II. ECONOMIC PRINCIPLES

Apparently unwilling or unable to refute Verizon VA's interpretation of TELRIC or to defend their own interpretation as more economically correct, AT&T/WorldCom resort to distortions of Verizon VA's studies and contorted interpretations of testimony and briefs filed in other proceedings. Their tactics cannot, however, distract from the key point: Verizon VA has interpreted and applied TELRIC in the most economically appropriate manner that, to the extent possible given the regulatory constraints, reflects the rational decisions Verizon VA would make going forward, acting efficiently over the long run. Petitioners, on the other hand, have adopted an extreme interpretation that makes no economic sense, is concededly unrelated to the real-world operation of competitive markets, and fails to account for the competitive and regulatory risks inherent in TELRIC. Moreover, as Verizon VA demonstrated in its initial brief and AT&T/WorldCom fail to refute in theirs, Petitioners do not even consistently apply their own interpretation of TELRIC in their studies; most notably, for example, they use entirely inconsistent assumptions to support their unjustifiably low proposals for the cost of capital and depreciation.

A. Verizon VA's Studies Are Long Run and Forward-Looking.

AT&T/WorldCom's claim that Verizon VA's studies are neither long run nor forward-looking is based on a misunderstanding or misrepresentation of those studies and key economic principles. Petitioners initially allege that Verizon VA's models "are not long-term studies but instead look forward only three years." (AT&T/WCom Br. at 13.) But, while Verizon VA's studies do use a three-year period to select the forward-looking mix of some technologies that would be used in building out the network,[1] to determine productivity and inflation, and to levelize labor rates, the recurring cost studies do not simply project what the network will look like in three years.[2] Instead, as Verizon VA has repeatedly explained, the technology mix assumed for the forward-looking network in its recurring studies reflects greater amounts of fiber, IDLC, and GR-303 than Verizon VA expects will ever be deployed in its network, let alone in three years. (*See, e.g.*, VZ-VA Br. at 12-13.) Indeed, AT&T/WorldCom acknowledge precisely this point: as they note, Verizon VA's methodology "produce[s] a mix of technologies for loops (including an *extraordinarily high* percentage of fiber and DLC) that Verizon does not anticipate having as its average blend of technology at *any* point in the foreseeable life of its assets." (AT&T/WCom Br. at 16 n.11 (first emphasis added).)

Moreover, the use of a three-year study period for the limited purposes just described is entirely reasonable. As Drs. Shelanski and Tardiff explained, a real-world long-run study is necessarily constrained by how far into the future the analyst can reasonably make predictions. (VZ-VA Br. at 18-19.) Indeed, that would be true even if the study did not include an express

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1/ AT&T/WorldCom assert that there is no reason to believe that the technology mix Verizon VA expects to use for new construction could serve as a useful proxy for the forward-looking mix of that technology over the new network. (AT&T/WCom Br. at 48.) This point is mystifying — it is hard to think of a better proxy for the real-world, forward-looking mix of technology that an efficient carrier would deploy, particularly when Petitioners have already conceded that Verizon VA's technology choices for new construction may well be "entirely rational." (AT&T/WCom Ex. 11 at 17; Tr. at 5631-32.) As explained, Verizon VA assumed this technology mix would be deployed network-wide, even though such widespread deployment would not occur by the end of three years or any time in the foreseeable future. (VZ-VA Br. at 13.)

2/ Verizon VA's *non-recurring* cost study does assume the forward-looking mix of the technology that it expects to have in place at the end of the three-year planning period. As Verizon VA has previously explained and discusses again below, this approach is entirely appropriate for non-recurring costs. (*See, e.g.*, VZ-VA Br. at 183-84.)

limitation on the length of the planning period — if the analyst cannot reasonably make predictions beyond three years, freeing the analyst to look beyond that time adds nothing to the value or reliability of the study. And Petitioners offer absolutely no evidence to challenge Verizon VA's conclusion that, in the rapidly evolving telecommunications marketplace, a reasonable period is three years.[3]

AT&T/WorldCom alternatively suggest that Verizon VA's study cannot be long-run because it does not start from a completely blank slate and instead considers whether to retain existing assets in the network. In particular, AT&T/WorldCom argue that to consider the choice of keeping an existing asset is "to be constrained by the existing network." (AT&T/WCom Br. at 15.) But that is nonsensical. By eliminating even the possibility of retaining an asset or network characteristic, Petitioners are the ones who seek to constrain Verizon VA's possible choices: Considering an additional choice cannot seriously be termed imposing a constraint. Petitioners are left with no response to the testimony of Drs. Shelanski and Tardiff establishing that the key to a long-run analysis is to permit all facilities and characteristics to be variable and to assume replacement or change only where it is efficient to do so. As Drs. Shelanski and Tardiff explained, that is what Verizon VA's studies do. (*See* VZ-VA Br. at 16-19.)

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[3] Petitioners suggest that a foreseeability limitation is unnecessary because the Commission's rules limit TELRIC to consideration of technologies that are "currently available." (AT&T/WCom Br. at 16.) In addition to being highly ironic since, as discussed below, Petitioners frequently assume the use of technologies that are *not* currently available, their argument misses the point. Even if the set of technologies is known, a long-run study still requires judgments concerning what decisions will be most efficient over the long run in view of factors such as changes in demand and the pace of expected technological change — factors that are as difficult to predict as what the next best technology will be.

AT&T/WorldCom try a different version of this same argument by claiming that, because Verizon VA's model incorporates some existing network characteristics such as loop routes, its methodology necessarily was embedded rather than forward-looking. (AT&T/WCom Br. at 13, 49-51.) But as Verizon VA has explained, assuming the continued existence of a network characteristic is perfectly consistent with a forward-looking study so long as that characteristic represents the most efficient way of providing service in Virginia. (VZ-VA Br. at 15-16.) Verizon VA determined that the existing characteristics embodied in its model meet that test. Petitioners have made no contrary showing — indeed, as discussed in Verizon VA's initial brief, they have not even identified a single route that they believe would be more efficient if changed.

The test of a forward-looking, long-run study is not whether every facility or network characteristic is different from the current one. Rather it is whether, having considered the available options, the carrier has modeled the facilities and network characteristics that are as cost efficient over the long run (even if they would not always be the lowest cost at this very moment in a hypothetical static world) as the regulatory framework permits, and that result in a network capable of providing the requisite services with the appropriate service quality. In these proceedings, only Verizon VA's studies meet this test.

B. Verizon VA's Studies Comply with the Most Economically Appropriate Interpretation of TELRIC.

Rather than grapple with Verizon VA's substantive analysis, AT&T/WorldCom devote much of their discussion concerning TELRIC to their contentions that Verizon VA's witnesses were unwilling to declare its studies TELRIC-compliant and that Verizon has taken a different view of TELRIC in other proceedings. In both cases, however, Petitioners distort or take out of context what Verizon and its witnesses have said and attempt to manufacture inconsistencies where none exist. Verizon VA's economic witnesses have unequivocally stated that the studies comply with the most economically appropriate interpretation of TELRIC. And regardless of how TELRIC has been interpreted by Verizon, CLECs, or some state commissions, the issue here is this Commission's interpretation of TELRIC. This proceeding presents the Commission with a clear opportunity to adopt the most economically appropriate interpretation of TELRIC and to reject an extreme and unrealistic interpretation.

AT&T/WorldCom's assertion that Dr. Shelanski has been unwilling to state that Verizon VA's studies are TELRIC-compliant is simply wrong. (AT&T/WCom Br. at 19.) In fact, Dr. Shelanski could not have been more clear in his direct testimony, when in response to the question "[i]s Verizon VA's cost model consistent with TELRIC," he unequivocally answered "[y]es." (VZ-VA Ex. 101 at 35; *see also* VZ-VA Ex. 101 at 3 (Verizon VA's model "complies with a reasonable interpretation of the Commission's TELRIC regime."); VZ-VA Ex. 117 at 21 ("Verizon VA's studies conform to the most economically appropriate interpretation of TELRIC.") Similarly, during the hearings, Dr. Shelanski stated that he "would be happy to explain why I think Verizon's model is consistent with an interpretation of total element long run incremental costs." (Tr. at 2834.)

Petitioners nevertheless seize upon Dr. Shelanski's testimony that he "can't really comment on what objectively as a legal matter the Commission's TELRIC rules are," as though that amounts to an admission concerning his view of Verizon VA's studies. (AT&T/WCom Br. at 19.) In fact, Dr. Shelanski was simply recognizing that TELRIC has been subject to different interpretations, including the extreme view offered by Petitioners; thus, he could not opine that Verizon VA's study was compliant with the *Commission's* interpretation of TELRIC without knowing what interpretation the Commission would ultimately adopt. Rather than presumptuously tell the Commission what it had meant, Dr. Shelanski simply testified that, in his view, Verizon VA's studies complied with the most economically appropriate interpretation of TELRIC.

Petitioners are forced to admit that Dr. Tardiff similarly endorsed Verizon VA's studies as TELRIC-compliant. (AT&T/WCom Br. at 20.) As they note, Dr. Tardiff stated that Verizon VA's model "complies with a reasonable interpretation of what [the TELRIC] rules are." (Tr. at 2855.) Petitioners attempt to take the sting out of this testimony by suggesting that Dr. Tardiff took a different view of TELRIC in an article he previously co-authored, which observed that the Commission "has explicitly rejected proposals by the ILECs that the rates be 'based on' their own projected actual incremental costs . . . ." (AT&T/WCom Br. at 20.) But as Verizon VA has repeatedly noted, Verizon VA's studies are *not* based on its "own projected actual incremental costs." Indeed, it has explained that TELRIC — and Verizon VA's TELRIC-compliant studies — necessarily understate the "actual incremental costs" it expects to incur.[4/] (VZ-VA Br. at 10.)

Petitioners also proffer the non sequitur that Verizon VA's economic witnesses must not have been willing to testify that Verizon VA's studies are TELRIC-compliant because they expressed certain disagreements with TELRIC itself. (AT&T/WCom Br. at 19-20.) It is certainly true that Drs. Shelanski, Tardiff, and Hausman, as well as Verizon itself, believe that

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[4/] Perhaps recognizing the futility of their characterization of Dr. Shelanski's and Dr. Tardiff's testimony, Petitioners focus much of their attention on the failure of Dr. Hausman to discuss TELRIC. (AT&T/WCom Br. at 18-19.) However, the purpose of Dr. Hausman's testimony was not to opine on Verizon VA's studies' compliance with TELRIC or even to address Verizon VA's studies at all. Instead, as is evident from even a cursory reading of his testimony, Dr. Hausman focused on a narrow, albeit critical, point: that AT&T/WorldCom's MSM is internally inconsistent and fails to properly measure economic costs because it does not account for the effects of sunk costs and depreciation, which would be particularly significant under the MSM's radical assumptions of instantaneous, ubiquitous replacement. (VZ-VA Ex. 111 at 5-20.)

TELRIC is not economically correct and understates forward-looking costs. Indeed, as Petitioners note, Dr. Shelanski observed that in order to comply with TELRIC's constraints, Verizon VA's studies in some cases departed from what would be economically correct. (Tr. at 2949; *see also* VZ-VA Ex. 101 at 21-22.) But Verizon's and its witnesses' belief that TELRIC itself understates Verizon VA's forward-looking costs says nothing about whether Verizon VA's studies are TELRIC-compliant. As explained above, Drs. Shelanski and Tardiff unequivocally testified that they believed the studies do comply with TELRIC. Indeed, the fact that Verizon VA deviated from what it believes to be economically correct and thereby understated its costs actually underlines the fact that it designed its studies to comply with TELRIC.

AT&T/WorldCom finally attempt to suggest that Verizon VA's interpretation of TELRIC here differs from the interpretation voiced in Verizon's briefing before the Supreme Court. (AT&T/WCom Br. at 17-18.) They note, for example, that Verizon stated in its Supreme Court brief that TELRIC is not "tied to the incumbent's actual network and present or future cost structure." (AT&T/WCom Br. at 17.) But the supposed inconsistency to which Petitioners point is illusory. Neither Verizon VA's studies nor its interpretation of TELRIC here is premised on the belief that TELRIC permits full recovery of Verizon VA's "present or future cost[s]" or must be based on Verizon VA's "actual network." To the contrary, Verizon's cost studies here *understate* Verizon's present and future costs precisely because those studies *do* comply with TELRIC. In any event, these proceedings provide the Commission with an opportunity to apply its own interpretation, and it should apply the most economically rational one.

Indeed, the Commission's own reply brief in the Court demonstrates that the extreme view proposed by some CLECs is not the correct interpretation of TELRIC. It makes clear, for example, that TELRIC does not require assumptions such as the instantaneous, ubiquitous replacement inherent in Petitioners' model. As the Commission explained, while a replacement network such as the MSM has all-new switches with the requisite capacity to serve all current demand, "TELRIC . . . does *not* assume that an efficient carrier would provide the switching element with large-capacity switches, rather than with a mix of smaller switches and so-called 'add-on modules.'"[5/]

In the end, Petitioners' suggestions that Verizon VA's economic witnesses did not endorse its models as TELRIC-compliant or that Verizon VA's interpretation of TELRIC is inconsistent with Verizon's Supreme Court brief serve as little more than unsuccessful attempts to distract from the substantive issues in these proceedings. As Drs. Shelanski and Tardiff clearly testified, Verizon VA's cost studies not only comply with TELRIC, they comply with the most economically appropriate interpretation of TELRIC. And it is that interpretation the Commission should adopt here.

C. AT&T/WorldCom Advocate an Extreme Version of TELRIC that Their Own Studies Even Fail To Apply Consistently.

AT&T/WorldCom's claim that Verizon VA has not challenged that their studies are TELRIC-compliant (AT&T/WCom Br. at 12) is misleading and overlooks two basic points. First, the extreme interpretation they posit is unrelated to the real-world operation of competitive markets and is economically indefensible. Second, AT&T/WorldCom do not even apply their interpretation consistently: while they assume instantaneous and ubiquitous deployment of new

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5/ Reply Brief for Petitioners Federal Communications Commission and the United States, *Verizon Communications, Inc., et. al. v. Federal Communications Commission, et. al.*, Nos. 00-511, 00-555, 00-587, 00-590 and 00-602 at 9 n.7 (July 2001) (emphasis added) ("FCC Reply Brief").

technologies in a competitive market when it produces lower costs in their model, they ignore those assumptions when determining the cost of capital and depreciation, presumably because consistent application of those assumptions would increase costs. Even their own economist could not defend this approach.

As Verizon VA explained in its testimony and initial brief, AT&T/WorldCom's assumption that forward-looking costs are immediately driven down to the costs of a network that instantaneously and ubiquitously contains the current least-cost technology has nothing to do with the real-world economics of a competitive market, particularly one characterized by significant uncertainty concerning future changes in technology and demand and high sunk costs. (VZ-VA Br. at 19-23.) AT&T/WorldCom respond by asserting that Verizon VA has caricatured their theory because "TELRIC is not based on the insane assumption" that a carrier would repeatedly rebuild its existing network from scratch. (AT&T/WCom Br. at 24.) Instead, they say, their model assumes:

> [A] *hypothetical* carrier using the most up-to-date technology serving total demand . . . *whether or not it or any other carrier deploys the most recent technology.* The economic assumption upon which the model is based, in other words, is *not* that there will be some carrier in the real world that every three years actually deploys a network identical to the one that TELRIC hypothesizes.

(AT&T/WCom Br. at 24 (emphasis in original).) AT&T/WorldCom's response reveals one of the most fundamental flaws in their approach. They acknowledge — as they must — that they do not expect that a carrier would actually enter the market under the assumptions they make. But if no real-world carrier would engage in the concededly irrational exercise of instantaneously building a complete network with the newest technologies, then costs in a real-world competitive market would not be affected (let alone be reduced) by that entirely theoretical possibility. In other words, if no competitor would ever exist that would or could build a network and deploy the plant and technology in the manner Petitioners advocate, the theoretical costs of that hypothetical network would simply not be a competitive consideration.

As Drs. Shelanski and Tardiff explained, the costs in a competitive market are a product of the "rational business decisions" made by competitors and potential entrants — any attempt to "divorce business decisions from costs and prices is bizarre." (VZ-VA Ex. 117 at 9-10.) Yet that is precisely what AT&T/WorldCom propose to do here. A firm in a competitive market does not dream up hypothetical scenarios about entry by an ideally efficient competitor that would have the lowest possible short-run costs and then price as though it faced such irrational entry. Rather, potential competition from a new entrant can affect costs and prices only if an existing firm faces a realistic prospect of that competition. AT&T/WorldCom have now conceded that they have no reason to believe that a rational carrier *would* enter under the assumptions they make. They assert that this fact is irrelevant, but to the contrary: it means their hypothetical entrant is irrelevant to a real-world carrier's forward-looking costs.

AT&T/WorldCom next assert that, regardless of how real-world carriers rationally act, the value of their facilities is necessarily equal to the costs of the most current, least cost technologies. (AT&T/WCom Br. at 24-25.) Verizon VA previously explained the numerous fallacies in this assumption (VZ-VA Ex. 117 at 12-14; VZ-VA Br. at 23-26), and Petitioners do not even attempt to respond or offer any support for their claim. What they do instead is blatantly misquote Dr. Shelanski's testimony. AT&T/WorldCom state that Dr. Shelanski testified that "the mere existence of new technology lowers recurring costs whether or not it is efficient for the carrier to deploy new technology . . . ." (AT&T/WCom Br. at 25.) In fact, what Dr. Shelanski explicitly said was that "the mere existence of new technology *may* lower recurring costs whether or not it is efficient yet for the carrier to actually deploy that new technology." (VZ-VA Ex. 110 at 21 (emphasis added).) This difference is critical.

As Dr. Shelanski explained, the effect of new technology on recurring costs requires a complex analysis and depends on numerous factors. It is certainly not the simple and direct relationship AT&T/WorldCom assume. The issue here is not the value of a piece of telecommunications equipment on the secondary market, but the appropriate rate for services provided over that facility as part of a network. Even if the development of a new generation of planes by Boeing might reduce the resale value of an older plane, it would not necessarily reduce the price for a passenger's seat on an airline. And any such possible effect would likely be quite small and slow to develop, particularly because airlines would be likely to deploy the new planes incrementally (if at all). Moreover, any assessment of the effect of new technologies must consider the full cost of deploying those new technologies, particularly the cost of capital and depreciation, which would increase substantially to the extent one assumes faster deployment of the new technology. (*See* VZ-VA Br. at 23-26.)

AT&T/WorldCom do not even begin to address these complexities. Indeed, rather than estimate a cost of capital and depreciation in a manner consistent with their assumption that TELRIC requires determining costs as though the incumbent is subject to competition with a firm that instantaneously and ubiquitously deploys the latest technologies, Petitioners base their cost of capital and depreciation on a monopoly market. (*See* VZ-VA Br. at 26-29.) Even AT&T/WorldCom's own economist, Ms. Murray, conceded the fallacy of this approach and acknowledged that "all the model assumptions have to be consistent. So, to the degree that it requires a competitive market to get all of the other assumptions, that would be true for the cost of capital as well." (Tr. at 3202.) Petitioners' model fails this basic test and thus is not only inherently invalid but fails to accord consistently even with Petitioners' own view of TELRIC.

Petitioners' cost of capital and depreciation calculations are further flawed because they fail to take account of the risks inherent in the instantaneous replacement assumptions in their TELRIC theory. (*See* VZ-VA Br. at 28-29.) As Dr. Hausman explained, an appropriate model must account for the risks associated with sunk costs and economic depreciation, particularly because failing to account for sunk costs would confer a free option on CLECs. (VZ-VA Ex. 111 at 7-20.) While AT&T/WorldCom assert that the Commission simply rejected Dr. Hausman's analysis (AT&T/WCom Br. at 22-23), the Commission in fact recognized the need to take these factors into account; it simply indicated that it believed TELRIC itself could account for these factors if properly applied.[6/] If there were any doubt on this point, it was put to rest when the Commission reaffirmed in its reply brief to the Supreme Court that "an appropriate cost of capital determination takes into account not only existing competitive risks . . . but also risks associated with the regulatory regime to which a firm is subject."[7/] Petitioners, who dispute the need to even account for these risks, clearly have not done so in their model. Thus, in this respect as well, their model is not compliant with even their extreme interpretation of TELRIC.

6/ *See* First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499, 15849 ¶ 686 (1996) (*"Local Competition Order"*) ("We agree . . . that . . . the combination of significant sunk investment, declining technology costs, and competitive entry may increase the depreciation costs and cost of capital of incumbent LECs."); *see also id.* ¶¶ 687-88.

7/ FCC Reply Brief at 12 n.8.

III. GLOBAL STUDY INPUTS

A. The Depreciation Lives Verizon VA Used in Its Studies Are Forward-Looking and Appropriate.

As Verizon VA has explained, the depreciation lives in Verizon's studies were determined using Generally Accepted Accounting Principles ("GAAP"). These lives are the same reliable, accurate, unbiased lives that have been previously approved by the Commission[8/] and that Verizon used for its 2000 financial reports. Although GAAP lives cannot possibly account for the risks inherent in TELRIC's successive replacement methodology, much less the extreme version of TELRIC advanced by Petitioners, GAAP lives are inherently forward-looking and account for the risks of competition and technological change intrinsic to the telecommunications industry. In contrast, as Verizon VA has shown, Petitioners advocate the use of lives that were prescribed almost eight years ago, in a very different era in the telecommunications market, and prior to the 1996 Act or the TELRIC regulatory regime with its attendant risks and requirements. In fact, as Petitioners' own depreciation witness, Richard Lee conceded, the lives recommended by AT&T/WorldCom are simply inconsistent with TELRIC's fundamental assumption of a competitive telecommunications marketplace. (Tr. at 3371.) They instead assume a world in which the ILEC is the sole provider of local service (Tr. at 3396), and

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8/ *See* VZ-VA Br. at 40; Memorandum Opinion and Order, *Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, 16 FCC Rcd 6237 ¶ 74 (January 22, 2001) (*Kansas-Oklahoma § 271 Order*), *aff'd in part, rev'd in part, Spring Communications Co. v FCC*, 274 F.3d 549 (D.C. Cir. 2001); Reply Declaration of Daniel J. Whelan and Gary E. Sanford, *Application by Verizon Pennsylvania Inc. et al for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*, FCC 01-269 Docket No. 01-138, at 16-18 (August 2001) (noting use of GAAP depreciation lives, which Commission did not change when approving Verizon PA's § 271 application).

thus are inconsistent with the central theme guiding Petitioners' cost studies: that UNE costs should be determined as though the incumbent faces competition from a new entrant that instantaneously and ubiquitously has deployed the most up-to-the-minute technology.

Petitioners' brief fails to address the critical failure of their depreciation lives to account for the fully competitive market and the inherent risks that are assumed elsewhere in their studies. In fact, rather than address this at all, AT&T/WorldCom devote the majority of their discussion to an effort to demonstrate, by manipulating Financial Accounting Standards Board (FASB) texts, that GAAP is biased due to the principle of conservatism, despite Verizon VA's demonstration that this argument is simply incorrect and outdated. (AT&T/WCom Br. at 97-101.) The remainder of their argument boils down to an effort to attack lives that Verizon VA does *not* use — and which typically are *shorter* than the lives it does use. And finally, Petitioners make the implausible argument that technology and the level of competition have not changed since 1994 and thus cannot have affected the length of depreciable lives in the industry. None of these arguments withstands scrutiny or supports use of the outdated 1994 lives in Petitioners' studies.

1. Petitioners' Efforts to Show That GAAP Lives Are Biased Are Unavailing.

AT&T/WorldCom seek to discredit the GAAP lives used by Verizon VA on the ground that those lives are overly conservative. They contend that financial accounting lives are "driven by corporate objectives, including the objective of protecting shareholders, and by the GAAP principle of conservatism, which encourages the accountant to err on the side of overstating costs for financial reporting when there is uncertainty about their precise level." (AT&T/WCom Br. at 97.) But this argument simply rehashes the arguments raised by Mr. Lee that Verizon VA witness Dr. Lacey — an experienced CPA who lectures on GAAP and serves on several accounting boards that review and update GAAP — has refuted.

First, as Dr. Lacey explained both in his written testimony and at the hearing, the notion that shorter lives protect shareholder interests is plainly mistaken. Shorter lives produce higher expenses, lower net income, and lower asset values, which may actually serve to *lower* stock prices, not raise them. Because creditors look at the same financial statements as the stockholders, they too would have a negative reaction to biased, shorter lives and may raise the interest rate they charge the company. There simply is no rule that either shareholders or management prefer shorter versus longer depreciation lives, and Petitioners point to nothing that would suggest otherwise. (*See* VZ-VA Ex. 105 at 11-13; VZ-VA Ex. 119 at 6-7; Tr. at 3336.) Because Verizon VA uses the depreciation lives it recommends in this proceeding for all of its operations and in a variety of contexts outside of UNE pricing, Verizon VA has no incentive to use shorter depreciation lives solely in order to raise UNE rates.

The same is true with respect to AT&T/WorldCom's argument that GAAP lives are unreliable because GAAP embraces the "principle of conservatism." Verizon VA's witness Dr. Lacey, who served on a committee that established GAAP and is a co-author of some of the GAAP principles, is the one witness in this case with the unimpeachable credentials and expertise to opine on those principles and their practical application. (Tr. at 3291.) As Dr. Lacey explained, the Accounting Standards Executive Committee on which he was a voting member in 1993 specifically rescinded the standard that implied a bias of conservatism would be acceptable. While conservatism is still mentioned in FASB's Accounting Concept Statement 2, it is specifically not in the "Hierarchy of Accounting Qualities."[9] (Tr. at 3308; VZ-VA Ex. 119 at 3.) This was done in order to ensure that application of GAAP produced its ultimate goal: the "right answer . . . an unbiased answer, our best answer." (Tr. at 3311-12.)

AT&T/WorldCom insist, however, that the Commission should disregard Dr. Lacey's expert opinion with respect to the principles that he helped draft, calling his interpretation of his own work "cramped." (AT&T/WCom Br. at 100.) They argue that the Commission instead should rely on Mr. Lee's opinion that the "accounting profession [never] intended to nullify the conservatism principle in this way." (AT&T/WCom Br. at 101.) And their supposed "smoking gun" is the fact that FASB did not suggest that there was *never* a place for conservatism and continues to define the term. But Mr. Lee's effort to play with the language he seized upon is unavailing. Dr. Lacey explained that GAAP still permits a "conservative" approach to *total* uncertainty, but that the 1993 repeal of that principle from the Hierarchy of Accounting Qualities was intended to limit its application to the rare circumstance where all the information available suggested that two lives were about *equally* likely and there was no way to determine which life was more appropriate. As long as there is *any* data that would be better than "flipping a coin," GAAP requires determining a life consistent with that data rather than selecting a shorter one. (Tr. at 3322 (Lacey).)

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[9] Petitioners point to a handful of cases that cite the fact that GAAP includes the principle of conservatism. (*See* AT&T/WCom Br. at 97-98.) Petitioners' reliance on these cases is misplaced. Some of those decisions simply are outdated (the first FCC case Petitioners cite is from 1993, for example); others simply fail to reflect that GAAP has been revised and no longer embraces that principle. Such evidence may never even have been presented in those proceedings.

Moreover, while conservatism has its (rare) place, Dr. Lacey, who is responsible for supporting the fact that Verizon VA's lives are GAAP-compliant, certainly never indicated that he found it necessary to apply the principle of conservatism in this case. While setting depreciable lives may be a difficult exercise, as Petitioners argue (AT&T/WCom Br. at 100), this does not bring the principle of conservatism into play. GAAP is designed to identify the *best available estimate* of economic lives, and Dr. Lacey testified that Verizon VA had done so in this case. Petitioners have shown no basis to believe otherwise.

2. Benchmarking Supports Use of Verizon VA's Lives.

Petitioners next argue that the Commission should disregard any other lives that might provide a useful benchmark for the lives that Verizon VA uses in its studies. The problem with which AT&T/WorldCom must contend is that the lives of other industry players — Petitioners themselves and cable television operators — are reasonably comparable to the lives Verizon VA uses. While Petitioners would like to dismiss such data as irrelevant, the Commission itself, at the hearing, requested data concerning AT&T's and WorldCom's intrinsically relevant financial reporting lives. That data shows that Verizon VA's lives are reasonable. For example, AT&T's 1999 financial reports used lives significantly shorter than Verizon VA's GAAP lives. (Tr. at 3263-64.)[10] WorldCom's lives are comparable to Verizon VA's proposed lives as well; for instance, WorldCom uses a ten-year life for digital switching (the same life proposed by Verizon VA), a fifteen-year life for circuit equipment (compared to Verizon VA's proposed nine years),

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[10] Moreover, the data provided by AT&T establishes that AT&T accounts for the same categories of equipment that are at issue in these proceedings, further demonstrating the relevance of AT&T's data to Verizon VA's GAAP lives.

and a forty-year life for conduit systems (compared to the fifty-year life proposed by Verizon VA). (*See* AT&T/WCom Response to record request 1 (10-23-01) (Att. 1).)[11]

3. Lives Established in 1994 Cannot Possibly Account for the Technology and Competition That Has Developed in the Ensuing Eight Years.

Finally, AT&T/WorldCom suggest that the FCC's 1994 lives sufficiently reflect the technology and competition that have developed in the eight years since they were set — and that, if anything, the lives the FCC set then should be *longer* to reflect their bizarre view that technology and competition have somehow *lengthened* lives.

As Petitioners see it, "[b]ecause the FCC's lives are 'economic' lives, they take into account expected changes" in capital goods prices, competition, technology — anything that "can be expected to affect the economic life of the assets in question." (AT&T/WCom Br. at 103.) But while this is clearly an optimal *goal* when setting economic lives, Petitioners cannot seriously contend that the FCC was perfectly prescient eight years ago — that it anticipated the 1996 Act, the explosion of the Internet, packet switching, and all other developments that have occurred in the ensuing years. It is precisely because such accuracy and prescience is so intrinsically unattainable that GAAP lives are reset periodically — to account for developments that require an update of the earlier estimate of an asset's life. (Tr. at 3383 (Lacey).) And it is precisely because there have been such developments that the FCC has prescribed shorter, more updated lives since 1994, first in 1995 and then again in 1999. (VZ-VA Ex. 114 at 4-5.) For

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[11] AT&T/WorldCom also seek to score points by attacking the lives recommended by Technology Forecasting Group ("TFI"). (AT&T/WCom Br. at 102.) But this is a curious focus: Verizon VA has not adopted or recommended the TFI lives. It simply demonstrated that its lives are comparable — and generally *longer* than the TFI lives.

example, in recognition of those same developments and the changing telecommunications market, the FCC recently has decreased the prescribed life for digital switches to 10.5 years for Verizon South, Inc. — seven years less than the old life that Petitioners continue to advocate. (VZ-VA Ex. 120 at 2.)

What is particularly ironic is that AT&T/WorldCom's witness, Mr. Lee, admitted at the hearing that had the FCC revisited Verizon VA's depreciable lives in a represcription proceeding, Petitioners would have advocated the use of whatever those represcribed lives were for these proceedings.[12/] (Tr. at 3269-70.) In essence, then, Petitioners are not suggesting that technology and competition have not had a real economic impact on Verizon VA — but that the Commission should ignore that impact purely on the ground that it has not considered it in an unrelated represcription proceeding.[13/] That wholly unprincipled position belies AT&T/WorldCom's pretense that they seek economically correct lives. What they seek are simply *long* lives — lives that will decrease UNE rates as much as possible, regardless of cost.

[12/] After Mr. Lee acknowledged he was aware that the FCC recently prescribed a 10.5 year life for Verizon South Inc., Verizon VA counsel asked Mr. Lee: "[I]f this proceeding were for the other Verizon incumbent in Virginia, you would be recommending a 10-and-a-half year life?" Mr. Lee responded, "[t]hat's correct." (Tr. at 3270.)

[13/] Petitioners in fact suggest that because Verizon VA has not sought represcription, it may not advocate lives here that are different from the FCC's existing lives, apparently on the theory that Verizon VA knew those lives would be at issue here and thus had some obligation to initiate a represcription proceeding. (*See* AT&T/WCom Br. at 104 n.102.) That is silly. Verizon VA had no reason, under state regulations, to seek represcription. (*See* Tr. at 3412 ("Verizon is a price cap carrier, and depreciation expense doesn't affect [the] price cap.")(Sovereign).) Instead, Verizon VA appropriately believed that this Commission would apply TELRIC-compliant GAAP lives in these proceedings, rather than FCC lives set outside the TELRIC context and without reference to the relevant principles and constraints.

In contrast, Verizon VA's GAAP lives are designed to account for the real technological and competitive developments with which Verizon VA has to contend, and the impact they have had on the depreciable lives of Verizon VA's telecommunications assets.[14/] Verizon VA's lives also are set with an eye toward anticipating the impact that additional (and in some cases accelerated) technological change and increasing competition will have. While this cannot be predicted with total certainty, Verizon VA's lives are designed to provide the most accurate estimate available based on *current information*. And such current information — such as the increasing competition from broadband providers (as well as wireless providers and others) which may lead to eventual obsolescence of the digital switch, SONET equipment, and copper — suggests that Verizon VA's lives *must* be shorter than those the FCC prescribed eight years ago.[15/]

Moreover, under TELRIC, depreciable lives should not simply reflect actual competition or actual anticipated competition. To comply with the TELRIC framework — something that the Commission was not required to do when it set lives in 1994 — depreciable lives must assume the hypothetical world in which facilities-based competition is a reality. As Ms. Murray

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14/ Petitioners' effort to support their outdated lives through an analysis of Verizon VA's depreciation reserve (AT&T/WCom Br. at 96) does not prove that the FCC's 1994 lives could possibly be considered forward-looking today. (*See* VZ-VA Ex. 113 at 2-9.)

15/ Petitioners' suggestion that technological change and competition have lengthened lives is absurd. They argue, for example, that the purchase of UNEs is an *alternative* to facilities-based bypass, so that now incumbent LECs have a new use for their network. (AT&T/WCom Br. at 103.) But TELRIC assumes that there will be a competitor whose network is the equivalent of Verizon's, and who thus would *compete* with Verizon in the UNE wholesale business. (*See, e.g.*, Tr. at 3368-69 (Preiss); VZ-VA Br. at 39-40.) Ms. Murray in effect admitted that Petitioners' argument rests on the absence of facilities-based competition — an assumption wholly inconsistent with the remainder of Petitioners' approach to UNE costing.

admitted, the network would have to be repeatedly repriced to account for the "diminution of the value to the wholesale resource because of the technology change" that the new, efficient competitor would be able to instantaneously deploy. (Tr. at 3408-09.) When this risk is taken into account, Verizon VA's depreciable lives are too *long*. Certainly this Commission's 1994 lives were not designed to account for this risk or the other regulatory risks associated with TELRIC. Mr. Lee plainly admitted this, conceding that the lives he recommends are *not* based on a hypothetical TELRIC world (Tr. at 3371), but instead on a world that does not even exist any longer today — a world in which the ILEC is the *sole* provider of local service. (Tr. at 3396.)

While AT&T/WorldCom assert that the frequent revaluation of assets does not shorten lives (AT&T/WCom Br. at 105), after making this statement, they find themselves without an argument to support it. The only possible support they have is the claim that depreciation lives may be long where the technology is "sufficiently mature" (AT&T/WCom Br. at 105), but of course they dare not suggest that telecommunications technology is "mature," as this would detract from their ability elsewhere to suggest that Verizon VA's UNE costs be assessed on the basis of imaginary technology that clearly has not been developed to date. Instead they reiterate the argument that in 1994, the Commission anticipated every technological change that was likely to come to fruition between then and now. (AT&T/WCom Br. at 105-06.)

B. The Cost of Capital Employed in Verizon VA's Studies Is Far More Appropriate Than Petitioners' Proposal.

It should now be clear that Petitioners' proposed 9.54% cost of capital severely understates the appropriate cost of capital that should be adopted in these proceedings. They have offered no reason for such a substantial downward departure from the 11.25% the Commission established as the starting point for cost of capital in a TELRIC model.[16] More tellingly, the record now reveals that the cost of capital each Petitioner actually uses for the local exchange market is substantially higher not only than the Commission's starting point but than what Verizon VA itself proposes here. **[BEGIN AT&T PROPRIETARY]** XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX **[END AT&T PROPRIETARY]** **[BEGIN WORLDCOM PROPRIETARY]** XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX**[END WORLDCOM PROPRIETARY]**

As Verizon VA has explained, 12.95% is the cost of capital that Verizon VA uses in making network investment decisions.[17] This represents a highly conservative estimate of Verizon VA's forward-looking cost of capital, a conclusion confirmed by the fact that Petitioners use figures that are more than **[BEGIN AT&T AND WORLDCOM PROPRIETARY]** XXXXXXXXXXXXXX. **[END AT&T AND WORLDCOM PROPRIETARY]** The cost of capital used in Verizon VA studies does not even fully account for all the risks inherent in the TELRIC regime, particularly if that regime were interpreted in the extreme manner that Petitioners advocate. (*See, e.g.*, VZ-VA Ex. 104 at 5.)

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[16] *Local Competition Order* at 15856 ¶ 702 (emphasis added).

[17] As they do numerous times in their brief, Petitioners, lacking any substantive response, resort to entirely unsubstantiated accusations that Verizon VA or its witnesses are lying about Verizon VA's use of this cost of capital. (AT&T/WCom Br. at 93-94.) Such desperate tactics should be rejected for what they are.

On the other hand, Petitioners' proposed cost of capital fails to reflect the risks of a fully competitive UNE market — let alone the other regulatory risks that result from their extreme interpretation of TELRIC — even though most of the remaining costs in their model are based on those very assumptions. Petitioners' economist admitted at the hearing that this inconsistency was indefensible, and the point is only further underlined by their brief. Petitioners have failed to overcome this fatal flaw and, even apart from that, their criticisms of Verizon VA's cost of capital figure and defense of their own proposal fail on their own merits.

1. Petitioners Cannot Overcome Their Concession That Their Proposed Cost of Capital Violates TELRIC.

AT&T/WorldCom concede that their cost of capital does not take into account the regulatory risks inherent in TELRIC, including its requirement that costs be based on those that would exist in a fully competitive market. As discussed in Verizon VA's initial brief, Petitioners' economist, Ms. Murray, acknowledged during the hearings that this was a mistake. As she put it, "all the model assumptions have to be consistent. So, to the degree that it requires a competitive market to get all of the other assumptions, that would be true for the cost of capital as well." (Tr. at 3202.) This conclusion should be uncontroversial. If the goal of TELRIC is, as the Commission has stated, to arrive at costs that "best replicate[], to the extent possible, the conditions of a competitive market,"[18] then all the cost components naturally should reflect that competitive market assumption. (*See* VZ-VA Br. at 26-27, 44; *see also* Tr. at 3475-76 (Vander Weide).)

18/ *Local Competition Order* at 15846-47 ¶ 679.

Notwithstanding the common sense nature of this conclusion and their own economist's admission (which they neglect to mention), Petitioners now backtrack and contend that the cost of capital need not be based on the assumption of a fully competitive market even if all other costs are. (AT&T/WCom Br. at 69-80.) Their attempts to justify this position from an economic perspective do not withstand even cursory scrutiny. Perhaps not surprisingly, then, much of their argument amounts to the presentation of strained and ultimately incorrect interpretations of Commission statements in the vain hope of showing that their unjustifiably inconsistent assumptions are attributable to or consistent with the Commission's rulings. This attempt fails. And, once Petitioners' failure to use a competitive market assumption is recognized as erroneous, many of their remaining arguments simply fall away.

a) The Failure to Use a Competitive Market Assumption in Estimating the Cost of Capital for a TELRIC Study Is Economically Unjustifiable.

Petitioners' attempt to defend their failure to reflect the competitive market assumption in their cost of capital from an economic perspective is singularly unpersuasive. They first trot out the bizarre theory that, while "costs" should reflect those that would accrue in a competitive market, the "returns" need not. (AT&T/WCom Br. at 77.) Apparently, though they do not quite have the audacity to say it, Petitioners seek to suggest that the "*cost* of capital" is not a cost at all. Not surprisingly, AT&T/WorldCom fail to cite a single authority of any kind for this absurd assertion. As the Commission itself has explicitly noted in its discussion of cost of capital under

TELRIC, "the forward-looking cost of capital, *i.e.*, the cost of obtaining debt and equity financing, is one of the *forward-looking costs* of providing the network elements."[19]

Petitioners' attempt to draw economic support for their inconsistent approach from the testimony of Dr. Taylor — a Verizon witness in a separate proceeding more than four years ago. (AT&T/WCom Br. at 78-79.) Petitioners have misinterpreted and misquoted Dr. Taylor. As an initial matter — as AT&T/WorldCom's cost of capital witness conceded — Dr. Taylor was not even addressing the calculation of cost of capital. (Tr. at 3610.) Dr. Taylor made the unremarkable statement that "it is not unheard of for regulators to set prices in noncompetitive markets that replicate the prices that would result from a competitive market." (AT&T/WCom Br. at 78.) That is surely true — indeed, that is what the Commission has stated it is trying to do in TELRIC proceedings — but it is unclear why Petitioners believe this is helpful to them; prices in "a competitive market" would reflect the cost of capital in that competitive market. Petitioners also note that Dr. Taylor observed that "it is possible for a regulatory standard which sets rates at competitive levels to coexist with an environment in which the regulated firm faces less competitive risks than a competitive firm would face." (AT&T/WCom Br. at 78-79.)

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[19] *Local Competition Order* at 15854-55 ¶ 700 (emphasis added). Petitioners' quote from two Supreme Court decisions observing that a public utility is generally entitled to a rate of return equal to that of other firms with "corresponding risks." (AT&T/WCom Br. at 78). These cases are not relevant to the appropriate cost of capital here. In both cases, the regulator was setting rates based on the utility's actual, present costs, rather than any measure of forward-looking costs (let alone a regime such as TELRIC). *See Bluefield Waterworks & Improvement Co. v. PSC of West Virginia*, 262 U.S. 679, 690 (1923); *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 604-05 (1944). Obviously, in the context of those cases, using the rate of return earned by firms with risks similar to the actual risks faced by the utility was consistent with the rest of the cost-setting regime. By contrast, the firms with "corresponding risks" in a TELRIC cost of capital calculation necessarily are firms in a competitive market of the type assumed by TELRIC, not the monopoly market assumed by Petitioners.