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

[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

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[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

[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 not 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

[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."