prevent the inherently unreasonable double counting of phantom savings."[103] It reiterates its own argument that its cost presentation included only $5.3 billion in costs, compared with its actual 1998 costs of $7.6 billion, and that its TELRIC investment came to $16.5 billion, in comparison with actual investment of $21.9 billion. It contends as well that the CLEC Coalition has

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[102] Z-Tel took no exception to the use of an FLC in principle but excepted broadly to the manner in which it had been calculated. It withdrew that exception in a letter dated July 6, 2001, acknowledging that it had unintentionally misstated what it regarded as the flaw in the Judge's recommendation but noting that its withdrawal of its exception should not be understood as support for the FLC. In its reply brief on exceptions (p. 6), Z-Tel argues that what it sees as an inconsistency in Verizon's position with respect to the FLC suggests we "should, at a minimum, raise the FLC to 0.975, although the evidence . . . suggests it is perhaps best to eliminate the FLC altogether." Verizon moved to strike that passage of Z-Tel's brief on the grounds that it effectively renews Z-Tel's withdrawn exception in a manner denying Verizon the opportunity to respond. Z-Tel responds that its comments, purportedly showing how an FLC could be calculated in a manner consistent with TELRIC, constitute a procedurally proper response to WorldCom's argument on exceptions that the FLC is inconsistent with TELRIC.

Z-Tel's arguments on this issue in its reply brief differ from those initially presented and withdrawn, but they do not in any event respond to Verizon's exception and they are portrayed as a response to WorldCom's exception only in Z-Tel's reply to Verizon's motion to strike. In effect, the arguments constitute a challenge to the recommended decision's endorsement and calculation of the FLC and could have been presented on exceptions, thereby allowing for response by Verizon. To allow presentation of the arguments now, especially after Z-Tel explicitly withdrew its initial exception on the point, would be unfair, and Verizon's motion to strike this portion of Z-Tel's reply brief on exceptions is granted.

[103] Verizon's Reply Brief on Exceptions, p. 32. The recommended decision, it should be noted, was concerned about the double-count but did not characterize the savings as "phantom."

not called into question the Judge's finding that an account-specific FLC would be impracticably cumbersome to compute, suggesting that if the exercise were as easy as the CLEC Coalition contends, the CLEC Coalition could have performed it in its brief on exceptions, thereby permitting Verizon to respond to the analysis.

The CLECs have not shown the FLC to be unnecessary for its stated purpose; at most their arguments imply that it should have been applied in Phase 1 as well. That it was not applied there does not preclude its use here, for it appears to be a proper methodological refinement. (Methodological refinement, of course, can raise rates as well as lower them; the test is whether the adjustment makes sense.) The general exceptions to the FLC accordingly are denied, and we reject as well the CLEC Coalition's proposal to calculate an FLC on an account-specific basis; the Judge properly found any such effort to be impracticable. That said, we reiterate the Judge's observation that "use of the FLC to avoid double counting the effects of TELRIC requires being sure that the remaining 'single count' is not understated. To that end, expense adjustments should be rigorously applied where warranted."[104] We have taken account of that recommendation in our decisions.

We have recalculated the FLC on the basis of our determinations today; the restated figure is 65%.

[104] R.D., pp. 43-44.

Removal of Retail Avoided Costs

Consistent with the premise of the FCC's UNE pricing regulations, Verizon's studies reflected the assumption that Verizon was a purely wholesale company; they sought, therefore, to remove avoidable retail costs from consideration. AT&T argued that Verizon had not gone far enough in that direction and that, among other things, it should have excluded Universal Service Fund (USF) contributions, which are assessed on the basis of retail end-user revenues and accordingly would not be incurred in a wholesale-only environment. Verizon responded that the hypothetical wholesale-only environment would likely involve changes in the USF and that it was unlikely that Verizon and other ILECs would be relieved of all responsibility for universal service. More fundamentally, Verizon pointed to the Eighth Circuit's rejection of the wholesale-only premise that underlies exclusion of USF expenses, arguing that that aspect of the court's decision had not been stayed pending Supreme Court review and that we therefore were obligated to take it into account.[105]

The Judge adopted Verizon's retail adjustment as a placeholder, noting that AT&T had not addressed itself to the effect of the Eighth Circuit's decision on its USF adjustment and that Verizon had not presented any estimate of how the decision would affect its own figures. He noted as well that the Eighth Circuit's decision on this matter "pertained to resale rates, not UNEs. Extending it to the calculation of excluded retail costs for purposes of UNE pricing may have the benefits of consistency, but the CLEC Alliance [which had raised the issue before the Judge but did not file a brief on exceptions] presents arguments, on which judgement can here be reserved, against doing so."[106] The Judge accordingly invited further consideration of this issue.

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[105] More specifically, the Eighth Circuit determined that the 1996 Act called only for removal of retail "costs that are actually avoided," a lesser amount than the "avoidable" retail costs that the FCC required be removed.

[106] R.D., p. 44, n. 97.

On exceptions, AT&T asserts that the TELRIC standard remains in place pending Supreme Court review of the Eighth Circuit decision and urges us to "simply ignore the most recent Eighth Circuit decision in [our] decision on all issues raised in this docket."[107] It sees no reason to single out retail avoided costs for special treatment, noting, as did the Judge, that the portion of the Eighth Circuit's decision at issue pertained to resale rates, not UNE prices.

Verizon, in contrast, contends it would be irresponsible to ignore the Eighth Circuit decision, which, though directed specifically to resale rates, is equally applicable to UNE pricing. It cites in this regard our statement in Phase 1 that there was no basis for distinguishing between resale rates and UNE prices for purposes of estimating the retail costs to be excluded[108] and that the Eighth Circuit decision accordingly is directly applicable. With specific reference to the Universal Service Fund matter, Verizon argues that the Eighth Circuit decision removes the entire premise for AT&T's adjustment, and it reiterates its argument that even without the Eighth Circuit decision, it would be unreasonable to assume that Verizon would have no USF responsibilities in a wholesale-only environment. Finally, responding to the Judge's invitation, it submits a recalculation of its avoided costs computed in a manner it sees as consistent with the Eighth Circuit decision and estimates that the adjustment would thereby be reduced by approximately $175 million.

In its reply brief on exceptions, AT&T argues that the Eighth Circuit, in a portion of its decision not previously cited in this case, explicitly ruled that Universal Service Fund costs should be excluded from the costs of providing network elements inasmuch as they are not based on actual costs.[109] The

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[107] AT&T's Brief on Exceptions, p. 31.

[108] Phase 1 Opinion, p. 96. It is noteworthy that in Phase 1, Verizon advocated a distinction here while AT&T opposed it.

[109] AT&T's Reply Brief on Exceptions, p. 84, citing Iowa Utilities Board v. FCC, 219 F. 3rd 744, 753.

Eighth Circuit accordingly did not remove the basis for AT&T's adjustment, as Verizon suggests; rather, says AT&T, it affirmed it. Verizon asks, in its post-briefing motion, that this portion of AT&T's reply brief be disregarded, inasmuch as AT&T had not raised the argument in its initial brief, where it contended only that the Eighth Circuit decision was irrelevant here. Should we deny that request, Verizon would respond that the Eighth Circuit was dealing with above-cost contributions to the USF, which Verizon agrees should not be recovered in rates and which it has not sought to recover. The point here, it says, is whether they should be again be removed in calculating retail avoided costs. Finally, AT&T objects as well to Verizon's recalculation of avoided costs, characterizing it as a "completely extra-record improper submission of what purports to be a recalculation of Verizon's entire avoided cost study."[110] It urges that the recalculation be disregarded. Verizon responds that the recalculation was requested by the Judge.

Turning first to the procedural issue, AT&T's argument with respect to the Eighth Circuit's treatment of the USF should have been raised on exceptions, in response to the Judge's request to brief the issue. But in the interest of full consideration, we will entertain Verizon's response rather than striking the passage in AT&T's brief.

Taking account of all the arguments before us, we reject AT&T's USF adjustment as unsupported and unnecessary, if only because Verizon has already removed USF contribution from its calculations. But we also see no need to modify the retail avoided cost adjustment further in light of the Eighth Circuit, inasmuch as the portion of the decision not stayed relates to resale rather than UNEs, and a TELRIC-based decision on UNEs should continue to reflect avoidable, rather than only avoided, retail costs.

[110] AT&T's Reply Brief on Exceptions, p. 84.

ACF Versus CCF

Verizon's ACF method, in contrast to the CCF mechanism used in the First Elements Proceeding, assigns some costs and expenses not on the basis of investment but on the basis of expenses or revenues. As a result, a portion of the common overhead ACF is assigned to non-recurring charges which, because they entail no investment, would bear no assignment of common overhead under the CCF method. The CLEC Coalition objected to this change, urging continued use of CCFs in order to avoid what it regarded as an unwarranted increase in non-recurring charges. The Judge agreed with Verizon, however, that non-recurring charges should bear a portion of the overhead costs from which they benefit, and he therefore found the ACF method for allocating costs to be reasonable.

The CLEC Coalition excepts, asserting that because common overhead costs are incurred on a recurring basis, they should not be recovered through nonrecurring charges. In addition, it contends that we have required use of CCFs in the context of collocation rates and that the applicable FCC rules require that UNE and collocation rates be calculated on the same basis. It contends further that approval of the ACF method will entail a departure, without adequate explanation, from the UNE pricing method adopted in Phase 1 of the First Proceeding.

In response, Verizon cites testimony that the existence of nonrecurring activities has a direct effect on the level of these expenses.[111] It argues further that the FCC regulations cited by the CLEC Coalition require only that both UNE rates and collocation rates be set on a TELRIC basis and do not require that the TELRIC standard be applied in the same manner to different groups of rates. In any event, Verizon adds, it has been recognized throughout the proceeding that the factors ultimately adopted in this module would apply to collocation rates as well as to UNE rates.

Verizon's response is persuasive, and the exception is denied.

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[111] Tr. 3,313.

Network ACF

The network ACF "includes repair, rearrangement and testing expenses as well as testing equipment capital costs, plus plant account and general network loadings."[112] In calculating the factor, Verizon assumed a reduction in "R dollars," the costs associated with subscriber troubles, on the premise that such troubles would diminish with the placement of newer copper plant. It did not reduce "M dollars," attributable to rearrangements associated with customer moves, municipal requirements, and network upgrades, seeing no basis for assuming that such costs would decline.

The Judge held that Verizon had failed to refute the reasonable expectation that moves and rearrangements would be less costly in a forward-looking system. He cited, in this regard, a statement by Staff in its scoping memorandum prepared early in the proceeding as well as a press release by SBC (another regional Bell operating company) stating that new loop infrastructure "will substantially reduce the need to rearrange outside plant facilities when installing new or additional services."[113] He regarded WorldCom's 50% adjustment to M dollars as unduly high, however, and recommended a 30% adjustment unless parties could show on exceptions that a different figure was warranted.

Verizon excepts, contending that despite Staff's statement in the scoping memo, Verizon's witness had shown in uncontroverted testimony that there was no technology that would permit reductions from historical levels of M dollars. It objects as well to reliance on the SBC press release, arguing that WorldCom had offered no testimony on how it was relevant and that Verizon's witnesses had shown, among other things, that projected savings such as these might not emerge. Verizon regards it as unreasonable to reject the expert testimony of its witnesses in favor of a press release discussing another company's network, insisting there is no record basis to assume

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[112] Verizon's Initial Brief, p. 54.

[113] Exhibit 393 (offered by WorldCom), p. 7.

that SBC's network is consistent with the one contemplated by Verizon's studies. Verizon particularly objects to application of the 30% adjustment to the pole and conduit accounts, which encompass items whose cost will not decline as a result of technological advances.

AT&T responds that Verizon's exception merely reiterates its conclusory testimony, regarded as inadequate by the Judge, that network reconfiguration will continue to be required even in a forward-looking network. According to AT&T, Verizon fails to respond to the Judge's observation that Verizon had not recognized the extent to which those activities might be less costly then they had been in the past. AT&T charges that Verizon's discussion of Exhibit 393 does not address the Judge's fundamental concern that Verizon had not borne its burden of proof, and it notes that Verizon likewise failed to consider whether the 30% adjustment recommended by the Judge should be replaced by some other number, insisting only that no adjustment at all would be proper. AT&T specifically disputes, as lacking any record basis, Verizon's proposal to treat poles and conduits differently.

Possible differences between SBC's network and Verizon's might well preclude reliance on SBC's experience for purposes of estimating the amount of an adjustment, but the Judge did not use the SBC statement for that purpose. Rather, he saw it as confirming the reasonable inference, already reflected in the Staff scoping memorandum, that even though forward-looking technology would not obviate network reconfiguration, it would reduce its cost. Despite its burden of proof, Verizon's effort to refute that premise pertained to the continued need for reconfiguration, which the Judge acknowledged, but not to its cost; and the Judge reasonably found that an adjustment was warranted. He conservatively regarded WorldCom's 50% adjustment as excessive and adopted a 30% figure instead, and Verizon's exception, limited to the adjustment in principle, offers no basis for any other number. Verizon does, however, provide a qualitatively persuasive basis for not applying the adjustment to pole and conduit accounts,

where there are less likely to be technological advances that reduce costs. Verizon's exception is granted to the extent that the adjustment will not be applied to poles and conduits; it is otherwise denied.

In a separate matter under this heading, WorldCom contended that the Network ACF was overstated because of a diminution in the adjustment--the copper repair adjustment factor (CRAF)--designed to eliminate recovery of expenses associated with repairing deteriorated copper plant. In the First Proceeding, the "deteriorated copper repair reduction," an important portion of the CRAF, had been set at 60%; Verizon here proposed to lower it to 35%, thereby reducing the overall CRAF from 42% to 25%. The 35% deteriorated copper repair reduction results from averaging the 60% used in the First Proceeding on the basis of a 1996 study with a new estimate of 10%. WorldCom charged the new figure lacked evidentiary support and was simply an unexplained estimate; Verizon argued that its reduction to the CRAF reflected the notion that newer plant already in good condition was less likely to experience large trouble rate improvements in the future. The Judge found that argument to make sense in concept, but he regarded Verizon's 10% estimate to be inadequately supported. Verizon had associated that figure with units that would be experiencing excellent service, and the Judge saw no basis for assuming that all equipment would have as small an improvement as the best units. In the absence of a better estimate, and in view of Verizon's burden of proof, he substituted a 25% estimate for Verizon's 10% and averaged that 25% figure with the 60% of the First Proceeding.

Verizon excepts, arguing that no party had offered testimony challenging its 10% figure and that cross-examination of its witness, who had directly pertinent expertise, reinforced its reasonableness.[114] It denies it failed to meet its burden of proof, arguing that if the 25% figure used by the Judge had been submitted in responsive testimony, Verizon could have offered rebuttal. It recognizes that its 10% figure is based on part on

[114] Tr. 5,272-5,287.

judgment, but it argues that the judgment "reflects the expert opinion of a witness with years of relevant experience who was willing to face cross-examination to test the reasonableness of the exercise of his judgement," and that there is nothing in the record to challenge that judgment.[115]

In response, AT&T maintains the record provides a basis for questioning the 10% figure and contends that evidence and argument submitted by several CLECs and cited by the Judge support the Judge's conclusion.[116] It asserts that Verizon's effort to pretend the evidence is not there does not make the evidence disappear, and that the weight to be assigned to the evidence is a matter to be determined by the Judge and, ultimately, by us.

The record on this issue is not so conclusive as either side would have it. The pages of the recommended decision referred to in AT&T's reply brief on exceptions relate in large part to matters other than the specific CRAF adjustment; but the pages of the transcript cited by Verizon do not sustain its 10% figure against the criticism that a number associated with the best performing equipment should not be universally imputed. The Judge reasonably took account of that unrefuted concern in making a conservative adjustment to Verizon's figure, and Verizon's exception is denied.

Wholesale Marketing ACF

The wholesale marketing ACF captures the expenses of "advertising, product management, and customer interfacing functions."[117] Verizon claimed to be seeking recovery here only of the costs that would be incurred in a wholesale market, but nevertheless included certain advertising expenses. Several CLECs objected, contending that there would be no need to advertise the availability of UNEs at wholesale and that

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[115] Verizon's Brief on Exceptions, p. 69.

[116] AT&T's Reply Brief on Exceptions, pp. 78-80, citing R.D., pp. 46-48.

[117] Verizon's Initial Brief, p. 59.

allowing advertising expense would require CLECs to pay twice for advertising--once to Verizon and once through their own advertising channels. The Judge disallowed 85% of the claimed advertising expense, noting that we had disallowed 90% in the First Elements Proceeding but that evidence on this record suggested that some wholesale advertising was now under way and warranted a reduction in the disallowance.

Verizon excepts, contending, as already discussed, that the Eighth Circuit decision precludes assuming a wholesale-only environment. In a mixed wholesale/retail TELRIC environment, Verizon continues, it would be doing the same sort of advertising it does today and, accordingly, no disallowance should be applied. Beyond that, Verizon reiterates its arguments that even in a wholesale-only environment, it would engage in market stimulation advertising, brand awareness advertising, and advertising to the CLECs themselves.

AT&T responds that Verizon is merely reiterating the arguments on advertising that the Judge found unpersuasive. It sees no record basis for Verizon's claim that as a retail/wholesale provider in a TELRIC environment it would be doing the same sort of advertising it does today. (AT&T's more general arguments on the wholesale-only issue have already been noted.)

As already explained, the Eighth Circuit's decision with respect to resale rates, though not stayed, does not require changing the assumptions applicable to UNEs. Verizon has shown no basis for departing in principle from the decision we made in the First Proceeding, and the Judge adequately tempered that result by reducing the amount of the disallowance in on the basis of evidence presented here. Verizon's exception is denied.

Common Overhead ACF

"The common overhead ACF reflects common overhead expense, SPE or equivalent expenses[,] and savings from the Bell Atlantic/NYNEX Merger."[118] Exceptions are raised with regard to all three components.

1. Common Overhead Expenses

Common overhead expenses are those associated with activities, previously designated as general and administration (G&A) functions, including executive, planning, general accounting and finance, external relations, legal, and human relations. The recommended decision disallowed certain expenses related to Y2K concerns, rejecting as unproven Verizon's argument that the incurrence of those costs merely served to defer other costs and that no disallowance accordingly was warranted.

Verizon excepts, contending that the only relevant evidence was offered by its witness, who had day-to-day familiarity with the pertinent budgets and testified that the Y2K costs only deferred the incurrence of others. AT&T responds that the Judge properly found that Verizon failed to prove its case, inasmuch as Verizon had "offered no analysis or quantification to support its witness's creative assertion" and that "the fact that Verizon's witness asserted a proposition does not mean that the finder of facts has no choice but to accept that proposition."[119]

Verizon's argument on exceptions simply refers to its witness's testimony, which the Judge found inadequate. Y2K costs are inherently a one-time event, and Verizon has not disproven the reasonable premise that they should be disallowed as such. Its exception is denied.

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[118] Verizon's Initial Brief, p. 63.

[119] AT&T's Reply Brief on Exceptions, p. 69

2. Special Pension Enhancement Expense

Special Pension Enhancement expenses are those associated with Verizon's offering of enhanced retirement benefits in order to reduce its workforce. In Phase 3 of the First Proceeding, we denied Verizon's request to recover some $387 million of such costs. We cited procedural grounds, related to the timeliness of the claim, and substantive grounds, including, among other things, the need to recognize possible offsetting savings. We nevertheless authorized renewed consideration of the issue in this proceeding, albeit it on a prospective basis only; and we added, in response to AT&T's request for rehearing, that Verizon bears the burden of showing any allowance to be procedurally and substantively proper.[120] In the present proceeding, Verizon seeks to recover some $400 million of SPE, a figure based on the average of 1998-1999 SPE expenses, adjusted to remove avoidable retail costs. It contends, in essence, that the productivity reflected in its cost studies can be achieved only if it continues to restructure its workforce in a manner requiring the expenditure of SPE costs.

Various CLECs argued, among other things, that these costs are incurred to overcome the effects of past inefficiencies, that they would not be incurred by an efficient forward-looking company, and that allowing them would contravene TELRIC. The Judge agreed with Verizon that early retirement incentive costs could be incurred in a TELRIC environment and held that the costs to be allowed here, if any, "should reflect the normal level of costs that Verizon could be expected to incur in that environment."[121] He found, however, that Verizon had not borne its burden of proving that its claimed $400 million of costs would be incurred in a forward-looking environment; that there was no basis on the record for

[120] Phase 3 Opinion, pp. 21-22; Phase 3 Rehearing Opinion, pp. 6-7. A full discussion of the issue's background appears in the Phase 3 Recommended Decision (issued October 2, 1998), pp. 18-20.

[121] R.D., p. 59.

identifying some lower amount; and that recovery of SPE expenses should again be disallowed. In reaching that conclusion, he cited evidence[122] that there had been considerable variation in annual SPE costs between 1994 and 1999, calling into question Verizon's reliance, in forming its estimate, on the costs incurred in 1998 and 1999, the second and third highest of the six years. He noted as well that the six years encompass two mergers, which could be expected to involve unusual levels of early retirement, and the transition from monopoly to competition, which could also be expected to involve an unusual degree of workforce reduction. Finally, he noted again that allowance of the FLC adjustment requires special diligence to be sure that all forward-looking expense reductions are properly reflected.[123]

Verizon excepts, disputing the premise that these are transitional costs incurred to move to a properly sized workforce and asserting that such costs are incurred by all businesses needing to restructure or refocus their workforces in a manner that may involve reductions in some areas and increases in others. It notes that its workforce overall was not substantially reduced between 1995 and 1999 and that nonmanagement workforce actually grew in order to meet the company's service related commitments. More specifically, it notes that one of the two mergers referred to by the Judge was not completed until 2000, after the period analyzed, and that AT&T itself, a company that has not experienced major mergers and not been subject to rate of return regulation, has also incurred SPE costs in recent years.[124] Finally, Verizon contends that to recognize an assumed level of productivity and merger savings without allowing the costs that must be incurred to realize those savings "is analogous to adopting rates that

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[122] Exhibit 410,CC-VZ-154 (revised supplemental response).

[123] R.D., pp. 59-60.

[124] Tr. 3,058.

reflect cost savings from a change in technology, while ignoring the costs of developing that technology."[125]

In response, AT&T reviews the history of the issue and supports the Judge's rejection of what it characterizes as Verizon's "by now threadbare arguments."[126] It contends that Verizon has failed to demonstrate why it will continue to need workforce refocusing in the future and why its 1994-1999 experience provides a reliable basis for projecting the future. It notes that the 1994-1999 period included movement from cost-of-service regulation to incentive regulation, substantial corporate restructuring (including a significant merger), and the transition to dealing with at least limited competition. The CLEC Coalition likewise objects to any allowance, noting, among other things, Verizon's failure of proof.

Verizon's exception, like its argument to the Judge, makes a good case for the proposition that SPE costs should not be viewed entirely as a transitional matter and that they are likely to be incurred in some amount on an on-going basis. But the exception, again like the argument to the Judge, fails to provide any basis for estimating that on-going cost. The historical years studied by the company involved major changes in its operations and organization, and even if, as Verizon argues, its overall workforce did not decline, there is certainly reason to assume an atypically high degree of "refocusing."

As the party with the burden of proof, Verizon should have done more to parse its historical experience into its normal and non-normal components; and its failure to do so, together with the need, already noted, to review these expenses rigorously because of our approval of the FLC, could justify continued total disallowance of the item, as the Judge recommends. But burden of proof, for all its importance, is ultimately a device to be used for the purpose of setting of just and reasonable rates, and to disallow all SPE costs here on

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[125] Verizon's Brief on Exceptions, p. 65.

[126] AT&T's Reply Brief on Exceptions, p. 70.

burden of proof grounds would be to reach a result that was procedurally justified but substantively wrong. In the absence of a better estimate, we will allow $60 million of SPE costs, representing 75% of a five-year average of those costs in the early 1990s, before the advent of the mergers and competitive markets that tend to increase these expenses.[127] In doing so, we recognize the qualitative reality that these costs will not disappear in a TELRIC environment, but we keep the allowed amount properly low in view of Verizon's failure to prove a higher amount warranted.

3. Merger Savings

Verizon reflected, in its common overhead ACF, the savings associated with the NYNEX/Bell Atlantic merger but contended that the further savings associated with the Bell Atlantic/GTE merger could not yet be estimated. The Judge saw no doubt that an estimate of savings associated with the Bell Atlantic/GTE merger should be reflected, and he instructed Verizon to include an estimate of those savings in its Brief on Exceptions, which would follow the date for Verizon's submission on the matter in Case 00-C-1945, where the savings are being addressed. He invited all parties to comment on how to reflect those savings, inasmuch as rates would likely be set here before the conclusion of Case 00-C-1945.

AT&T urges recognition here at a minimum of the estimated savings submitted by Verizon in Case 00-C-1945, suggesting that the amount ultimately calculated in that case will likely exceed Verizon's estimate and that reflecting that minimum amount in UNE rates should not await the outcome of the separate proceeding. It would provide for further adjustment in UNE rates when Case 00-C-1945 is completed. In its reply brief on exceptions, AT&T questions two aspects of Verizon's estimate of the merger savings--its offsetting of projected 2003 merger savings by removing projected savings for 2001 and its removal of procurement expense savings and sales and marketing savings.

[127] See Resale Opinion, p. 59.

Verizon objects to any separate recognition of the Bell Atlantic/GTE merger savings, contending that their achievement is already reflected in its productivity adjustment, which the recommended decision has already increased. It insists that "realizing cost savings from mergers is one of the primary ways that companies can increase their productivity."[128] The CLEC Coalition responds that Verizon's productivity data predate the Bell Atlantic/GTE merger and that separate adjustments would not overlap.

We agree with the Judge that savings associated with the Bell Atlantic/GTE merger should be reflected here, and there is no basis for finding that they are already subsumed in Verizon's productivity adjustment.[129] Verizon's estimate of those savings (and its estimate of savings attributable to the NYNEX/Bell Atlantic merger) are being examined in Case 00-C-1945, and we should not here prejudge the outcome of that case. Accordingly, we adopt Verizon's savings estimates as placeholders and will set UNE rates on that basis; those rates should be adjusted prospectively at the conclusion of Case 00-C-1945 to reflect its results.

Depreciation ACF

In Phase 1 of the First Proceeding, we determined that the depreciation lives to be used in estimating UNE costs should be those set for Verizon consistent with the FCC's triennial represcription process; in so doing, we rejected Verizon's request to use shorter depreciation lives (and consequently higher expense) based on generally accepted accounting principles (GAAP). Consistent with that determination, Staff stated, as part of its effort early on to assist the parties in setting the scope of this proceeding, that

> the Commission decided in [the First Elements Proceeding] that TELRIC depreciation rates should be based on depreciation lives used in calculating

[128] Verizon's Reply Brief on Exceptions, p. 40.

[129] As noted above, we are granting Verizon's exception with respect to the amount of the general productivity adjustment.

> booked depreciation on a regulatory basis. If the service lives for [Verizon's] plant changed since rates were set in [the First Proceeding], the new service lives and depreciation rates should be used in developing TELRIC element costs.[130]

Claiming consistency with that precedent and guidance, Verizon proposed use of the depreciation lives we adopted for regulatory purposes effective January 1, 1998. The Judge, however, agreed with AT&T that rates should continue to be set on the basis of the longer service lives set by the FCC in 1995 and used in the First Proceeding. He found that the service lives we adopted in 1998 had been set pursuant to Verizon's Performance Regulatory Plan (PRP) and did not embody changes of the sort to be taken into account pursuant to Staff's August 1999 memo. He noted that Staff had expressed important reservations about those service lives, which Staff said it had reviewed only with respect to the benchmark established in the PRP; a full study conducted without the PRP's constraints might well have produced a different result. The Judge added that the 1998 changes predated Staff's August 1999 memo and that Staff, had it contemplated use of the 1998 changes here, could have said so. He regarded these considerations as outweighing Verizon's unsubstantiated concern that the 1995 depreciation rates had become stale.

On exceptions, Verizon contends that Staff was aware, when it stated in its memo that changed depreciation rates should be used in developing TELRIC costs, that the only mechanism for change was the one provided for in the PRP, and that Staff had determined, in the letter cited by the Judge, that the revised depreciation rates were consistent with the PRP guidelines. It suggests that Staff's reference to the different results that might be reached through a complete depreciation study was simply a "general reservation of differences, [providing] no basis for rejecting the use of regulated

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[130] Staff memorandum dated August 11, 1999, quoted at Tr. 3,360 and in Verizon's Initial Brief, p. 69.

depreciation rates,"[131] and that no testimony had been offered, by Staff or anyone else, as to the specific concerns Staff was referring to. In contrast, it adds, Verizon offered a witness prepared to testify on its depreciation ACF.

In response, AT&T dismisses Verizon's exceptions as cursory and unresponsive to the Judge's reasoning. It renews its claim (on which the Judge did not rely) that its own depreciation witness was better qualified to testify on the subject than Verizon's witness.

In agreeing with AT&T that the 1995 depreciation lives should be used, the Judge overstated the significance for this proceeding of Staff's reservations about the 1998 lives. Service lives for Verizon's plant have, in fact, been changed since the First Elements Proceeding, and the fact that those changes were made in the manner contemplated by the PRP--something Staff would certainly have recognized when it provided the guidance in its scoping memo for this proceeding--is no reason to reject the use of those lives here. And though the special circumstances of the 1998 lives preclude reliance on them as precedent in any post-PRP consideration of depreciation, those shorter lives may well be appropriate for a TELRIC study, in that they better reflect the treatment of depreciation in the competitive market contemplated by TELRIC. Accordingly, Verizon's exception is granted.[132]

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[131] Verizon's Brief on Exceptions, p. 73.

[132] Verizon also asserts that the Staff calculations accompanying the recommended decision erroneously fail in some instances to use the recommended depreciation rates. There is no need, however, for any adjustment on that account. The depreciation ACFs calculated by Staff in fact differ in some instances from the Phase 1 depreciation CCFs, but that is not the result of a failure to use the proper depreciation rates. The difference results simply from insertion of the recommended service lives and salvage factors into Verizon's study for this proceeding, rather than its Phase 1 study.

COST OF CAPITAL

Introduction

Cost of capital presentations were made by Verizon and by AT&T jointly with WorldCom. Verizon proposed a figure of 12.6%, which it regarded as conservative in light of its study's conclusion that a forward-looking weighted average cost of capital related to the supplying of UNEs would be in the range of 13.03% to 13.38%. AT&T/WorldCom estimated the weighted average cost of capital to be in the range of 9.17% to 9.91%.

The parties differed little in their estimates of the cost of debt but disagreed sharply on cost of equity and capital structure. The differences reflected in part Verizon's view that it should be seen as a fully competitive enterprise subject to all the associated risks and entitled to a correspondingly higher return on investment and AT&T/WorldCom's contrary view that an incumbent local exchange company (and supplier of UNEs) remains an inherently less risky operation.

Verizon's witness calculated a cost of equity of 14.78%, based on a discounted cash flow (DCF) analysis of a proxy group comprising the companies included in the Standard and Poors (S&P) Industrials, and a debt cost of 7.77%. Verizon contemplated a debt/equity ratio in the range of 25%/75% to 20%/80%; the former implied an overall capital cost of 13.03%, while the latter implied 13.38%. In its studies, it used a figure of 12.6%, equal to the figure it uses in its own business decisions[133]; in light of its witness's calculations, it regarded that figure as conservative.

AT&T/WorldCom's witness calculated an equity cost of 10.42%, averaging the results of a DCF analysis of a proxy group comprising the regional Bell holding companies and the larger independent telephone companies (10.24%) and a capital asset pricing model(CAPM) analysis (10.6%). AT&T/WorldCom envisioned a capital structure ranging from 54% debt/46% equity to 20% debt/80% equity, implying an overall cost of capital (assuming a

[133] Verizon's Reply Brief, p. 63.

debt cost of 7.86%) ranging from 9.17% to 9.91%; the midpoint of that range is 9.54%.[134]

In the First Proceeding, we adopted a weighted average overall cost of capital of 10.2%, reflecting a cost of equity of 12.1% and a debt/equity ratio of 40%/60%.[135] Relying in large part on our analysis in the First Proceeding, the Judge recommends an overall cost of capital of 10.5%, comprising a cost of equity of 12.19%, a cost of debt of 7.39%, and a debt/equity ratio of 35%/65%. Verizon and AT&T except, the former challenging several aspects of the Judge's analysis and the latter contending that the Judge's figure is at the high end of the range of reasonableness and that proper application of his own analysis would have produced a substantially lower number.

The Recommended Decision

Noting the continued pertinence of our discussion of the issue in the Phase 1 opinion,[136] the Judge first determined that AT&T's proxy group again reflected Verizon's risk profile better than did Verizon's proxy group, and he recommended its use. He reasoned that just as TELRIC should not be understood to contemplate "a fantasy network" that makes use of speculative technology, so, too, should it not "be taken to require basing the cost of capital on a 'fantasy marketplace,' in which the provision of local telephone service is as competitive as the sale of detergent."[137] While such a market is the goal, it has not yet been achieved with respect to local service and appears even more remote with respect to UNEs. To recognize the movement that has been achieved, however, he recommended use of

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[134] Tr. 2,292, reflecting the updated estimates in rebuttal testimony, as slightly increased in a letter to the Judge from AT&T's counsel dated January 31, 2001.

[135] Phase 1 Opinion, p. 40.

[136] Phase 1 Opinion, pp. 38-39.

[137] R.D., pp. 76-77.

a capital structure of 35% debt/65% equity, rather than the 40%/60% structure we contemplated in Phase 1.

Next, again relying on the Phase 1 precedent, the Judge rejected Verizon's renewed request to recognize quarterly dividends and flotation costs in calculating the cost of capital. In Phase 1, we rejected those measures as "unnecessary and contrary to precedent," and the Judge saw no need to modify that result here.

Finally, the Judge noted that in the Phase 1 Opinion we rejected AT&T's proposal to use a multistage DCF model rather than the single-stage model advocated by Verizon, that AT&T's arguments in the present case resembled in many ways those in Phase 1, and that there continued to be no basis for rejecting the single-growth model and adopting a three-growth model as a matter of principle or theory.[138] He went on to suggest, however, that the unusual circumstances that had led us to use a multistage DCF model in a limited number of cases appeared to exist here as well and warranted some adjustment to the result produced by the single-stage DCF analysis. He considered a range of options, found their results to vary widely, and ultimately concluded that the best course of action was to calculate a cost of equity by applying, to the current cost of debt, the equity risk premium[139] that emerged in Phase 1. That risk premium came to 4.8 percentage points; applying it to the debt cost here of 7.39% produced a cost of equity of 12.19%, which the Judge found to be well within the range supportable by the record as a whole. Because Verizon challenges various aspects of the Judge's analysis, it is here set forth in full:

> Using the AT&T proxy group with updated data would suggest, under a one-growth DCF model, a return on equity of 14.77%--almost the same as the return Verizon calculated on the basis of its own proxy group. The

[138] R.D., p. 78.

[139] That is, the difference between the cost of debt and the cost of equity, reflecting the greater risk associated with equity.

figure comprises a dividend yield of 2.45% (measured as of March 30, 2001) and a growth rate of 12.32% (based on I/B/E/S growth rate as of March 15, 2001). Several factors suggest that result is unreliable and out-of-line, incorporating a growth rate that will not be sustained.

For one thing, the equity return calculated in the First Proceeding, 12.1%, exceeded the cost of debt calculated there (7.3%) by 4.8 percentage points. The present cost of debt (measured, as in Phase 1, as the average of Moody's composite rate for Aa rated debt and S&P's composite rate for A rated debt as of April 3, 2001) is 7.39%, and a 14.77 equity cost would exceed that figure by 7.38 percentage points. There is no explanation for so substantial an increase in equity risk premium, and it calls the calculated equity return seriously into question. Beyond that, there are several factors that could account for an extraordinarily high growth factor in the short run, among them the growth of wireless and data/internet and international services. These are unlikely to continue to sustain the growth factor in this way, and some remedial adjustment seems warranted.

Several alternatives present themselves. A three-growth DCF, applied to the AT&T proxy group, using the I/B/E/S growth rates for the first five years, an average of that growth rate and AT&T's alleged sustainable growth rate (6.29%) for the ensuing 15 years, and the sustainable growth rate thereafter produces an average equity cost of 10.30%. A two-stage analysis, using the sustainable rate after the first five years, produces an average cost of 9.26%. These figures appear unduly low, particularly when compared to a broadbased average calculated in the Merrill Lynch Quantitative Profiles analysis, using a three-stage growth model. The April 2001 edition of that document calculated a DCF return of 11.2% for both the S&P 500 and for a group of 29 telecommunications companies.

In view of these widely divergent estimates and the ongoing major changes in the industry that may account for them, it seems to me that a fair and conservative result can be obtained by applying to the current cost of debt the same equity risk

> premium that emerged in the First Proceeding. The cost of debt, as noted, is now 7.39%, and the equity risk premium in the First Proceeding was 4.8 percentage points. That suggests a cost of equity in this proceeding of 12.19%, a figure well within the range supportable by the record as a whole. The resulting overall cost of capital, using a debt/equity ratio of 35%/65%, comes to 10.5%.[140]

Exceptions

1. Verizon

Verizon contends the recommended cost of capital is unreasonably low, failing to reflect its risk in offering UNEs. Disputing the Judge's view that it would be wrong to contemplate vibrant competition in the offering of UNEs, it asserts that the FCC's Local Competition Order provides for UNE rates to approximate those that would be charged in a competitive market.[141] It argues that the increase in competition since issuance of the Phase 1 opinion and anticipated further increases justify the higher risk premium that troubled the Judge, and it charges that the recommended decision's "treatment of this issue is result-oriented, unbalanced, and ignores the record."[142] According to Verizon, the 14.77% cost of equity that resulted from application of a one-growth model to AT&T's proxy group was consistent with the results of its own witness's analyses, and the Judge's rejection of that result because of its high implicit risk premium conflicts with the requirement of the Local Competition Order that rates be set to simulate those that would prevail in a competitive market. Verizon alleges as well that the recommended decision fails to recognize risk factors other than competition such as operating leverage, the pace of technological change, and the regulatory environment. It stresses the last in particular, pointing to regulation's

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[140] R.D., pp. 79-80.

[141] Verizon's Brief on Exceptions, p. 74, citing Local Competition Order, ¶¶635, 679, and 738.

[142] Verizon's Brief on Exceptions, p. 75.

imposition of large and thus far unrecovered investment in operational support systems and to the TELRIC construct, which requires rates well below actual costs.

Verizon disputes as well the Judge's treatment of capital structure, noting that it reflects only a relatively minor adjustment to the capital structure per Verizon's books, even though the Local Competition Order requires use of a market value capital structure which, according to Verizon, would contain more than 80% equity. It sees no basis for rejecting its witness's cost of capital analyses, some of which did not rely exclusively upon the S&P Industrials with their associated risk. It suggests several alternative figures to show the extent to which the Judge's 10.5% cost of capital is understated: using the recommended decision's proxy group and 11.8% cost of equity together with a 20%/80% debt/equity ratio produces a cost of capital of 11.23%; using Verizon's recommended capital structure and the 14.77% cost of equity that results from the recommended decision's single-stage DCF analysis produces a cost of capital of 13.3%; and using the recommended decision's capital structure with the 14.77% cost of equity produces a cost of capital of 12.20%.[143]

Finally, Verizon notes that the cost of capital used by AT&T in making its investment decisions is 15.31%, and that the 12.6% reflected in Verizon's studies is equal to the figure Verizon has used in making its own investment decisions.[144] Noting once again that its witness's analyses called for a cost of capital of 13.03% to 13.38%, Verizon reiterates its view that 12.6% would be a conservative estimate of the true cost.

AT&T disputes Verizon's criticisms of the recommended decision, noting that Verizon failed to mention the Merrill Lynch analysis that produced a cost of equity substantially lower than that recommended by Verizon's witness. More specifically, it charges that Verizon's claim of vibrant competition is unsupported by the record and cites our

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[143] Verizon's Brief on Exceptions, pp. 78-79.

[144] Id., p. 79, citing Tr. 2,892.

statement, in a recent opinion, that Verizon continued to dominate the special services market; it contends the same can be said with respect to the provision of UNEs.[145]

AT&T characterizes as "the most peculiar aspect of Verizon's argument" its discussion of regulatory environment, contending that Verizon "may not be awarded a higher cost of capital because it has failed to present a credible case for recovery of its alleged OSS development costs or because it would prefer to base UNE rates on its historical rather than its forward-looking costs."[146] Among other specific points, AT&T contends that the internal cost of capital rates that it used for its own planning purposes are of no relevance here. Referring to its own exception, next discussed, it contends that the Judge's recommendation is at the high end of the range of reason and should be reduced by at least 100 basis points.

2. AT&T

AT&T contends that the Judge failed to follow through on his conclusions, and that a proper application of his analysis would result in a weighted average cost of capital no higher than 9.19%.[147] It endorses the Judge's conclusions with regard to the state of competition in the UNE markets, the consequent propriety of using the proxy group advanced by AT&T, and the need to depart here from the single-growth model. It goes on to cite the great importance in the calculation, as evidenced from the Judge's figures, of the choice between a single-stage and multi-stage model and to agree that the single-stage growth figure would be unsustainable. Turning to the Merrill Lynch analysis cited by the Judge, which calculates a

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[145] AT&T's Reply Brief on Exceptions, p. 92, n. 42, citing Cases 00-C-2051 et al., Verizon New York, Inc. - Special Services, Opinion No. 01-1 (issued June 15, 2001).

[146] AT&T's Reply Brief on Exceptions, pp. 93-94.

[147] Verizon points out in response that the 9.19% figure appears to be an arithmetic error and should be 9.9%, given AT&T's statement that it represents the sum of 2.6% and 7.3%. (Verizon's Reply Brief on Exceptions, p. 41.)

DCF return of 11.2% for both the S&P 500 and a group of 29 communications companies, it contends that both of those groups are riskier on average than Verizon's UNE line of business. It therefore regards the study's 11.2% figure as a ceiling and excepts to the Judge's recommendation of a 12.19% cost of equity on the basis of his risk premium calculation. It urges reduction of the cost of equity to 11.2% and a resulting overall weighted average cost of capital of 9.19%.

Verizon responds that AT&T proposal here is unsupported by record evidence and is below the 9.54% cost of capital urged by its own witness. It disputes as well AT&T's claim that its figure is compelled by the Judge's reasoning, noting that the Judge relied on the Merrill Lynch analysis only as a basis for assessing the reasonableness of a multi-stage DCF. The analysis itself is not part of the record and played no role in the Judge's calculation of the recommended cost of capital. It argues again that its own 12.6% cost of capital is a conservative figure worthy of being adopted.

Discussion and Conclusion

The Judge for the most part followed the precedents we set in Phase 1, departing from them only when it appeared that the one-growth model produced an unreliable result incorporating an unsustainable growth and that the alternatives seemed no more reasonable. In view of the circumstances that appeared to account for the widely divergent results, he resorted to what amounts, essentially, to an update of the result we reached in Phase 1.

AT&T's exception provides no basis for reducing the result reached by the Judge in order to capture the "logical conclusion"[148] of his analysis; it simply calls for using some of the factors he took into account in a manner that suggests, through the application of AT&T's own judgment, a different figure. We are unpersuaded by that judgment, and AT&T's exception is denied.

[148] AT&T's Brief on Exceptions, p. 18.

Verizon's exception, meanwhile, amounts in essence to an argument that the Judge failed to take adequate account of the competitive risks that it faces in offering UNEs. But that, too, is a matter of judgment; and we are satisfied that the Judge's analysis accounts adequately for those risks, particularly given our decision (discussed above) to use shorter depreciation lives and thereby mitigate Verizon's risk as well as Verizon's right to petition for increased UNE rates in the future in the event it believes it can justify such action. All told, an equity risk premium of 4.8 percentage points reasonably recognizes the risks at hand.

Applying that risk premium to an updated cost of debt (as of January 3, 2002) of 7.33% suggests a return on equity of 12.13% and an overall return of 10.5%, as shown in the following table:

	PERCENTAGE	COST	WEIGHTED COST
Debt	35%	7.33%	2.6%
Equity	65%	12.13%	7.9%
Total	100%		10.5%

LOOP COSTS

Introduction and Overall Method

Verizon studied the costs of providing unbundled access to two- and four-wire analog loops and two- and four-wire

digital loops.[149] Its cost studies claim to assume a fully forward-looking design based on next-generation digital loop carrier (DLC) technology, supported by fiber optic feeder cable, even though DLC is nowhere near universal deployment. Among other things, DLC provides for the conversion of analog signals into digital format in a remote terminal (RT) located in the outside plant, allowing for the direct delivery of digital line signals to digital line switch ports. Verizon maintains this configuration is always less costly than one that terminates an analog signal at the switch, assuming costs are analyzed by taking account of the loop/switch combination as a whole rather than of the loop alone. According to Verizon, "comparing loop costs, without reference to switching costs, is a fallacy that undermines most CLEC analysis of the relative costs of all-copper loops and fiber-fed DLC-equipped loops at short lengths."[150] Verizon cites in this regard our endorsement, in the First Elements Proceeding, of a 100% fiber feeder/DLC configuration, and it continues to regard that premise as consistent with TELRIC.

Verizon's loop architecture also assumes the use of forward-looking GR-303 technology, which, among other things, permits a smaller number of switch ports to serve a given number

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[149] According to Verizon, "a two-wire analog loop is a transmission circuit consisting of two wires that is used to both send and receive voice conversation in the 300-3000 Hz frequency range. This is the basic loop type used for providing voice-grade 'POTS' ["plain old telephone service"] service. A four-wire analog loop consists of two pairs, one to transmit and one to receive. It is used in certain private line and data service applications. A two-wire digital loop is a two-wire loop suitable for the transmission of certain high-speed data services. In particular, Verizon's two-wire digital ('premium') loop can be used to provide ISDN - Basic Rate interface ('BRI') service to an end-user customer. A four-wire digital loop will support DS1-level transmission. It can be used, among other things, to provide ISDN - Primary Rate Interface ('PRI') service to an end-user customer. (Tr. 2,421-22.)" Verizon's Initial Brief, pp. 108-109, n. 247.

[150] Id., p. 112.

of POTS loops.[151] Nevertheless, Verizon's studies consider not only the "integrated" DS1-level GR-303 interface but also a more costly DS0-level "universal" (non-GR-303) interface. This use of universal DLC (ULDC) interfaces rather than integrated DLC (IDLC) is controversial and is discussed below.

Along with the foregoing technology assumptions, Verizon's study posited use of existing outside plant routes and lengths, on the premise that they are driven by factors, such as geography and local land-use requirements, that will not change in a forward-looking environment. To determine the equipment that would be deployed along those routes, it randomly selected 55 wire centers (representing all three of its proposed density zones) and asked its outside plant engineers to develop a forward-looking design for each of the 242 feeder routes within those wire centers. It explained that "the engineers were asked to assume current customer and central office locations, and current routing of feeder cable, but otherwise to develop designs that were in no way constrained by the current, 'embedded' deployment of facilities. In this way, Verizon insured that the loop design underlying its studies would be fully forward-looking."[152] In determining the quantities of equipment to be deployed, Verizon made assumptions regarding utilization factors, and it applied what came to be called an "environmental factor," said to take account of zone-specific

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[151] The initially analog signal appears at the switch port as a DS0 digital channel (a voice-grade digital channel, i.e., a digital channel of the lowest capacity), having been converted to that format at the remote terminal. There is, however, no DS0-level loop/switch interface, and DS0s are grouped as a 24-channel DS1 for interconnection. The GR-303 interface group comprises up to 28 DS1 channel groups interconnecting a remote terminal and a switch, and it obviates a one-to-one association of switch ports and loops by taking advantage of the fact that only some customers will be requesting service at any given time and establishing a connection between a DS0 channel and a loop only when the customer picks up the phone. That phenomenon is referred to as "concentration." (Verizon's Initial Brief, p. 115.)

[152] Verizon's Initial Brief, pp. 118-119.

differences in the amount of work required to install outside plant. Finally, it developed a "link cost calculator" that costs out the facilities designed by the outside plant engineers.

Verizon studies were subjected to a variety of criticisms, some of which continue to be raised on exceptions. As in the recommended decision, issues related specifically to digital subscriber loops (DSL) are discussed in a separate section.

Network Design and Loop Configuration

A major source of controversy in the First Elements Proceeding was Verizon's assumption of 100% fiber optic feeder; other parties argued, in general, that for relatively short loops (various cross-over points were identified) copper feeder would be less expensive, and the Hatfield Model contemplated its use. We ultimately determined to use the 100% fiber feeder network, finding that when installation and maintenance, among other things, were taken into account, fiber offered cost and operational advantages that warranted its use even for relatively short narrow band loops.[153] In the present proceeding, there is general (though not universal) agreement that all-fiber feeder is the technology of choice as long as it is deployed in a manner that maximizes its advantages; but several CLEC parties denied that Verizon had done so.

After reviewing the arguments, the Judge concluded that Verizon had "for the most part, successfully defended its network design."[154] But he applied several adjustments, which are the subject of exceptions by Verizon (for having been made at all) and by WorldCom (for not having gone far enough).[155]

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[153] Phase 1 Opinion, pp. 82-84; Phase 1 Rehearing Opinion, pp. 22-29.

[154] R.D., p. 87.

[155] One network configuration issue--the number of remote terminals per central office terminal--is considered in the context of fill factors.

1. Concentration Ratio

As already suggested, the concentration ratio represents the degree to which the number of loops can exceed the number of ports on the premise that a connection between a port and a loop will be needed only when the customer picks up the phone. WorldCom called for increasing the ratio from the 3:1 proposed by Verizon to as high as 6:1; Verizon contended, among other things, that so high a ratio could result in inadequate port capacity and blocked traffic. The Judge found that Verizon had not borne its burden of proving a 3:1 concentration ratio to be the absolute maximum but that a ratio as high as 6:1 could indeed imperil service and, "to ensure that prices set on the basis of a reasonable, least-cost premise,"[156] he recommended a concentration ratio of 4:1. Verizon and WorldCom except.

Verizon continues to advocate its 3:1 concentration ratio, which it says represents the judgment and experience of its network engineers on the best way to balance the countervailing interests in minimizing port costs per loop through a higher concentration ratio and avoiding the call blocking that would result if a free switch port were unavailable when needed because the ratio was too high. It reiterates its argument that a Verizon document cited by WorldCom in support of a 6:1 ratio did not in fact support that ratio in practice, contends as well that the Judge's recommended 4:1 ratio had no support in the record, and insists that the only relevant data in the record was Verizon's expert's testimony in support of the 3:1 ratio. Verizon adds that the 3:1 ratio is used in an actual network planning guideline and that it has no interest in increasing its own retail costs through an inefficient network design, given that its local exchange rates are capped by its PRP. Verizon warns that we "should be extremely reluctant to endorse potential service-affecting changes in network management guidelines based on

[156] R.D., p. 88.

nothing more than intuition."[157] It suggests as well that a forward-looking construct might require a lower concentration ratio because of longer holding times attributable to internet usage.

WorldCom, meanwhile, continues to urge a 6:1 concentration ratio, contending that it is supported by Verizon's economic and network planning studies. In its view, a 4:1 ratio does not make optimal use of NGDLC technology and therefore does not reflect least-cost network design as required by TELRIC. Verizon responds that WorldCom has offered no basis for challenging the Judge's conclusion that a concentration ratio as high as 6:1 could imperil adequate service, and it reiterates its explanation that the Verizon planning document relied on by WorldCom used the 6:1 ratio only as a strawman in a study conducted before the 3:1 concentration ratio was established as the actual field design guideline. WorldCom's reply, meanwhile, disputes Verizon's claim that no party provided evidence contrary to its 3:1 proposal, asserting that "Verizon is not given license to claim that no contradictory evidence exists simply because it does not like the contradictory evidence with which it was presented."[158] WorldCom characterizes Verizon's concerns about effects on service as a red herring and reiterates its argument that Verizon's concerns about call blockage arise form inefficiencies in the legacy network that would not exist in a forward-looking construct.

In effect, WorldCom's exception continues to claim that the Verizon planning document it cites is something other than what it appears to be, and Verizon's exception ignores the fact that while the planning document cannot be relied on to establish a 6:1 concentration ratio, it constitutes record evidence that a 3:1 ratio is not the only one that could be reasonably considered. In settling on a 4:1 ratio, the Judge reasonably took account of the state of the record as a whole

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[157] Verizon's Brief on Exceptions, p. 28.

[158] WorldCom's Reply Brief on Exceptions, p. 30.

and of the countervailing interests at stake. We adopt that ratio for costing purposes; both exceptions are denied.[159]

2. Integrated v. Universal DLC

Verizon studied two alternative loop/switch interfaces: the integrated DS1-level interface and the universal DS0-level interface. The latter is more expensive, but Verizon maintained its use was dictated in some circumstances by service choices made by the CLEC. Several CLECs disputed that premise.

The Judge credited the CLECs' argument that GR-303 technology should be able to obviate UDLC at least in the near future and that a properly forward-looking TELRIC analysis should take account of that. He noted as well, however, that the capacity may not be available now and that its timing was less than certain. Applying a procedure used in the First Proceeding in analogous situations, he recommended that rates be set now on the basis of UDLC connections in the situations where Verizon proposed to do so, but that they be adjusted downward one year from the date of the recommended decision, to reflect IDLC connections, unless Verizon could show that it would be unreasonable to make that adjustment. Verizon and several CLECs except.

Verizon objects to what it characterizes as a rebuttable presumption that the UDLC rate should be eliminated within one year. The issue, it asserts, is that GR-303 systems support only a DS1-level interface--"a fact that is not a minor, as yet unresolved technical blemish but one that lies at the heart of the GR-303 concept. There is no technical development that will 'cure' that fact, and no party introduced evidence to

[159] Verizon notes further that the 4:1 ratio was applied, in the Staff workpapers accompanying its rate recalculations, to universal interfaces and DS-1 central office terminals, neither of which support concentration, and that these errors should be corrected whatever the concentration ratio may be. Verizon's point is well-taken and the needed correction will be made.

the contrary."[160] Accordingly, a CLEC wishing to take advantage of GR-303 would have to purchase an entire DS1 level interface, comprising 24 DS0 channels, and doing so would be uneconomic for a CLEC wishing to purchase only a few loops at a particular central office terminal. Verizon therefore maintains the UDLC is a lower-cost alternative for some CLECs even in the forward-looking environment.

AT&T, WorldCom, and Covad object to any UDLC rate even for the short term. They contend that GR-303 technology can accommodate DS0 unbundling, pointing to record evidence of several methods for doing so. WorldCom asserts that the current state of Verizon's network should be disregarded inasmuch as GR-303 technology is technologically deployable and does not require access to a universal interface. Covad notes that there was no intimation in the First Elements Proceeding, where Verizon advocated use of IDLC, that use of that technology would require CLECs to purchase loops in groups of 24. It characterizes the recommended decision as giving Verizon a gift by allowing it to charge on the basis of embedded costs for one year.

In response, Verizon does not deny the technical feasibility of connecting a single voice-grade loop to an ILDC interface, but it insists that doing so would be inefficient, requiring the CLEC to bear the costs of a full DS1-level interface and, under some of the alternatives technologically available, requiring additional equipment. In response to Covad's observation about the Phase 1 decision, it notes that the purpose of this proceeding is to update and improve the rates set in Phase 1.

In a related issue raised for the first time on exceptions, AT&T and WorldCom urge that even if the recommended decision is adopted on this issue, the UDLC rates should not be applied to loops purchased as part of the UNE platform (UNE-P). WorldCom notes that Verizon's testimony proposed to price loops on the basis of UDLC only where the CLEC interconnects with

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[160] Verizon's Brief on Exceptions, p. 29.

Verizon's loop network (UNE-L), which is not the case when UNE-P is purchased. They urge clarification on that point; AT&T adds a request for clarification that the UDLC rate would apply to UNE-L only where the CLEC elects to interface with Verizon at the DS0 level rather than the DS1 level. In addition, AT&T asks for clarification that the digital port rate applies to UNE-P.

In response, Verizon objects to what it characterizes as this deaveraging of UNE-P loops, suggesting that it would discourage facilities-based competition by imposing higher loop rates on CLECs that install their own switches. It suggests, instead, that a blended rate be set for all UNE loops, reflecting the relative proportions of IDLC, UDLC, and copper interfaces that will be encountered in the actual forward-looking network.

It seems clear that a IDLC connection can be made with a single DS0 loop; the question is whether it can yet be done in a manner that avoids making available to the CLEC (and, in fairness, requiring the CLEC to pay for) the remaining 23 DS0 loops in the DS1 bundle. The Judge properly recognized that that question is now unanswered but may eventually be answered positively, and we deny both exceptions. During the interval remaining before the review of the matter in May 2002, Verizon should work with interested CLECs to ascertain whether a single DS0 loop can, in fact, be unbundled and connected to an IDLC interface in a cost-effective manner.

In requesting clarification that UDLC rates would not apply to loops purchased as part of the UNE-P, AT&T and WorldCom seek a form of deaveraging that appears to be an unwarranted refinement in view of the uncertainty regarding the continued need for UDLC. In the event it becomes clear, when the matter is revisited in May, that UDLC-based pricing for DS0 loop connection will remain in place, the deaveraging favored by AT&T and WorldCom should be further examined. In addition, parties at that time should consider the possibility that the additional costs of a UDLC DS0 connection are better regarded as a switching cost rather than a loop cost. For now, rates should be set on a blended basis, along the lines suggested by Verizon.

Demand Forecast and Utilization Factors

Determining the needed level of investment requires assessing the demand for service over a pertinent period and the utilization (or "fill") factor for the equipment, i.e., an "estimate of the proportion of [the] facility that will be 'filled' with network usage."[161] Higher fill factors imply less investment and consequently lower rates; the countervailing risk is that too high a fill factor may imply investment insufficient to provide adequate service.

In this section we first discuss the demand forecast, which the parties and the Judge considered in the context of the fill factor for loop distribution plant. That fill factor, which attracted the greatest degree of attention, is considered next, followed by a number of other fill factor issues related to loops. Fill factors related to other elements are discussed later in this order.

1. Demand Forecast

Verizon took account of "ultimate demand," that is, it recognized growth over a ten-year period. The Judge agreed with Verizon that the FCC had not ruled out the use of ultimate demand, which had to be taken into account to insure that the contemplated system would be properly sized, but he agreed as well with AT&T that current customers should not bear the full cost of serving demand that is not expected to eventuate for ten years. He dismissed AT&T's method for allocating those costs as needlessly complex and cumbersome, and he determined that ultimate demand should be recognized by taking account of the net present value of the ten-year average demand, assuming annual growth of 3%--the midpoint of the 2% to 4% annual growth that Verizon envisioned.

On exceptions, Verizon sees no basis for the adjustment, maintaining that planning on the basis of ultimate demand is needed to prevent service disruptions that would

[161] Local Competition Order, ¶682.

affect current customers and that the cost of the needed cushion is properly regarded as a cost of serving current demand. Current customers, it continues, pay charges that represent only the current period costs of the ultimate demand while future customers pay the future period costs; overall, "the customers in each period pay only the costs accrued in that period for the investments necessary to effectively serve the demand in that period, including 'cushion' investments."[162] In Verizon's view, the Judge's recommendation would guarantee underrecovery, since it would take no account of the additional investment needed to serve the future demand that is, in effect, being reallocated into the present. Verizon notes as well (and is joined in this regard by AT&T) that while the recommendation was to use the present value of the ten-year average demand, Staff's workpapers show that the adjustment was made on the basis of the simple average. In addition, the adjustment was applied to the whole loop rather than just to distribution cable, even though most of the other loop components are not sized on the basis of ultimate demand.

AT&T replies that Verizon's justification for imposing the cost of the entire network on current period customers is inconsistent with the ultimate demand planning concept, intended to avoid having to add increasing amounts of new spare capacity on an ongoing basis. Arguing that Verizon's method would require current period customers to pay the cost of currently required network facilities plus those needed for ten years of future growth and demand, it asserts that "Verizon is attempting to have its cake and eat it too by suggesting that it be permitted to recover the costs of ultimate demand at the front end, and then treating the ultimate demand concept as if it were in fact not ultimate at all but rather adjustable upward with every incremental growth in demand."[163] With regard to the implementation errors cited by Verizon, AT&T agrees that Staff's workpapers failed to use present value analysis but contends

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[162] Verizon's Brief on Exceptions, p. 34.

[163] AT&T's Reply Brief on Exceptions, p. 43.

that its use would decrease calculated loop costs rather than increase them. It also disputes the suggestion that loop components other than distribution cable are not designed on the basis of ultimate demand, pointing to Verizon's instructions, in the survey on which its cost study rests, that the entire loop be designed to accommodate ten years of anticipated growth.[164]

WorldCom likewise notes that without the Judge's adjustment, costs would be spread only over current demand, and today's customers would be forced to bear the costs of future growth.

The Judge struck a fair balance between the need to take account of ultimate demand for planning purposes and the need to spread the costs of doing so in a manner that is fair to both present and future customers. Verizon's exception establishes no flaw in the balance he struck, and it is denied. The calculation carrying out the Judge's recommendation should be corrected in the manner agreed on by both parties. His adjustment should be applied to the entire loop unless Verizon can show, when it makes its compliance filing, that loop components other than distribution cable were not sized on an ultimate basis even though it appears, from the instructions cited by AT&T in its reply brief on exceptions, that they were.

2. Distribution Fill Factor

In the First Elements Proceeding, we adopted a 50% distribution fill factor. In the present case, Verizon assumed a 40% fill factor while various CLECs called for factors ranging from 50% to 75%. Emphasizing that "in resolving this issue we are pursuing not truth so much as fairness and reasonableness,"[165] the Judge found that the record suggested a range of reasonable factors running from something above 40% to something below 56%. Using Verizon's analysis but adjusting it in several respects, he settled on a distribution fill factor of 50%. Verizon, WorldCom, and AT&T except.

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[164] Id., p. 44.

[165] R.D., p. 96.

Verizon's quantitative analysis in support of its 40% fill factor[166] began with a 60% factor, reflecting two lines per zoned household--necessary to accommodate long-term potential peak demand in the distribution area--and actual household demand of about 1.2 lines. Actual demand will be reduced on account of undeveloped land, vacancies, and the fact that some customers will not use Verizon's infrastructure; and Verizon therefore multiplied its 60% factor by 90% to reflect unbuilt but zoned land, 95% for vacancies, 90% for customers who do not use Verizon's wireline network, and 90% for breakage.[167] The resulting figure was a fill factor of 41.6%.

In considering Verizon's analysis, the Judge first determined, in view of the recent trend, that AT&T's estimate of 1.3 lines per household appeared more reasonable than Verizon's figure of 1.2, but he invited parties to present updated data, if available, on exceptions. Verizon reports in its brief that the figure for January 2001 was 1.26 lines per household, but it continues to argue that 1.2 is a better long-run, forward-looking estimate because increased penetration of DSL service and cable modems will cut into demand growth for second lines. AT&T responds that the Judge's figure of 1.3 lines is supported by record evidence and logical analysis.

The Judge next reduced Verizon's adjustment for undeveloped parcels from 10% to 5% on the premise that undeveloped parcels will presumably be developed in the future. Verizon argues that new undeveloped land is added in a service area as existing undeveloped parcels are filled, resulting in a dynamic equilibrium in which population growth is balanced by the platting and zoning of new land. Even in mature areas, it

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[166] Verizon maintained as well that the 40% factor was supported by the estimates of its central engineering staff presented in Phase 1 and by application of adjustments and corrections to the 50% factor we there adopted.

[167] Breakage refers to what is otherwise termed the "lumpiness" of investment, i.e., the existence of minimum quantities of installable capacity, which makes it impossible to precisely match new installations with demand.

adds, developed lots may be lost to abandonment or changes in use. The Judge also reduced from 10% to 5% Verizon's adjustment for customers lost to competitors, reasoning that the loss of customers would be offset somewhat by customers acquired as undeveloped parcels are developed. Verizon regards the Judge's treatment as fallacious, inasmuch as the land usage estimate relates customer locations to the maximum possible number allowed by zoning while the competitive loss adjustment applies to actual customers, the percentage of whom will be lost to competition will not decline as the number of living units increases. With respect to both adjustments, AT&T replies that Verizon would place too much weight on the judgment of its own experts and allow insufficient leeway for the exercise of the Judge's judgment and our own. It contends that the Judge's treatment of these adjustments falls within the range of reasonableness identified on the record. The CLEC Coalition likewise endorses the Judge's reasoning, noting, among other things, the overlap among Verizon's adjustments.

Verizon adds, overall, that the Judge is in effect asserting that Verizon should be deploying less spare capacity than it currently deploys, and it urges us to recognize the potential effects of such a determination on service quality.

WorldCom's exception continues to urge a fill factor higher than 50%, noting that a recent publication of Telcordia (formerly Bellcore) shows a nationwide average loop fill factor of 65%. It asserts that the loop rates resulting from the 50% fill factor proposed by the Judge "remain unjustifiably high."[168] It notes as well that the FCC used a 75% fill factor in its universal service order.

Verizon replies that the FCC made it clear that its universal service proxy model is not applicable to UNE pricing and that the Telcordia figure--which is, in any event, extra-record--refers to feeder cable, not distribution cable.

In resolving this issue, it is important to keep in mind the Judge's point that there is no one "right" number that

[168] WorldCom's Brief on Exceptions, p. 23.

we are seeking; rather, we need a fair and reasonable estimate that takes account of the available information and the concerns at stake. The matter is inherently one on which informed judgments can differ.

The Judge found that AT&T's estimate of 1.3 lines per household is a better figure than Verizon's 1.2 lines; that view is strengthened by the recent data reported by Verizon. The Judge's other modifications to Verizon's adjustments, like the adjustments themselves, were less tied to specific evidence, but they, too, rested on sound rationales. Verizon's critique of the Judge's reasoning certainly suggests that it would have been wrong to disallow the adjustments entirely, but that is not what the Judge did. He recognized the conceptual merit of the adjustments but, applying his judgment to all the information before him, found a need to reduce them to avoid the risk that their net overall effect was overstated. The resulting fill factor of 50% is well within the range suggested by the record as a whole, and Verizon's exception to it is denied.

3. Other Utilization Factors

a. Remote Terminal Electronics

Verizon proposed a fill factor of 84% for RT electronics, which it sought to justify as the 90% objective fill factor, adjusted downward to allow for growth (4%) and churn (2%). The CLEC Alliance and WorldCom urged a 90% factor, arguing, in effect, that churn and growth were adequately accounted for in the difference between 100% fill and 90% fill. The Judge credited Verizon's explanation of why the objective fill factor of 90% did not in itself allow adequately for growth and churn, but he also found that Verizon had failed to show why its separate growth and churn factors were necessary and reasonable. Taking account of the need for fairness and of Verizon's burden of proof, he recommended a fill factor of 88%, which would allow a total of 2% for growth and churn.

Verizon excepts, contending that its fill factor is supported by the record and that the Judge cited no data and provided no analysis in support of his adjustment. Pointing to

the record, it explains how it calculated the 4% churn factor and 2% growth factor; cites recent data suggesting a statewide churn factor as high as 5.5% and suggests it was conservative in using the 4% figure associated with the New York metropolitan area; and argues that the two adjustments are cumulative and that each would be required in the absence of the other. It adds that forward-looking utilization factors can not be measured, because they are based on a network design not yet fully deployed, but that its analysis was based on engineering judgment and actual data and suggest the Judge's rejection of that analysis on burden of proof grounds sets a standard that cannot be met.

In response, AT&T cites the Judge's statement that "Verizon has explained why the objective fill factor of 90% does not in itself allow adequately for growth and churn, but it has not shown that its separate growth and churn factors are both necessary and reasonable."[169] It contends that Verizon's exception focuses only on the second clause of that statement, failing to recognize the implication of the first clause that growth and churn are recognized in part, albeit it not adequately, in the 90% factor. Accordingly, it suggests, the Judge found an additional 2% allowance to be adequate. WorldCom likewise defends the Judge's recommendation as record-based, but continues to support it own 90% fill factor.

Verizon has met its burden insofar as it has shown that growth and churn are separate matters, and the Judge properly found that they were not adequately allowed for in the 90% objective fill factor. But there nonetheless is overlap between the reasonable ranges for these items, and the Judge reasonably concluded that 88% was a figure that adequately took account of all of them. Verizon's pure reliance on actual data is insufficient; again, some forward-looking analysis is required. We adopt the Judge's recommendation as a sound exercise of judgment.

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[169] R.D., p. 99.

b. RT Enclosures and COTs

For remote terminal enclosures, Verizon used fill factors of 70.9% in the Manhattan zone, 56.7% in the major cities zone, and 44.8% in the rest-of-state zones. The CLEC Alliance and WorldCom recommended a factor of 84%, which the Judge rejected on the basis of qualitative considerations identified by Verizon as suggesting that figure was too high. He found, however, that Verizon had failed to make a quantitative showing in support of its own fill factors and, "recalling once again that Verizon bears the burden of proof, and recognizing that there is considerable flexibility in designing RT enclosures (even if not as much flexibility as WorldCom and CLEC Alliance would have it), [he recommended] that Verizon's proposed RT enclosure fill factor in each zone be adjusted upward by 15%."[170] He likewise recommended a 15% upward adjustment in Verizon's utilization factor for central office terminals (COTs), rejecting the CLEC Alliance and WorldCom's recommended factor of 90% but noting the need to take account in this utilization factor of Verizon's failure to show convincingly that more than two RTs per COT would be unacceptable.

Verizon excepts, again alleging no quantitative or analytical support for the Judge's adjustment, based solely on a finding that Verizon had failed to meet its burden of proof. It adds that the utilization factors for RT enclosures and COTs are not an input parameter to its cost studies; rather, they emerge after the fact from the routes designed by Verizon's engineers on the basis of forward-looking engineering considerations, including the need to allow for growth and modularity in the size of available facilities. There is, accordingly, no one spreadsheet item that can be adjusted, and Staff's workpapers applied the adjustment by multiplying the number of lines served by the facilities by 115%. Verizon argues that the result of that calculation include facilities that exceed their capacity (that is, with utilization factor greater than 100%) or that are

[170] R.D., pp. 99-100.

unreasonably close to their capacity. Verizon presents in a attachment to its brief examples of these phenomena, contending they demonstrate the adjustment to have been unwarranted.

AT&T responds by again asserting that Verizon has ignored the analysis in the recommended decision, which refers, among other things, to Verizon's ability to deploy facilities in a way that can maximize their utilization. It suggests the Judge did not explicitly find that Verizon had failed to meet its burden of proof but, instead, simply recognized that burden, placing it in the context of the regulator's need to keep in mind that the "utility has a clear self-interest in erring on the side of high cost forecasts."[171] AT&T therefore regards the Judge's skepticism about Verizon's specific factors as proper and asserts that "since ultimately all factors reflect prediction and judgment, they are not susceptible to proof to a mathematical certainty. [His recommended decision] is quite correct in not accepting uncritically Verizon's own judgments as to the precise level of fill factors for RT enclosures and COTs."[172] Finally, AT&T sees the 15% adjustment as affecting the costs to be recovered by Verizon through its UNE rates, and in no way undermined by the fact that when it is applied on a facility-by-facility basis--something necessitated only by the design of Verizon's cost study--it results in some facilities exceeding 100% of their capacity. The adjustment, according to AT&T, "will of course have no real world effect on the actual utilization or capacity of any particular Verizon network facility."[173]

WorldCom's exception, meanwhile, maintains that Verizon's assumption of only two RTs per COT fails to capture forward looking efficiencies and that the matter is not adequately addressed by the Judge's adjustment to the fill factor. It urges a fill factor of 90% and an assumption of five

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[171] R.D., p. 87, cited at AT&T's Reply Brief on Exceptions, p. 48.

[172] AT&T's Reply Brief on Exceptions, pp. 48-49.

[173] Id., p. 50.

RTs per COT in order to spread COT costs over more loops, citing a portion of the proprietary record as support for its premise. WorldCom urges as well an 84% fill factor for RT enclosures, renewing its contention that Verizon's fill factors are unreasonably low and contending that the Judge's 15% adjustment is inadequate.

In response, Verizon argues that its network planning guidelines--cited by WorldCom as encouraging multiple RTs--note the additional costs that may be associated with multiple RTs, including the need for round-the-clock access. Because of such concerns, it continues, multiple RTs are used only where the alternative would be grossly inefficient underutilization of COTs, which is not the case in Verizon's studies. It sees no basis for the utilization factors proposed by WorldCom and notes, among other things, that minimum size RT enclosures often cannot be installed on the sites that are available, requiring the use of a larger enclosure and consequently reduced fill factor.

The possible difficulties identified by Verizon with respect to multiple RTs preclude outright adoption of a multiple RT network design premise, but, as already suggested, the potential use of multiple RTs is something that can be reflected in the COT fill factor. The Judge's 15% adjustment does so, and it is adopted.

With respect to RT enclosures, the Judge's adjustment again took account of the record as a whole, and recognized the design flexibility that was available. AT&T has explained why the seeming anomaly identified by Verizon on exceptions is not dispositive, and the Judge's adjustment is adopted.

Environmental Factor

To test its intuitive hypothesis that the amount of work required to install outside plant might vary by geographic area, Verizon analyzed its engineering and construction records information system (ECRIS) data to identify such variation and

found higher costs in dense areas such as Manhattan.[174] The study compared, by geographic region corresponding to Verizon's nine strategic business units (SBUs) and three density zones, the actual labor time required to perform outside plant work operations against the standardized time for the same work operations. The standardized times, developed by Verizon's consultant H. B. Maynard and Company, estimate "the standard, average time for performing the function, regardless of where in the State it is performed, except for minor differences in the travel time to and from the work site."[175] Actual and standard times alike take account of the types and amounts of plant that is placed, rearranged, or removed; but the actual time considers, as well, factors that depend on locale and density specific conditions. These include, among others, "traffic conditions at the work site; terrain requiring hand digging; locations requiring the removal and restoration of fences, posts, and other objects; locations requiring landscaping; locations requiring minimum two-person crews; locations requiring the removal of waste contaminants (with contractors); locations requiring security arrangements."[176]

The analysis was performed by Verizon's statistical consultant NERA, which examined more than 388,000 individual work operations associated with over 4,000 outside plant estimate jobs throughout the state. The study found that the Manhattan had an actual-to-standardized-labor-time ratio of 1.59, the highest in the State, and that the statewide average ratio was 1.37. (Verizon explained a statewide average greater than 1.0 by noting that the ECRIS standardized times do not account for all the costs actually incurred in performing outside plant work, omitting the locale-specific conditions that

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[174] It should be recognized that previous deaveraging studies took account of inter-zone differences in technology, equipment deployment and loop length. They did not take account of zone-specific differences in the amount of work required to install outside plant.

[175] Verizon's Initial Brief, p. 137.

[176] Id., pp. 137-138, n. 313, citing Tr. 2,472-2,473.

show up in actual worktimes.) Asserting that NERA's statistical analysis shows the differences in the ratios to be statistically significant, Verizon argued that these costs must be taken into account in determining loop costs.

CLECs objected to the environmental factor on several grounds, contending that it would undo the forward-looking considerations reflected in the ECRIS standard time increments and asserting that application of the environmental factor impeaches the ECRIS database that Verizon otherwise relies on.

The Judge found the environmental factor to be reasonable in principle as a method to recognize empirically derived geographical cost differences. He was unpersuaded, however, by Verizon's attempt to explain why the statewide average actual-to-standardized ratio substantially exceeded unity; if the reason was that the ECRIS standardized times failed to include all pertinent costs, he held, Verizon was, indeed, impeaching its own ECRIS estimates. He therefore recommended that Verizon be required to recalculate the environmental factor in a manner that assumes a statewide average of 1.0 and adjust each regional environmental factor pro rata. Verizon excepts to that modification; AT&T and WorldCom except to adoption of the environmental factor in principle.

WorldCom and AT&T both note that ECRIS data have been relied on for years and that the standard time increments assume forward-looking efficiencies and labor. The environmental factor, they contend, would eliminate those efficiencies. WorldCom sees no basis for Verizon's assertion that the difference between standard time increments and actual times are caused by environmental conditions rather than inefficient work practices, noting that the NERA analysis measured only the differences and did not attempt to determine their causes. It contends as well that the record shows that ECRIS estimates include locale-specific costs,[177] obviating any adjustment on that account. AT&T suggests that the effect of the environmental factor, even when reduced as recommended by the Judge, shifts

[177] Citing Tr. 4,702-4,704.

costs among geographic density zones within the State in an unjustified manner.

Verizon responds that while ECRIS already reflects such locale-specific items as travel time and hourly labor rates, the environmental factor captures, in a manner superior to ECRIS, other matters such as traffic jams and weather conditions that cannot be anticipated for specific jobs. That these factors "vary systematically by geography," it says, "shows that they cannot be facilely attributed to inefficiency, as WorldCom attempts to do."[178]

In its own exception, Verizon renews its argument that its analysis confirmed, in a statistically significant manner, the intuitive belief that there were significant geographic variations in worktimes for various tasks. The ratio of actual to standardized times for Manhattan was 1.59, the highest identified; the statewide average was 1.37. Verizon objects to the Judge's recommendation to reduce the statewide average to 1.0, noting that it would have the effect of reducing the Manhattan ratio to 1.16. Because the ECRIS standardized times do not account for "locale-specific conditions" such as time lost due to traffic activity or weather conditions, it says, the Judge's recommendation would improperly disregard those costs. It disputes as well the suggestion that the difference between standardized and actual times is attributable to inefficiency, citing its witness's testimony that the PRP provides incentives to efficiency and that the statistically significant geographic variation in any event belies the suggestion. Verizon likewise denies that it is impeaching the ECRIS estimates, which have their purpose but do not necessarily reflect all of the costs that should be taken account of in a TELRIC analysis. It notes that in actual field applications the ECRIS factors are increased by certain locality specific adder variables and that the factors incorporated here simply represent another type of variable.

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[178] Verizon's Reply Brief on Exceptions, p. 23.

AT&T responds that the Judge's recommendation (which it objects to for reasons already noted) would recognize geographic differences without permitting "use of the environmental factor as a backdoor mechanism for increasing Verizon's indicated costs on a statewide basis."[179] Z-Tel likewise responds that the Judge's adjustment insures that the environmental factor recognizes geographic variations without increasing costs overall and expresses skepticism that Verizon would rely on the ECRIS database in the conduct of its business if the database understated costs to the extent Verizon contends here.

It is indisputable that costs differ from one geographic area to another, and proper cost analysis should take reasonable account of those differences. Verizon presented its environmental factor primarily as a mechanism for doing so, and the Judge accordingly understood it as a deaveraging measure that should not increase the overall average cost. His adjustment applied that understanding, reducing the overall environmental factor to unity.

Verizon now contends that the point of the environmental factor is not only to deaverage but also to recognize costs that simply are not included in the ECRIS standardized worktimes. As part of that process, the base to which the environmental factor was applied was first reduced to exclude the locale-specific "adders" already build into ECRIS. Application of the environmental factor represented an effort to restore the adders in a manner that calculates the variation more rigorously; and it is that restoration that accounts for a statewide average ratio (of costs reflecting the environmental factor to ECRIS costs net of any adders) greater than one. Verizon asserts on exceptions that restoration of the adders alone would have produced a statewide average ratio of 1.32, and it argues that the theory behind the Judge's adjustment would

[179] AT&T's Reply Brief on Exceptions, p. 52.

warrant reducing the 1.37 ratio only to 1.32, not all the way to 1.0.[180]

The difficulty with Verizon's position, however, is that it effectively adjusts the ECRIS worktimes to take account of actual costs in a manner that may substantially undo the reflection in ECRIS of forward-looking efficiencies. Verizon itself has characterized ECRIS as one of the features contributing to the TELRIC-compliance of its studies, inasmuch as the ECRIS "standard time increments assume forward looking efficiencies in labor that have not been achieved in actual experience."[181] A TELRIC-compliant study can (and should) take account of geographic variation, but Verizon's calculation of the costs to be added to recognize geographic variation fails to distinguish between costs genuinely attributable to locale-specific circumstances and those resulting from inefficiencies that a forward-looking study should disallow.

That failure on Verizon's part would warrant adoption of the Judge's adjustment, to ensure that the environmental factor is used only to deaverage and not to recognize additional, potentially inefficient, locale-specific costs. But Verizon has shown, as a qualitative matter, that some additional locale-specific costs need to be allowed for, and while it has not shown, as a quantitative matter, how much of its actual costs may be attributed to inefficiency, it seems unreasonable to assume that figure to be more than 50%. Accordingly, we will not deny Verizon's exception outright but will recognize 50% of the costs at issue in its exception. (In other words, the statewide average environmental factor should be reduced to 1.185:1, and the regional factors should be adjusted pro rata.) That result strikes a fair balance, on the state of this record, between recognizing additional costs attributable to geographic variation and limiting the risk of allowing recovery of

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[180] Verizon's Brief on Exceptions, p. 41, fn. 105; Verizon's Reply Brief on Exceptions, p. 22, fn. 63.

[181] First Network Elements Proceeding, Exh. 135, response to ATT-NYT-255.

inefficiencies that should be excluded from a forward-looking study.[182] Correspondingly, the exceptions of AT&T and WorldCom, which would disallow the environmental factor entirely, are denied.

Link Cost Calculator

Verizon's link cost calculator pulls together the various loop cost inputs and calculates an overall result. AT&T alleged ten specific errors in the calculator's operation. Verizon's rebuttal testimony acknowledged and corrected for two of them, and the Judge resolved the remainder (including one as to which Verizon acknowledged the error but applied a correction AT&T deemed inadequate). Only those that continue to be at issue on exceptions are here discussed; the item designations are those applied by AT&T and used in the recommended decision.

Item D. AT&T adjusted the link cost calculator to eliminate the cost for copper riser cable in situations where fiber is assumed to go directly to the customer premises. The Judge was persuaded by Verizon's qualitative explanation that the situation at issue is one in which the fiber goes directly to the customer's building but that copper riser would still be needed to reach customers on upper floors, but he agreed with AT&T that Verizon had failed to establish the frequency with which copper would be needed on that account. He invited Verizon to provide further detail in is brief on exceptions.

In that brief, Verizon asserts that the forward-looking amount of intrabuilding copper needed in large building environments was taken into account in the feeder route survey, and comes to 162 feet. It submits as well an analysis based on Manhattan building height data which, it says, supports that result.

AT&T responds that Verizon has submitted not actual data but an analysis based on new, unsupported, extra-record

[182] To state the matter differently, we are applying a very rigorous productivity adjustment to Verizon's figure, a step warranted by Verizon's reliance on actual data without any persuasive effort to remove the effects of inefficiency.

assumptions regarding building configurations in Manhattan. It objects in general to Verizon being allowed to supplement its evidence and urges us to scrutinize it skeptically.

The Judge properly found AT&T's total disallowance to be wrong in concept, and Verizon's presentation on exceptions establishes that it recognized a reasonable amount of copper riser cable in the situations at issue. No adjustment to the link cost calculator need be made on this account.

Item F. AT&T substituted an average installed pole price of $417 for Verizon's range of $385 to $765 per pole. The Judge found that Verizon had demonstrated on rebuttal both the propriety of not using a statewide average and the flaws in AT&T's analysis, but he expressed concern about Verizon's uncritical reliance on unadjusted embedded pole costs. He recommended a 10% downward adjustment to Verizon's figures as an interim measure, instructing Verizon to present on exceptions an analysis of recent trends in its own pole costs. Verizon submits that analysis as Attachment 5 to its brief, and AT&T does not respond.

The current data submitted by Verizon suggest that the Judge's 10% downward adjustment to installed pole costs was conservative. A somewhat larger adjustment might be warranted, but in the absence of more definitive trends, we adopt the Judge's result.

Item G. Acknowledging an error pointed out by AT&T, Verizon corrected its study with respect to the sharing of poles with electric utilities and cable television companies. AT&T contended in brief, however, that Verizon had in effect taken back its concession by eliminating an adjustment to the multiple sheaths between poles that it believed was inappropriate in the distribution portion of the link. The Judge found that Verizon had not specifically shown why AT&T's multiple sheath adjustment was inappropriate but that AT&T, for its part, had never explained why the adjustment had been offered. He noted that while Verizon bears the burden of proof, its opponents have the burden of going forward with evidence challenging particular aspects of Verizon's study; in the absence of any such evidence,

Verizon had no need to specifically disprove AT&T's adjustment. He invited the parties to address the matter further on exceptions.

AT&T now asserts that the Judge "inexplicably forgives Verizon's entire failure of proof and improperly shifts the burden of proof to AT&T."[183] It contends that it submitted its adjustment to reflect fully the sharing of pole structures in Verizon's cost calculations and that the issue of multiple sheaths was raised only by Verizon in responding to the adjustment. It therefore sees no basis for the conclusion that AT&T bore the burden of proof on the issue.

Verizon responds that its rebuttal testimony reflected and explained its adjustment to correct the error in its original testimony that AT&T had identified. It contends that AT&T has not supported its challenge to Verizon's adjustment and that "Verizon's burden of proof does not 'kick in' with respect to specific challenges until the challenging party's burden of going forward is satisfied."[184]

AT&T's exception does not provide further substantive explanation of its adjustment, as the Judge invited, but simply disputes the Judge's treatment of the burden of proof issue. But that treatment was correct and consistent with longstanding practice, and AT&T's exception therefore is denied.

Item I. AT&T charged that Verizon in effect applied too low a fill factor to inner duct[185] by first assuming that each conduit carries three inner ducts, two of which are used and one of which serves as a spare, thereby establishing a tacit utilization factor of 66.7%; and then applying a 60% utilization factor, reducing the effective factor to only 40%. Verizon contended that the 60% utilization factor accounts for the spare ducts in a duct bank rather than the spare inner duct in a duct,

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[183] AT&T's Brief on Exceptions, pp. 38-39.

[184] Verizon's Reply Brief on Exceptions, p. 23.

[185] "Inner duct" refers to small pipes or tubes placed inside a conventional duct to allow the installation of multiple wires or cables.

but the Judge found that it had failed "to disprove the reasonable allegation that it overstates costs through overlapping fill factors that provide more excess capacity than is needed,"[186] and he adopted AT&T's adjustment.

Verizon excepts, arguing that the recommendation effectively assumes that only the number of conduits needed at any given time would be deployed in a trench. That, however, would require frequent costly and disruptive outside plant work to open trenches and add new conduits as demand grows. It argues that the third inner duct cannot be used to satisfy demand growth because it is there to provide contingency capacity, and cannot be used on a planned basis to support cable additions or emergency maintenance. In any event, it adds, inner duct would not be used at all in conduit containing copper distribution cable.

AT&T responds that Verizon has not shown any flaw in the Judge's conclusion that a 40% fill factor overstates the amount of needed excess capacity and it again charges that Verizon is seeking to have current users pay 100% of the cost for facilities that would be only 40% used.

Verizon's arguments explain why two types of fill factor need to be recognized here, but they fail to demonstrate the absence of overlap between them and the need for a cumulative fill factor as low as 40%. The Judge's resolution of the issue was reasonable, and Verizon's exception is denied.

Dark Fiber

"Dark fiber" refers to a fiber optic strand within an in-place fiber optic sheath that is "not connected to electronic equipment needed to power the line in order to transmit information."[187] It is offered only on an as-is, where-available basis, where spare facilities exist. Rhythms/Covad accordingly argued that Verizon incurs no capacity costs in connection with dark fiber and that CLECs purchasing it should not pay capacity

[186] R.D., p. 117.

[187] Verizon's Initial Brief, p. 155.

costs. The Judge agreed with Verizon, however, that "when all is said and done, the provision of a dark fiber cable would mean one less spare was available for other purposes, and the purchasing CLEC should bear the associated costs."[188] Noting, however, the possibility that Verizon might be able to recapture a dark fiber cable if it were needed--a possibility raised by Rhythms/Covad on the basis of information from a New Jersey proceeding--the Judge suggested that such a right of recapture might reduce or eliminate the capacity costs associated with dark fiber. The record was unclear with regard to the right of recapture, and he asked Verizon to clarify the matter on exceptions.

In its brief on exceptions, Verizon confirms that its New York dark fiber tariff provides no right of recapture. It adds that even if there were a right of recapture, the CLEC would be using and benefiting from a Verizon facility and should pay a capacity cost for the period in which it is used. Rhythms/Covad suggest that Verizon's offering of that argument--which they dispute--betokens an intention to recapture dark fiber despite its tariff provision, and they argue that Verizon's reference to a tariff provision that they regard as inconclusive fails to provide the clarification of the matter requested by the Judge. It seems clear, however, that the tariff provision precludes recapture and that capacity costs should be allowed, as the Judge recommends; we need not reach the hypothetical question of whether the existence of a right of recapture would warrant a different result.

Rhythms/Covad except to what they characterize as the Judge's failure to address himself to their separate argument that no fill factor should be applied to dark fiber. They assert that dark fiber in effect is a product of fill factors, coming into existence because Verizon placed more fiber in service than was needed and that the cost of the spare fiber is already recovered through the application of fill factors in

[188] R.D., p. 118.

other rates. They warn that allowing a fill factor for dark fiber would permit multiple recovery of those costs.

Verizon responds that UNEs always are drawn from spare capacity and are not provisioned by assigning to the CLEC a loop that is already in use. It explains that "an overall pool of interoffice fiber exists, with a level of spare that is reflected in the appropriate utilization factor, and all orders for fiber transport facilities, whether 'lit' or dark are filled from the spare in that pool. (A similar analysis applies to loop dark fiber.)"[189] It therefore sees no basis for a fill factor for dark fiber any different from that used generally.

Verizon's response is persuasive; Rhythms/Covad's exception is denied.

House and Riser Cable

House and riser cable is placed in a multi-story building, running from a point of interconnection within the building, often in the basement, to the network side of the customer's network interface device. Several issues related to house and riser rates were posed and resolved by the Judge; the issues that persist on exceptions involve the fill factor and the house and riser asset inquiry charge.

1. House and Riser Fill Factor

In the First Elements Proceeding, Verizon proposed and we adopted a fill factor of 65% for house and riser cable. In the present proceeding, Verizon proposed to reduce that factor to 40%. AT&T suggested the 56% fill factor it recommended for distribution plant generally, and the CLEC Coalition urged retention of the 65% factor used in the First Proceeding. The Judge recommended a fill factor of 60%, finding, among other things, that Verizon had not shown why it here proposed to apply the distribution fill factor to house and riser cable even though it had proposed a much higher factor in the First Proceeding.

[189] Verizon's Reply Brief on Exceptions, p. 24.

Verizon excepts, contending that the factor proposed in the First Proceeding should not govern here inasmuch as the purpose of this proceeding is to update, extend, and refine the studies used earlier. It cites the difficulty and expense of augmenting capacity within an existing building and asserts that with the exception of undeveloped lots, the factors bearing on utilization factor for distribution cable generally apply as well to house and riser cable. If anything, it suggests, use of the same factor overstates the achieved utilization in high rise buildings, given the need to provide extra capacity at construction in order to avoid costly additions later. It notes as well AT&T's use for house and riser cable of the same 56% fill factor it uses for distribution cable generally.

AT&T responds that Verizon's exception merely asserts that the factor adopted in the First Proceeding should not govern here but fails to offer any reasons or explanation. The CLEC Coalition likewise asserts that Verizon has not shown why the factor should be reduced to such a great extent and it notes that AT&T, in recommending the same factor for distribution and house and riser, called for the factor to be 56%. The CLEC Alliance cites the argument that house and riser utilization should be higher than distribution utilization generally because it serves a fixed area with more predictable growth rates and comparatively smaller augmentation costs.

As the Judge found, the factors tending to increase the house and riser fill factor in comparison with that for distribution cable are offset by the countervailing factors identified by Verizon. It is noteworthy as well that AT&T, like Verizon, appears to believe that offset is total, advocating use of the same fill factor (56% in AT&T's case; 40% in Verizon's) for both elements. At the same time, we cannot disregard the fact that in the First Proceeding, Verizon advocated a much higher fill factor for house and riser cable than for distribution cable. Verizon is not bound by the First Proceeding, nor are we, and methodological improvements are among the purposes of the present case; but the considerations cited here as warranting the same fill factor for the two

services are not newly discovered and Verizon has not fully explained its significant change of position.

In all, it appears to us that house and riser cable should have a higher fill factor than distribution cable, but that the difference should be less than the ten percentage points the Judge recommends. We will use a factor of 55%, the midpoint of the 50%-60% range.

2. Asset Inquiry Charge

The house and riser asset inquiry charge is imposed when a question about ownership of house and riser cable cannot be answered through the database available free of charge on Verizon's website and intervention by engineers is needed. AT&T urged rejection of the charge, contending that it improperly requires CLECs to bear the costs created by historical inadequacies in Verizon's inventory records. The Judge determined that a strict TELRIC construct might require disallowance of the costs even if Verizon had not acted imprudently (in the classical regulatory sense) in designing its system, inasmuch as the costs might not have been incurred at all had the embedded record keeping system been designed with the provision of UNEs in mind. He nevertheless recommended allowance of the costs, on the grounds that "there is no showing of imprudence; the costs are real and calculated in a forward-looking manner; it seems likely that at least some of these costs would be incurred in connection with a database that contemplated provision of UNEs; and denying the costs outright would incur the risk of assuming a 'fantasy' record keeping system."[190]

The Attorney General excepts, arguing, first, that Verizon needs accurate information regarding asset ownership for its own business purposes, without regard to provision of UNEs. Accordingly, it incurs the associated costs even without providing UNEs. In addition, the Attorney General asserts, it may be proper for CLECs to pay for the cost of making house and

[190] R.D., pp. 122-123.

riser asset records available to them, but the recommended decision does not state that Verizon has documented those particular costs. Verizon does not respond.

Verizon has reasonably documented the costs at issue (subject, of course, to the generally applicable adjustments we are adopting), and the Judge reasonably explained why they should be allowed, taking account of the sorts of concerns raised by the Attorney General. The exception does not warrant changing that result, and it is denied.

Loop Rate Deaveraging

Verizon proposed to continue the existing arrangements for deaveraging loop rates into three zones: Manhattan (Zone 1A), major cities (Zone 1B), and the remainder of the State (Zone 2).[191] FairPoint proposed an alternative, revenue-neutral, deaveraging plan intended to foster local exchange competition in some of the more densely populated areas now included in Zone 2; in effect, it would distinguish between small cities and suburban areas on the one hand and rural areas on the other. FairPoint offered five specific proposals, all intended to insure "that the Rural rateband would . . . apply to truly rural areas and not to the downtown area of smaller cities and towns. Each proposal is grounded in the complementary principles that there is a strong correlation between population density and loop costs, and that areas with similar population density should be grouped into the same unbundled loop rate band."[192]

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[191] The FCC's rules require us to "establish different rates for elements in at least three defined geographic areas within the state to reflect geographic cost differences" (47 C.F.R. §51.507(f).) In the First Proceeding, decided while that rule was stayed, we initially established only two zones: Zone 1 (called "major cities" and comprising loops served by central offices with a density greater than 1,500 loops per square mile) and Zone 2 (the remainder of the State). After the TELRIC rules were reinstated, we accepted Verizon's proposal to establish Manhattan as a separate zone.

[192] FairPoint's Initial Brief, p. 2.

The Judge expressed sympathy for FairPoint's goal of promoting the development of local service competition in smaller cities, but he found that Verizon had shown FairPoint's proposals to be flawed in both theory and practice: "Among other things, there appears to be a very significant difference, not adequately recognized by FairPoint, between a densely populated area large enough to encompass an entire central office (or more) and one that constitutes only a portion of a central office that comprises as well areas of much lower density. I recommend rejection of FairPoint's proposals and continued use of three-zone deaveaging in the manner proposed by Verizon and seemingly acceptable to all other parties."[193] FairPoint and Broadview except.

FairPoint's brief on exceptions expresses support for the loop rates recommended for Zone 2 but believes it justified adoption of one of its alternative deaveraging plans. It does not repeat its arguments but responds only to the Judge's concern about deaveraging rates at a sub-central office level. It acknowledges the difficulties associated with any such arrangement, and urges us to consider implementing its alternative rate structure where the zones comprise distinct central offices.

Verizon responds that breaking out a suburban zone from the existing Zone 2 would substantially increase rates for the remaining rural customers; its analysis suggests those rates could go as high as $36.62 per loop per month. It concludes that FairPoint's rate plan would benefit FairPoint but foreclose any possibility of competition in the rural parts of the State.

FairPoint has not shown that the potential benefits of further deaveraging outweigh its practical difficulties and unintended adverse consequences for rural areas. Its exception is denied.

Broadview says it supports the recommended decision's loop rates for Zone 1A (Manhattan) and Zone 2 (rest-of-state), but expresses concern over the recommended rate increase for

[193] R.D., p. 106.

Zone 1B (major cities), in which most of its customers reside. It asserts that "the prime driver to competitive growth is likely to be small to medium business, those businesses that are often located near or at the fringe of dense urban areas,"[194] in density zone 1B.

Verizon responds that Broadview offers no specific criticisms of the recommended decision's computation of rates for zone 1B and fails to meet the requirement of our rules[195] that exceptions specifically identify the basis on which they rest.

The increase to which Broadview excepts grows out of the fact that the existing Zone 1B rate is artificially low, for it was set in the First Proceeding before Zone 1 had been divided and reflects average costs for that entire zone. When Manhattan was broken out as a separate Zone 1A with a deaveraged, lower rate, the rate in Zone 1B was left unchanged instead of being increased to reflect the higher deaveraged costs in the remainder of the original Zone 1. That historical anomaly is now being corrected; and while Broadview's concern about the resulting Zone 1B increase is understandable, it points to no error requiring correction. Its exception is denied.

In its own brief on exceptions, Verizon notes the FCC's requirement that UNE rates be deaveraged into at least three defined geographic areas to reflect geographic cost differences, cites our conclusion in the First Proceeding that there were no significant geographical variations in the costs of elements other than loops, and explains that it proposed to continue that approach here. It believes the Judge accepted that proposal but did not say so explicitly and asks us to clarify the matter.

It seems clear that the Judge agreed with Verizon that only loop rates should be deaveraged; in any event, we clarify that that is our intention, except for the possible deaveraging of interoffice transport rates discussed below.

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[194] Broadview's Brief on Exceptions, second unnumbered page.

[195] 16 NYCRR §4.10(c)(2)(iii) and (iv).

INTEROFFICE TRANSPORT

Interoffice transport facilities comprise large capacity cables and associated electronic equipment used to carry calls between switches. Within the broad category are dedicated transport--a facility purchased and used entirely by one CLEC--and shared transport, involving facilities used by more than one carrier, each of which pays for its share on a usage basis. The rates for shared transport are based on those for dedicated transport. Accordingly, though the issues disputed on exceptions pertain specifically to dedicated transport, their resolution affects rates for shared transport as well.

Ports Per Node

Verizon's dedicated transport cost study assumes 100% deployment of synchronous optical network (SONET) transport rings with 100% fiber facilities, a forward-looking technology. Each SONET ring provides 48 DS3 connections. AT&T contended that Verizon had understated the number of ports that must be used at each SONET node to provide the 48 DS3s, thereby overstating its investment per DS3 and, in turn, the cost of dedicated interoffice transport. More specifically, AT&T calculated, on the basis of Verizon's assumptions, that each node must have on average approximately 26 ports. (That figure was based on the need for 96 ports to support 48 DS3s, since each DS3 enters the ring at one node and departs it at another. Verizon asserted there were 3.76 nodes per ring, implying approximately 26 ports per node.) Verizon's study, however, assumed only 16 ports per node, thereby substantially overstating, in AT&T's view, the investment per DS3. In rebuttal, Verizon acknowledged the inconsistency identified by AT&T but maintained that even though its current network in fact has 3.76 nodes per SONET ring, its cost study network properly assumed 6 nodes per ring, equivalent to 16 ports per node. It claims to have used the figure of 3.76 nodes that characterizes its existing network only to calculate fiber costs (thereby understating them), but not to calculate SONET costs. The Judge

regarded Verizon's explanation as satisfactory and saw no need for any adjustment. WorldCom and Focal except.

Focal argues that Verizon's claim to have resolved the apparent inconsistency should be rejected because a six-node assumption artificially inflates costs; the assumption is inconsistent with anything observed in Verizon's existing network; and, most importantly, the record lacks evidence that a forward-looking network requires six nodes per ring. It suggests that Verizon proposes that figure in order to "avoid recognizing actual costs that reflect efficient engineering and reap enhanced profits by superficially inflating them."[196] It urges that rates be set on the basis of 26 ports per node--i.e., 3.76 nodes per ring--which it regards as demanded by efficiency, reality, and consistency. WorldCom likewise maintains that Verizon has not borne its burden of proof and that Verizon's explanation requires the assumption that its current network does not incorporate forward looking SONET technology and design.

In response, Verizon regards it as significant that AT&T, which initially advanced the adjustment, does not except. With regard to substance, it contends that there is no evidence in the record to challenge the six-node assumption and that the CLECs objecting to it have not borne their burden of going forward with a prima facie challenge. It disputes as well the premise that a higher number of nodes per ring is inefficient or costly, contending that larger rings (requiring more nodes) entail such efficiencies as less fiber and fewer connections between rings. In Verizon's view, the appropriate balance is a matter of engineering judgment, and the CLECs have offered no basis for challenging Verizon's engineers' judgment on the issue. It notes as well that the HAI Model contemplates very large ring sizes.

That a forward-looking network construct differs from the existing network is hardly surprising, and those differences alone certainly cannot invalidate it. But that type of

[196] Focal's Brief on Exceptions, p. 3.

difference is the only real basis offered here for contesting Verizon's otherwise reasonable forward-looking assumption. In addition, Verizon has responded credibly to the argument that its construct may increase costs. We see no reason to modify the Judge's conclusions on this issue, and the exceptions are denied.

Optional Digital Cross-Connect System

AT&T objected to Verizon's inclusion of a digital cross-connect system (DCS) on most dedicated transport circuits regardless of whether the CLEC wished to purchase it, arguing that the FCC had allowed CLECs to order dedicated transport and DCS separately; Verizon contended that the extent of its unbundling obligation was not within the scope of this costing proceeding and that no CLEC had yet requested an unbundled DCS product. The Judge directed Verizon to identify the costs of an unbundled DCS product here unless it could cite a conclusive determination that it need not offer the product. He added that Verizon was free to argue elsewhere against any such offering.

Verizon has submitted a calculation of its DCS costs but notes that the resulting rates are intended to apply only to the extent Verizon is obligated to offer the product. It reserves its right to raise issues regarding that obligation in other proceedings.

The CLEC Alliance replies that Verizon has failed to show that it was not obligated to offer the unbundled product pending decision in those other proceedings, and it asks us to order Verizon to provide it on an unbundled basis "until and unless Verizon can sufficiently demonstrate otherwise."[197] The CLEC Alliance's request is beyond the scope of the proceeding and is denied, without prejudice to its further consideration in appropriate forums.

[197] CLEC Alliance's Reply Brief on Exceptions, p. 13.

Fill Factors

Verizon used a 75% fill factor for interoffice transport. The CLEC Alliance recommended fill factors of between 80% and 90%, arguing, among other things, that even though the equipment installed to accommodate traffic growth might be utilized at a 75% rate, the density and volume of the New York City telecommunications market suggested that existing facilities accommodating existing traffic were likely at full capacity and that the overall fill factor ought to exceed 75%. Verizon's response referred to the need for adequate capacity to ensure a prompt response to orders, a concern the Judge acknowledged. The Judge concluded, however, that "the CLEC Alliance's arguments strongly imply a fill factor higher than Verizon proposed; once again it is important to remember that not only that Verizon bears the burden of proof, but also that in a forward-looking analysis, its own experience provides the starting point but not the conclusion."[198] He therefore recommended a fill factor of 80%; Verizon, WorldCom, and Focal except.

Verizon contends that the Judge offered no derivation or analysis for his higher number and that the witness relied on by WorldCom and the CLEC Alliance lacked engineering expertise and offered no evidence in support of his recommendation. It maintains that its 75% factor is based on the experience, expertise, and judgment of the people who actually build and operate the network and that the notion that utilization should be maintained at as high a level as possible will lead to installation delays and held orders. It points in this regard to our statement, in a recent opinion, that Verizon's efforts to reduce utilization levels were part of the measures taken to improve its performance in providing interoffice facilities.[199]

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[198] R.D., p. 148.

[199] Verizon's Brief on Exceptions, p. 50, n. 127, citing Cases 00-C-2051 et al., Verizon-New York, Inc. - Special Services, Opinion No. 01-1 (issued June 15, 2001), pp. 11-12.

In response, WorldCom charges that Verizon "demeans and ignores the analytical work performed by [the Judge] and [our] Staff,"[200] and it defends its witness against Verizon's attack, noting his telecommunications experience as well as that of the witnesses sponsored by the CLEC Alliance. The CLEC Alliance argues to similar effect, contending that Verizon's recommendations derive "from the practical experience and technical judgment of people who have a traditional monopoly network design mentality that cannot escape inefficient engineering design constructs."[201] It reviews the basis on which its witnesses criticized Verizon's recommendation, asserting that the absence of spare capacity on the existing transport network is irrelevant in a forward-looking TELRIC network.

In their own exceptions, WorldCom and Focal urge higher fill factors than those recommended by the Judge. Focal disputes the Judge's implication that the CLEC Alliance had made a general recommendation for a fill factor between 80% and 90%; in fact, it recommended factors of 90% for most of the components involved. It argues as well that the Judge's recommendation of a remote terminal fill factor of 88% implies an interoffice transport fill factor of at least 90%, inasmuch as the interoffice system as a whole runs at nearly full capacity and has a higher utilization factor than RTs. Most importantly, in Focal's view, utilization rates should be highest for portions of the network with more highly concentrated traffic, such as the interoffice network. WorldCom likewise cites the specific fill factors proposed by the CLEC Alliance.

Verizon responds that the Judge was aware of the CLEC Alliance's fill factors and apparently intended the 80% recommendation as a compromise. It argues as well that the record lacks evidence supporting the comparative fill factor principles asserted by Focal and that there is no basis for

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[200] WorldCom's Reply Brief on Exceptions, p. 38.

[201] CLEC Alliance's Reply Brief on Exceptions, p. 15.

concluding that utilization levels for transport will necessarily be higher than for loop components.

The Judge's recommendation represents his considered assessment of the parties' positions, recognizing, once again, that there is no one "correct" fill factor. In our view, however, the fill factors offered by the CLEC Alliance, which for the most part were at 90%, should have weighed more heavily in that assessment and warrant a fill factor of 85%.

IOF Deaveraging

The CLEC Alliance called for deaveraged transport costs, on the premise that costs would be lower in higher density areas because of higher fill factors and other considerations. Verizon contended that if a separate Manhattan rate were established, it would have to reflect not only the lower costs associated with shorter transport distances but the added costs associated with the high complexity circuit design characteristic of Manhattan.

The Judge directed Verizon to include with its brief on exceptions an estimate of a deaveraged Manhattan dedicated interoffice transport rate, so a judgment could be reached on whether costs differ enough to warrant deaveraging. Verizon has done so, and it states that its analysis demonstrates that the costs of interoffice transport within Manhattan are higher than the statewide average. It adds that it opposes deaveraging in view of the administrative costs and the difficulty of applying deaveraged transport rates to routes that cross density zone boundaries.

WorldCom in response challenges Verizon's estimate, contending, among other things, that it neither demonstrates the claimed need for greater circuit complexity in Manhattan nor takes account of all the efficiencies available there. It asks that Verizon be directed to recompute a deaveraged transport rate reflecting an average ring length of no more than 3.8 miles.

The issues raised by WorldCom preclude adoption of a deaveraged rate on the basis of Verizon's estimate, and the

differences between the parties over whether Manhattan costs are higher or lower than average warrant a determination now that cost differences have not been shown to require deaveraged rates for this element. Parties may comment in greater detail on the matter within 30 days of the date of this order, and we will decide, on the basis of those comments, whether to pursue the matter further.

DSL COMPATIBLE LOOPS AND LINE SHARING

Introduction

Digital subscriber line (DSL) technology entails the use of specialized electronics that permit the transmission over copper telephone lines (as distinct from more advanced optical fiber) of high-speed data signals while at the same time allowing the customer to make ordinary voice calls. The technology takes several forms, collectively referred to as xDSL; of particular pertinence here are asymmetric DSL (ADSL) and high-bit-rate DSL (HDSL).[202]

"Line sharing," meanwhile, refers to an arrangement under which a CLEC is able to provide DSL data service over a loop that is also used by the incumbent carrier to provide retail voice grade service. The voice traffic is transported in the low frequency (0 to 4kHz) range of the loop; the data traffic is transported in the higher frequency spectrum above 4kHz.

Some rates for DSL and line sharing offerings were considered in two earlier accelerated tracks of this proceeding. In Opinion No. 99-12 (issued December 17, 1999)(the DSL

[202] More specifically, ASDL uses a twisted-pair copper loop; the asymmetry refers to its ability to support a much higher transmission speed to the customer than from the customer. Its use thus permits rapid downloading by a customer of information from the internet or other databases. HDSL uses either a two-wire or a four-wire copper loop; transmission speeds (which are the same in both directions) are much higher when the four-wire version is used. Verizon's tariff includes rates for ADSL loops and for two-wire and four-wire HDSL.

Opinion), we set rates for the nonrecurring charges and one recurring charge that Verizon had proposed for DSL loops. The rates were set on a permanent basis, in the legal sense of not being subject to refund or reparation, but we characterized them as "interim," inasmuch as they were expressly set for further examination here. Later, in Opinion 00-7 (issued May 26, 2000) (the Line Sharing Opinion), we set rates for line sharing. Those rates were made temporary, but "only with respect to quantitative matters that depend on the yet to be admitted [in Module 3] material. To the extent qualitative judgments regarding the applicability of various rate elements to line sharing [could] be made on the basis of the existing record their rate implications [were made] permanent."[203]

Among the issues under this heading is the propriety of Verizon's having priced DSL loops and line sharing on the basis of an all-copper loop architecture. The CLECs attacked that concept on the premise that doing so was inconsistent with the basing of all other UNE costs on a forward-looking, all-fiber feeder architecture and amounted to an unlawful violation of TELRIC requirements. Verizon argued that the use of copper was correct, inasmuch as DSL was an inherently copper-based technology that would not be needed in an all-fiber environment. We generally agreed with Verizon in the DSL Opinion and the Line Sharing Opinion, and Verizon insists that those decisions represent the "law of the case," warranting rejection of the renewed arguments to the contrary by Rhythms/Covad and the CLEC Alliance.[204] One implementation issue with regard to that dispute remains before us on exceptions, along with various parties' concerns about some specific DSL and line sharing rates.

Copper Versus Fiber

As a practical matter, the issue of whether DSL loops should be priced on the basis of copper or fiber was rendered moot by Verizon's stated intention to price xDSL-compatible

[203] Line Sharing Opinion, p. 17.

[204] Verizon's Initial Brief, p. 169.

loops at the rate applicable to two-wire analog loops, despite what Verizon regards as the higher costs associated with the former. The recommended decision included, for informational purposes only, a distinct, higher rate for an ADSL copper link, and Rhythms/Covad ask for clarification that the rates for xDSL loops are, in fact, the same as the rates for analog loops. Verizon regards such clarification as unnecessary but unobjectionable, and we here provide it.

Covad asks as well that we not adopt any rate, even on an informational basis, for the ADSL copper link, asserting that Verizon provided no cost support for it and the recommended decision engaged in no analysis of it. AT&T likewise asserts that Verizon's copper cost claims were not subject to rigorous review and asks us to specify that we have not addressed their merits.

Verizon replies that its cost study for an all-copper loop was presented in detail and went unchallenged by any CLEC. It denies that its pricing proposal renders its cost analysis moot, noting that if the cost analysis had shown copper costs to be less than fiber, the pricing proposal would not have been adopted. It therefore asks us to adopt its cost estimate subject to any generally applicable adjustments.

Verizon's pricing proposal for DSL loops obviates detailed consideration of its all-copper loop proposal. There likewise is no need to specify a rate for an all-copper loop, even for informational purposes, and we shall not do so.

Loop Qualification Charge

Loop qualification refers to the process by which it is determined whether a particular loop can be used for DSL

transmission.[205] Verizon offers several forms of access to that information. Its "mechanized loop qualification" service affords basic information on loop qualification by querying an electronic database. CLECs wishing additional information are offered "manual loop qualification" and "engineering query," which involve "checking other databases, performing automated [metallic line tests] on loops, and checking paper outside plant records (known as 'cable plats')."[206] These additional services incur additional charges.

The more costly forms of access are needed because the available mechanized databases are not fully populated. Rhythms/Covad therefore objected to the associated charges, arguing, among other things, that the charges require CLECs to cover the cost of correcting Verizon's failure to develop a proper database and that a forward-looking, TELRIC-compliant cost study would assume a market in which Verizon's network took account of the needs of its CLEC customers. The Judge analogized the issue to the house and riser asset inquiry charge, reasoning that while a strict TELRIC construct might contemplate the existence of a more comprehensive database, adopting that construct would incur the risk of assuming a fantasy record keeping system. He distinguished this issue, however, on the grounds that Rhythms/Covad's witness had credibly suggested that Verizon's compliance over the past 20 years with its own guidelines related to its databases would have resulted in more of the pertinent information being included. The Judge believed Verizon had established the

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[205] Copper loops often are equipped with devices that preclude their use to support DSL; the devices were installed in the past to enhance the network in various respects. If loop qualification determines that such devices are present, the loop must be "conditioned" to remove them. The Judge considered various issues related to loop conditioning, and those raising quantitative matters are discussed below under the heading of Nonrecurring Charges. Qualitative issues related to loop conditioning (R.D., pp. 155-157) are not raised on exceptions.

[206] Verizon's Initial Brief, p. 180.

soundness of its historical procedures for developing its database, but he saw little assurance of the extent to which those procedures had been complied with. "In view of that failure of proof, and to provide additional incentive to develop the database as a tool that meets the CLECs' needs as well as Verizon's own needs as a retailer, [he recommended] a downward adjustment of 25% in Verizon's loop qualification charges."[207]

Verizon excepts, arguing that artificially lowering rates to provide it incentives violates the requirement that UNE rates be cost-based. In addition, it sees no evidence "other than the ipse dixit assertion of the Covad/Rhythms witness"[208] that its database procedures were not complied with. It adds that the recommendation ensures that Verizon will not be able to recover its forward looking costs, makes no allowance for the cost of populating the database, and permits CLECS to avoid making a fair contribution to loop qualification costs.

In response, Rhythms/Covad note that Verizon did not cross-examine their witness on this issue and that the witness, a former Bell Atlantic outside plant engineer, has long experience and thorough knowledge of Verizon's practices. They regard the creation of incentives as fully consistent with TELRIC, for TELRIC replicates competitive pricing, which offers incentives to efficiency. They argue that the Judge's recommended rates are, in fact, above TELRIC, inasmuch as they require CLECs to pay for inefficient manual processes. And they dispute what they take to be Verizon's premise that it has been ordered to undertake a crash project to update its databases without being reimbursed for the associated costs; they assert that they seek not such a crash project but only charges that reflect efficient technology.

Once again, the Judge has reached a reasonable result on the basis of the record as a whole, including burden of proof considerations and evidence to which Verizon would assign little if any weight. But the evidence is undeniably there, and the

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[207] R.D., p. 160.

[208] Verizon's Brief on Exceptions, p. 55.

Judge did not act unreasonably or unfairly in crediting it more than Verizon would. His reference to providing a needed incentive should be seen not as sanctioning a below-cost rate but as explaining why the rate was being set toward the low end of the range of reason for those costs.

Splitter Administration and Support Charge

As already explained, "line sharing" refers to an arrangement in which a CLEC is given access to the DSL transmission capability of a copper loop that is also used by Verizon to provide retail voice grade services. The voice traffic is transported in the lower frequency range and the data traffic in the higher frequency range; the voice and data traffic are routed to their respective switches through the use of devices referred to as "splitters." Two scenarios for the provisioning of line sharing were developed in the ongoing DSL Collaborative and were considered in Verizon's cost studies. In scenario A, the splitter is located in the CLEC's collocation space in Verizon's central office; in Scenario C, it is mounted on a relay rack located in Verizon's central office space. In both scenarios, the splitter is owned by the CLEC.

Verizon proposed a splitter administration and support charge (SASC) comprising ACF-type components: a network maintenance factor (to recover splitter repair, maintenance, and similar expenses) a wholesale marketing factor (to recover "product management, advertising and customer-interfacing functions associated with the wholesale market"[209]), and a support factor (to recover a range of support functions such as information management, research and development). Consistent with our decision in the Line Sharing Opinion, the network maintenance factor would not be applied in line sharing scenario A, inasmuch as the splitter would be located in the CLEC's collocation space and Verizon would incur no maintenance costs.

[209] Verizon's Brief on Exceptions, p. 51.

Rhythms/Covad challenged the SASC on a variety of grounds. The Judge found that many of the arguments echoed more generic concerns about ACFs, particularly whether Verizon had adequately removed costs associated with its own retail activities. He held that those issues were adequately addressed by the recommended adjustments to ACFs generally, which would be applied here as well. The issue unique to splitters, he continued, was whether ACFs should be applied at all to an item of hardware in which Verizon itself has no investment. Verizon maintained that the CLECs' splitter investment was simply a surrogate base to which the ACF could be applied in order to recover real costs. The CLECs countered that doing so was fundamentally at odds with the theory underlying the construction of ACFs.

The Judge's finding on that issue is set forth at length because the parties' arguments on exceptions pay close attention to its wording:

> It seems to me that the CLECs have the better of this argument. What is at stake is not consistency for its own sake--i.e., the claim that ACFs are applied to Verizon's investment and therefore should not be applied to CLECs' investment--but the possibility that the ACFs would have been calculated differently had the historical investment base included investment other than Verizon's own. In that event, the denominator of the ACF ratio would have been greater and the ACF correspondingly lower. But applying the existing ACFs to investment not owned by Verizon entails a clear risk of overrecovery.
>
> This is not to say that Verizon incurs no costs in connection with line sharing of the sort recovered through the ACFs at issue. Its testimony shows that the costs (once those related to retail activities are properly removed) are real, though care must be taken to eliminate as well all costs related to relationships with equipment vendors. But despite its burden of proof, it has not proposed a reasonable way to identify and recover those costs; and recovery therefore should be disallowed.

> Finally, with specific reference to the maintenance costs proposed to be recovered from Scenario C CLECs, Rhythms/Covad have not shown splitter maintenance costs to be de minimis. If Verizon can devise and present on exceptions a better cost estimation and recovery mechanism, those costs should be allowed.[210]

On exceptions, Verizon suggests the Judge "appears to recommended a provisional disallowance of the proposed [administration and support] charge."[211] Noting that the Judge acknowledged the reality of these costs (but expressing surprise at his recommendation that costs associated with equipment vendors be disallowed, seeing no risk of the double recovery warned of by the Rhythms/Covad witness inasmuch as the costs at issue here are included in a different account from those recovered elsewhere), it contends that the only real question is how the amount of the costs should be determined. Its answer is to recover these costs, like other expenses, through ACFs; and it sees no basis for the Judge's concern over applying ACFs to investment not included in the investment base used to compute them. It contends that as long as the expenses included in the numerator of the annual cost factor development match the investments included in the denominator, the resulting factor will properly reflect the relationship and may be applied to investments not included in the initial investment base. It nevertheless recomputes the ACFs on an investment base including aggregate CLEC splitter investment and finds only "an insignificant reduction"[212] in the resulting wholesale marketing and support ACFs. (It does not provide the analogous calculation for the network factor because the allocation of splitters between scenarios A and C could not be determined by the briefing deadline.) Verizon argues that the recalculation "should eliminate the double recovery concern, and thus obviate

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[210] R.D., pp. 171-172.

[211] Verizon's Brief on Exceptions, p. 52.

[212] Id., p. 54.

any basis for unjustly denying Verizon the recovery of what the RD concludes, correctly, are 'real' costs."[213]

Rhythms/Covad argue in response that Verizon misunderstood the Judge's recommendation, which was to disallow so much of these charges as relate to the wholesale marketing and other support ACFs, but provide Verizon a further opportunity on exceptions only to estimate and propose a recovery mechanism for the maintenance costs to be recovered from scenario C CLECs. Instead, Verizon seeks to recover the entire SASC and fails to make the authorized specific showing with regard to maintenance costs. With specific reference to disallowance of vendor costs, Rhythms/Covad notes that Verizon's exception refers to an argument by their witness that was not raised in brief nor cited by the Judge. The Judge's point related to a different argument--that CLEC equipment suppliers perform product management, advertising, and customer interfacing functions with respect to the splitters and that Verizon is not involved in those processes--and Verizon does not address itself to that concern. Rhythms/Covad therefore urge rejection of the wholesale marketing and other support cost components of the SASC consistent with the Judge's recommendation, which Verizon has not shown to be flawed; and continued rejection of the maintenance cost component, inasmuch as Verizon has not responded to the invitation extended by the Judge with respect to those costs.

Rhythms/Covad's readings of the Judge's recommendations are more persuasive than Verizon's. The Judge's invitation to submit a better cost estimate and recovery mechanism was directed to maintenance cost components, and Verizon did not specifically respond. And his concern about vendor costs related to the CLECs' incurrence of those costs on their own.

That said, Verizon's recomputation of the pertinent ACFs in a manner reflecting inclusion of splitter costs in the denominator obviates the Judge's principal substantive concern

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[213] Id.

on this point. If the ACFs are recomputed in this manner, and the SASC is further modified to eliminate costs related to relationships with equipment vendors, the charge may be imposed.

Line Sharing SAC Charges

The collocation service access connection (SAC) charge recovers the costs of providing the physical connection between a CLEC's collocated equipment and Verizon's network. The Judge accepted Verizon's argument that line sharing requires enough cabling to warrant the imposition of two SAC charges for each installation but that the charge should be premised on the use of 165 feet of cable in each instance, rather than the higher amount that Verizon suggested was supportable.

In its brief on exceptions, Verizon notes that the charge set in the Collocation module of this proceeding is, in fact, based on 165 feet of cable and no change is required. Verizon's point, which is uncontested, is correct.

Cooperative Testing

Cooperative testing refers to a joint effort by a Verizon technician and a CLEC technician to ensure, on the installation of a line sharing arrangement, that it is properly installed and working. Verizon proposed a charge of $37.15 per loop for cooperative testing, which it regarded as cost based. Rhythms/Covad objected, contending that CLECs should not be required to pay for work and then pay for testing to make sure the work was performed; at a minimum, they suggested, the charge should be waived wherever the failure of a loop is Verizon's fault, and Verizon should bear the burden of identifying instances in which the charge may be imposed. The Judge held that line sharing involves use of a line already known to be carrying dial tone (in contrast to a stand-alone DSL installation, where a new line must be installed and tested), which "tends to negate at least one possible source of trouble that may be attributable to Verizon. In these circumstances, it seems reasonable to allow imposition of the cooperative testing charge; to provide for its waiver if the trouble is attributable

to Verizon; but to require the CLEC to bear the burden of showing a waiver to be warranted."[214]

Rhythms/Covad except, disputing what they take to be the Judge's assumption that cooperative testing is used primarily for line sharing arrangements; they assert that it is intended primarily for use with stand-alone DSL loops in order to ascertain the presence of dial tone and the existence of continuity (that is, a complete circuit). Rhythms/Covad add that the absence of continuity is a serious problem in connection with stand-alone DSL loops and that the problem is attributable to Verizon, as the party responsible for making the necessary cross connections. Accordingly, and because cooperative testing helps Verizon identify its own provisioning errors, they assert that Verizon should bear the testing costs and the rate should be set at zero.

In his reply brief on exceptions, the Attorney General agrees with Rhythms/Covad's analysis and recommends that Verizon bear the cost of cooperative testing when deploying a new stand-alone line and that CLECs bear the cost in the line sharing context unless the CLEC can establish that the defect identified is one for which Verizon is responsible.

Verizon responds that although cooperative testing is used primarily with stand-alone DSL loops, it is also used occasionally for line sharing and it is only in those situations that the charge would be imposed. It adds that cooperative testing is nothing more than a normal quality assurance procedure, the costs of which should be recoverable.

The posture of this issue is somewhat peculiar: Rhythms/Covad except; the Attorney General supports their analysis; yet the Attorney General's ultimate recommendation is substantially the same as the Judge's. In any event, we are satisfied that the Judge drew a reasonable distinction between the stand-alone DSL context and that of line sharing. In the former, there should be no charge for cooperative testing; in

[214] R.D., p. 174.

the latter, the charge may be imposed but should be waived if the CLEC can show the flaw to have been Verizon's fault.

NONRECURRING CHARGES

Introduction

Nonrecurring costs (NRCs; the abbreviation refers as well to the nonrecurring charges intended to recover those costs) have been defined by Verizon as "one-time costs that are incurred in responding to a carrier's request for the initiation, change, or disconnection of service."[215] To state the matter most generally, the costs are determined by estimating the worktimes needed to perform the required activities and multiplying them by the appropriate labor rates. NRCs have been a nettlesome issue since Phase 2 of the First Proceeding and continue to be controversial here. The issues are both complex and important, inasmuch as CLECs regard NRCs as upfront impediments to market entry.

In Phase 2 of the First Proceeding, we found that Verizon had failed to meet its burden of proof with regard to NRCs and that the record could have justified rejecting its NRC presentation in toto. Doing so, however, would have been tantamount to finding that the costs at issue were zero, clearly an incorrect conclusion, and we therefore set reasonable placeholder NRCs at a level approximately 57% below Verizon's proposals.[216] Verizon's failures of proof related to both the forward-looking nature of its study and its method for estimating worktimes.

In Phase 3, Verizon proposed additional NRCs. We found that Verizon's estimating methods had been improved in some respects, and we approved several of the new NRCs. We rejected others, as to which the new estimating method had not

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[215] Verizon's Initial Brief, p. 288.

[216] The basis for the 57% adjustment is set forth in the Phase 2 Opinion, pp. 53-54; in general, the adjustment represented the average effect of applying, in each work function for which Verizon had conducted a task oriented costing (TOC) analysis, the minimum rather than the mean TOC data point.

been applied. We also strengthened the procedure used to ensure that NRCs did not double recover costs already recovered through carrying charge factors.

In the present proceeding, Verizon claims to have presented studies designed to satisfy the earlier criticisms. Most of the studies were based on the nonrecurring cost model (NRCM); of the nine studies that did not rely on the NRCM, none is specifically controverted.[217]

The Judge described Verizon's study in some detail[218]; in general Verizon first determined worktimes using today's method of operations and then adjusted those results to reflect the effects of planned mechanization efforts. It therefore contended that the study was forward-looking, resulting in NRCs that often are substantially less than current costs, but it explained further that some activities will continue to require manual rather than mechanized work effort.

Noting the improvement in Verizon's NRC studies between Phase 2 and Phase 3 of the First Proceeding, the Judge found that Verizon's efforts to study its NRCs on a forward looking basis had been still further improved. He did not regard the studies as fatally flawed by their use of existing systems and costs as a starting point, holding that "the key is whether adequate steps have been taken to adjust that starting point to reflect reasonable forward-looking assumptions. Verizon's evidence details those steps, and they appear generally sufficient."[219] To the extent, however, that NRCs reflected continued use of UDLC technology, the Judge recommended that, like the corresponding recurring charges, they be set on that basis for now but they be reduced in a year to a level consistent with IDLC alone unless Verizon can show that step to be unreasonable.

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[217] Verizon's Initial Brief, p. 289, n. 689, listing the nine non-NRCM studies.

[218] R.D., pp. 176-177.

[219] R.D., p. 181.

AT&T excepts to the Judge's general endorsement of Verizon's NRC studies and Verizon excepts to a number of specific adjustments related to NRCs for DSL service.

The Studies in General

Noting the substantial burden cumulatively imposed by NRCs on Verizon's competitors, AT&T argues that Verizon's current NRC submission suffers from the same principal flaw--its reliance on Verizon's existing embedded network--as the submission found unacceptable in Phase 2. According to AT&T, the adjustments made by Verizon in contemplation of planned network upgrades failed to reflect the TELRIC network that underlies its proposed recurring costs. As a result, AT&T contends, NRCs and recurring costs are based on fundamentally different network assumptions, something that TELRIC does not allow. AT&T therefore urges us to find that Verizon has again failed to sustain its burden of proof and to reject the proposed NRCs entirely; should we be reluctant to take that radical a step, AT&T would propose a disallowance of 40%.

Verizon responds that AT&T is merely reiterating arguments fully considered and rejected by the Judge and that his recommendation reflects a careful consideration of the evidence. It characterizes the proposal to reduce the costs by 40% as unlawful and unfair, noting that AT&T presented no affirmative case on NRCs, having offered only a critique of Verizon's studies that was refuted on rebuttal.

AT&T exception is denied. The Judge fully recounted both the history of the issue in the earlier proceeding and the basis on which he found Verizon's current studies to be generally acceptable. AT&T's arguments on exceptions offer nothing new on the point.

OSS Efficiency (Fallout Rate)

The fallout rate refers to the percentage of CLEC orders that cannot be processed electronically and that require more costly manual intervention. AT&T asserted that Verizon's study contemplated excessive fallout rates, as high as 25%--a

figure AT&T says it calculated for a 2-wire loop--and that in a properly designed system, the fallout rate should not exceed 2%. The CLEC Alliance noted that the 2% figure had been adopted in proceedings in Connecticut and Massachusetts; AT&T asserted that the record relied on in Massachusetts was similar to the one before us.

The Judge found that Verizon had not borne its burden of proving that its fallout rate was adequately optimistic. Noting that "fallout rates can be expected to decline as experience is gained with more efficient OSS, and [that] it is important that rates here be set on the premise of minimal fallout," he recommended adoption of the 2% fallout rate advocated by AT&T.[220]

Verizon excepts, arguing that there is no record basis for applying an across-the-board 2% fallout rate. It agrees that "minimal" fallout should be assumed but insists its studies do just that, using different levels of fallout, estimated by its experts, for different types of activities. Contending that AT&T offered no evidentiary support for the 2% figure, it suggests that AT&T was relying on a Southwestern Bell Telephone experience it had cited in other proceedings. That experience, in Verizon's view, is distinguishable, inasmuch as it pertained only to the service order function of simple residential retail service, which cannot be extended to other service categories.

AT&T replies that it in fact offered extensive testimony criticizing Verizon's fallout rates, including the testimony of a knowledgeable witness; it contends Verizon is again alleging "no evidence" when it means "evidence that it considers to be in one way or another insufficient." AT&T adds that the Southwestern Bell experience is a strawman set up by Verizon in its exception, for it had not been referred to by the Judge. The Judge referred, instead, to a Massachusetts decision that had been extensively quoted from in AT&T's reply brief and that Verizon's exception ignores.

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[220] R.D., p. 184.

Verizon contends as well that whether or not the 2% fallout rate is valid, the calculations accompanying the recommended decision applied it incorrectly in one instance, inasmuch as the software translation needed to connect a new UNE-P port and loop would always have to be performed manually. Verizon asserts that no party offered any evidence challenging that claim but that the calculations accompanying the recommended decision nevertheless reflect application of the 2% fallout rate to that activity. Even if the rate is generally adopted, it argues, it should not be applied here.

AT&T responds that Verizon again misrepresents the record, citing testimony by its witness that if a forward looking network construct and forward looking OSSs are assumed, no manual software translation would be needed to connect the new UNE-P port and loop.[221] Accordingly, AT&T contends, the adjustment was properly applied to that activity.

As AT&T points out, the Judge had ample record basis for his 2% fallout rate, and Verizon's general exception here is denied. Verizon's specific exception related to new UNE-P ports, however, is granted; manual software translation is indeed needed in connection with a new UNE-P installation, and AT&T has not shown the contrary.

Loop Conditioning NRCs

Rhythms/Covad contended that Verizon's study overstated the worktimes used in calculating NRCs. In particular, they questioned Verizon's assumption that loop conditioning work must proceed one loop at a time instead of through what it regarded as the more efficient process of deloading multiple loops, and they urged use of the time estimates proposed by their witnesses. Verizon contended that a proper analysis of multiple loop conditioning showed that it would pose service problems and significantly increase costs.

[221] AT&T's Reply Brief on Exceptions, p. 101, citing Tr. 1,573-1,578 and Exhibit 316.

The Judge found the record inconclusive in a variety of ways and treated the loop conditioning NRC as follows:

> Deloading loops in batches of 25 or 50 may risk degrading service or increasing costs in the manner warned of by Verizon; but deloading only one loop at a time does not appear absolutely essential to system integrity or cost minimization, and might itself jeopardize system integrity by requiring more frequent opening of enclosures.[222]
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> To state the matter differently, Verizon has not borne its burden of proof with respect to its proposed charges, but it has shown ample qualitative reason why the charges should not be reduced to a level consistent with the worktimes advanced by Rhythms/Covad. To reflect the state of the record before me, I conclude that Verizon should recompute its worktimes on the premise that loops are deloaded on average in batches of ten, thereby capturing some of the efficiencies that may be available through multiple deloadings while recognizing the difficulty of extending that premise too far.[223]

Verizon excepts, arguing that it conclusively refuted Rhythms/Covad's 25- or 50-loop proposal and that the Judge's 10-loop proposal poses, to a somewhat lesser extent, the same difficulties and lacks any basis in the record. According to Verizon, multiple deloadings could degrade or cause a loss of service and would generate additional costs to reload loops in the event they were not used for DSL service and were rededicated to voice grade service. Verizon points as well to what it characterizes as unrefuted evidence that, for a variety of technical reasons, there would be only few instances in which

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[222] Without intending to belittle concerns about service quality, I cannot help but note that such warnings have a long history of overstatement, going all the way back to pre-divestiture AT&T's objections to competitive customer premises equipment. (Footnote in R.D.)

[223] R.D., pp. 188-189 (footnote omitted).

multiple deloadings could be performed, and it contends that while the evidence was directed toward the proposed 25- or 50-pair deloading, it applies as well to the Judge's 10-loop proposal. A 10-loop premise, accordingly, requires assuming unachievable economies of scale and produces rates far below cost. Verizon contends further that the Judge ignored its arguments that rates premised on multiple deloadings pose troublesome cost recovery and rate design issues, given that customers typically do not request loops in multiples of ten. Finally, Verizon contends that despite his claim not to have belittled concerns about service quality in invoking pre-divestiture AT&T's objections to competitive customer premises equipment, the Judge did in fact do just that, discounting Verizon's specific testimony on the service quality problems posed by multiple deloadings.

In response, Rhythms/Covad dispute Verizon's claim that its evidence was unrefuted and suggest the Judge chose a middle ground that reflected his assessment of the relative strengths of the opposing bodies of evidence. They review the testimony of their witnesses explaining how multiple loop conditioning could be accomplished, noting that Verizon did not cross-examine these witnesses. They contend that their witnesses' testimony established, among other things, that multiple loop conditioning is consistent with modern cable splicing technology and that single-loop conditioning can degrade service by causing wire insulation to deteriorate.

The Judge fully explained how he reached his conclusion on the basis of the record as a whole, and while Verizon's arguments on exceptions urge a different reading of that record, they do not require it. Verizon may be correct to argue that, in many instances, it will have to condition one loop at a time, but there will likely be instances--such as multiple occupancy residential buildings--in which more than 10 loops may be conditioned at once. The 10-loop premise balances those factors as well, and Verizon's exception is denied.

DUCTS AND CONDUITS

Introduction, Background, and Legal Context

Ducts and conduits differ from nearly all of the other products considered in Module 3 of this proceeding in that they are not classified as UNEs pursuant to the 1996 Act and are not required by federal law to be priced in accordance with TELRIC. Indeed, the FCC method for pricing ducts and conduits (which is not binding on the states) is based on historical costs, and CTTANY urged its use. Verizon, in contrast, urged that conduit rentals, like UNE rates, be set on a forward-looking TELRIC basis, a proposal that would increase the rates very substantially from their present levels, set in 1970 on the basis of historical costs. The Judge provided a detailed description of the background and legal context for duct and conduit pricing[224]; for convenience, we note here the following highlights:

- The federal statute grants the FCC authority over rates for pole attachments (defined to include ducts and conduits), but exempts from that authority any case in which a state regulates pole attachments and certifies to the FCC that it does so in a manner that "consider[s] the interests of the subscribers of the services offered via [the pole] attachments as well as the interests of the consumers of the utility services."[225] New York has so certified.

- The FCC has several times determined that rates for pole attachments, ducts and conduits should be set on the basis of the utility's historical costs. It did so most recently in the "Reconsideration Order" issued in May 2001.[226]

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[224] Supplemental R.D., pp. 2-5.

[225] 47 U.S.C. §224(c)(2)(B).

[226] Amendment of Rules and Policies Governing Pole Attachments and Implementation of §703(e) of the Telecommunications Act of 1996, CS Dockets No. 97-98 and 97-151, Consolidated Partial Order on Reconsideration (rel. May 25, 2001)(the Reconsideration Order).

- Section 119-a of the Public Service Law, enacted in 1978, grants us authority over rates for pole attachments and use of ducts and conduits and specifies certain guidelines to be followed in setting those rates.

- In our 1997 "Pole Attachment Opinion," we determined that we should exercise our authority over pole attachment rates by adopting the FCC's historical cost method. In so doing, we noted the need for "cooperative federalism" and the usefulness of avoiding unnecessary variation in regulatory requirements, all for the purpose of bringing customers the benefits available from the development of competitive markets.[227]

- Verizon argued, in connection with the proposed inclusion of duct and conduit pricing in Phase 3 of the First Elements Proceeding, that our adoption of the FCC's method for pole attachment pricing applied to ducts and conduits as well. It attributes its change of position since then to its "comprehensive review and re-evaluation of costing and pricing issues" in the present proceeding.[228]

More specifically, Verizon asserted that its current rate of 75¢ per foot per year is grossly understated, inasmuch as it was set in 1970 on the basis of even earlier costs and has not been changed since; it noted that the rate was far below the corresponding rates in other states within its footprint. Verizon proposed a forward-looking costing method that takes account of the current cost of construction for new conduit systems. The rates resulting from Verizon's study (and the current rates for comparison purposes) are as follows:

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[227] Case 95-C-0341, Pole Attachment Issues, Opinion No. 97-10 (issued June 17, 2001).

[228] Verizon's Initial Brief, p. 219, n. 501.

Proposed	Conduit Rates (per duct-foot) Current Rate (Statewide)	Verizon Proposed Major Cities[229]	Verizon Rest-of-State
Main Conduit[230]	$0.75	$6.22	$5.41
Subsidiary Conduit	$1.40	$9.49	$7.68

CTTANY's analysis, based on the FCC's historical cost method, began with publicly available ARMIS data on embedded costs, used those data to calculate a net investment figure, and divided that figure by total system length to arrive at the net linear cost of conduit. In calculating net linear cost, it relied not on ARMIS data, which it regarded as unreliable, but on information available from Verizon's continuing property records (CPR); that controversial step is discussed in greater detail below. On the basis of its analysis, CTTANY calculated a maximum rate per foot of 80¢.

The Judge determined, for reasons described below, that ducts and conduits should be priced on the basis of the FCC's method, as CTTANY urged, but without application of CTTANY's adjustment reflecting the use of CPR data. On that basis, he calculated a per-foot cost of $1.50 per duct-foot. Verizon excepts to the rejection of its forward-looking costing method and to the Judge's further recommendation that rates be set, in some situations, on the basis of a CLEC's use of less

[229] Verizon's study did not include Manhattan (or the Bronx), where ducts and conduits are owned not by Verizon but by its wholly-owned subsidiary, Empire City Subway, Limited. Empire City Subway, which offers conduit space to Verizon and other carriers on a nondiscriminatory basis, is regulated by the New York City Department of Information Technology and Telecommunications.

[230] "Main conduit" refers to a bank of conduit that directly connects two manholes or a central office vault and a manhole, along with certain associated equipment. Subsidiary conduit refers to conduit extending from manholes to poles or buildings (other than central office buildings) that is needed to extend underground cables to connections with either aerial or block cables.

than one-half of a duct. CTTANY excepts to the Judge's rejection of its CPR-based adjustment.[231]

Historical vs. Forward-Looking Costs

After describing the parties' arguments at some length[232] the Judge recommended use of the FCC's historical-cost method for setting duct and conduit prices. He agreed with Verizon that we were not bound by the FCC's method and that PSL §119(a) need not be read to require basing prices on historical costs, but he rejected Verizon's policy arguments in support of forward-looking pricing. He reasoned as follows:

> Essentially, Verizon insists on the need for consistency between the pricing of conduit rentals on the one hand and of UNEs on the other. But the FCC, the author of TELRIC pricing for UNEs, appears to see no need for that consistency, having very recently reaffirmed historical-cost-based pricing of poles and conduits; and this Commission, as a matter of discretion, has deferred to the FCC in this regard, at least with respect to pole attachments. I see no reason why conduits, whose function is analogous so that of poles, should be treated any differently from them, and the Commission's decision in Opinion No. 97-10 seems controlling here. That, indeed, was Verizon's own position in the First Elements Proceeding, and its attribution of its changed position only to its "comprehensive review and re-evaluation of costing and pricing issues" inevitably suggests a degree of result orientation.
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> Beyond that, it does not appear that forward-looking duct and conduit technology

[231] The Judge resolved a number of additional issues that are not pursued further by the parties on exceptions and, in general, are not discussed further here. Of these, we note only the Judge's rejection, on various legal grounds, of CTTANY's proposal that we assume jurisdiction over the rates charged by Empire City Subway. The Judge's treatment of the issue is consistent with precedent and law and we explicitly affirm it.

[232] Supplemental R.D., pp. 8-13.

> differs all that much from historical. In contrast to the UNE situation, this is not a case where TELRIC pricing is needed to avoid imposing on CLECs the costs associated with the incumbent's embedded plant (and embedded inefficiencies). Verizon's plea for consistency between UNE pricing and duct and conduit pricing fails to take account of the differences between the two products.
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> Accordingly, I see no basis for recommending what would be, in effect, a reversal of Commission precedent. Consistent with the Commission's earlier determination with respect to pole attachments, rates for duct and conduit rentals should be set, following the FCC's method, on the basis of historical costs.[233]

On exceptions, Verizon stresses the gap between the Judge's recommended rate of $1.50 per duct-foot per year and its calculated forward-looking costs ranging from $5.41 to $16.56. Arguing that consistency and fairness require pricing ducts and conduits on the basis of TELRIC as long UNEs are priced on that basis, Verizon suggests that departing from TELRIC in the one instance where it produces higher rates "would sacrifice principled decision-making to blatant result orientation, and would highlight the uncompensated taking effected in this proceeding."[234]

In addition to being demanded by fairness, Verizon argues, consistent pricing for stand-alone conduit[235] and for loops is required by economic logic, for only if prices are consistent will CLECs make economically efficient choices

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[233] Supplemental R.D., pp. 14-15.

[234] Verizon's Brief on Exceptions, p. 2. (Unless otherwise specified, citations in this section of the order are to the briefs and reply briefs on exceptions to the supplemental recommended decision.)

[235] Stand-alone conduit, at issue here, is conduit offered by Verizon as a product to CLECs that wish to run their own cable through it. Conduit is also included as part of the supporting structure for loop and transport plant, in which event its costs are recovered through the appropriate UNE rates.

between buying unbundled loops from Verizon and deploying their own loop plant in Verizon's conduit. The Judge noted that the FCC appeared to see no need for that consistency; Verizon suggests the FCC did not consider the question. Verizon adds that forward-looking pricing would permit us to deaverage conduit rates on the same geographic basis as loops and to set separate rates for main and subsidiary conduit, refinements not available under the FCC's method and that might work to the CLECs' advantage inasmuch as subsidiary conduit costs are higher but, according to CTTANY, its constituents for the most part use main conduit.

Asserting that the Judge relied primarily on the Pole Attachment Opinion in recommending use of the FCC method, Verizon argues against "blind adherence to precedent."[236] It contends the earlier decision was directed only to poles and not to conduit and that we recognized the potential distinction in requiring Verizon to submit forward-looking cost studies for consideration here; just as the Phase 1 UNE rates are up for reexamination here, it adds, so should we reexamine the contemporaneous decision regarding poles. In its view, the perceived need for consistency and "cooperative federalism" that we cited in choosing the FCC method for poles should not be decisive here, inasmuch as rates set in various states on the basis of the FCC formula would not necessarily be uniform and any such uniformity that might be achieved would be at the expense of the more important uniformity between conduit and loop rates: "Unbundled loops and stand-alone conduit are, to some extent, economic substitutes for each other. Conduit in New York and conduit in New Jersey are not substitutable in this fashion."[237] Verizon acknowledges that it took an opposite view on this issue in 1998 but regards as unwarranted the Judge's suggestion that its change of position "inevitably suggests a degree of result orientation"; it cites, rather, the cogency of

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[236] Verizon's Brief on Exceptions, p. 5.

[237] Id., p. 7.

the arguments now presented in favor of consistent costing methods.

Finally, Verizon reiterates its effort to refute, point-by-point, the FCC's reasoning in support of its decision to price conduit on the basis of historical costs. The arguments were presented to the Judge and summarized by him as follows:

- The FCC cited stability and simplicity in support of maintaining the status quo; Verizon sees no reason to exempt conduit from the rate changes contemplated in this proceeding and sees no reason for simplicity to be a decisive consideration.
- The FCC noted the complicated procedures that would be needed to develop a new, forward-looking ratemaking formula; Verizon points out that this proceeding has already done so.
- The FCC held that the advantages of forward-looking pricing were likely to be less pronounced in the pole attachment context; Verizon regards that contention as baseless, arguing that even though conduit facilities are not built or replaced on a unit-by-unit, as-needed basis, new conduit does need to be built as demand expands.
- The FCC noted the absence of any congressional directive to deviate from the use of historical costs; Verizon reiterates its point that the FCC's regulations are not binding here.
- The FCC noted that its notice has not specifically raised the possibility of moving to forward-looking costing; Verizon notes that this procedural objection likewise is inapplicable here.[238]

In sum, Verizon argues that neither precedent nor policy warrants doing anything other than exercising our discretion to

[238] Supplemental R.D., pp. 8-9.

price ducts and conduits on a TELRIC basis as long as UNEs are so priced.

If Verizon in its exception points to the small increase recommended by the Judge over the rates set in 1970, CTTANY in reply emphasizes the very large percentage increase now sought by Verizon--between 621% and 729% for main conduit and between 449% and 1,083% for subsidiary conduit. In support of its position that historical cost pricing should be retained, it argues, first, that forward-looking costs are not a proper basis for conduit pricing. It contends, in this regard, that Verizon constructs conduit for its own use and rents only excess capacity to cable operators; that Verizon is reimbursed through make-ready charges for the cost of modifying existing plant to accommodate additional facilities; that conduit plant is nowhere near exhaustion; that conduit differs from UNEs in that its technology is relatively static; and that forward-looking pricing is not needed to provide consistent price signals inasmuch as cable operators already occupy the conduit and will not abandon their facilities-based service in favor of leased UNE arrangements. It disputes Verizon's suggestion that geographical deaveraging would produce more favorable rates, and it denies Verizon's claim that there is no need for interstate consistency, arguing that investment decisions are based on characteristics of the geographic market and that we recognized, in the Pole Attachment Opinion, that investment in New York would be promoted by reduced barriers to competition.

CTTANY points as well to our Staff's informal rejection, over the years, of Verizon's arguments that forward-looking pricing was consistent with PSL §119(a),[239] and it contends that the thoroughly litigated factors that led us to adopt the FCC's method for pricing poles in 1997 remain equally valid today. It notes the FCC'S recent reaffirmance of its

[239] The Judge held that §119-a "need not be read to require basing prices on historical costs." (Supplemental R.D., p. 14.) We need not reach that issue, inasmuch as we are deciding, on other grounds, to base prices on historical costs.

position and its explanation there of the differences between poles and conduits on the one hand and UNEs on the other.[240] CTTANY asserts as well that Verizon ignores the substantial body of law regulating poles and conduits as essential facilities and rejecting the use of forward-looking costing; and it says that Ameritech, a similarly situated incumbent LEC, recently proposed pricing based on historical costs in an Illinois proceeding.

RCN, in its late filed reply, argues to similar effect, pointing to the distinctions drawn by the FCC between poles and conduits on the one hand and UNEs on the other. It adds that TELRIC is intended to produce prices that are lower than those based on historical costs--a point it says Verizon itself makes in its brief to the Supreme Court in the TELRIC litigation--and that the FCC chose that policy "to foster competition by easing the financial impact of entering a marketplace that a monopoly provider controls and manipulates."[241] Verizon's pricing plan, which would dramatically increase existing duct and conduit rates, would have just the opposite effect. RCN points as well to the importance of following precedent, and it sees no public interest rationale for deviating from the policy of cooperative federalism we adopted with regard to pole rentals.

The arguments on exceptions add little to the thorough airing this issue received before the Judge, and we are satisfied that he properly resolved it. Verizon's exception is denied not out of "blind adherence" to precedent but because the precedent was sound when adopted; remains so now (as the FCC, too, recently held yet again); and deserves to be extended to ducts and conduits, which have more in common with pole attachments than with UNEs.

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[240] It cites the FCC's Reconsideration Order, ¶¶15-25.

[241] RCN's Reply Brief on Exceptions, p. 3, citing Local Competition Order ¶¶705-706.

Use of CPR Data Rather Than ARMIS

In applying the FCC's method, CTTANY used certain data from Verizon's continuing property record, rather than the ARMIS data on which Verizon relied, to determine the number of duct-feet over which net conduit investment should be spread. Verizon objected to CTTANY's recourse to those data and to the manner in which it had used them. The Judge agreed with Verizon, and CTTANY excepts.

The Judge set forth the full background for the issue.[242] Briefly, it should be understood that conduits are structures that provide physical protection for cables. They may consist of one or more ducts, which actually carry the cables. The term "duct-feet" refers to the total length of duct work in the network, while "trench-feet" or "conduit-feet" refers to the total length of the trenches in which the conduit is buried. The relationship between conduit-feet and duct-feet depends on the average number of ducts buried in each trench.

On the basis of ARMIS data, Verizon calculated a total of 265.5 million duct-feet in its network. That figure, together with a net conduit investment of about $903 million, produced a net investment per duct-foot of about $3.40. But ARMIS data showed a duct-to-conduit ratio of 3.8, which CTTANY saw as out of line with the average ratio of 5.74 in the remainder of the former Bell Atlantic footprint. It therefore turned to Verizon's continuing property record, a detailed physical inventory system that CTTANY regarded as more accurate; it noted that the FCC method generally relied on publicly available reports such as ARMIS but permitted use of more accurate data when available. CPR data showed the average number of ducts per main conduit to be 7.91, which CTTANY reduced to 7.21 ducts per conduit to recognize that subsidiary conduit usually held only two ducts. It calculated that adjustment by taking account of the ratio of main to subsidiary duct derived from Verizon's CPR.

[242] Supplemental R.D., pp. 17-18.

On that basis, CTTANY computed a higher number of duct-feet and a consequently lower investment per duct-foot. After describing the parties' arguments in detail,[243] the Judge found CTTANY's adjustment flawed:

> Verizon's challenge to CTTANY's adjustment is persuasive. In effect, CTTANY is double-counting the greater number of ducts in main conduit: once to determine the weighting to be afforded main conduit and once to determine the number of ducts to which the weighting is to be applied. The proper weighting would be on the basis of main and subsidiary trench-feet, and that weighting would then be applied to the larger number of ducts in main conduit, thereby recognizing that larger number only once. As Verizon has shown, that correct weighting produces, as would be expected, a cost per duct-foot identical to the one produced by simply dividing net investment by the number of duct-feet. Accordingly, I recommend that the rate be set on the basis of the FCC method, using a cost per duct-foot calculated by dividing net investment by the number of duct-feet shown in the ARMIS data, and without reference to the CPR data.[244]

On exceptions, CTTANY maintains that the Judge rejected the best evidence of the number of ducts per conduit, relying, instead, on a questionable number derived from the ARMIS data. It argues that, in an analogous context, pole attachment rates take account of the usable space on poles, something that may be determined from CPR data. CTTANY goes on to reiterate its comparison of the ARMIS-based figure of 3.8 ducts per conduit in New York with the 5.74 ducts per conduit average; asserts that Verizon has provided no evidence to explain the discrepancy; and notes that most of the other states within the Verizon footprint have ratios that cluster around the mean. It contends as well that Verizon's critique of CTTANY's weighting of main and subsidiary conduit implies the impossible

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[243] Supplemental R.D., pp. 19-20.

[244] Supplemental R.D., p.21.

result that subsidiary conduit has less than one duct. CTTANY goes on to argue the inherent accuracy of CPR data, noting that even though it uses 1994 plant data, the plant is long-lived and its physical characteristics are not like to have changed. CTTANY charges that Verizon mischaracterized its calculations and adheres to ARMIS data demonstrated to be inaccurate; and it criticizes the Judge for accepting the ARMIS data "rather than drawing a negative inference from Verizon's stonewalling, and its insistence on using a figure that cannot be correct."[245]

Verizon responds that the issue to be determined is the cost of conduit investment per duct-foot and that the average number of ducts per conduit is irrelevant to that issue. The needed answer can be obtained directly by dividing total net investment by total duct-footage, and the latter figure can be obtained easily from ARMIS. The figure can be obtained from CPR data as well, and the CPR duct-footages are consistent with the ARMIS duct-footages. The ARMIS data, however, are more current. Rather than use this direct approach, Verizon argues, CTTANY used an indirect approach that first calculates net investment per trench-foot and then converts that figure into an investment per duct-foot. Verizon reiterates its efforts to show the fallacies in CTTANY's calculations, adding an explanation of the artifact, noted by CTTANY on exceptions, of less than one duct in subsidiary conduit. But Verizon sees no need even to consider that indirect approach and the complexities it entails, given the ready availability of the direct analysis.

The Judge fully explained his finding that CTTANY's analysis was flawed, and nothing in CTTANY's brief on exceptions rehabilitates the analysis. Verizon properly notes that the exercise here is a simple one--dividing conduit investment by the total number of duct-feet--and that the number of duct-feet suggested by ARMIS data and the number of duct-feet suggested by CPR data are not very different. Why the number of ducts per conduit in New York appears to be below the footprint average has not been conclusively explained, but Verizon has identified

[245] CTTANY's Brief on Exceptions, p. 8.

a number of factors that may account for it. More importantly, the ratio is not really germane to the exercise at hand, and there is in any event no basis for replacing it with a ratio that is almost as far above the average as it itself is below. CTTANY's exception is denied.

Half-Duct Presumption

To facilitate calculation of a rate reflecting the percentage of conduit capacity occupied by an attachment, the FCC adopted, and reaffirmed in the Reconsideration Order, a rebuttable presumption that the attacher occupies one-half of a duct.[246] Unless the presumption is rebutted, the attacher is charged a rate based on one-half of the calculated cost per duct-foot. The FCC added that "when the actual percentage of capacity occupied is known, it can and should be used instead of the one half duct presumption," and that "the presence of inner duct is adequate rebuttal. Where inner duct is installed, either by the attacher or in a previous installation, the maximum rate will be reduced in proportion to the fraction of the duct occupied. That fraction will be one divided by the actual number of inner ducts in the duct."[247]

In light of those provisions, CTTANY presented rates for a full duct, a half duct, one-third of a duct, and one-quarter of a duct, to be applied depending on the number of inner ducts installed. Verizon objected, contending that the half-duct premise should be applied inasmuch as "Verizon would not, except in extraordinary circumstances, occupy the same duct as a CLEC."[248] In its own study, Verizon calculated rates for a whole duct and a half duct only, and it considered that a reasonable compromise between its interests and the CLEC's. CTTANY contended, however, that where inner duct is used, the attacher typically occupies less than half of the duct and that the FCC's

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[246] Reconsideration Order, ¶¶95-98 and history there cited.

[247] Reconsideration Order, ¶98.

[248] Verizon's Reply Brief, p. 120, citing Tr. 5,756-5,757.

provision for rebutting the half-duct presumption recognizes that reality.

The Judge found no reason to question the FCC's premise that the presence of inner duct rebuts the presumption that the attacher occupies half a duct, and he therefore recommended adoption of CTTANY's proposal to develop rates that assign a correspondingly lower proportion of the total cost to the attacher and to set the rate on the basis of the number of inner ducts present. Verizon excepts.

Verizon argues, first, that developing different rates for different fractional occupancies would be difficult administratively and would impose additional costs, such as those related to inventories of inner ducts. Moreover, it regards fractional rates as unnecessary to insure fair cost allocation, given that it rarely occupies the same duct as a CLEC and that a CLEC occupying an inner duct in effect uses the entire duct. As a practical matter, moreover, its standard practices limit the number of inner ducts to two or three, and the placement of more than three ducts will be even rarer in the future, as cable sizes are increased to include larger numbers of fibers. The two-inner-duct case is covered by Verizon's half-duct proposal, and where three inner ducts are present, one of those ducts would be a maintenance spare, the cost of which should be shared by the occupiers of the duct.

In response, CTTANY cites testimony by Verizon to the effect that modern conduit construction allows for placement of three or four inner ducts, and it points out that even though Verizon may choose not to share a duct with a CLEC, it retains custody over the inner ducts and has the option to lease them to other attachers. It sees no basis for Verizon's administrative objections, asserting that where the number of inner ducts cannot be determined, the FCC formula uses the half-duct rate. Finally, CTTANY characterizes as "ludicrous"[249] Verizon's argument that one inner duct should be excluded from consideration as a maintenance spare, seeing no evidentiary support for such

[249] CTTANY's Reply Brief on Exceptions, p. 12.

treatment. In any event, it says, the FCC took the view that even a spare constitutes part of conduit capacity.

Verizon's objection raises no theoretical arguments not presented to and rejected by the Judge. Its novel arguments are that rates for fractions of a duct less than one-half are unnecessary and administratively burdensome. But administrative burden is unproven, particularly if the half-duct presumption prevails in the event the number of inner ducts cannot be determined. And if the rate turns out to be unnecessary, it will simply not be imposed. The Judge reasonably followed the FCC's premise that the presence of inner duct rebuts the presumption of half-duct occupancy, and Verizon's exception is denied.[250]

OTHER ISSUES

UCRCC

The unbundled CLEC reciprocal compensation charge (UCRCC) is intended to compensate Verizon in situations where it receives certain types of calls from the CLEC for hand off to a second CLEC and must make reciprocal compensation payments to that second CLEC. Verizon calculated the charge on the basis of average actual payments over the period September 1999 through December 1999, and the Judge directed it to recalculate the rate in its brief on exceptions on the basis of a longer sample period terminating more recently. Verizon provides the updated data and a revised rate in its brief; the rate is lower than that initially calculated.

AT&T requests in response that we direct Verizon to update the UCRCC data and rate on a quarterly basis, inasmuch as these payments likely will continue to decline. WorldCom argues

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[250] In its reply brief on exceptions, CTTANY asks us to "accept the RD's decision to adopt the FCC half-duct presumption." (CTTANY's Reply Brief on Exceptions, p. 12.) For the sake of clarity, it should be noted that the half-duct presumption was not challenged by Verizon; its exception related to the Judge's recommendation of the FCCs further point, that the presence of inner duct sufficed to rebut the half-duct presumption and warrant application of a smaller fraction.

that even the recalculated rate is inconsistent with TELRIC, inasmuch as it reflects historical experience instead of being derived on the basis of new TELRIC-based transport and switching rates. It urges that the UCRCC be set equal to Verizon's tariffed reciprocal compensation rates that result from this proceeding; to do otherwise, it argues, would allow Verizon to recover from the originating CLEC more than it would pay to the terminating CLEC for carrying the traffic.

AT&T's request that this rate be updated quarterly is something Verizon has already agreed to,[251] and it seems warranted in view of the ongoing changes in these figures. It is adopted. WorldCom's proposal to change the nature of this charge raises concerns that may be reasonable but is offered for the first time in its reply brief on exceptions. Parties may comment on it within 30 days of the date of this order, and we will then determine whether to pursue the matter further.

OS/DA Rate

Verizon notes that the Judge accepted its proposal for pricing operator services/directory assistance, which is not a UNE, on a flexible basis using TELRIC costs as the lower bound and a market based rate at the upper bound. The rate appendix to the recommended decision, however, provides only an adjusted TELRIC rate, and Verizon therefore asks for clarification that its proposal is approved. We provide that clarification, which is opposed by no party.

The Commission orders:

1. To the extent they are consistent with this order, the recommended decision and supplemental recommended decision of Administrative Law Judge Joel A. Linsider, issued May 16, 2001 and June 18, 2001, respectively, are adopted as part of this order. Except as here granted, all exceptions to those recommended decisions are denied.

[251] Verizon's Initial Brief, p. 274.

2. Within 20 days of the date of this order, Verizon New York Inc. (Verizon) shall file tariff amendments consistent with this order. Upon filing those tariff amendments, Verizon shall serve copies on all active parties to this proceeding. Any party wishing to comment on the tariff amendments may do so by submitting 10 copies of its comments to the Secretary within 15 days of the date the amendments are filed. The tariff amendments shall not take effect on a permanent basis until approved by the Commission but shall be put into effect on a temporary basis on ten days' notice, subject to refund if found not to be in compliance with this order.

3. For good cause shown, the requirement of newspaper publication of the tariff amendments is waived.

4. Judgment is reserved as to the matter of possible refunds with respect to temporary switching rates.

5. Parties wishing to comment on the matters set by this order for further comment (i.e. possible geographic deaveraging of interoffice transport rates and possible modification of the unbundled CLEC reciprocal compensation charge) shall submit fifteen copies of their comments to the Secretary within 30 days of the date of this order.

6. This proceeding is continued.

By the Commission

(SIGNED) JANET HAND DEIXLER
Secretary

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Mintues-of-Use Calculation (See Footnote 71 of the Order)

Z-Tel, in Equation 2 of Attachment A, of its Reply Brief on Exceptions, characterizes Verizon's traffic-sensitive switching cost (TSSC) estimate as

$$TSSC = \frac{COST}{BDMOU \times 251}$$

However, it would be helpful to re-characterize the left-hand side of the equation as traffic sensitive switching cost per annual business day minute of use (MOU).

$$\frac{TSSC}{ANNUALBDMOU} = \frac{COST}{BDMOU \times 251}$$

Verizon, page 20 of its Brief on Exceptions, indicated that the traffic sensitive switching cost element should be applicable to all billable MOUs. The following equation summarizes the total annual billable MOUs per year [business day (BD) MOUs plus weekend/holiday day (WHD) MOUs].

$$ANNUALMOU = ANNUALBDMOU + ANNUALWHDMOU$$

where

$$ANNUALBDMOU = BDMOU \times 251$$

and

$$ANNUALWHMOU = WHDMOU \times 114$$

In order to produce a unit cost that, when applied to all billable MOUs, produces revenues equaling the total traffic-sensitive investment cost, the annual business day MOUs in the denominator of the second equation above must be multiplied by the ratio of total annual MOUs to annual business day MOUs.

$$\frac{TSSC}{ANNUALBDMO\ U} \times \frac{1}{\frac{ANNUALMOU}{ANNUALBDMO\ U}} = \frac{TSSC}{ANNUALMOU}$$

Since

$$\frac{ANNUALMOU}{ANNUALBDMO\ U} > 1$$

the unit cost per MOU must be lower than Verizon's methodology indicates.

$$\frac{ANNUALMOU}{ANNUALBDMO\ U} = \frac{(BDMOU \times 251) + (WHDMOU \times 114)}{BDMOU \times 251}$$

VERIZON NEW YORK INC.
Summary of Commission Adjustments
To Verizon's Recommended Decision Compliant Rate Filing

Note – The adjustments listed below include the revisions needed to reflect the modifications to the Recommended Decision discussed in the text of the opinion as well as correction of technical errors found during Staff's review of Verizon's Recommended Decision compliance filing. The latter are not discussed in the text of the opinion.

SWITCHING

1. Allocate 66% of end office (EO) switch material costs to non-traffic sensitive (NTS) switch UNE's and 34% to traffic sensitive (TS) switch UNE's.

INVESTMENT LOADING FACTORS

1. Reduce the denominator of the land and building factor by $466,893,554 to reflect the subtraction of Remote Terminal equipment investment in Account 2232 (Circuit Equipment CPE) per Verizon's original (2/7/00) workpaper Part H, section 1, page 1, line 15, column d.

2. Increase the Engineer, Furnish and Install (EF&I) factor will be increased from 30% to 40%.[1]

ANNUAL COST FACTORS (ACF)

1. Reduce the general productivity factors for maintenance and non-network related expenses from 3% and 12%, respectively, to 2% and 10%.

2. Adjust the Forward Looking to Current Factor (FLC) from 75% to 65%.

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[1] The EF&I factors for end office and tandem switching should be calculated in the manner proposed by Verizon in its Brief on Exceptions compliance and the material prices adopted by the Commission.

VERIZON NEW YORK INC.
Summary of Commission Adjustments
To Verizon's Recommended Decision Compliant Rate Filing

3. For the poles and conduit Network ACF only, reflect reversal of the Recommended Decision's 30% reduction to the Moves & Rearrangement (M) dollars.

4. Recalculate the Wholesale Marketing, Other Support and Network ACFs so that the denominators include an estimate of Splitter Investment not owned by Verizon.

5. Increase the Common Overhead ACF to reflect a $60 million allowance for Special Pension Enhancement (SPE) payments by including that amount on Verizon's original (2/7/00) workpaper part H, section 3.11, page 4 of 5, line 4.

6. Adjust the Return, Interest and Federal Income Taxes ACF's to reflect the following cost of capital.

	%	Cost	Rate of Return
Debt	35%	7.3%	2.6%
Equity	65%	12.1%	7.9%
Total	100%		10.5%

7. Adjust the depreciation ACFs to reflect the depreciation lives and net salvage values in Verizon's original (2/7/00) filing.

8. Use the forward-looking cost of capital for the cost of capital input into the "support capital cost model".

LOOPS

1. Reverse the adjustments that applied the land and building loading factor to all central office equipment investment. (See Exhibit 333P [Exhibit AH-1 at 1], adjustment 5, sheets OSP-96, OSP-192, OSP-672, OSP-1344, 16CEV, 16 CEMH, 24CEV, 24 CEMH, PCH-1, PCH-2, IT-RR and IT-CPE).

2. Reflect one-half the Recommended Decision's adjustments to normalize the environmental factors used in the link cost calculator.

VERIZON NEW YORK INC.
Summary of Commission Adjustments
To Verizon's Recommended Decision Compliant Rate Filing

3. Reflect one melded loop rate for all loops based on the latest month's UNE-P (IDLC) and UNE-L (UDLC) lease quantities.

4. Reverse application of the 4:1 GR303 concentration ratio to universal interfaces and DS-1 central office terminals.

5. Reverse the 100% conduit fill factor for innerducts applied to conduit containing copper distribution cable.

6. Reduce the power investment factor input into the link cost calculator to reflect the appropriate rate (.018085).

HOUSE AND RISER CABLE

1. Decrease the fill factor from 60% to 55%.

INTEROFFICE TRANSPORT

1. Reflect the Recommended Decision's adjustment to reflect a weighted-average distance of 12 miles between wire centers (versus 33.4 miles) for Common (Shared) Transport. See workpaper part B-2, section 3, pages 1 and 2, line 3.

2. Increase the fill factor for dedicated transport from 80% to 85%.

NON RECURRING CHARGES (NRC)

1. For UNE-P ports only, reverse the Recommended Decision's adjustment to reflect a 2% fallout rate.

2. Reflect the Recommended Decision's adjustment reducing the NRC rate for "ADSL Conditioning - Manual Loop Qualification" and "ADSL Conditioning - Manual Loop Qualification Expedite" by 25%. See Verizon exhibit M, section 1, page 1 of 1.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on February 27, 2002

COMMISSIONERS PRESENT:

Thomas J. Dunleavy, Presiding
James D. Bennett
Leonard A. Weiss

CASE 00-C-1945 - Proceeding on Motion of the Commission to Consider Cost Recovery by Verizon and to Investigate the Future Regulatory Framework.

CASE 98-C-1357 - Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements.

ORDER INSTITUTING VERIZON INCENTIVE PLAN

(Issued and Effective February 27, 2002)

BY THE COMMISSION:

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INTRODUCTION

When we instituted the Verizon New York Inc. (Verizon) regulatory proceeding in November 2000, the Commission intended an examination of the emergence and status of the competitive market for local telecommunications service in New York, with concomitant modifications to the Verizon Performance Regulatory Plan then in effect. This proceeding, along with the concurrent litigation of wholesale rates in Case 98-C-1357, encompassed the range of issues fundamental to establishing a framework for the next generation of local competition in New York, as envisioned by the Telecommunications Act of 1996 (the 1996 Act). In November 2001 we asked the parties to this proceeding to explore the possibility of a comprehensive joint proposal for the Commission to consider integrated solutions to the closely intertwined issues of a distressed competitive marketplace, Verizon's retail prices, service quality protections, incentives to invest in New York's infrastructure, and the public interest in promoting all forms of competition.[1] We gave the parties 60 days. On February 8, 2002, Verizon and Department of Public Service Staff (Staff) filed a Joint Proposal Concerning Verizon Incentive Plan (VIP or Plan), attached to this order as Appendix A. Most competitors joined them.

We find the terms and provisions of the Joint Proposal, in the context of our wholesale rate decision issued in January 2002, to provide a proper balancing of the interests of customers, competitors, the incumbent, and the economic development of New York State and to produce just and reasonable rates with a guarantee of safe and adequate service. We adopt the terms of the Joint Proposal as discussed herein, and put in place a Verizon Incentive Plan to create the framework and conditions to allow and encourage all forms of competition in New York. The retail rate flexibility that we accord Verizon by this order is premised upon the existence of such competition and on the continuation of adequate service.

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[1] Cases 00-C-1945 *et al,* Order Granting Staff Motion (issued November 30, 2001).

PROCEDURAL HISTORY

In November 2000 we instituted a proceeding "to resolve outstanding issues regarding the recovery of certain costs sought by Verizon New York Inc.; to consider the potential modification of [Verizon's] Performance Regulatory Plan (PRP), pursuant to conditions included in our approvals of its past mergers; and to consider emerging issues related to the development of a vibrant competitive marketplace and the future regulatory regime that may be appropriate following the conclusion of the PRP."[2] The first step in that process, as contemplated in our order, was the issuance by Staff, on January 2, 2001, of a White Paper setting forth its analysis of the exogenous costs and competitive cost onsets that might be recoverable by Verizon under our orders approving the two mergers (NYNEX/Bell Atlantic and Bell Atlantic/GTE) that led to its formation.[3]

In a series of rulings that reflected, in part, a conference with the parties held on February 13, 2001, Administrative Law Judges Joel A. Linsider (Litigation Judge), Jaclyn A. Brilling and Eleanor Stein (Settlement Judges) invited comments on the Staff White Paper and elaborated on the scope of and schedule for the proceeding.[4] Comments and reply comments on the White Paper were duly filed and, consistent with the judges' rulings, Verizon on May 15, 2001 filed its financial data and a proposal, with supporting testimony, for a future regulatory plan. Presentations by other parties were to be filed on

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[2] Case 00-C-1945, Order Instituting Proceeding (issued November 3, 2000), pp. 1-2.

[3] Cases 96-C-0603 et al., NYNEX/Bell Atlantic Merger, Opinion No. 97-8 (issued May 30, 1997); Case 98-C-1443, Bell Atlantic/GTE Merger, Order Granting Approval of Merger (issued August 12, 1999).

[4] Case 00-C-1945, Ruling Inviting Comments and Convening Conference on the Scope of the Proceeding (issued January 2, 2001); Ruling on Scope and Schedule (issued February 27, 2001); Ruling on Request for Clarification (issued April 6, 2001).

August 13 but, by letter dated August 1, Verizon requested that discussions be initiated and that the litigation schedule be suspended. In a ruling issued August 6, Judge Linsider suspended the litigation schedule.

The parties' discussions were scheduled to begin on September 11, 2001 in New York City. That meeting was of course cancelled as the terrible events of that day unfolded, and talks were postponed to allow Verizon and other parties to direct all their efforts to recovery. Discussions resumed in December 2001 and continued into early February 2002, with Judge Stein serving as mediator throughout. Participants are listed in Appendix B.

Concurrently the final stages of litigation were going forward in Module 3 of the Second Network Elements Proceeding (Case 98-C-1357), an examination of the pricing of Unbundled Network Elements (UNEs). A recommended decision had been issued in May; briefs and reply briefs on exceptions had been filed, and the case was being prepared for presentation to us. That process as well was delayed by the September 11 attack, and we invited parties to submit comments on the extent, if any, to which the attack and its aftermath might have a bearing on the issues in that case. We later granted a Staff motion to hold the UNE rate decision in abeyance and consolidate UNE issues with the resumed discussions in this proceeding, but we limited that process to 60 days.[5] A joint understanding incorporating UNE rates generally was not reached, and we considered UNE rates at our January session and issued our decision on January 28, 2002.[6] In that decision, we remanded for further discussion among the parties the issue of potential refunds resulting from the decrease in previously temporary rates for switching elements. Intensive mediated efforts in this proceeding continued, ultimately producing the Joint Proposal here before us for consideration.

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[5] Cases 00-C-1945 and 98-C-1357, Order Granting Staff Motion (issued November 30, 2001).

[6] Case 98-C-1357, Order on Unbundled Network Element Rates (issued January 28, 2002)(UNE Order).

Following its submittal by Verizon and Staff, the Joint Proposal was executed as well by ACC Telecom Corp., Allegiance Telecom of New York, Inc., AT&T Communications of New York, Inc. (AT&T), BridgeCom International (BridgeCom), Broadview Networks (Broadview), Communications Corporation of New York, Conversent Communications of New York, LLC, Focal InfoHighway Communications Corp. (InfoHighway), RCN Telecom Services, Inc., Talk America, Inc., TCG New York, Time Warner Telecom (Time Warner), XO New York, Inc. and Z-Tel Communications, Inc. (Z-Tel). Statements supporting the Joint Proposal were submitted by Verizon, Staff, Worldcom, Z-Tel, BridgeCom, and Cablevision Lightpath; Covad stated it did not oppose. Responsive comments were submitted by the Attorney General, CompTel, PULP, Assemblyman Richard Brodsky, and ChoiceOne. An evidentiary hearing before Chairman Helmer and Chief Administrative Law Judge Judith A. Lee was held in Albany on February 19, 2002; the record comprises 671 pages of stenographic transcript and 15 exhibits. At the conclusion of the hearing, closing statements in lieu of initial briefs were presented by PULP, the Attorney General, AT&T, WorldCom, Allegiance, Focal, Time Warner, Z-Tel, BridgeCom, William Thornton on behalf of Assemblyman Richard Brodsky, Verizon and Staff. Replies were submitted by Staff, Verizon, PULP, and BridgeCom. In addition, public comments were received via a special channel on our toll-free opinion line and by e-mail via the comment form on our website.

SUMMARY OF THE JOINT PROPOSAL[7]

The proposed Verizon Incentive Plan (VIP) would have a term of two years, beginning March 1, 2002. The associated Service Quality Plan (SQP) would extend an additional year, through February 28, 2005. The VIP and SQP would govern

[7] This summary is provided only for the reader's convenience and in no way supersedes or modifies the terms of the Joint Proposal itself. It is not exhaustive, and an omission of a reference to any particular term of the Joint Proposal is of no import.

Verizon's retail and wholesale rates; relations with its competitors; service quality; accounting, pension, and other regulatory matters; and infrastructure.

The following findings, expectations, and requirements are premises of the plan:

- Verizon's service quality performance is generally satisfactory, and a service quality plan is in place to prevent backsliding.
- Active competition will exist across all market segments.
- Unbundled network element (UNE) rates will be as set in the UNE Order.
- The UNE Platform (UNE-P) will remain available in accordance with then-Bell Atlantic-New York's April 6, 1998 Pre-Filing Statement (PFS) as here modified.
- Facilities-based competition will continue to develop.

Rates

The VIP affords Verizon flexibility with respect to its rates, subject to specified conditions, exclusions, and limitations. General conditions of pricing flexibility include the following:

- The overall revenue increase associated with pricing flexibility may not exceed 3% on an annualized basis in each Plan Year.
- Pricing flexibility may be suspended pursuant to the terms of the Service Quality Plan.
- Verizon must take full responsibility for explaining to its customers the need and rationale for any price increase and must explain that the price increase is based solely on its own business decision.
- Downward rate flexibility is unlimited, except that the rate for any product or service must exceed or equal its

incremental cost and usage offerings must pass an imputation standard.

Verizon will be afforded upward rate flexibility for all products and services consistent with the Service Quality Plan except the following:

- Carrier access services
- UNEs
- Wholesale discounts for services offered for resale
- Interconnection and reciprocal compensation
- Lifeline services
- Maintenance and access to the ALI database
- Directory assistance and other database inquiries for competitive providers
- Non-recurring service connection charges for residential and small business customers
- Certain services previously ordered to be provided at no charge.

Where upward rate flexibility applies, there is no cap on the rate for any individual service except that:

- No increase in the charges for First Line Basic Service shall exceed $1.85 per line in the first year and $0.65 per line in the second year.
- The total price for 1FR service[8] in Rate Group 1 shall not increase by more than $2.00 in the first year of the Plan and $2.00 in the second year of the Plan.
- The total price for 1FR service in Rate Groups 3 and 5 shall not increase by more than $2.00 in the first year of the Plan and $3.00 in the second year of the Plan.

[8] This service is a residential service consisting of the basic line charge and flat-rate local usage.

Unbundled Network Elements

For the term of the VIP, and regardless of any changes in its obligations under federal law, Verizon will make the UNE Platform available to CLECs serving small business customers on the pricing and duration terms applicable, under its PFS obligations, to CLECs serving residential customers.

Rates for UNEs are those set in the UNE Order, as specifically set forth (with respect to the main UNEs and the UNE-P) in Appendix A to the Joint Proposal, and Verizon will not contest those rates, either before us or in court. The sole exception to those rates is that the non-recurring charge for two-wire and four-wire hot cuts will be limited to $35. (The difference between the higher charge set in the UNE Order and the $35 charge under the VIP will be applied as a bill credit.) That limitation, agreed to by Verizon in order to arrive at a joint proposal, is part of the proposed treatment of refunds on account of the switching rates kept temporary in the First Network Elements Proceeding; other aspects of the refund treatment are as follows:

- Verizon will provide a "Forward Fund" of $15 million that will satisfy any potential liability for refunds, net of any reciprocal compensation payments due and owing to Verizon.
- Payments will be made only to CLECs that operate within the State; that paid the temporary switching rate; whose hot cuts in 2001 did not exceed 5,000; and that relinquish any other claims for retroactive payments related to switching rates.
- The Department of Public Service will conduct an expedited process to allocate the Forward Fund among eligible CLECs. Payments to CLECs will be 50% in the form of direct payments and 50% in the form of bill credits over a six-month period.
- Verizon will give up any claim to recovery of reciprocal compensation overpayments on account of excess switching rates.

Competitive Enhancements

Verizon agrees to cooperate in a task force that will work toward establishing processes and procedures to standardize efficient wholesale transactions in several specified areas including billing and collection, building access, and efficient provisioning for services where no facilities are available. The task force will report to us within three months of the issuance of this order.

Verizon will also participate in a task force to work with CLECs and Staff to solve urgent facilities, hot-cut and other bottleneck problems. That task force will report to us within six months.

Service Quality

The Service Quality Plan establishes a series of performance objectives, compliance with which is to be periodically reviewed. Failures to meet objectives are subject to various outcomes, depending on the nature and severity of the failing. These include suspension of pricing flexibility and rate credits of up to $100 million for failure to meet three objectives plus $35 million for each additional objective not met. The Plan includes detailed provisions for the calculation and distribution of these payments. In addition, Verizon undertakes to pay $100,000 into the State's general fund in the event of certain major service interruptions and to implement a special services process improvement program. The Plan details procedures to ensure the accuracy of service quality measurement.

Financial Consistency and
Additional Regulatory Protections

The VIP provides for Verizon's PSC regulatory financial figures and depreciation reserve to be gradually conformed to those used in its filings with the Securities and Exchange Commission. Existing regulatory assets and liabilities are to be extinguished by the end of the VIP's term and no new ones are to be created except with respect to World Trade Center restoration. Any changes to Generally Accepted Accounting Principles (GAAP) are to be adopted for both SEC and state regulatory purposes under the plan.

Verizon will account for pensions and other post-employment benefit (OPEB) obligations in accordance with SFAS #87 and SFAS #106. In addition,

- Verizon will not withdraw plan assets other than to pay benefits (including administrative expenses) or settle benefit obligations associated with pension and OPEB plans.
- Verizon will not annuitize, curtail, or otherwise settle its pension or OPEB obligations to employees of regulated entities in New York without our prior approval.
- Verizon will notify us of major changes in pension or OPEB plans, material changes in assumptions, or use of plan benefits for purposes other than pensions and related administrative expenses.

Infrastructure

To ensure investment commensurate with good service quality, Verizon will

- File annual construction budgets that identify service-related investments
- Meet annually with Staff to review its construction budget, with emphasis on several specified areas

- Report annually on plans and progress related to new technology and new services.

To ensure reliability consistent with post-September 11 best practices, Verizon will

- By July 1 of each year, inform Staff of its intention to implement changes, reflecting lessons learned from incidents such as the September 11 attack, to the Network Reliability and Interoperability Council's best practices and industry standards; and report annually to Staff on its progress toward implementation
- Participate in industry/government forums on network reliability
- Cooperate in developing data to be used by Staff in its Geographic Information System designed to provide service outage information.

Miscellaneous Provisions

The Joint Proposal would resolve outstanding issues related to exogenous cost recovery and merger savings (the so-called "White Paper" issues). It would have us find that available merger savings fully offset otherwise allowable cost onsets and exogenous costs; and that ordering clauses 5 and 6 of the orders approving the NYNEX/Bell Atlantic merger and the Bell Atlantic/GTE merger had been satisfied such that Verizon relinquishes any claim to rate increases associated with exogenous costs and that merger savings will not be used as a basis for rate reductions. Verizon likewise would withdraw its recent request for recovery of OSS costs associated with various DSL-related items.

The Joint Proposal includes a provision reserving our authority to act on the level of Verizon's rates and service should circumstances render Verizon's rates unjust or unreasonable or render the Plan unreasonable, unnecessary or insufficient for the continued provision of safe and adequate service by Verizon. In addition, Verizon agrees not to

challenge the rates set in the UNE Order before us or in court, during the term of the plan, though it does not thereby relinquish any rights elsewhere with respect to the underlying theory of the case, including the use of TELRIC costing.

The Joint Proposal would defer, to the end of the VIP's term, the review of rates for the loop/switch interface that would otherwise take place, pursuant to the UNE Order, in May 2002.

Verizon agrees to reduce the connection charge for Lifeline service from $10 to $5. In addition, it will maintain an outreach and education program for Lifeline. More generally, it will design and carry out, within existing consumer education budgets, a commitment to inform customers about their rights, responsibilities and special programs.

RECORD EVIDENCE AND STATEMENTS IN SUPPORT

Verizon

In testimony submitted with the Joint Proposal, Verizon characterizes the plan as "an important step toward establishing appropriate incentives for Verizon NY and other carriers to invest in and develop telecommunications facilities in the State of New York and to engage in full-fledged competition, governed by market forces and not unduly restrained by regulation."[9] It regards the plan as especially important following issuance of the UNE Order which, it asserts, imposes regulatory constraints on Verizon's wholesale business that make it even more important for Verizon to be able to compete on a level footing in the retail marketplace. Verizon believes as well that its good service quality performance warrants revisiting its service quality obligations and that conforming its regulatory financial reports to its SEC reports properly reflects the competitive marketplace. Verizon regards the VIP as consistent with our "policy of substituting market discipline for direct regulatory intervention where there is evidence, as there is here, that such market discipline will have the desired

[9] Verizon's Prefiled Testimony, p. 7.

effect,"[10] but adds that the plan maintains adequate regulatory safeguards even as it allows Verizon increased flexibility to respond to market forces.

With reference to the Plan's pricing flexibility, Verizon contends generally that the growth in competition in the New York telecommunications market obviates detailed price regulation; that pricing flexibility benefits consumers by enabling Verizon to deploy pricing plans more responsive to consumer needs; and that Verizon needs pricing flexibility to respond to its competitors, who already have virtually total pricing flexibility. It urges elimination of asymmetric regulatory constraints that, in its view, prevent competitors from charging cost-based prices, encourage market inefficiencies by allowing its competitors to capture customers simply by reason of their regulatory advantages, and diminish the incumbent's ability to innovate. Verizon adds that affording it the opportunity to compete and obtain a reasonable return on its investment is particularly important in view of the UNE Order, which makes entry more attractive to other carriers. It adds that only the prospect of adequate levels of return will provide it the economic rationale to invest in its network, which makes up a substantial part of the State's telecommunications infrastructure. At the same time, strong and increasing competition will preclude Verizon from profitably raising prices above competitive levels, and increases in the charges for first line basic service are limited.

More specifically, Verizon argues that the 3% annual limit in increased annual revenues is reasonable, among other things, in light of the trend of change in cost of living. It notes that the 3% is a ceiling, that rate increases are not required, and that they would be imposed only if Verizon concluded that the market warranted them. It asserts that the relatively small increase allowed in basic service rates, even if applied, would still leave telephone service affordable; that increased competition benefits consumers by providing them more

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[10] Id., pp. 9-10.

choice and better value; and that Lifeline rates will not be raised and that the Lifeline connection charge will in fact be reduced to $5.

Verizon estimates the following revenue effects in 2002 associated with price changes under the VIP[11]:

Rate Change	Revenue Effect in 2002
$1.85 per line increase	$120.6 million
Other changes up to 3% maximum	$15.3 million
New UNE-P and UNE-L rates	($227.2 million)
Switching rate refund	($15 million)
Credit on hot cut NRC	($2.5 million)

Verizon includes with its filing financial projections for the years 2002-2004[12] and suggests that its calculated returns are below any fair and reasonable range of returns that we might set in a rate case and are, in fact, optimistic: they contemplate exercise of the full 3% pricing flexibility, which might be precluded by market conditions; they assume payment of no service quality penalties; and they are based on the earlier projections, filed May 15, 2001, which are likely to prove optimistic in light of economic conditions generally and the aftermath of the September 11 attack.

With regard to service quality, Verizon notes that it has made substantial investments to meet or exceed the service quality standards imposed under the performance regulatory plan about to expire and that the new three-year service quality plan (SQP) associated with the VIP insures continued high-quality service. In contrast to the PRP service plan, which was designed to encourage the capital investments needed to improve service, the VIP service quality plan recognizes the improvement that has been achieved and is designed to prevent backsliding from those levels. Pointing to the SQP's statewide performance objectives, the availability of credits for customers if those objectives are not met, and our authority to suspend pricing

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[11] Verizon's Prefiled Testimony, pp. 33-34.

[12] Id., pp. 17-18.

flexibility if two performance objectives are missed in a single review period beginning on or after February 28, 2003, Verizon explains that the plan uses regulation to set minimum service quality standards but that competitive forces will likely require all market participants to exceed that regulatory floor. Verizon notes that the SQP is designed to prevent poor performance in any part of its service area, explaining why it believes the performance objectives to be appropriate, and describing how the enforcement mechanisms--payments and the potential suspension of pricing flexibility--are crafted in a way that will require consistently high levels of service quality. It notes as well that the provisions to ensure accurate service results borrow heavily from the analogous provisions of the PRP but include a number of new items, among them a process being developed with the Communications Workers of America for the investigation of allegations of service misreporting.

Verizon explains that the plan to conform its PSC books to GAAP accounting is warranted because the increasingly competitive telecommunications market obviates the separate accounting records associated with a rate-base/rate-of-return regulatory regime. The transition's effect on customers, if any, would be a benefit associated with the write-off of a substantial amount of rate base through accelerated depreciation.

Overall, Verizon asserts that the VIP ensures high-quality services at affordable prices, and provides Verizon NY with the flexibility it needs to compete in today's market and with the incentives to continue to invest in New York.

Staff

Staff believes the Joint Proposal "is both in the public interest and consistent with the Commission's pro-competitive and economic development policy initiatives."[13] The Plan's goals, according to Staff, include the stimulation of

[13] Staff's Prefiled Testimony, p. 3.

competitive market forces so that customers benefit from investment in new technology, which produces innovation and choice. Staff expects competition will discipline prices in a manner that will permit customers to avoid the price increases authorized by the VIP should Verizon put them into effect. The expanded availability of UNE-P for small business customers and benefits for UNE-L competitors will introduce greater competition into the small business market and strengthen opportunities for economic development. The special services process improvement program will improve provisioning performance for high capacity circuits, thereby aiding economic development. The retail service quality and infrastructure components of the VIP preclude Verizon from enhancing its earnings by sacrificing good service quality, while the existing performance assurance plan continues to ensure high wholesale service quality for CLECs. The plan includes additional protections for Lifeline customers as well as an outreach and education program related to special programs.[14]

Staff expects the competitive enhancement task forces created under the plan will improve operating relationships between Verizon and its competitors. In addition, the financial consistency terms of the VIP will move Verizon's accounting and financial reporting to a method that reflects the actual competitive environment. Staff suggests that the reduced wholesale prices required by our UNE Order will increase local service competition around the State and across all customer groups, thereby warranting reduced regulation of Verizon's own retail rates and the price flexibility provided for in the VIP.

Staff identifies several features of the Plan that, in its view, well serve the public interest. Among them are the offering of the UNE platform to CLECs serving small business customers; the establishment of task forces to deal with issues that interest and concern CLECs; the improved provisioning and maintenance of special services; and the price flexibility afforded Verizon. Price flexibility is in the public interest,

[14] Staff's Prefiled Testimony, pp. 3-5.

Staff continues, because it will allow rates to move gradually to costs; because Verizon's return on equity will likely fall within a reasonable range for companies with similar risk profiles; and because customers may be able to avoid any price increases by looking to competitive providers. Staff points as well to the Plan's resolution of the switching rate refund issue and to its reduction of the non-recurring charge for hot cuts, additional steps that will contribute to the growth of competition.

Staff believes that the Plan will promote economic development, suggesting the Plan will advance economic development by enhancing competition; creating strong incentives for Verizon to maintain its improved service quality; encompassing a separate agreement by Verizon to improve the provisioning of special services,[15] which are critical to the State's information-based economy; and relaxing rate regulation. With specific reference to special services, Staff notes inadequacies in Verizon's past performance[16] and explains that Verizon has now agreed to introduce a management program designed to improve its provisioning performance and to insure that the services are properly maintained once in place. The program includes customer credits in the event of below-target performance and is designed to gradually improve service.

Staff places the pricing flexibility provisions of the VIP in the context of a telecommunications market that has become steadily more competitive and in which traditional rate regulation is no longer necessary. The caps on pricing flexibility reflect Verizon's continued position as the dominant, though no longer monopoly, provider of telecommunications service. Staff cites past actions by the Commission allowing pricing flexibility as markets have opened, such as with respect to terminal equipment.

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[15] Special services are a variety of dedicated point-to-point private lines services generally used by business for the transport of data and voice traffic.

[16] Citing Cases 00-C-2051 et al., Opinion No. 01-1 (issued June 15, 2001).

Staff offers a financial analysis explaining how Verizon's rates under the plan will be just and reasonable. It sees no basis for concern about Verizon achieving an excessive return over the course of the Plan, citing, among other things, competitive pressures on that return. Taking account of the reduced UNE rates and anticipated revenue increases associated with the Plan, Staff estimates, on Verizon's premises, earnings of 2.8% in 2002, 6.4% in 2003, and 4.6% on average.[17] With Staff's traditional rate-case type adjustments, those figures become 11.4%, 16.3% and 13.9%.[18] Staff suggests that a traditional regulatory model might have produced an authorized return only in the range of 11% to 12% rather than its forecast 13.9%, but it believes that the overall result is reasonable in view of Verizon's specific risk profile (which might have suggested a return at the 12% end of the range in a traditional analysis); the other benefits of the Plan, which justify allowing a somewhat higher return; and the prospect that Verizon will be unable to exercise the maximum pricing flexibility authorized by the plan, which would reduce the forecast return below 13.9%. Staff notes as well that over the term of the PRP, Verizon has earned below reasonable levels on both its own calculations and Staff's. Overall, in Staff's judgment, "given the Plan benefits, risks that confront Verizon in transitioning to competition, and the Commission's general reservation of authority, this Plan produces just and reasonable rates."[19]

Competitors' Statements

1. WorldCom

Urging us to adopt the terms of the Joint Proposal, WorldCom cites its recognition of the need for additional competitive enhancements to ensure that the local telephone

[17] Verizon's own calculations in fact differ somewhat from these, but the difference is not significant for decisional purposes.

[18] Staff's Prefiled Testimony, p. 64.

[19] Staff's Prefiled Testimony, p. 83.

market in New York remains open and to promote active competition across all market segments. In WorldCom's view, the Plan's provisions, together with the recent reductions in UNE rates, should further our pro-competitive regulatory policies. It suggests that some aspects of the plan "could have been stronger in some respects,"[20] but it expects that those matters will be addressed in other proceedings here and before the Federal Communications Commission.

2. Z-Tel

Noting that the recent UNE rate reductions will lead Z-Tel to resume marketing efforts for residential customers in New York, Z-Tel cites the timing and certainty of the Joint Proposal as factors giving it significant value. It notes Verizon's agreement not to challenge the UNE rates and the assurance that the UNE platform will be available for at least two years for small business customers with up to 18 lines. It appends a study showing the benefits to competition and small business customers likely to flow from that provision. Z-Tel also endorses the $15 million pool related to switching refunds, though it suggests the full amount of overpayments would substantially exceed it.

Z-Tel supports the service quality provisions of the Plan because the quality of the service received by Z-Tel and other CLECs from Verizon at wholesale is generally required to be on a par with the service quality that Verizon provides to its retail customers. Z-Tel identifies as well some of the issues it believes may be productively addressed by the task forces created under the plan.

Z-Tel expresses support for our policy of encouraging the development of competitive markets and of using "output oriented, performanced based approaches to regulate areas that are not competitive."[21] Noting that competitive entry has stagnated over the last six months, Z-Tel suggests that the

[20] WorldCom's Statement in Support, p. 2.

[21] Z-Tel's Prefiled Testimony, p. 9.

added certainty afforded by the VIP with respect to the recent UNE rate reductions, the availability of the UNE platform, Verizon's wholesale performance, and the resolution of CLEC service delivery and billing problems will encourage competitors to resume their efforts to enter the market. Z-Tel considers the Joint Proposal to be in the public interest.

3. BridgeCom International

BridgeCom describes its goal in the proceeding as arriving at a "fair and equitable agreement which would encourage the development of competition in local exchange markets, while at the same time assuring improvements in service quality to all customers and protecting retail customers from unreasonable rate increases" and says "approval of the Joint Proposal will help achieve those goals."[22] BridgeCom cites several provisions of the Joint Proposal that it regards as essential to the continued development of competition in the local exchange market; these include Verizon's commitment not to challenge the UNE order, the expanded availability of the UNE platform without any "glue charge" (though BridgeCom does not waive its rights to continue to press for continuation of the expanded UNE platform beyond the two years of the plan), the limitation to $35 of the charge for hot cut conversions, and the resolution of the White Paper issues in a manner that precludes cost recovery.[23] Overall, BridgeCom asserts that "approval of the Joint Proposal will be in the best interests of business and residential consumers in this State, competitive carriers, Verizon itself, and the public at large. By encouraging the development of competition, the Plan will bolster the economy of this State and lead to use of new and efficient technologies, the introduction of more and innovative services, and the

[22] BridgeCom's Statement in Support, p. 1.

[23] BridgeCom requests in this regard that we confirm its understanding that the $.55 per line rate approved in the UNE order for OSS development and implementation costs will be withdrawn.

establishment of wholesale and retail rates which are just and reasonable."[24]

4. Cablevision Lightpath

While asserting that the UNE order and the Joint Proposal are the latest in a series of steps that demonstrate New York's commitment to the development of effective competition in the local exchange market, Lightpath urges us now to turn to the question of efficient and effective interconnection, an issue that it regards as paramount to facilities-based carriers in New York. It stresses the important role of facilities-based carriers and urges us, "as a complement to progress made on behalf of UNE-P competitors in the current proceeding, to address promptly the need for appropriate and effective measures to streamline interconnection."[25]

5. AT&T

AT&T notes that Staff, in its supporting testimony, stresses that it could not have entered into the settlement without a reasoned confidence that the new UNE rates would permit effective retail competition in all local markets, based upon its margin analysis. AT&T agrees with the Staff analysis that retail price competition based on UNEs could act as an effective alternative to retail rate regulation.

AT&T represents that, with the UNE rate decision and the settlement, it can compete aggressively across the broad spectrum of the local market. Without detailing its competitive plans, it intends to be a force in the New York market to compete in the short term and to invest for the long.

As to the grant of increased retail rate flexibility to Verizon, AT&T argues, the trade-off is exactly correct. The transition from monopoly to competitive conditions should always include a transition from regulated pricing to market-driven

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[24] BridgeCom's Statement in Support, p. 5.

[25] Lightpath's Comments, p. 3.

pricing. It believes the current conditions will support price competition, and supports the timing of this decision.[26]

RESPONSIVE COMMENTS

Attorney General

Noting that his goals in the proceeding have been to promote and accelerate the growth of competitive local markets throughout the State and to ensure fair rates and treatment for retail ratepayers in the transition to those markets, the Attorney General believes the Plan's provisions are essential to the first of those goals but that they fall short of achieving the second, in that they rely too heavily on competitive markets to moderate Verizon's rates and ensure its service quality.

The Attorney General comments favorably on and supports the provisions of the VIP related to wholesale rates and other aspects of the relationship between Verizon and its competitors. He believes those provisions are "essential for New York to remain in the vanguard of competition and widespread customer choice," notes the widespread CLEC support for the VIP, and assumes those competitors "will now find it in their business interest to enter the New York market in strength."[27]

He asserts that "competition, especially for residential and small business customers, has not yet become enough of a reality so as to diminish the need for sufficient regulation of the dominant provider. The VIP should go far to further the transition. In the interim, Verizon-NY's retail ratepayers need more protection in the form of reasonable rates and incentives for good service quality performance than this plan now provides."[28]

Turning to matters of service quality, the Attorney General notes both the improvements since 1995 and the continued failure to meet some PRP targets and the penalties incurred by Verizon on that account. He therefore expresses concern that

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[26] Tr. 610-611.

[27] Id., p. 7.

[28] Attorney General's Comments, p. 2.

some of the VIP's service quality provisions fail to insure maintenance of past improvements in service performance. He suggests, among other things, that some performance objectives be disaggregated by district for purposes of assessing penalties (albeit it not for purposes of determining whether to suspend price flexibility) in order to ensure adequate performance in all regions. In addition, he favors more rigorous service quality objectives with respect to the customer trouble report rate and the PSC complaint rate. He suggests as well that penalty levels be graduated to reflect the magnitude of the shortfall from the target; that the "outlier" performance objective be made more rigorous and that a $100,000 penalty be imposed for each outlier; that the first review of Verizon's service quality performance take place six months, rather than one year, after approval of the Plan; and that pricing flexibility be suspended whenever a single annual performance objective is missed, rather than only if two or more objectives are missed, as the Plan provides.

With respect to rate increases and pricing flexibility, the Attorney General recognizes the need to strike a balance between regulation and deregulation as the transition to competition proceeds but expresses concern that the balance here may go too far in the direction of deregulation, given Verizon's continued status as the dominant provider of local service. He recommends as well that the transition from regulatory accounting to GAAP and SEC accounting take place over five years rather than over three in order to avoid creating excess revenue requirements associated with too fast a transition, thereby diminishing the need for 3% annual rate increases. He notes in this regard the FCC's rejection two years ago of a proposal by incumbent local exchange carriers to accelerate depreciation, and its determination that traditional depreciation rates could be waived only if the additional depreciation cost were booked below the line and thus borne by shareholders.

The Attorney General endorses the VIP's resolution of the White Paper issues, but expresses concern that the Plan

cancels various other potential ratepayer benefits and claims. These include a $55 million penalty for Verizon's failure to meet one of the service quality standards associated with approval of the NYNEX/Bell Atlantic merger, as well as several other benefits potentially available to ratepayers under the PRP (which would be terminated six months earlier than its August 31, 2002 expiration date) and otherwise.

Finally, the Attorney General regards the two-year term of the VIP as appropriate, given the degree of uncertainty about the future development of competition and the potential need to reassess matters as soon as two years from now. He also notes favorably the provision recognizing our authority to modify or terminate the Plan in mid-term should intervening circumstances render Verizon's rates unjust or unreasonable.

CompTel

CompTel supports the Joint Proposal and notes favorably its pro-competitive enhancements, particularly those related to UNE rates and UNE-P availability. It urges us, however, "to ensure that the pro-competitive aspects of the Plan are implemented and enforced in the same spirit in which they were negotiated and resolved--that is, with dedication and perseverance."[29] In addition, it urges us to establish, before the Plan's expiration, a process to assess the need to extend the term for some of the pro-competitive provisions.

PULP

PULP expresses concern about the Joint Proposal's failure to address difficulties now being experienced in the telephone Lifeline program. PULP explains that although the New York telephone Lifeline program is "robust" in comparison to those in other states, enrollment has declined precipitously over the last five years. PULP attributes the decline to the fact that Lifeline enrollment is tied to eligibility for other low-income assistance programs and that as eligibility for those

[29] CompTel's Comments, p. 2.

programs declines, so does access to Lifeline. To respond to the problem, PULP proposes that three programs be added to the list of those creating telephone Lifeline eligibility: The National Free/Reduced School Lunch Program, The State Earned Income Tax Credit Program, and the Child Health Plus Program. PULP suggests that each of these programs encompasses the same income levels as the existing programs and that they are unlikely to see significant shifts in enrollment resulting from welfare reform.

PULP asserts as well that if these additional customers were able to access the telephone Lifeline program, virtually all of the increased cost would be paid by the federal government through the Federal Universal Service Fund and the State Targeted Assistance Fund. As a result of those arrangements, any revenue gain to Verizon associated with the customer moving from Lifeline to non-Lifeline basic service would be offset by revenue losses resulting from reduced federal or state support money.[30]

In its closing statement and in reply, PULP asserts that expanding the number of programs that provide Lifeline eligibility will have no negative impact on Verizon revenues, citing Verizon's response to recent PULP interrogatory requests.[31] PULP reiterates its view that if there is no provision to designate additional Lifeline qualifying programs, the Commission should reject the Joint Proposal. In response, Verizon counters that low-income New Yorkers have telephone service at a rate exceeding the comparable population nationwide, and that in November and December 2001 Lifeline customers increased by 11,000.

ChoiceOne

ChoiceOne "supports the Joint Proposal's spirit and goals," but expresses concern that the parties' understandings and agreements may not be fully reflected in the document. It

[30] PULP's Prefiled Testimony, p. 6.

[31] Verizon response to PULP-VZ-3B, Exhibit 15.

therefore seeks a series of clarifications.[32] Its requested clarifications include the Performance Assurance Plan, terms and prices for hot cuts, task force deadlines, service quality parity, and OSS cost recovery.

Finally, ChoiceOne asks for clarification that the Joint Proposal would apply to all carriers, whether or not signatories.

Public Comments

To inform the public about the joint proposal and to solicit public comment, the subject was featured on the front page of AskPSC.com, and an e-mail was sent to the business community. A press release announced the vehicles - the Opinion Line and the AskPSC.com - available for public comment and included a summary of the proposal's major provisions. The AskPSC.com website had a direct link to the Consumer Comment Form.

Thirty comments were received from the Opinion Line and through AskPSC.com. Most who commented were against the proposal; several offered a few general remarks related to both the Commission and Verizon; one person asked that meetings about the proposal be held in his area. A few people mentioned that they formerly worked for Verizon.

Of the public comments addressing relevant issues, the majority reflected concerns about rates, both now and what they would be under the proposal, high surcharges and taxes; poor quality of service; the lack of competition in parts of the State; and less frequent reporting under the proposal than what is presently in place.

After consideration of the comments, in the context of the balance of the record in this proceeding, we remain confident that the provisions of the Joint Proposal will improve the conditions for the growth of competition and protection of consumers, with an appropriate level of regulatory oversight.

[32] ChoiceOne's Comments, pp. 1-2.

DISCUSSION

In our determination as to the terms of the Joint Proposal, we have considered the evidence in the records of these proceedings, including the parties' and others' statements, testimony adduced at the February 19, 2002 evidentiary hearing, closing statements at that hearing and the subsequent reply briefs. A number of concerns regarding specific terms or asserted omissions of the Joint Proposal are considered and decided here.

Requests for Clarification or Modification of the terms of the Joint Proposal.

Certain parties have requested clarification or modification of the terms of the Joint Proposal.

PULP proposes, as a condition for its support for the Joint Proposal, that residents who qualify for National Free/Reduced Lunch, the State Earned Income Tax Credit, and Child Health Plus be eligible for Lifeline. Verizon objects, stating that 8% of its customers receive Lifeline service, and that increases in its contributions to the state universal service fund, in particular, would be burdensome. Moreover, it is unclear whether the uncontested decline in Lifeline customers is attributable to changes in federal assistance programs or to increased scrutiny of customers' eligibility.

The Federal-State Joint Board on Universal Service is currently conducting a proceeding to determine what, if any, changes should be made in the federal low-income program eligibility. We will await the outcome of that review before addressing whether additional changes to the New York State program are advisable. Accordingly, noting that the Joint Proposal requires a reduction in the current connection charge for Lifeline to $5.00 and outreach and education programs, we adopt the relevant terms as proposed.

BridgeCom urges the Commission to clarify the extent of Verizon's obligation to provide the UNE platform under the terms of the Joint Proposal. In BridgeCom's view, the Pre-Filing Statement, as modified by the terms of the Joint

Proposal, guarantees that the UNE platform will be available without line limitation for residential customers statewide; and for business POTS customers in all central offices of the state, with the exception of specifically designated New York City central offices, without limitation as to the number of lines; and for business POTS customers in those New York City central offices where a customer uses 18 lines or less at a specific location. Further, BridgeCom seeks clarification that those designated New York City central offices are and will remain the 17 set forth in Verizon's 916 Tariff.[33] Staff, in reply, asserts that the Joint Proposal modifies the four-line restriction to 18 lines as to those central offices, but does not create any new restriction.[34] Staff replies that FCC requirements subsequent to the Pre-filing Statement limited UNE platform availability for business to customers with fewer than four lines in the designated New York City central offices (17 New York City central offices where, by the beginning of the Pre-Filing Statement duration period, two or more CLECs were collocated for the provision of local service). Verizon, also in reply, undertakes to provide the UNE platform at wholesale tariffed rates to a requesting competitor to serve a business customer with 18 or fewer lines in any part of its service territory. We see no ambiguity in the terms of the Joint Proposal and accordingly require Verizon to provide the UNE platform for business customers outside of New York City without restriction and in central offices in New York City that meet the two-

[33] BridgeCom's Reply, p.4, citing PSC No. 10-Communications Tariff (filed August 1, 2001 to be effective September 1, 2001).

[34] BridgeCom also seeks clarification as to the duration period for the provision of the UNE Platform under the Pre-Filing Statement. We agree with Staff that the four- and six-year duration periods began with FCC approval of Verizon's New York §271 petition in December 1999.

collocation criterion for business customers with up to 18 lines for the duration of the Pre-filing Statement.[35]

Assemblyman Brodsky expresses concern about the abbreviated comment process on the Joint Proposal, noting that the negotiation process tends to leave the public with relatively little information about the proceeding.[36] Assemblyman Brodsky raises three concerns. He asserts, first, that the fairness and reasonableness of the proposed rate increase cannot be adequately understood within the time available for comment. Second, he objects to the Plan's failure to include funding for the functions previously performed by the Diffusion Fund created under the PRP as a means of improving telecommunications infrastructure in underserved low-income communities. He urges modification of the Plan to include such funding, in the amount of $10 million over two years, allocated among all market participants. Additionally he expresses concern over a reduction in service quality standards. He suggests the PRP's service quality requirements resulted in a significant improvement in service, objects to any loosening of standards, and urges continuation of service quality standards set on a regional basis. Assemblyman Brodsky's office reiterated at the evidentiary hearing these concerns about the absence of a technology diffusion fund from the VIP, retail rate and service quality concerns, and the adequacy of the process. As to rates and service quality we have considered the evidence and parties' arguments on these issues and see no reason to modify or reject the Joint Proposal. As to the diffusion fund, as Verizon points out in response, this issue is more appropriately considered in the broader context of universal

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[35] In compliance with the UNE Order and in anticipation of Commission approval of the Joint Proposal, Verizon filed a tariff that establishes the terms and conditions for provision of UNE-P. As part of the filing, Verizon acknowledges, it incorrectly limited availability in 30 central offices, listed in Appendix B of Verizon Tariff Number 10. The proper reference should be Appendix C, that includes 17 central offices in New York City.

[36] Assemblyman Brodsky's Comments, p. 1.

service. The technology diffusion fund incorporated in the Performance Regulatory Plan predated the 1996 Act, which provides a comprehensive framework for universal service support on a competitively neutral basis. New York has participated in and benefited from the federal schools and libraries program, as well as a state Targeted Assistance Fund. It is in this context that proposals for additional funding must be raised. Accordingly, we see no need to modify the Joint Proposal in this regard. Finally, as to procedure, because of the opportunities for participation commencing with the May 2001 Verizon filing of a proposed incentive plan, and the active involvement of industry, consumer and government parties representing federal, state, and New York City government, we see no need to revisit the Joint Proposal and delay implementation of its benefits to competition.

The Attorney General, in a closing statement, expressed the hope that the terms of the Joint Proposal, in the context of the wholesale rates established in the UNE Order, would provide the needed transition to greater competitiveness for local telecommunications. While raising the concern that retail customers could be paying too much for too little service if competition fails to flourish, the Attorney General expressed a commitment to join in the effort to maximize competitive opportunities. As to the Attorney General's proposals to strengthen certain service quality performance targets and adjust the financial incentives, Staff responds that the Joint Proposal terms represent only minimal modification of current targets, that the Commission's current standard should be applied, that the outlier provisions in the Joint Proposal are sufficient to prevent backsliding, and that the link between rate flexibility and service quality provides ample additional financial incentive. In Verizon's view, it has fulfilled its obligations under the Performance Regulatory Plan and provided its customers excellent service, arguing for the Joint Proposal service quality plan which measures service using statewide annual averages, with outlier provisions protecting against problem areas. Having considered the comments of the Attorney

General and other parties, the public and the evidence before us, we conclude that the service quality-related terms of the Joint Proposal will provide the necessary protections for retail consumers for three years.[37] Moreover, the link between rate flexibility and service quality guarantees sufficient incentive for Verizon to comply.

Cablevision Lightpath seeks to add to the Joint Proposal a rebuttable presumption that a three-year extension of an existing interconnection agreement is in the public interest. Verizon opposes, on the grounds that the presumption would interfere with the balance of parties' rights under and is inconsistent with the 1996 Act. We are concerned about the costs to competitors and incumbents of protracted and burdensome negotiations and litigation concerning renewal of interconnection agreements. We agree the process can be streamlined but the proposed modifications raise substantial concerns and we are not prepared here to order them.

Choice One seeks clarification or modification of the Joint Proposal to require specific outcomes and timetables for the task forces created to explore new products and eliminate bottlenecks, in particular for facilities-based competitors. Verizon, in reply, expresses concerns about further regulatory burdens imposed in the form of the task forces. We will adopt the terms of the Joint Proposal with respect to the task forces, on the assumption that Verizon's commitment of resources, the good faith participation of all interested parties, the involvement of Staff and the guidance of the Office of Hearings and Dispute Resolution will result in timely and effective solutions wherever feasible. Moreover, should the task forces fail to reach agreement on the issues with which they are charged, disputes will be resolved by the Commission. In addition, we share the expectation of Staff that the IDLC review

[37] In Reply, Verizon clarifies, as Choice One requested, that the Performance Assurance Plan remains in effect according to its terms. We agree.

will be undertaken within the relevant task force, conducted during and completed prior to the end of the term of the Plan.[38]

General Discussion

The Plan affords ratepayers the opportunity to take advantage of the benefits of the coming competitive marketplace, while, at the same time, it provides the stockholders an opportunity to mitigate the financial impacts of the significant UNE price reductions.

According to the extensive analysis provided by Staff of the current status of competition in New York, as of the beginning of this year, approximately 27% of Verizon's local access line market was served by CLECs operating in Verizon's territory. The Commission has long fostered competitive markets and we believe the record supports findings that the local market is open and customers enjoy sufficient competitive alternatives. The review of various competitive entry strategies reveals that consumer benefit is maximized when competing services are offered via competing networks or via enhanced, value-added platforms. We recognize, as parties have noted, the recent setbacks to the development of competition, including the upheaval in the capital markets and observable, adverse effects of the UNE prices set in the First Network Elements Proceeding, which allowed insufficient margin between UNE prices and Verizon's retail prices. The Plan addresses certain of these concerns, along with the recently reduced UNE prices. The stability provided by the Plan (through such features as Verizon's agreement not to challenge the UNE rates and not to claim exogenous costs) and the Plan's other competitive enhancements related to UNE Platform availability, charges, procedures, and other matters, will enable CLECs to continue to compete in New York. The resolution of the competitive issues to be addressed by the task forces and other competitive enhancements under the Plan also will enhance opportunities for facilities-based competitors.

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[38] Staff testimony, Tr. 526.

With respect to retail service quality, the significant improvement since 1995 (when the current PRP went into effect), together with the positive impact of competitive pressures on service quality, warrant a new approach, directed less to bringing service up to predetermined targets and more to maintaining quality at the new, higher levels. The Service Quality Plan permits Verizon to freely compete and invest while protecting consumers from serious erosion in telephone service quality. With rebates that may be paid to customers if service quality falls, and performance objectives crafted to discourage pockets of poor performance, backed by Verizon's risk that pricing flexibility will be suspended if service quality declines significantly and a process for monitoring performance, service quality protections afforded by the Plan are effective.

With respect to retail rate flexibility, we are persuaded that the limited flexibility accorded Verizon in the VIP will enable it to respond to competitive pressures without rendering rates unreasonable.

CONCLUSION

Based upon the evidence in this record, we adopt the terms of the Verizon Incentive Plan contained in the Joint Proposal. We find the Plan will result in the continued provision by Verizon of safe and adequate service at just and reasonable rates, and that its terms will significantly enhance the conditions for local telecommunication competition in New York.

The Commission orders:

1. Verizon New York Inc. (Verizon) is directed to file tariff amendments that implement price changes consistent with this order to become effective on a temporary basis on one day's notice.

2. Within 15 days of the issuance of this order, Verizon is directed to file tariffs that implement any additional pricing flexibility consistent with this order to become effective on a temporary basis immediately upon filing.

3. Upon filing the tariff amendments consistent with Ordering Clauses 1 and 2 above, Verizon shall serve copies on all active parties to this proceeding. Any party wishing to comment on the tariff amendments may do so by submitting 10 copies of its comments to the Secretary within 15 days of the date the amendments are filed. The tariff amendments shall not take effect on a permanent basis until approved by the Commission, subject to refund if found not to be in compliance with this order.

4. With respect to charges for services other than First Line Basic Service, Verizon must notify the Commission and its customers of an exercise of upward rate flexibility no less than 20 days prior to such rates taking effect. With respect to charges for First Line Basic Service, after the first year, Verizon must notify the Commission and its customers of an exercise of upward rate flexibility no less than 30 days prior to such rates taking effect.

5. For good cause shown, the requirement of newspaper publication of the tariff amendments is waived.

6. Verizon shall provide a credit to carriers purchasing 2-wire and 4-wire loop hot cuts sufficient to offset the difference between the cost-based rates established in the UNE Rate Order and a $35.00 charge, with no additional associated service order charges.

7. Verizon shall provide $15 million for a Forward Fund to satisfy any potential liability for refunds to eligible competitive carriers arising out of the Commission's establishment of temporary rates for the switching element, net of any reciprocal compensation payments due and owing to Verizon.

8. Task Forces concerning new products and services and the elimination of bottlenecks will be convened by the Office of Hearings and Dispute Resolution.

9. The parties' requested modification of the Commission determination in the UNE Rate Order issued January 28, 2002, that rates for the loop/switch interface be reviewed in May 2002 is granted, and the determination is

modified to postpone the completion of that review until the termination of the Plan.

10. The terms of the Joint Proposal filed in this proceeding on February 8, 2002, subject to Verizon's unconditional acceptance of this order as described below, are adopted in their entirety and are incorporated as part of this order.

11. Verizon must submit a written statement of unconditional acceptance of this order, signed and acknowledged by a duly authorized officer of Verizon, by February 28, 2002. This statement should be filed with the Secretary of the Commission and served on all parties in this proceeding.

12. These proceedings are continued.

By the Commission,

(SIGNED) JANET HAND DEIXLER
Secretary

Verizon New York Inc.
[redacted]

Sandra Dilorio Thorn
[redacted]

February 8, 2002

BY HAND

Honorable Janet Hand Deixler
Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223

Re: Case 00-C-1945

Dear Secretary Deixler:

Enclosed please find the Joint Proposal Concerning Verizon Incentive Plan for New York.

Respectfully submitted,

Sandra DiIorio Thorn

cc: Honorable Jaclyn A. Brilling (By E-mail and Hand)
Honorable Joel A. Linsider (By E-mail and Hand)
Honorable Eleanor Stein (By E-mail and Hand)
All Active Parties (By E-mail and Overnight Delivery)

JOINT PROPOSAL CONCERNING VERIZON INCENTIVE PLAN

The undersigned parties jointly propose that the Public Service Commission approve the following Verizon Incentive Plan (the "Plan"). This Plan will supersede Verizon's Performance Regulation Plan which has been in effect since September 1, 1995 extinguishing all continuing rights and obligations under the Performance Regulation Plan.

The terms, conditions and underlying premises of the Plan are as described herein.

I. Premises: Verizon New York Inc.'s ("Verizon's") service performance under section 603 of the Commission's Rules is generally satisfactory and a service quality plan is in place to prevent backsliding to unacceptable performance levels. Active competition will exist across all market segments, UNE Rates will be as established by the Commission, UNE-P will remain available consistent with the Pre-Filing Statement of Bell Atlantic-New York, dated April 6, 1998 (the "PFS") as modified herein, and facilities-based competition will continue to develop.

II. Term of the Plan: The Plan is a two-year plan, beginning on March 1, 2002, with the Service Quality Plan extending one year beyond the Plan, through February 28, 2005.

III. Competitive Provisions

A. UNE Rates:

Rates for unbundled network elements and for the unbundled network element platform ("UNE" and "UNE-P") are as established by the Commission in its order in Case 98-C-1357, issued and effective January 28, 2002. The specific rates for the main elements and the platform are attached as Appendix A. As part of the proposed resolution, as described in C below, of the issues related to refunds described in the Commission's Order on Unbundled Network Elements

Rates,[1] the non-recurring charge for 2-wire and 4-wire hot cuts is $5.00, with no additional service order related charges.

B. UNE Availability:

For the term of this plan, notwithstanding any change in its obligations under Federal law, Verizon commits to modify its PFS commitments such that it will offer UNE-P to Competitive Local Exchange Carriers ("CLECs") serving small business customers (defined as business customers with 18 lines or less), on the same pricing and duration terms as its offering to CLECs for serving residential customers.

C. Relief Related to Temporary Switching Rate:

The issue of switching rate refunds is resolved as follows:

- For the term of the Plan, Verizon, in order to reach a settlement, agrees to a negotiated non-recurring charge for 2-wire and 4-wire loop hot cuts of $5.00 per loop, with no additional associated service order charges. This shall be accomplished by a credit provided by Verizon to the carrier sufficient to offset the difference between the cost-based rates established in the Commission's UNE Rate Order for these procedures and the $5.00 charge proposed herein.
- Verizon agrees to relinquish any right it may have to recovery of reciprocal compensation overpayments related to recalculation of switching costs or rates in the UNE Rate Order.
- Verizon agrees to provide $5 million (the "Forward Fund") to resolve the issues related to potential refunds to eligible competitive carriers. This Forward Fund payment will satisfy any potential liability for refunds arising out of the Commission's establishment of temporary rates for the switching element, net of any reciprocal compensation payments due and owing to Verizon.
- Eligibility for payment from the Forward Fund will be premised on the carrier's pre-existing right to seek retroactive relief based on having paid the temporary switching rate established in Verizon's tariff; no carrier shall be

[1] Case 98-C-1357-New York Telephone Company, Order on Unbundled Network Element Rates, issued

eligible for payment from the Forward Fund if it has obtained more than 5,000 hot cut lines in 2001 among all affiliates of such carrier. Only a carrier currently serving customers in the State of New York that relinquishes any claim it may have against Verizon related to switching rates for retroactive payments under interconnection agreements or otherwise will be eligible for payment from the Forward Fund.

- The Department of Public Service will conduct an expedited process in order to allocate the Forward Fund among eligible carriers. Any payments due to carriers from the Fund, net of reciprocal compensation paid to a carrier and its affiliates shall be made 50% in the form of an immediate bill credit and 50% in the form of bill credits over a 6-month period.

D. <u>Other Competitive Enhancements</u>:

1. <u>New Products and Procedures</u>:

The undersigned agree that they can and should share best industry practices in a number of areas to encourage competition and enhance cooperation between and among industry participants. While Verizon cannot commit to any specific outcome, it agrees to cooperate in a New Products and Services Task Force that will address a number of these issues, including best practices for billing and collection, building access and efficient provisioning for services where no facilities are available. The goal of the Task Force will be to attempt to establish processes and procedures that will standardize efficient wholesale transactions. No later than three months from the date of a Commission Order approving the Plan the Task Force will forward to the Commission a report detailing its findings, agreements and recommendations for industry best practices. The Task Force will focus specifically on the following:

a) <u>Billing and Collection</u>

- How to establish for all carriers a reasonable period of time for back billing, including the conditions under which exceptions would exist;
- How to develop billing verification tools for all carriers;

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and effective January 28, 2002 (the "UNE Rate Order").

- Whether reasonable procedures can be developed for initiating and responding to billing disputes for all carriers;
- Whether procedures/methods applicable to all carriers can be developed to minimize overbilling.

b) EELs/UNEs

- To facilitate the provisioning of service when a UNE order is rejected due to "lack of facilities", the Task Force will attempt to establish applicable pricing and provisioning protocols so that facilities can be provisioned in a reasonable time frame and at a reasonable price that is consistent with Verizon's retail offerings.

c) Virtual Building Connection Product

- Without any relinquishment of rights parties to the Task Force may otherwise have, and where legally and technically feasible, the Task Force will attempt to develop a product(s) to enhance carriers' ability to gain access to buildings.

2. **Elimination of Bottlenecks to Migrating Customers from UNE-P to CLEC facilities**:

Verizon will establish a Bottleneck Elimination Task Force to work with CLECs and staff to solve urgent facilities, hot cuts and other bottleneck problems. The Task Force will report back to the Commission on the status of these issues within 6 months.

IV. Service Quality Provisions

A. Retail Service Quality Plan: The following plan (the "Service Quality Plan") ensures the continued provision of quality telephone service for Verizon. The conditions of the Service Quality Plan are as follows:

Service Quality Term: The term of the overall Verizon Incentive Plan plus one year.

Definitions:

- Market Area: Verizon's operating area in the State of New York.

- Measurement Period: Twelve-month period. The first measurement period ends February 28, 2003.
- Redundancy Failure: A failure that occurs as a result of Verizon having an actual level of diversity less than the level Verizon certifies annually as existing in the Signaling System 7 ("SS7") and Enhanced 911 ("E911") networks where the appropriate level of diversity is determined in accordance with NYCRR 603.5(b)(3). Verizon's annual certification due July 1st each year over the Service Quality Term will detail the actual level of diversity in the SS7 and E911 networks overall as of the prior Calendar Quarter.
- Review Period: Annual period ending with the close of each Plan Quarter; the first review period ends February 28, 2003.
- All other terms are as defined in the Commission's Telephone Service Standards, Special Service Guidelines, and the Department's Emergency Plan.

Performance Objectives: The following objectives are the foundation of the Service Quality Plan and apply in the market area for each Measurement and Review Period.

- **Troubles:** Customer Trouble Report Rate ("CTRR") equal to or less than 3.3 per hundred access lines.
- **Out-of-Service:** Average percent out-of-service over 24 hours equal to or less than 20%.
- **Installation:** Average percent of initial basic service installed within 5 days or less greater than or equal to 80%.
- **Complaints:** A rate of less than 5.5 complaints per 10,000 lines.[2]
- **Outliers:**[3] No more than 175 Service Inquiry Reports filed in the initial Measurement Period, and 125 in any subsequent period where the number of service inquiry reports are determined in accordance with Appendix B.[4]

[2] The Complaints target in this Plan presumes existing Public Service Commission complaint handling procedures. If, as a result of changes to either the complaint handling procedure or the types of complaints that are counted against Verizon, the degree of effort needed to meet this target is materially modified, Verizon and staff agree to adjust the Complaints target to reflect the impact of the reviewed procedures on Verizon's expected performance.

[3] The Outliers targets were determined by considering only certain service inquiry reports (i.e., based on trunks that originate and terminate at Verizon facilities only). Verizon agrees that it will also measure

Enforcement: Service related data will be provided to the Commission. Additional information staff deems appropriate will be provided upon request to the extent required by the Public Service Law.

Service Measurement Accuracy

1. Verizon's Quality Assurance Team ("QAT") shall ensure the internal controls are reasonably sufficient to assure net error rates of 5% or less in each measurement entity (*i.e.*, the percent of under-reporting errors minus the percent of over-reporting errors must be 5% or less) by the following:

    a) Monthly sampling reviews will be performed at the IMC level to assure accurate results. Any IMC that exceeds a (±) 1% Net Error rate will be subject to an adjustment of results based on a twelve-month rolling average of the monthly adjustment factors to be developed as the Plan progresses;
    b) The QAT will communicate the outcome of the sampling process with field directors who will take corrective actions to improve measurement accuracy. Staff shall be advised of any corrected results and remedial actions;
    c) Adjustments will be performed for Customer Trouble Report Rate (CTRR), Out of Service ≥24 Hours, and Service Affecting >48 Hours measurements;
    d) If any measurement entity exceeds a (±) 5% Net Error rate, the Director will be required to prepare a written report indicating the analysis and corrective actions to be taken to insure accurate results. The QAT will monitor and insure compliance with this requirement;

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performance in a way that includes not only trunks that originate and terminate at Verizon owned facilities but trunks that terminate at facilities owned by other carriers (such as competitive local exchange carriers, interexchange carriers, and wireless carriers); however the latter will not be included for the purposes of the Service Quality Plan. Verizon also agrees that it will work closely with other carriers and Staff to limit the number of trunk blockages that occur.

[4] For the Outliers component of this Plan, the Maintenance and Installation service standards are measured on a Central Office and Installation Maintenance Center ("IMC") basis, except, however, that those

e) The QAT will implement the Manager Sampling Plan and the procedures for handling allegations of mis-reporting from the CWA "Hot-Line" (the "CWA Hot-Line Process") that are developed in compliance with the requirements of the Commission's "Order Adopting Report," issued May 17, 2001 in Case 01-C-0440 (the "May 2000 Order");

f) Each year the President of Verizon New York will attest to the fact that Verizon has implemented the above service measurement accuracy activities to be performed by the QAT.

2. Outside Review

a) Each year that the Service Quality Plan is operative Verizon shall hire an independent external auditor (hereafter Auditor) to review the procedures employed by the QAT (including the QAT process to sample and adjust results), the Manager Sampling Plan, the CWA Hot-Line Process, and other QAT oversight activities (e.g., answer time, installation and network blockage service quality measurements). As part of this review, the Auditor will perform a sampling of the QAT sample for comparison with the results obtained by the QAT. The Auditor will issue a report setting forth its findings based on its review of the QAT process;

b) If the Auditor finds any entity with a total gross error rate over 30%, a substantive audit of that entity by the Auditor shall be required. (This is not intended to limit the Auditor from recommending specific actions, such as a substantive audit, if an entity has a gross error rate less than 30%, but to serve as an out-of bounds requirement for specific action.) The total gross error rate is the sum of under-reporting errors plus the over-reporting errors;

c) The Request for Proposal ("RFP") for hiring the Auditor shall be reviewed by staff and interested parties prior to issuance.

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standards that are measured on an IMC basis can be changed to a Dispatch Resource Center basis or another, more highly aggregated basis, upon approval of Staff.

d) If the Auditor determines that Verizon has complied with the procedures to reasonably ensure accurate results as required herein, a detailed audit shall not be required. If the external auditor determines there were major deficiencies in Verizon's compliance, a detailed audit of the results for the year in question shall be conducted by the Auditor. The Auditor shall review compliance with the 5% net error process for each entity that exceeds a 5% net error rate to ensure that corrective actions are being taken; and

e) The Auditor shall make an annual report to Verizon of its findings and recommendations and this report shall be submitted to the Commission and provided to interested parties.

3. Verification of Penalty Payments – Verizon agrees to ensure that all penalties are issued accurately. This shall be accomplished by utilizing the existing Performance Regulation Plan rebate process currently employed by the QAT. When a credit is given, Verizon shall use the QAT to verify that customers received the appropriate credit. Verizon's internal auditors shall verify this on an annual basis. Credits will be paid in 90 days from the date the service quality results measured under this plan are finalized. Verizon will provide Staff with a report detailing the credit payments made.

Service Quality Link to Pricing Flexibility: If Verizon fails two Performance Objectives at the end of any Review Period, the following applies:

- Prospective pricing flexibility as provided in the Plan is suspended;
- Pricing flexibility is not restored until Verizon passes each performance objective for three consecutive months based on a rolling twelve-month average.[5]

[5] Should Verizon experience a company-wide work stoppage during the course of this Plan that causes Verizon to miss performance objectives set forth herein, Verizon can petition the Commission for an adjustment to and normalization of its performance results and can proceed to exercise its pricing flexibility pending the Commission's decision on that petition. Normalization of results will be performed in accordance with the service quality normalization process set forth in the March 13, 2001 memorandum from the Office of Communications to the Commission attached to the Commission's "Order Granting In Part and Denying In Part Requests for Waivers of Service Quality Targets," issued June 7, 2001 in Case 92-C-0665.

If Verizon fails a performance objective in a Measurement Period, a rate adjustment, as described below, applies.

Performance Rate Adjustments: Verizon will credit customer rates in the Market Area if a performance objective is not met in a Measurement Period as follows:

- Following are the total credit amounts available in a Measurement Period if Verizon misses one or more performance objectives. These total credit amounts will be divided by the number of performance objective(s) that were missed in that period to determine the credit amount payable on each missed performance objective:
  - If a single objective is not met, the total credit amount available is $5 Million.
  - If two objectives are not met, the total credit amount available is $0 Million.
  - If three or more objectives are not met, the total credit amount available is $00 Million, plus an additional $5 Million for each objective above three that is not met.
- In any case where Verizon misses the PSC Complaint or the Outliers performance objective in a Measurement Period, the total credit amount available for that performance objective will be distributed on an equal per access line basis in the Market Area;
- In any case where Verizon misses the Troubles (CTRR), Out-of-Service, or Installation performance objective in a Measurement Period, the total credit amount available on that performance objective will be distributed on a per occurrence basis to each affected customer who experiences a service problem that is measured in the performance objective(s) that was missed in the Measurement Period;[6]

[6] Affected customers is defined as follows:

- Troubles – all lines with a measured trouble during the measurement period
- OOS – all lines out-of-service longer than 24 hours in the measurement period
- Installation – all basic line installations taking longer than 5 days in the measurement period

- In no instance will a credit to any one affected customer exceed $0 per occurrence in a Measurement Period. If as a result of this restriction a portion of the total credit amount available remains unpaid, the unpaid amount will be distributed on an equal per access line basis in the Market Area.

Major Service Interruption: Verizon agrees that no major service interruptions will occur as a result of a Redundancy Failure in its Signaling System 7 or E911 network after July 1, 2002. Upon a finding by the Commission that a failure did occur after that date, Verizon agrees to make a payment of $00,000 into the State's General Fund.

Special Services Service Quality

Verizon has agreed to implement the special services process improvement program with related improvement milestones and customer credits, as more fully described in a letter to the Department of Public Service dated February 8, 2002.

V. Pricing Flexibility Provisions

Verizon will be allowed pricing flexibility beginning March 1, 2002 in accordance with the conditions listed below.

Conditions:

Upward flexibility is allowed on all services and products consistent with the Service Quality Plan, with the following exceptions:

- UNE prices
- Wholesale discounts for services offered for resale
- Interconnection and reciprocal compensation prices
- Lifeline services
- Maintenance and access to the ALI database
- Directory Assistance and other database inquiries for competitive providers
- Non-recurring service connection charges for residential and small business customers
- Certain services previously ordered to be provided at no charge, for example, call blocking or PIC freezes

There is no cap for increases in the rates for individual services except for 1FR service[7] in Rate Group 1, 3 and 5[8], except that any increase in the charges for First Line Basic Service shall not exceed $.85 per line in the first year and $.65 per line in the second year.[9] Downward pricing flexibility is limited only to a rate equal to Verizon's incremental cost and usage offerings must pass an imputation standard. Rates for Carrier Access Services may not increase.

Overall revenue increases associated with pricing flexibility are capped at 3% on an annualized basis each Plan year, using units in service for all services for the prior year over any annual period.[10]

Under no conditions is flexibility is allowed:

- If pricing flexibility is suspended under the terms of the Service Quality Plan.
- Unless Verizon agrees to take full responsibility to explain the need or rationale for any flexible price increase to its customers and that all communications with customers will explain that the basis for any flexible price increase is solely its business decision.

VI. Financial Consistency and Additional Regulatory Protections

Verizon shall conform amounts reported on its New York State regulatory financial reports with the amounts it reports in its filings with the Securities and Exchange Commission (e.g., 10K). This transformation shall occur over a three-year period beginning on the first day of the Verizon Incentive Plan.

Depreciation expense recorded during the term of the Verizon Incentive Plan shall be equal to the sum of the depreciation recorded on the SEC books plus a three-year

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[7] 1FR service is a residential service consisting of the basic line charge and flat rate local usage.

[8] The total increase to the price of 1FR service in rate group 1 shall not exceed $2.00 in the first year of the Plan and $3.00 in the second year. The total increase to the price of 1FR service in rate groups 3 and 5 shall not exceed $2.00 in the first year of the Plan and $3.00 in the second year.

[9] Under this Plan, First Line Basic Service is defined as the first line for a particular customer at a particular location for basic service access, basic message rate, individual message business lines and analog PBX trunks.

[10] Staff will be provided with the units-in-service for all services and the price changes put into effect each Calendar Quarter over the term of the Plan to assure this condition is met.

amortization of the difference between the depreciation reserve recorded on the SEC books and the depreciation reserve recorded on the state regulatory books as of the first day of the plan. At the end of the three-year amortization period, the depreciation reserve used for state regulatory purposes will thus be equal to the SEC depreciation reserve.

During the term of the Verizon Incentive Plan, neither regulatory assets nor regulatory liabilities shall be created, with the exception of Commission approved net costs associated with the restoration of the World Trade Center aftermath. All existing regulatory assets and liabilities shall be fully extinguished by the end of this plan in accordance with the first paragraph above. Any changes to GAAP as promulgated by the accounting profession will be implemented for both the SEC books and the state regulatory books.

Verizon shall be allowed to account for pension and other post employment benefit obligations ("OPEB") consistent with SFAS #87 and SFAS #106. This includes allowing Verizon to retain the benefit/detriment of financial accounting gains/losses during the term of the Verizon Incentive Plan. In no event will Verizon be allowed to withdraw plan assets other than to pay benefits, including administrative expenses, or settle benefit obligations associated with its pension and OPEB plans. Verizon commits to obtain New York State Public Service Commission approval prior to annuitizing, curtailing, or otherwise settling all or substantially all of Verizon's pension plan/OPEB obligations for employees of regulated entities in New York state. The Commission will be notified if there are any major changes in these plans, if "assumptions" change materially, and if plan assets are used for purposes other than directly paying benefits and related administrative expenses.

VII. <u>Infrastructure</u>

To assure investments commensurate with good service quality, Verizon agrees to:

- File annual construction budgets that identify service-related investments
- Meet with staff on an annual basis to provide an overview of its construction budget with an emphasis on:
    1. Service quality improvements
    2. Increased network reliability

3. Deployment of new technology, including a demonstration that the introduction of new services and technologies is non-discriminatory
4. Deployment of advanced services

- Provide with each annual construction budget filing an overview of Verizon's plans and progress toward introducing new technology and advanced services and to identify new services to be provided

To assure reliability consistent with post-9/11 best practices

- As changes to the Network Reliability and Interoperability Council's "best practices" and industry standards reflecting lessons learned from incidents such as the events of September 11, 2001 are developed, Verizon, will, by July 1st of each year over the term of the Verizon Incentive Plan, inform the PSC Staff of its intention to implement the practice or standard. Verizon will also report to the Staff, on an annual basis, the progress it is making toward the implementation.
- Participate in industry/governmental forums concerning network reliability.
- Cooperate in the development of data to be used by the staff in its Geographic Information System designed to provide service outage information to the Commission and the State of New York.

VIII. Miscellaneous:

A. Exogenous Costs and Merger Savings

With respect to the matters under consideration in Case 00-C-1945 with respect to outstanding exogenous cost filings and merger savings (the so-called "White Paper" issues), the parties propose that the Commission find that available merger savings fully offset otherwise allowable cost onsets and exogenous costs, and that Ordering Clauses 5 and 6 in the Order Approving the Bell Atlantic/NYNEX Merger, issued and effective March 21, 1997, and the Order Approving the Bell Atlantic/GTE Merger, issued and effective August 12, 1999, have been satisfied in a way that Verizon relinquishes its claim to rate increases as a result of exogenous costs, and such merger saving shall not be used to require rate reductions as contemplated in those Order Clauses.

Verizon agrees to withdraw its revisions to Tariff P.S.C. No. 10 -Communications filed May 29, 2001,as well as those rates proposed in its supplemental filings in Case 00-

C-0127, relating to recovery of OSS costs for Line Sharing, Line Splitting, Unbundled Sub-Loop Arrangements, Feeder Sub-Loops, and other DSL-related items.

B. Reservation of Authority:

The parties recognize that the Commission reserves the authority to act on the level of Verizon's rates and service pursuant to the Public Service Law should it determine that intervening circumstances have such a substantial impact as to render Verizon's rates unjust or unreasonable or render this Plan unreasonable, unnecessary or insufficient for the continued provision of safe and adequate service by Verizon-New York. Should the Commission exercise this authority, Verizon has the right to withdraw from this Plan.

C. Reconsideration and Judicial Review

During the term of this Plan, Verizon agrees that the rates prescribed by the Commission's UNE Rate Order will remain in effect and that it will not challenge those rates before the Commission or in court. For purposes other than challenging the rates prescribed in the Commission's UNE Rate Order, Verizon does not relinquish any legal or equitable rights it may have with respect to the underlying theory of the case, including, but not limited to, the cost recovery theory known as TELRIC. This commitment should not be interpreted as a voluntary agreement for purposes of the Bell Atlantic/GTE FCC merger conditions as to the level of rates, the rate design or the theory of the case. If the aforementioned decision is appealed or otherwise challenged by any person or entity, Verizon, in supporting the Commission's decision in Case 00-C-1945 reserves all legal and equitable arguments it would otherwise have had.

The parties propose a modification of the PSC determination that rates for the loop/switch interface be reviewed in May 2002 to reflect IDLC connections, where appropriate.[11] The modification consists of postponing that review until the termination of the Plan.

D. Lifeline

- Reduction in the present connection charge from $0 to $.
- Maintain an outreach and education program for Lifeline

[11] UNE Rate Order, pp.93-95.

E. <u>Consumer Outreach and Education</u>:

Verizon will design and implement, within existing consumer education budgets, an outreach and education program to inform customers about their rights and responsibilities and special programs, such as Lifeline and the Relay Service.

Unbundled Network Element Rates

Verizon's major unbundled network element ("UNE") rates per UNE Rate Order.

UNE	Old Rate	New Rate
2-Wire Analog Loop Rate[1]		
Manhattan	$1.83	$1.70
Major cities	$2.49	$1.31
Rest of State	$9.24	$5.51
Line Port	$2.50	$2.57
Local Switching		
Originating	$0.003150	$0.001147
Terminating	$0.003150	$0.001111
End Office Trunk Port	$0.000656	$0.000371
Common Transport	$0.000783	$0.000203
Tandem Switching	$0.001017	$0.000481
Tandem Trunk Port	$0.001464	$0.000570

Note – The old rates for local switching were not deaveraged between originating and terminating. The old rates for all usage based rates were time of day sensitive (day, evening & night). The amounts shown are a weighted-average based on actual usage by CLECs leasing Verizon's UNE-P in the first months of 2001.

Utilizing the methodology employed by Verizon in its supplemental response to Staff interrogatory PSC-VZ-18 in Case 00-C-1945, these rates will impact the average monthly cost of Verizon's UNE-P as follows.

UNE	OLD	NEW
Loop	$4.05	$1.49
Port	2.50	2.57
Average Usage per Line	10.61	5.08
Revenue Per Line	$17.17	$9.14

[1] These are melded integrated digital loop carrier (DLC)/universal DLC rates as only one rate is to be charged for all loops leased.

Service Inquiry Reports for the purposes of measuring Outliers under the Service Quality Plan are the sum of the following in any Measurement Period:

Service Inquiry Reports = Unadjusted Service Inquiry Reports $_{\text{Current Year}}$ + (Total Credits $_{\text{Prior Year}}$ + 50% of Total Credits $_{\text{Prior Year –1}}$)

TOTAL CREDITS COMPUTED AS FOLLOWS

Formula	Credits
One Unadjusted SIR for any single Measure[1]	5 per measure
No Unadjusted SIR for any single Measure	10 per measure
More than 50 Unadjusted SIRs for any measure	Minus 2 credits for each measure
More than 2 consecutive Unadjusted SIRs for any entity	Minus $^{1}/_{10}$ credit times the number of SIRs in excess of 2 for each such entity
Total Credits	Sum of the above

Total Credits for any year may be zero, but not negative.

[1] There are ten measures defined in NYCRR 603.4(d)(1); however, Answer Time Performance Results (for Business Office, Repair Office, and Operator Assistance) are consolidated and considered a single measure for the purpose of determining credits. Thus, there are eight measures for the purpose of determining service inquiry report credits under the Service Quality Plan.

IN WITNESS WHEREOF, the parties have duly executed this agreement, as of February 8, 2002.

VERIZON NEW YORK INC.

BY: Sandra Dilorio Thorn

NAME: Sandra Dilorio Thorn

TITLE: VP & General Counsel, NY & CT

Case 00-C-1945

IN WITNESS WHEREOF, the parties have duly executed this agreement, as of February 8, 2002.

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BY: Peter M. McGowan

NAME: Peter M. McGowan

TITLE: Staff Counsel

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Attorney General of the State of New York

New York City Department of Information Technology and Telecommunications
Public Utility Law Project
Communications Workers of America
AT&T Communications of New York, Inc.
WorldCom, Inc.
COVAD Communications Company
Citizens Communications
Competitive Telecommunications Association
Time Warner Telecom, Inc.
Focal Communications Corp. of New York
Allegiance Telecom
Network Access Solutions Corp.
XO Communications, Inc.
Cablevision Lightpath, Inc.
Sprint Communications Company, L.P.
Conversent Communications of New York
Z-Tel Communications, Inc.
New York State Telecommunications Association, Inc.
Choice One Communications, Inc.
Network Plus, Inc.
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STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on January 22, 2003

COMMISSIONERS PRESENT:

Maureen O. Helmer, Chairman[1]
Thomas J. Dunleavy
James D. Bennett
Leonard A. Weiss
Neal N. Galvin

CASE 98-C-1357 – Proceeding on Motion of the Commission to Examine New York Telephone Rates for Unbundled Network Elements.

ORDER DENYING REHEARING PETITIONS

(Issued and Effective February 6, 2003)

BY THE COMMISSION:

Verizon New York Inc. (Verizon) filed tariff amendments to comply with the Commission's "Order on Unbundled Elements"(UNE Rate Order),[2] which established new rates for Verizon's unbundled network elements (UNEs). These proposed tariff amendments, which included revisions to Tariffs PSC NY Nos. 1,8,9 and 10, were approved in part and modified in part by the Commission in its "Order Approving Compliance Tariff subject

[1] Chairman Helmer served as Chairman until January 31, 2003.

[2] Case 98-C-1357, Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements, Order on Unbundled Network Elements (issued January 28, 2002).

to Modifications"[3] (Compliance Order). Verizon and AT&T Communications of New York, Inc. (AT&T) with WorldCom, Inc. (AT&T/WorldCom) have petitioned for rehearing of the Compliance Order. In addition, RCN Telecom Service, Inc. (RCN) submitted a letter in lieu of a brief, to which Verizon responded.

Verizon's Petition for Rehearing

Verizon seeks reconsideration of two aspects of the Compliance Order. First, Verizon argues that the rates for Digital Trunk Ports, 911/E911 Ports, and Voice Dialing on Integrated Services Digital Network (ISDN) should be restored to the levels that Verizon set forth in its tariff filing. Second, Verizon states that "expedite" charges should be available in those instances where Verizon makes good faith efforts to provide expedited service, and incurs costs for doing so, but is unable to achieve the shorter provisioning intervals for reasons beyond its control.

Digital Trunk Port Rate

Aside from requiring Verizon to reduce the overall local switching investment levels assumed in Verizon's cost studies, the UNE Rate Order also mandated that a greater percentage of the investment be assigned for recovery by the non-traffic sensitive rate elements associated with the switch, leaving a smaller percentage of the total investment for recovery by the traffic sensitive or usage elements. The interaction of those two rulings, Verizon notes, meant that

[3] Cases 98-C-1357, 00-C-1945, Proceeding on Motion of the Commission to Consider Recovery by Verizon and to Investigate the Future Regulatory Framework, Order Approving Compliance Tariff Subject to Modifications (issued October 15, 2002).

different adjustments were required for traffic sensitive and non-traffic sensitive investments.[4]

Verizon argues that the Compliance Order adopted rates for Digital Trunk Ports, 911/E911 and ISDN Features/Voice Dialing that were lower than those rates that Verizon had set forth in its compliance filing.[5] Verizon notes that the Compliance Order states that there were "various discrepancies" between Verizon's rates and the computations by staff. This "discrepancy," according to Verizon, is the result of staff applying a much lower adjustment factor (i.e., the total switch or average factor) to the End Office Trunk Port investments than Verizon used in its compliance filing.[6] This lower adjustment factor, which Verizon states was applied only to the End Office Trunk Port and not to other local switching investments, was an average of the traffic sensitive and non-traffic sensitive factors. "By using an adjustment factor calculated on a total-switch basis, but applying it selectively, to only some switch investment, staff's computation set rates that clearly fail to recognize a substantial portion of the switch investment level

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[4] The Commission directed that 34% of the investment be allocated to traffic sensitive and 66% to non-traffic sensitive (as compared with Verizon's proposed allocation of 64% traffic sensitive and 36% non-traffic sensitive). Thus, the shift of investment to non-traffic sensitive resulted in an increase in total non-traffic sensitive recovery (compared with Verizon's cost study) and a reduction in traffic sensitive recovery.

[5] Verizon had filed rates of $190.30/month for the Digital Trunk Port and 911/E911 Port; staff computed a rate of $102.40 for each. Verizon filed a rate of $1.44/month for ISDN Voice Dialing; staff computed a rate of $1.38/month. The Commission adopted the rates based on staff's calculations.

[6] Verizon states that the basic discrepancy is in the calculation of the End Office Trunk Port Rate. The two other rates at issue here are derived from that rate.

approved in the UNE Rate Order."[7] Verizon states that the only justification offered for the calculation is that Verizon made the same mistake in the End Office Trunk Port rate that was first filed pursuant to the Recommended Decision[8] in this case.

Verizon queries whether it should be held to a rate that clearly fails to recognize a significant portion of the investment approved by the Commission in the UNE Rate Order merely because it failed to catch a computational error that was made by staff in its own rate calculation. Verizon argues that there is no question that Verizon and staff were attempting to set rates that would achieve the investment levels set out in the UNE Rate Order. Verizon distinguishes this computational error from a dispute over input values or substantive cost study approaches, where a party must file an objection or risk waiver if it fails to do so. Verizon posits that a gross injustice would result if the Commission prevented it from correcting its original failure to catch the calculation error because Verizon would recover less than the Commission-authorized investment levels.

In response, AT&T/WorldCom dispute Verizon's position that the difference between the digital trunk port rate adopted by the Commission and Verizon's proposed rate is only a computational error. AT&T/WorldCom state that the digital trunk port rate set forth by the Commission is the correct rate because, based upon their calculation, it is the only rate that will yield an overall switch investment of $105 per line, as set out in the UNE Rate Order. If the Commission granted Verizon's rehearing petition on this issue, the resulting rate would be

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[7] Verizon Petition for Rehearing, p. 4.

[8] Case 98-C-1357, Recommended Decision (issued May 16, 2001).

higher than $105 per line. According to AT&T/WorldCom, Verizon's suggestion that the non-traffic sensitive factor be used to increase the digital port rate would result in a cost overstatement, by producing rates in excess of $105 per line investment.

While asserting that Verizon's arguments are substantively in error and should be denied by the Commission, AT&T/WorldCom agree that Verizon should not be held to rates resulting from a calculation error in Verizon's rate set forth in the Recommended Decision.[9]

Discussion

The gist of the UNE Rate Order with respect to switching costs was that the company's cost study did not properly allocate switching investments. Accordingly, the UNE Rate Order called for less investments to be recovered from usage rates and more investments recovered from non-usage rates. Therefore, usage based switching rates were treated as recovering traffic sensitive costs and flat rate or non-usage rates were treated as recovering non-traffic sensitive costs. In general, rates were adjusted by traffic sensitive and non-traffic sensitive factors, respectively, to recover relatively more costs from non-traffic sensitive rates and less from traffic sensitive costs.

[9] In support of this position, AT&T/WorldCom state the same arguments were made in their rehearing petition (discussed infra) where AT&T/WorldCom argue that the Commission committed an error of law by holding them accountable for not excepting to Verizon's rates that were in the Recommended Decision. AT&T/WorldCom state that Verizon's argument validates the position taken in AT&T/WorldCom's petition and provides additional grounds for granting AT&T/WorldCom's petition on this issue.

The essence of Verizon's argument is that the End Office Trunk Port is a non-traffic sensitive facility and Verizon focuses on how its cost study assigned switching investment between traffic sensitive and non-traffic sensitive functions. However, the Commission's analysis of the allocation of cost recovery for switching costs between usage sensitive and non-usage sensitive rates did not accept Verizon's approach. Verizon's claim that the End Office Trunk Port is a non-traffic sensitive facility is undermined by the fact a significant portion of the End Office Trunk Port is recovered on a minute-of-use basis. For these reasons, we reject Verizon's claim that all End Office Trunk Port investments are non-traffic sensitive.

Verizon next claims that, by not using the higher non-traffic sensitive specific adjustment factor for the End Office Trunk Port investment, the resulting rates would result in an under recovery of the allowed investment. Verizon goes on to note that the under recovery of investment would occur unless there was a corresponding increase in traffic sensitive investment by applying the average adjustment factor to traffic sensitive investment as well. That is precisely what happened. The usage based End Office Trunk Port rate, which is set forth in Appendix A of the Verizon Incentive Plan, was established by applying the total switch or average adjustment factor. This application occurred because Verizon used the average adjustment factor in computing Recommended Decision compliance rates in its Brief on Exceptions for trunk rates. Thus, the usage based End Office Trunk Port rate in Appendix A of the Verizon Incentive Plan is based on the average factor. Having used the average adjustment factor for the End Office Trunk Port usage based rate, it makes sense to also use that same factor for the remaining trunk rates consistent with Verizon's compliance rates

in its brief on exceptions. Otherwise Verizon could over recover its switching investment.

Verizon has not established that the rates set by the Commission will result in the recovery of less than the $105 per line switch investment established by the Commission. While AT&T/WorldCom claim that Verizon's petition, if granted, would result in rates reflective of a switch investment higher than $105 per line, we believe the AT&T/WorldCom study has flaws. Verizon's adjustments to the AT&T/WorldCom calculations, although correcting for some flaws, are also not without errors. Neither AT&T/WorldCom's nor Verizon's presentations account for recovery based on the trunk port usage rate. For the reasons stated above and in the absence of a showing by Verizon that the Commission-established rates would prevent the company from recovering the switch investment of $105 per line, Verizon's rehearing petition to increase certain End Office Trunk Port rates will be denied.

Applicability of "Expedite" Charges

The UNE Compliance Order concluded that Verizon is entitled to the higher charge for expedited service only when it actually provides expedited service. To ensure that the expedite charge is applied in a consistent manner, the Commission directed Verizon to modify its tariff to conform to a similar provision in its federal tariff, which states that the higher rate shall not apply in those instances when Verizon does not complete the order in less than the standard interval.[10]

Verizon submits that this decision is erroneous. According to Verizon, the Telecommunications Act of 1996 (the

[10] Compliance Order, pp. 20 – 21.

Act)[11] and the accompanying regulations allow the recovery of Verizon's costs. Verizon argues that its costs are based on its efforts to provide expedited service. These costs are still incurred even where, due to unforeseen circumstances, Verizon is unable to meet the shorter interval. To find that Verizon is entitled to the higher charge for expedited service only when it actually provides expedited service would violate the cost recovery provisions of the Act.

Verizon also argues that conforming the state tariff provisions to the federal tariff provisions is not warranted here as Verizon is required to abide by different terms and conditions for each tariff. Specifically, Verizon states that its offering of UNEs is not voluntary, rather, it is required by the Act and UNEs are priced at Total Element Long Run Incremental Cost (TELRIC). Verizon's offering of services under its federal tariff, on the other hand, is part of a larger set of rights and obligations that are defined in the federal tariff. Verizon concludes that "[t]here is no reason why the two tariffs need to be consistent in this respect, particularly since they govern totally different suites of products under terms and conditions that already differ in numerous other ways."[12]

AT&T/Worldcom respond that Verizon should not be permitted to retain the higher charge for expedited service in those instances when it fails to provide the service in the shorter time interval. Analogizing this service to a letter sent by Express Mail, the higher fee for an Express Mail letter is paid if the letter is delivered within the time interval or

[11] See 47 USC §252(d).

[12] Verizon Petition for Rehearing, p.8.

the fee is returned to the customer. AT&T/WorldCom argue that the same situation is present: either a CLEC would pay the regular loop provisioning non-recurring charge (NRC) and would receive service within the standard interval, or the CLEC would pay the higher NRC and receive service in an expedited time period. However, unlike the Postal Service, AT&T/WorldCom state that Verizon only wants to put forth a good faith effort to provide the expedited service.

AT&T/WorldCom urges the Commission to reject these arguments on several grounds. First, Verizon has no incentive to provide expedited service without a tariff that provides such an incentive to deliver the expedited service. Second, the Commission has heard these arguments and has already rejected them; hence, there is no reason to revisit them. Since Verizon is not asserting that the Commission has committed an error in law or fact, AT&T/WorldCom aver that the Commission should reject these arguments.

Discussion

The underlying purpose of the expedited charge is to permit a CLEC to receive service in a shorter period of time provided the CLEC is willing to pay the higher charge for the service. To permit Verizon to retain the expedited charge in those instances when it did not provide the service within the shorter interval would vitiate the purpose of the charge: a CLEC would be paying a higher charge and would not be receiving expedited service. We agree with AT&T/WorldCom that there would be little, if any, incentive for Verizon to provide the service in the shorter interval if it were permitted to retain the expedited charge in those circumstances when service was not provided in the shorter period of time. We disagree with Verizon’s contention that the principle underlying the federal tariff should not be applied to the state tariff. The notion

that one should only pay for services received is on point irrespective of the nature of the service. Verizon's request for rehearing on this point will be denied.

AT&T/WorldCom Petition for Rehearing

AT&T/WorldCom ask the Commission to reconsider two issues in the Compliance Order. First, AT&T/Worldcom argue that in the UNE Compliance Order the Commission erroneously failed to require Verizon to revise its tariffs to reflect non-recurring charges (NRCs) based on the 2% fallout rate that the Commission allegedly ordered. Second, AT&T/WorldCom contend that Verizon unilaterally changed the application of rates pertaining to the lease of an Entrance Facility with the result that competitors are subject to an additional fixed charge, without justification in the record.

Non-Recurring Charges – 2% Fallout Rate

"Fallout rate" is the percentage of CLEC orders that cannot be processed electronically by Verizon and must be handled manually. AT&T/WorldCom argue that the Commission failed to require Verizon to apply a 2% fallout rate, which, according to AT&T/WorldCom, was required by the UNE Rate Order to be applied more broadly.[13] According to AT&T/WorldCom, the Commission's finding that "no party excepted to how Verizon applied the 2% fallout rate recommendation in its 'RD compliant rates'"[14] is irrelevant because AT&T/WorldCom were "specifically

[13] The 2% fallout was applied to the Recent Change Memory Access Center (RCMAC) and the Mechanized Loop Administration Center (MLAC). This was consistent with the application of the 2% fallout rate adopted by the Massachusetts Department of Telecommunications and Energy (Massachusetts DTE), which was referred to by AT&T in this proceeding before the Judge and the Commission.

[14] Compliance Order, p.16.

instructed by the Commission that there was 'no need to comment now on purely computational issues in order to preserve the right to raise such issues in connection with the ultimate compliance filing.'"[15] AT&T/WorldCom argue that they cannot now be prejudiced because they followed the instructions in the letter.

Moreover, according to AT&T/WorldCom, the Recommended Decision and the UNE Rate Order each specifically adopted the 2% fallout rate urged by AT&T. In the Recommended Decision, AT&T/WorldCom state that Judge Linsider specifically rejected Verizon's argument and accepted AT&T's when he stated:

> "While Verizon contends its fallout rate is extremely optimistic, the record does not show it to have borne its burden of proving that to be the case. Fallout rates can be expected to decline as experience is gained with more efficient OSS, and it is important that rates here be set on the premise of minimal fallout. *Overall, I recommend the 2% level advocated by AT&T.*"[16]

The fact that the Commission intended that the 2% fallout rate apply across the board to all NRCs, according to AT&T/WorldCom, is underscored by Verizon's argument on exceptions that "a 2% across-the-board fallout rate would be unreasonable and contrary to the record in this case."[17] Verizon's general exception was denied, with a single

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[15] AT&T/WorldCom Petition for Rehearing, p. 2, citing Letter from Janet Hand Deixler, Secretary to the Commission, to Robert D. Mulvee, Esq., Senior Attorney, AT&T, and Joseph A. Post, Esq., Regulatory Counsel, Verizon New York Inc. (July 10, 2001).

[16] AT&T/WorldCom Petition for Rehearing, p. 9, citing Recommended Decision, p. 190 (emphasis supplied by AT&T/WorldCom).

[17] AT&T/WorldCom Petition for Rehearing, p. 9, citing Verizon's Exceptions to the Recommended Decision, p. 79.

alteration, the Commission concluding "the Judge had ample record basis for his 2% fallout rate."[18]

With regards to the Massachusetts DTE decision, which was referred to by AT&T and in the Recommended Decision and the UNE Rate Order, AT&T/WorldCom suggest it may have generated confusion. AT&T/WorldCom explain that "[t]he 1999 Massachusetts Order adopted a 2% fallout rate and stated that the adoption of the 2% fallout rate would reduce the assigned costs of Bell Atlantic's Recent Change Memory Access Center ("RCMAC") and Mechanized Loop Administration Center ("MLAC"), the two entities which handle fallout from the OSS, to near zero in the NRC study" [footnote omitted].[19] However, AT&T/WorldCom now posit that "[f]or reasons unique to the particular structure of Verizon's cost submission and the record in the Massachusetts proceeding, the 1999 Massachusetts Order did not reference the TISOC [Telecom Services Industry Service Order Center]."[20]

AT&T/WorldCom state that they are not requesting that the Commission order Verizon to lower the NRCs, but only to make the NRCs compliant with the UNE Rate Order. In their view, Verizon has had this argument rejected twice and it should not now be granted due to computational errors made by staff. Further, contrary to Verizon's assertion that staff's calculations were the "law of the case," AT&T/WorldCom assert that such was not the case and, as discussed above, were instructed not to comment on them. The Commission, in

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[18] AT&T/WorldCom Petition for Rehearing, p. 9 citing UNE Rate Order, p. 143.

[19] AT&T/WorldCom at 15.

[20] AT&T/WorldCom at 16. Application of the 2% fallout rate to the TISOC, which is an entity that handles fallout from the OSS, would lower Verizon's non-recurring charges.

AT&T/WorldCom's view, has therefore committed an error of law by holding WorldCom and AT&T accountable for not excepting to Verizon's Recommended Decision compliant rates.

According to Verizon, on the other hand, AT&T/WorldCom have a fundamental misunderstanding of the application of the fallout rate. Verizon states that the Commission could not have intended that "all work processes that are involved in the provisioning of UNEs will be fully automated at least 98% of the time."[21] Fallout, as defined by Verizon, "is properly limited to those situations in which orders for valid reason drop out from a normally electronic (or 'flow-through') process. It has no relevance to activities that cannot normally be carried out on a flow-through basis."[22]

Verizon argues that the estimated Recommended Decision rates support its interpretation of fallout. According to Verizon, staff did modify the application of flow-through percentages of less than 98% for certain types of processes and orders. Verizon states that if staff had applied a 2% "manual processing" rate universally, rates would have been much lower and Verizon would have excepted. Further, Verizon states that it excepted to the Recommended Decision's 2% recommendation in one instance, and the Commission agreed with that exception. This underscores, in Verizon's view, that Verizon understood that the 2% fallout factor was to be applied to processes that were not inherently manual in the forward-looking construct. Moreover, the Commission's decision to grant the exception demonstrates that the Commission did not regard the factor as applicable to an activity where manual work was needed.

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[21] Verizon response, p. 3.

[22] Id.

Procedurally, Verizon argues that AT&T/WorldCom are precluded from raising this issue now because they failed to except to these rates at the proper time. AT&T/WorldCom's statement that they were instructed not to comment on purely computational issues is, in Verizon's view, inconsistent with the fact that they did except to other aspects of staff's computations. Further, the application of the 2% factor is a substantive decision, not a computational issue. Therefore, AT&T/WorldCom's decision to raise this issue now is, according to Verizon, in violation of Procedural Rule 4.10.

Discussion

The question presented is to which of the numerous activity work centers that are identified in Verizon's non-recurring cost model did the Commission intend to apply the 2% fallout rate. AT&T/WorldCom claim it should apply to virtually all functions. Verizon contends, on the other hand, that the Commission could not have intended that all work processes that are involved in the provisioning of UNEs will be fully automated at least 98% of the time.

As a threshold matter, Verizon, citing §4.10(d)(2) of the Commission's rules, challenges the petition on procedural grounds. The position advocated by AT&T was adopted in the body of the Recommended Decision, and the Appendix to the Recommended Decision, which described how Verizon's model would be adjusted, applied the 2% fallout rate to only two entities. Contrary to AT&T/WorldCom's claim, the Appendix to the Recommended Decision titled "Summary of Recommended Adjustments to Verizon's Cost Studies" was substantive and provided a concrete application of the decisions reached. Thus, AT&T could have, and should have, excepted. However, because the issue here is what the UNE Rate Order required, not whether it should be modified, we turn to the merits of the petition.

The Recommended Decision applied a 2% fallout rate in the manner set forth in the Appendix to the Recommended Decision. That limited 2% application, which did not include the TISOC, was adopted by the Commission in the UNE Rate Order. AT&T/WorldCom's attempt to now apply the 2% fallout rate to the TISOC is simply not persuasive.

Given the specific limitation on application of the 2% fallout rate in the UNE Rate Order, read with the Appendix to the Recommended Decision, our decision should be construed as applying the 2% fallout rate narrowly. Thus, Verizon's filing will be found to be in compliance with the Commission's decision.

The pleadings in this case do, however, raise questions as to whether the Commission should prospectively apply the 2% fallout rate to entities that handle fallout from the order intake portion of the OSS. Because we now understand that the TISOC is one of the entities that handles fallout from the order intake process, which is a highly automated process, a narrow application of the 2% fallout rate may be incorrect.

Moreover, Verizon's use of a 23% fallout rate for the TISOC is significantly higher than recent, actual fallout rates. As Verizon acknowledges in its response to the AT&T/WorldCom rehearing petition, its fallout rate for all UNE orders has ranged from approximately 7% to 10% over the past nine months, and this range reflects a significant decline from 2000. For these reasons, the Commission will, on its own motion, call for comment on whether the 2% fallout rate should be applied to the TISOC. By a separate Notice, the parties will be given a brief comment opportunity on whether the 2% fallout rate should be applied to the TISOC.

Entrance Facilities

AT&T/WorldCom posit that, throughout the proceeding, Verizon defined "entrance facility" as a type of loop, not part of the loop nor an additive of the loop.[23] Moreover, because of Verizon's definition, entrance facilities were not specifically mentioned in the Recommended Decision nor the UNE Rate Order. However, in the compliance filing, Verizon identified entrance facilities as "interoffice transport entrance facilities," defined as "unbundled transport facilities between the [CLEC's] switch and the [Verizon] serving wire center."

AT&T/WorldCom state that there is no record evidence for this redefinition. Further, while Verizon states that this is a mere reclassification, AT&T/WorldCom argue that it would significantly increase competitors' costs because a CLEC would have to lease three elements to create the same circuit, rather than two. Therefore, competitors would now have to pay three fixed charges, plus mileage.

AT&T/WorldCom state that they are not complaining about the validity of entrance facility rates, rather the issue is whether the application of the rates as set forth in the compliance tariff is consistent with the record in this case. AT&T/WorldCom state that it is not. If Verizon intended that entrance facilities were to be part of interoffice transport, then Verizon had the obligation to set that forth in its testimony and prove it, which it did not do. AT&T/WorldCom suggest two alternatives. First, the Commission can direct Verizon to file tariffs that implement entrance facilities as defined throughout the case. Or, should the Commission determine that the new definition is proper, then due process requires that the parties have an opportunity to examine and

[23] AT&T/WorldCom Petition for Rehearing, pp. 20-21.

litigate the costs of an interoffice transport network that includes entrance facilities.

Verizon refutes AT&T/WorldCom's argument that since Entrance Facilities were discussed in the loop section of Verizon's testimony, the approved rates cannot be applied to anything other than loops. According to Verizon, the facilities between Verizon's serving Wire Center (SWC) and the CLEC switch are part of interoffice facilities (IOF), which is explicitly stated in the FCC's definition of IOF.[24] For AT&T/WorldCom to argue that they were unaware of this configuration, according to Verizon, is not credible. Further, Verizon clearly stated this construct in response to an interrogatory by the CLEC Coalition.[25]

RCN Telecom Services, Inc.

RCN submitted in lieu of a brief a letter dated December 5, 2002 in support of AT&T/WorldCom's petition concerning Entrance Facilities. RCN agrees that Verizon unilaterally changed the definition of entrance facilities with the effect that CLECs must now be collocated at a Verizon central office at one end of a facility and have a switch at the other end. RCN argues that these two conditions are both inconsistent with FCC precedent and rules and are, hence, unlawful. According to RCN, the FCC expressly stated that "There is no requirement that a competitive LEC collocate at the incumbent LEC's wire center or other facility in order to

[24] Verizon response, pp. 14, 15, citing Local Competition Order, ¶440.

[25] Verizon response, pp. 15, 16.

purchase UNE dedicated transport."[26] Further, RCN states that the FCC does not require that dedicated transport be connected to a switching facility. Relying on the definition of dedicated transport,[27] RCN argues that there is no requirement that a switch be present at a CLEC's location, nor is there an order from the FCC requiring such. RCN concludes that the Commission should grant AT&T/WorldCom's petition on this point and direct Verizon to file tariffs that remove entrance facilities from dedicated transport and add it to the loop category without CLEC switching or collocation requirements.

Verizon responded to RCN's letter on December 10 and urges the Commission to reject it on several grounds. First, Verizon states that RCN's pleading is not authorized by §3.7(c) of the Commission's Rules. In addition to RCN summarizing AT&T/ WorldCom's arguments, Verizon states that RCN is introducing new arguments that are not addressed in AT&T/WorldCom's petition. According to Verizon, introduction of new arguments for reversing or modifying an order is not a "response" to a reconsideration petition; rather, it is a new and separate petition seeking rehearing of the Commission's order on separate grounds, which has been untimely filed. Such a filing was due within 30 days of the order, or November 14, 2002. Verizon

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[26] RCN at 3, citing Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection disputes with Verizon Virginia, Inc. and for Expedited Arbitration, CC Docket Nos. 00-218 and 00-249, Memorandum Opinion and Order, DA 02-1731 (Chief, Wireline Competition Bureau rel. July 17, 2002), ¶217.

[27] 47 C.F.R. 51.319(d)(1)(A)- Dedicated transport are those transmission facilities "between wire centers owned by the incumbent LECs or requesting carriers, or between switches owned by the incumbent LECs or requesting carriers."

avers that RCN's December 6 filing is unauthorized and should be ignored by the Commission.

With respect to the merits of RCN's claim, Verizon cites Section 5.3.1 of PSC No. 10, which "recognizes that collocation may not be required where an Entrance Facility (or, indeed, IOF in general) is accessed or utilized through UNE combinations such as UNE-P [UNE-Platform], EELs [Expanded Extended Link], or Extended Dedicated Trunk Ports."[28] Positing a "typical EEL arrangement" as an example, Verizon states that the IOF facilities would be connected at a Serving Wire Center and at a second Verizon wire center. At the second wire center, the IOF facilities would be cross-connected to a loop. This would not require collocation, even though the Entrance Facilities are at the CLEC end of the circuit.

Verizon refutes RCN's contention that a switch is required at one end of the entrance facilities. Citing PSC No. 10 Section 5.3.1, Verizon states that its tariff "provides for IOF between locations other than carriers' switches or wire centers, but in those cases no Entrance Facilities are utilized, and thus no Entrance Facility changes apply."[29] In Verizon's view, it is the presence of a carrier's switch that could require the use of Verizon's Entrance Facilities; the Entrance Facilities do not require the use of a switch.

Discussion

The thrust of AT&T/WorldCom's argument is that Verizon, in its UNE Compliance filing, unilaterally expanded the definition of interoffice transport facilities (IOF) to include an additional element, Entrance Facility. Although Verizon

[28] Verizon Response to RCN letter at 4.

[29] Verizon Response to RCN letter at 6 [footnote omitted].

contends that its tariff only reclassified entrance facilities from loop plant to interoffice plant and does not affect the validity of the rates, AT&T/WorldCom conclude that such rates in Verizon's compliance filing are not consistent with the record in this case. If entrance facilities were to be part of the interoffice network, then Verizon's testimony should have clearly said so.

The record in this case reflects a fully litigated examination of the cost studies underlying UNEs proposed by Verizon. Those cost studies, and the supporting testimony and exhibits, addressed the network elements required to complete the interoffice circuit from a CLEC's point of presence through Verizon's interoffice network to an end-user customer.

Verizon's testimony specifically defined that, for cost study purposes, the dedicated interoffice facility element included transmission facilities only between Verizon-owned wire centers. On the other hand, Verizon Entrance Facility cost studies specifically included equipment configurations used to provide a high capacity (DS-1 and above) transport path between a Verizon central office (or Serving Wire Center) and a customer's premises. According to Verizon, the "customer" may be a CLEC end-user customer, in which case the configuration would comprise a high capacity loop. If the "customer" is a Verizon wholesale customer (i.e., a CLEC), the customer's premises would be its wire center or switch location and the equipment would be part of the IOF UNE. Thus, the company's cost studies appropriately examined each element of the full IOF transport path from the CLEC's central office through the Verizon network to the CLEC's end-user customer and there does not appear to be any overlap of charges among those cost elements.

The confusion surrounding this issue appears to be that, in the UNE case, Verizon's supporting documentation for Entrance Facilities was included with the discussion of loop plant rather than with interoffice facilities. But the tariff filing shows Entrance Facility as a part of the IOF transport path. However, as Verizon points out, the equipment configuration studied by Verizon in its Entrance Facility cost studies is used both in some loops and in some IOF arrangements. Thus, where applicable, entrance facility is a valid component of interoffice transport.

The application of the rates set forth in the compliance tariff is consistent with the record in the UNE case. The cost studies underlying the individual elements were part of the record and all parties had the opportunity to examine and litigate the cost of interoffice transport and entrance facilities. AT&T/WorldCom's request to require Verizon to change the non-recurring charges associated with Entrance Facilities will be denied.

Verizon is correct that the Commission should reject RCN's letter submitted in lieu of a brief. Introduction of new arguments that are not addressed in AT&T/WorldCom's petition is not authorized by §3.7(c) of the Commission rules. Further, Verizon has adequately explained that there is no merit to RCN's contention that Verizon is seeking to impose some new collocation or switching requirements on CLECs that wish to use Entrance Facilities.

CONCLUSION

The Commission will: deny Verizon's request to retain "expedite" charges when Verizon is unable to provision services within a shorter interval; deny Verizon's request to restore certain port rates to levels that it set forth in its tariff

filing; deny AT&T/WorldCom's request to direct Verizon to revise the non-recurring charges based on the 2% fallout rate, but issue a separate Notice seeking further comment on whether the 2% fallout rate should be applied to the TISOC; and deny AT&T/WorldCom's request to require Verizon to change the non-recurring charges associated with Entrance Facilities.

The Commission orders:

1. The rehearing petition filed by Verizon New York Inc. is denied.

2. The rehearing petition filed by AT&T Communications of New York with WorldCom, Inc. is denied.

3. The arguments raised by RCN Telecom Service, Inc. in its letter in lieu of a brief are rejected.

4. This proceeding is continued.

By the Commission,

(SIGNED) JANET HAND DEIXLER
Secretary