

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

In the Matter of )  
)  
Price Cap Performance Review ) CC Docket No. 94-1  
for Local Exchange Carriers )  
)  
Access Charge Reform ) CC Docket No. 96-262

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**COMMENTS ON FURTHER NOTICE OF PROPOSED RULEMAKING**

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Date: January 7, 2000

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## SUMMARY

In response to the Commission's November 15, 1999 FNPRM, BellSouth demonstrates herein that the Commission is legally obligated to respond to the remand order of the Court of Appeals using the record developed in the 1997 Price Cap Performance Review, supplemented by X-Factor data for the years 1996-98 and BLS revisions and corrections to the economy-wide data. The Commission must act based on Option 1 in the FNPRM. Both Options 2 and 3 are not permitted under 47 U.S.C. § 402(h) for purposes of the Court's remand. Based on the record, the Commission should adopt an X-Factor of 4.86 percent for the remand period. It should not adopt a Consumer Productivity Dividend.

Although the Commission could consider changing the X-Factor methodology prospectively, it should not do so. In these Comments, BellSouth demonstrates that both Option 2, the 1999 Staff TFP Study, and Option 3, the Staff Imputed X Study, are fundamentally flawed and result in an upwardly biased X-Factor. The 1997 Staff TFP Study was relied upon by the Commission in the 1997 Price Cap Performance Review. Neither the methodology nor the X-Factor estimates produced by the methodology was challenged by any party to the appeals. In the interest of regulatory constancy, the Commission should not adopt yet another methodology at this time. Indeed, the Commission can avoid the need to re prescribe the X-Factor by adopting the CALLS proposal. The CALLS proposal deals with the price cap, access reform, and universal service issues in a comprehensive fashion, and produces substantially more consumer benefit than the Commission could legally generate by re prescribing the X-Factor.

If the Commission does not adopt the CALLS proposal, it should lower the X-Factor prospectively. The Commission should recognize that in the future, productivity gains will be harder to achieve than in the past, due to the lower level of employee force reductions, access

reform, the structural changes brought about by the Telecommunications Act of 1996, and the inroads of competition into LEC markets. For the future, the Commission should adopt an X-Factor of no more than 4.0 percent for the future. The Commission should not add a Consumer Productivity Dividend to that figure.

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**COMMENTS ON FURTHER NOTICE OF PROPOSED RULEMAKING**

BellSouth Corporation and BellSouth Telecommunications, Inc. (“BellSouth”) hereby comment in response to the Further Notice of Proposed Rulemaking, FCC 99-345, released November 15, 1999 in the captioned proceeding. BellSouth also participated in the preparation of the Comments of the United States Telephone Association (“USTA”), and endorses the views expressed therein.

**I. Introduction**

In 1990, the Commission adopted regulations that prescribe an upper pricing limit for the aggregate rates of certain local exchange carriers (“LECs”) called the Price Cap Index (“PCI”).<sup>1</sup> Price Caps replaced rate of return regulation, which limited earnings rather than prices, as the Commission’s chosen means of regulating the largest LECs.<sup>2</sup> By regulating prices directly,

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<sup>1</sup> In the Matter of Policy and Rules Concerning Rates for Dominant Carriers, 5 FCC Rcd 6786 (1990) (“LEC Price Cap Order”).

<sup>2</sup> “We believe that, where an incentive-based system can be designed to benefit both carriers and their customers, incentive-based regulation will produce greater benefits than adjustments to rate of return. We therefore disagree with those who advocate rate of return with a period of ‘regulatory lag’ as a means of inducing carriers to become more productive.” *Id.* at 6791, ¶ 40.

rather than earnings, the Commission sought to harness the profit-maximizing incentives of the competitive marketplace to spur efficiency and productivity by the LECs.<sup>3</sup>

Under Price Caps, each LEC must annually lower its PCI by the difference between an economy-wide measure of inflation and a “productivity offset” or “X-Factor.”<sup>4</sup> The X-Factor was implemented because the LECs had historically been more productive than the economy as a whole.<sup>5</sup> The Commission determined to share the benefits of LEC productivity gains between the LECs and their customers. First, it set the initial productivity offset at 2.8 percent, the average of two historical studies done by the Commission staff, one long-term and one short-term. Then the Commission added a 0.5 percent “Consumer Productivity Dividend” (“CPD”) to “assign the first price cap productivity gains to consumers.”<sup>6</sup> In order to protect consumers

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<sup>3</sup> In the Matter of Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1; Access Charge Reform, CC Docket No. 96-262, *Fourth Report and Order in CC Docket No. 94-1 and Second Report and Order in CC Docket No. 96-262*, 12 FCC Rcd 16642 (1997)(“1997 Price Cap Performance Review”). “Price cap regulation seeks to replicate the beneficial incentives of competition in the provision of interstate access services, while striking a reasonable balance between the interests of ratepayers and stockholders. Price cap regulation is intended to encourage growth in productivity by permitting incumbent LECs that increase their productivity to earn higher profits, while at the same time ensuring that interstate access customers share in the benefits of productivity growth in the form of lower rates. The price cap formula was designed to ensure that ‘[b]oth carriers and customers will be better off’ under price cap regulation.” *Id.* at 16645-46, ¶ 2.

<sup>4</sup> The Commission actually adopted separate PCIs for each of four “baskets” of LEC services. Because the basket structure is not at issue in this proceeding, BellSouth in these Comments refers to these indices in the singular.

<sup>5</sup> “The inflation measure embodies economy-wide productivity gains and price changes, while the ‘productivity offset’ subtracts the amount by which LECs can be expected to outperform economy-wide productivity gains. . . . We also take into account that historical studies can provide only limited guidance in setting a productivity offset that will be reasonable in an unknown future, not a known past.” LEC Price Cap Order at 6796, ¶ 74.

<sup>6</sup> “Our approach to establishing a reasonable offset has been in two stages. First, we have examined evidence and studies on historical telecommunications productivity, to establish an accurate productivity baseline, a level that LECs would be expected to achieve without regulatory reform. Second, we have proposed to add an additional productivity obligation, the Consumer Productivity Dividend or CPD, to assign the first price cap productivity gains to consumers in the form of lower rates.” LEC Price Cap Order at 6796, ¶ 76.

against a possible misspecification of the X-Factor, the Commission also imposed a “sharing” mechanism in the LEC price cap plan that did not exist in the AT&T price cap plan.<sup>7</sup>

The initial X-Factor was set at 3.3 percent. If a LEC was willing to commit to a more challenging 4.3 percent offset, it could keep a greater portion of its earnings without “sharing”. The Commission expressly recognized that LECs might earn as much as a 15.25 percent rate of return, net of sharing, under the initial price cap plan.<sup>8</sup>

The Commission recognized that relying on the historical price performance of the LECs under rate of return regulation to set the initial X-Factor was inherently problematic.<sup>9</sup> Therefore, the Commission announced its intention to undertake a price cap performance review after three years.

MCI sought reconsideration of the LEC Price Cap Order. MCI requested that the Commission disallow certain LEC advertising and marketing costs. In the LEC Price Cap Reconsideration Order<sup>10</sup> the Commission made it clear that it would not second-guess LEC management decisions:

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<sup>7</sup> LEC Price cap Order at 6801 et seq., ¶¶ 120-165. “In fashioning the backstop plan for LEC price caps, we have sought to balance competing goals. On the one hand, the benefits of increased productivity promised by the price cap program depend upon the creation of new profit incentives for the LECs. A backstop mechanism may dampen the LECs’ risks and rewards and thus reduce the incentives of a ‘pure’ price cap plan. On the other hand, any price cap plan must be consistent with the goals of the Communications Act, assuring just and reasonable rates and the continued availability of quality services. A backstop mechanism can help assure that the plan fairly shares the risks and rewards of future productivity gains between the LECs and customers, even in the unpredictable and varying circumstances of future years.” LEC Price Cap Order at 6801, ¶ 121.

<sup>8</sup> “In electing to lower prices further to reflect a higher 4.3 percent productivity offset, a LEC thus enables itself to reach an effective equivalent of a maximum 15.25 percent rate of return.” LEC Price Cap Order at 6788, ¶ 8.

<sup>9</sup> “Even if the historical record were clear, the future is not. The historical studies cannot assure that the future, in which the price cap plan will be applied, will not differ from the past.” LEC Price Cap Order at 6796, ¶ 78.

<sup>10</sup> In the Matter of Policy and Rules Concerning Rates for Dominant Carriers, 6 FCC Rcd 2637 (1991) (“LEC Price Cap Reconsideration Order”).

“[A]ny such disallowances to PCIs would interfere with the balance of objectives in price caps. The price cap plan focuses on results and permits LECs increased flexibility in achieving these results, including flexibility in deciding where to focus expenditures. That flexibility would be undercut by arbitrary disallowances.”<sup>11</sup>

The Commission also recognized that it would be inappropriate to disallow such expenses in the absence of a “demonstration that those expenses have been or will be imprudently incurred or otherwise should be disallowed.”<sup>12</sup>

When the LECs filed their 1992 price cap tariffs, the interexchange carriers (“IXCs”) attacked the expense levels reported by NYNEX which included expenses related to employee force reductions. The Commission rebuffed these attacks.<sup>13</sup> The Commission refused to credit IXC claims that recognition of the severance payments to departing employees for price cap purposes would “game” the system and should be disallowed.

Petitioners now suggest that the Commission should look behind a carrier’s reported total interstate earnings to decide whether a particular cost should be counted for the purpose of applying the low end adjustment mechanism or sharing. We find no support for making such a distinction in the LEC Price Cap Order or its reconsideration. To attempt to determine which costs are related to potential ‘gaming’ of sharing or low-end adjustments would lead us down a path of determining which business expenses are legitimate attempts to improve productivity and which are not. There is no suggestion in the Commission orders implementing price caps that this type of analysis is required. Even if the Orders permitted us to make such an analysis, petitioners have not suggested a means of distinguishing ‘legitimate’ recognition of costs from ‘manipulative’ ones.<sup>14</sup>

In 1995 the Commission reviewed the performance of the LEC price cap plan.<sup>15</sup> The Commission determined that the LEC price cap plan produced a “win-win” situation for carriers

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<sup>11</sup> LEC Price Cap Reconsideration Order at 2659, ¶ 46.

<sup>12</sup> Id.

<sup>13</sup> In the Matter of 1992 Annual Access Tariff Filings, 7 FCC Rcd 4731 (1992).

<sup>14</sup> Id. at 4735, ¶ 11.

<sup>15</sup> In the Matter of Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, First Report and Order, FCC 95-132, 10 FCC Rcd 8961, released April 7, 1995 (1995 LEC Price Cap Performance Review).

and their customers. The Commission noted that over the first three years of price cap regulation, prices charged by price cap LECs were \$5.9 billion lower than the prices at the start of price cap regulation.<sup>16</sup> In addition to lower prices, the Bell Operating Companies increased the amount spent on investment in new plant by about 4.5% during the first three years of price caps compared to the 1988-90 time frame.<sup>17</sup> The Commission recognized that the potential for the price cap LECs to increase their profits above levels that would have occurred under rate of return regulation was the engine driving the success of price cap regulation.<sup>18 19</sup>

The Commission also examined LEC earnings during the first four years of price caps. The Commission did not find that LEC rate levels were too high. It stated: “The price cap formula, including the 3.3 percent productivity offset, was adopted as a rule by this Commission, and carriers were entitled to rely upon it.”<sup>20</sup> The Commission determined that the 100 percent sharing zone, coupled with the price cap ceiling, ensured that “LEC rates would remain within a zone of reasonableness.”<sup>21</sup> The Commission also declined to change the sharing and low end adjustment mechanisms, or to make a one-time adjustment to LEC access rates, based on an alleged decline in the LECs’ cost of capital.<sup>22</sup> Despite declining interest rates and increased LEC

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<sup>16</sup> *Id.* At 8987, ¶ 60.

<sup>17</sup> *Id.* at 8988, ¶ 63.

<sup>18</sup> *Id.* at 8973-74, ¶ 28.

<sup>19</sup> See also Sappington, D.E.M. and Weisman, D.L., *Designing Incentive Regulation for the Telecommunications Industry* (MIT Press and AEI Press, 1996) at 337: “Substantial earnings by the regulated firm under an incentive plan can provide strong evidence that the plan is working as intended.”

<sup>20</sup> 10 FCC Rcd 8961 at 9072.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* at 9073, para. 255. See also, *Id.* at 9069, para. 245” “We reject all other proposals for one-time reductions based on changes in interest rates, on changes in the overall cost of capital, or based solely on the observation that LECs have experienced high earnings under price caps.”

earnings, the Commission stressed that “it was crucial to avoid undermining the profitability incentive that price caps seeks to create.”<sup>23</sup>

During the performance review, USTA presented a total factor productivity (“TFP”) study to replace the historical staff studies used to set the initial X-Factor. AT&T presented what it called the “Direct Model”, which “computes the X-factor that would have produced exactly an 11.25 percent rate of return under price caps.”<sup>24</sup> The Commission tentatively concluded that the TFP method should be used to establish a “permanent” X-Factor. The Commission noted that “[b]ecause TFP studies actually measure productivity growth rates, a TFP approach would appear to be ideally suited to determining the X-Factor.”<sup>25</sup> The Commission also tentatively concluded that the TFP approach should include an Input Price Differential (“IPD”).<sup>26</sup> The Commission decided that it did not have sufficient evidence to adopt a TFP-based permanent X-Factor. It therefore decided to extend the use of the original X-Factor data while it obtained additional evidence.<sup>27</sup> Finding that the Commission had simply chosen to “stick with its original methodology on an interim basis,” the Court of Appeals upheld the interim price cap plan in *Bell Atlantic Telephone Companies v. FCC*, 79 F.3d 1195, 1203 (D.C. Cir. 1996).

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<sup>23</sup> *Id.* at 9064, para. 235.

<sup>24</sup> *Id.* at 9019, para. 127.

<sup>25</sup> *Id.* at 9031, para. 157.

<sup>26</sup> *Id.* at 9033, para. 161. “If the trend in LEC input costs is consistent with the performance of the national economy as a whole, that trend should be reflected in the GNP-PI factor used to adjust PCIs annually. But, if the inflation factor does not accurately reflect changes in the carrier’s input costs, an X-Factor based on productivity changes alone will not capture the full extent of the differences between changes in LEC unit costs and the economy-wide inflation adjustment.” *Id.* at 9033, para. 160.

<sup>27</sup> The Commission revised its original X-Factor level by excluding the 1984 data point. The result was a “baseline” productivity offset of 3.5 percent, which, when combined with the CPD, resulted in an interim X-Factor of 4.0 percent. 1995 Price Cap Performance Review at 9053-54, para. 209. The Commission again gave LECs a choice of X-Factors with different sharing obligations. Carriers selecting the 4.0 X-Factor were required to share 50 percent of all earnings between 12.25 percent and 13.25 percent and 100 percent of their earnings over 13.25 percent.

## II. The 1997 Price Cap Performance Review Order

On May 21, 1997, the Commission released the 1997 Price Cap Performance Review order.<sup>28</sup> Consistent with the tentative conclusions it had reached in the 1995 Price Cap Performance Review, the Commission adopted the TFP method with an input price differential to set the X-Factor.<sup>29</sup> The Commission found that TFP “is a more accurate measure of LEC Productivity because it is based on incumbent LECs’ actual outputs and inputs.”<sup>30</sup> Both USTA and AT&T submitted TFP models for the Commission’s consideration. The Commission found that neither study “embodies all the best TFP calculation practices.”<sup>31</sup> It therefore adopted a staff study that selected what the Commission felt were the best elements of each. It then calculated TFP “using the most reasonable parts of each TFP study as it was presented in the record.”<sup>32</sup>

Ad Hoc and MCI presented studies that relied on the interstate accounting earnings of the LECs. The Commission rejected both studies, giving neither any weight in its decision. The Commission noted that it had repeatedly rejected reliance on interstate accounting earnings to set the X-Factor:

As we have said consistently in our discussion of price cap regulation over the years, we achieve beneficial incentives by placing less rather than more

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Carriers who selected the 5.3 percent X-Factor had no sharing obligation. No carrier elected the middle 4.7 percent X-Factor. Id. at 9055-56, paras. 214-15.

<sup>28</sup> In the Matter of Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1; Access Charge Reform, CC Docket No. 96-262, *Fourth Report and Order in CC Docket No. 94-1 and Second Report and Order in CC Docket No. 96-262*, 12 FCC Rcd 16642 (1997)(“1997 Price Cap Performance Review”).

<sup>29</sup> 1997 Price Cap Performance Review at 16652, para. 19: “[W]e conclude that TFP measures productivity growth more accurately than the method we adopted in the LEC Price Cap Order and the LEC Price Cap Performance Review, and more accurately than any other method proposed in the record before us.”

<sup>30</sup> 1997 Price Cap Performance Review at 16654, para. 23.

<sup>31</sup> 1997 Price Cap Performance Review at 16658, para. 33.

<sup>32</sup> Id.

importance on LEC interstate earnings. For that reason, we reject that alternative as a means for prescribing an X-factor.”<sup>33</sup>

The Commission also expressly rejected the Historical Revenue Method (the direct descendent of AT&T’s Direct Model). The Commission noted that the Historical Revenue Method reintroduced the incentive sapping features and the measurement problems of rate of return regulation that caused the Commission to adopt price caps in the first place:

“The Historical Revenue Method would set the X-factor prospectively at the level that would have, in retrospect, produced an industry-wide average rate of return of 11.25 percent under price cap regulation. Adopting the Historical Revenue Method on a moving average basis, as GSA recommends, would create substantially similar incentives to those under rate-of-return regulation, including a substantial reliance on accurate demand and cost forecasts. In addition, in the Price Cap Fourth Further Notice, we expressed concerns that the Historical Revenue Approach might not provide sufficient incentives for productivity growth, to the extent that increases in industry-wide earnings would increase the X-factor. No one has adequately responded to this concern.”<sup>34</sup>

Using the Staff’s hybrid model, the Commission calculated X-Factor estimates for the years 1986-1995. It then computed averages ranging from 10 years (1986-1995) to five years (1991-1995).<sup>35</sup> The averages ranged from 5.2 percent to 6.1 percent. The most recent five-year average, 1991-1995 produced the lowest average (5.2 percent) and also was the only average made up exclusively of years in which price caps were in effect.<sup>36</sup> Nevertheless, the Commission picked an X-Factor from the upper end of the range, 6.0 percent. It then added a 0.5 per cent CPD “in order to ensure that the increased benefits from the increased productivity

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<sup>33</sup> Id. at 16555-56, ¶ 25. See also Id. at 16660, ¶ 38 (rejecting Ad Hoc’s “interstate-only TFP adjustment”), Id. at 16695, para. 137 (“We also place no weight to the joint ex parte statement’s recommendation, which relies, without further analysis, on the MCI, Ad Hoc, and AT&T interstate-only proposals.”)

<sup>34</sup> Id. at 16654, ¶ 22.

<sup>35</sup> Id. at 16696, para. 138.

<sup>36</sup> Id. at 16696, para. 137.

we expect from incumbent LECs flow through to price cap customers...”<sup>37</sup> The Commission cited the elimination of mandatory sharing as the source of this expected gain in productivity, but made no attempt to justify the level of the CPD.<sup>38</sup>

The Commission eliminated sharing, noting:

“We also eliminate the sharing requirements of the current rules, which substantially undercut the efficiency incentives of price cap regulation and retained some of the cost-misallocation incentives inherent in rate-of-return regulation.”<sup>39</sup>

Finally, the Commission required each price cap LEC to recalculate its PCI as if the newly adopted 6.5 percent X-Factor had been in effect since the LECs 1996 Annual Access Tariff became effective. The Commission justified this requirement on the basis that the X-Factor adopted in the 1995 Price Cap Performance Review had been an “interim” factor, and that the LECs were therefore on notice that an adjustment to their PCIs might be required. Citing a desire “to limit harm to LEC productivity incentives that could result from the perception that our regulatory policies unnecessarily lack constancy” the Commission limited the adjustment to one year.<sup>40</sup>

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<sup>37</sup> Id. at 16697, para. 141. The Commission acknowledged that the CPD had been adopted to flow through to consumers the anticipated boost in productivity resulting from the transition from rate of return regulation to price caps. That transition had long since been accomplished. Nevertheless, the Commission stated: “The passage of time has not altered the need to strike this balance between ratepayer and shareholder interests.” Id. at 16691, para. 125. And despite the fact that the Commission had selected an X-Factor higher than the average actual productivity gains achieved by the price cap LECs, the Commission baldly asserted that a CPD was needed “to require LECs to transfer some portion of their unit cost reductions to their access customers.” Id.

<sup>38</sup> Id. at 16702, para. 154.

<sup>39</sup> Id. at 16645, ¶ 1. See also Id. at 16700-703, paras. 148-155.

<sup>40</sup> Id. at 16714, para. 179.

### III. Appeals From The Commission's Order

USTA, on behalf of the price cap LECs, and MCI, on behalf of the IXC's, appealed the 1997 Price Cap Performance Review Order.<sup>41</sup> USTA challenged fixing the baseline X-Factor at 6.0 percent, adding a 0.5 percent CPD, and making the price cap LECs reinitialize their PCI as if the new 6.5 percent X-Factor had been in effect since 1996. MCI challenged the Commission's decision to rely on total company productivity rather than interstate-only productivity in setting the X-factor, the Commission's decision to reinitialize the PCIs to only 1996 instead of some earlier date, and the elimination of sharing. No one challenged the Commission's TFP methodology or its calculation of historical X-Factors using that methodology.

In *United States Telephone Association v. FCC*, 188 F.3d 521 (D.C. Cir. 1999) the Court granted the LECs' petition for review and denied that of the IXC's. With regard to the selection of 6.0 percent as the baseline X-Factor, the Court noted:

The LECs argue that the FCC did not give a rational explanation of that choice, and we agree. None of the reasons given for choosing 6.0% holds water.<sup>42</sup>

The Court rejected the Commission's decision to afford little weight to averages containing the 1986 and 1992 data points. The Court found no statistical basis for rejecting the 1986 data point as an "outlier", and it rejected the Commission's stated reason for according little weight to the 1992 data point as "mystifying."<sup>43</sup>

If the productivity component of the X-Factor is to reflect the difference between LEC productivity and overall productivity growth, a proposition that is built into the Commission's formula, see *1997 Order*, 12 FCC Rcd at 16,785, there seems no reason to slight a datum because its anomalous character stems from the unusual magnitude of the second term rather than the first.<sup>44</sup>

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<sup>41</sup> Ad Hoc, a user advocacy organization, also appealed and filed a joint brief with MCI.

<sup>42</sup> 188 F.3d at 525.

<sup>43</sup> *Id.*

<sup>44</sup> 188 F.3d at 525-526.

The Court also held that the Commission's reliance on a "strong upward trend" in the 1992-1995 time period was inadequately justified. The Court noted that the so-called trend years appeared to be part of a cyclical pattern rather than an upward trend, and that the underlying components of the X-Factor exhibited no trend at all.<sup>45</sup> The use that the FCC made of AT&T's model also was rejected. The Court noted that the Commission incorporated into its own model those aspects of the AT&T model that it deemed reasonable, and then gave independent weight to AT&T's X-Factor estimates. The court noted that any difference between the FCC's estimates and AT&T's "presumably resulted from elements of AT&T's analysis that the FCC specifically rejected."<sup>46</sup> The Court remanded for further explanation.

The Court also rejected the Commission's explanation for continuing the 0.5 percent CPD. The rationale relied upon by the Commission to retain the CPD, i.e., that the elimination of sharing would spur further productivity gains by the LECs, did nothing to justify "retention of the old percentage, a retention that required some comparison of the current change with the initial one in terms of their likely impacts on productivity."<sup>47</sup>

The Court also granted the LECs' petition with regard to including the CPD in the "reinitialization" of the X-Factor back to 1996.

We agree with the LECs that if the FCC retains the CPD because of the productivity benefits expected from the elimination of sharing, no element of the reinitialization based on the CPD will be appropriate in the absence of evidence linking productivity gains to anticipation of sharing's elimination; the companies could not have responded to that incentive before its creation.<sup>48</sup>

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<sup>45</sup> 188 F.3d at 526. ("Where's the trend? As the underlying variables appear to be thrashing about wildly, the FCC's conclusion that the trend in the difference between the two had some predictive value requires explanation.") Id.

<sup>46</sup> Id.

<sup>47</sup> 188 F.3d at 527.

<sup>48</sup> 188 F.3d at 529.

The Court rejected all of the claims of the IXCs. The Court upheld the elimination of “sharing”, finding MCI’s argument that Section 201 requires retention of sharing to be without merit.<sup>49</sup> The Court rejected MCI’s “arbitrary and capricious” argument, noting that the FCC had explained that sharing blunted the efficiency incentives of the LECs and kept some incentive to shift costs.

MCI does not contest these effects, nor does it question the Commission’s argument that monitoring to catch them would be administratively burdensome and would increase its reliance on embedded accounting costs.<sup>50</sup>

The Court also rejected MCI’s argument that the Commission erred in using total company productivity gains rather than “interstate” productivity in setting the X-Factor.

In the first place, it is not clear that “interstate productivity” as opposed to total company productivity, is measurable, or even economically well-defined. This is so because direct productivity measurement requires measurement of inputs, and there is no obviously meaningful way to segregate LEC interstate and intrastate inputs because, as is undisputed, “interstate and intrastate services are usually provided over common facilities.” *1997 Order*, 12 FCC Rcd at 16,685, para. 107.<sup>51</sup>

Finally, the Court rejected MCI’s arguments that the FCC should have reinitialized the X-Factor all the way back to 1991. The Court held that repeated reinitializations “would impair the supposed incentive advantages of price caps—which derive from the firms’ supposing that their efficiencies will *not* come back to haunt them.”<sup>52</sup>

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<sup>49</sup> 188 F.3d at 527-528.

<sup>50</sup> 188 F.3d at 528.

<sup>51</sup> 188 F.3d at 528.

<sup>52</sup> 188 F.3d at 530. (Emphasis by the Court.)

#### **IV. The Commission's Responsibilities On Remand**

An order from the Court of Appeals remanding a decision to the Commission imposes specific responsibilities on the Commission. Section 402(h) of the Communications Act, 47 U.S.C. Sec. 402(h), states:

(h) In the event that the court shall render a decision and enter an order reversing the order of the Commission, it shall remand the case to the Commission to carry out the judgment of the court and it shall be the duty of the Commission, in the absence of the proceedings to review such judgment, to forthwith give effect thereto, and unless otherwise ordered by the court, to do so upon the basis of the proceedings already had and the record upon which such appeal was heard and determined.

Thus, in responding to the Court's remand, the Commission must rely upon the record as it was presented to the Court. The Commission is, of course, free to conduct a new rulemaking on a new record to adjust the LEC price cap plan going forward. But for purposes of the period between July 1, 1997 and the effective date of a new Commission rulemaking, the Commission is bound by the existing record.

The Court reversed the Commission and remanded for further explanation in two specific areas:

The FCC's decisions to select 6.0% as the first component of the X-Factor and to retain the 0.5% CPD are reversed and remanded to the agency for further explanation.<sup>53</sup>

The Court also gave the Commission a limited opportunity to justify the inclusion of the CPD in reinitialization of the X-Factor.<sup>54</sup> For the Commission to justify including the CPD in the reinitialization of the X-Factor, it must find specific evidence in the existing record that LECs

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<sup>53</sup> 188 F.3d at 531.

<sup>54</sup> 188 F.3d at 529.

anticipated the elimination of sharing and responded to that incentive with increased productivity beginning with the 1996 tariff year.

It is also important to note what is not before the Commission as a result of the Court's remand. The issues raised by MCI and rejected by the Court do not form part of the Court's remand, and thus cannot be challenged or changed in response to the remand.<sup>55</sup> Specifically, the Court did not remand the Commission's decision to eliminate sharing while retaining the low-end adjustment mechanism, the Commission's decision to base the X-Factor on total company productivity gains rather than "interstate only" productivity gains, or the Commission's decision to "reinitialize" the X-Factor for only one year. Therefore, these issues are not before the Commission on remand.

**V. The Further Notice Of Proposed Rulemaking ("FNPRM")**

On November 15, 1999, the Commission released a FNPRM in response to the Court's remand seeking comment on the appropriate X-Factor. While acknowledging that a different result may be necessary for the remand period<sup>56</sup> and for the prospective period following the effective date of the Commission's order<sup>57</sup>, the Commission nowhere in the FNPRM acknowledges or addresses the requirements of Section 402(h). This fundamental error (or oversight) causes the Commission to ask for comments on methodologies that are legally irrelevant during the remand period. For instance, the Commission asks for comments on three options for addressing the Court's remand. Of the three, only Option 1 is permissible under Section 402(h). The use of the staff's 1997 model to set the X-Factor was not challenged before

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<sup>55</sup> As noted above in the text, the Commission is free to change its price cap rules prospectively based on a new record, provided it acknowledges the change and justifies its departure from the prior plan.

<sup>56</sup> BellSouth refers to the period from July 1, 1997 until the effective date of the Commission's order addressing the Court's remand (presumably, July 1, 2000) as the "remand period".

<sup>57</sup> See FNPRM at para 2.

the Court, and is now the law of the case.<sup>58</sup> Options 2 and 3, therefore, are not available to the Commission during the remand period.

The Commission asks for comment on whether it may consider evidence that supplements the data in the 1997 Staff TFP Study.<sup>59</sup> During oral argument, the Court specifically asked whether later historical data supported the trends that the Commission found in the 1997 Staff TFP Study.<sup>60</sup> Both USTA and AT&T submitted Rule 28(j) letters to the Court describing their updates to the 1997 Staff TFP Study.<sup>61</sup> Accordingly, BellSouth believes that the Commission may lawfully consider evidence that supplements the 1997 Staff TFP Study, although it is precluded by Section 402(h) from considering evidence based on methodologies other than the 1997 Staff TFP Study. In addition, BellSouth notes that the Bureau of Labor Statistics (“BLS”) has updated and published replacement data for some of the U.S. economic data relied upon in the 1997 Staff TFP Study according to its usual practices. BellSouth believes that the Commission is obligated to reflect the government’s latest data revisions in the updated 1997 Staff TFP Study. The Commission should also reflect the changes in the multifactor productivity indices to be released this spring by BLS.

The Commission seeks comment on two other options for the remand period. Option 2 substitutes a new staff study using different, hypothetical capital inputs in lieu of the actual

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<sup>58</sup> *Christianson v. Colt Industries Operating Corp.*, 486 U.S. 800, 108 S.Ct. 2166, 100 L.Ed.2d 811, 830 (1988): “[W]hen a court decides upon a rule of law, that decision should continue to govern the same issues in subsequent stages in the same case.”

<sup>59</sup> FNPRM at para. 24.

<sup>60</sup> Transcript of Oral Argument held January 20, 1999 in the matter of *United States Telephone Association, et al. v. Federal Communications Commission, et al.*, Case No. 97-1469, et al., in the United States Court of Appeals for the District of Columbia Circuit, pp. 22-23.

<sup>61</sup> Letters from Michael K. Kellogg, counsel for Petitioner United States Telephone Association and Gene C. Schaerr, counsel for Intervenor AT&T Corp., dated January 21, 1999 and January 22, 1999, respectively, addressed to Mark J. Langer, Clerk of the United States Court of Appeals for the District of Columbia Circuit, and filed in *United States Telephone Association, et al. v. Federal Communications Commission, et al.*, Case No. 97-1469, et al.

returns to capital by the price cap LECs during the study period.<sup>62</sup> In Appendix A, the staff characterizes the 1997 Staff TFP Study's use of actual imputed cost of capital as a "potential error" that may require correction on remand.<sup>63</sup> One of the parties citing this "potential error" is AT&T. Ironically, this "potential error" was one of the aspects of the AT&T TFP model that the Commission staff accepted when it created the 1997 Staff TFP Study.<sup>64</sup> No party challenged this aspect of the 1997 Staff TFP Model before the Court, and its acceptance by the Commission is now final for purposes of remand.<sup>65</sup> Indeed, in challenging that aspect of the Commission's 1997 Staff TFP Study, AT&T is challenging its own evidence and expert witness.

Option 3 is, by the Commission's own admission, merely a variant on the AT&T Direct Model, which the Commission has referred to as the Historical Revenue Approach. As admitted in the FNPRM<sup>66</sup>, the Commission rejected the Historical Revenue Approach in the 1997 Price Cap Performance Review. No party challenged that aspect of the Commission's Order before the Court. The Commission's decision to reject the Historical Revenue Approach is therefore final for purposes of the remand from the Court. Therefore, the Commission cannot lawfully consider Option 3 to set the X-Factor for the remand period.

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<sup>62</sup> BellSouth here demonstrates merely that Options 2 and 3 cannot properly be considered during the remand period. Later in these comments, BellSouth demonstrates that these Options are fundamentally flawed, and should not be used to reset the X-Factor prospectively.

<sup>63</sup> FNPRM at 20.

<sup>64</sup> The USTA TFP Model did not equate the input cost of capital to the firm's overall return on investment.

<sup>65</sup> See 188 F.3d at 525: ("In a determination unchallenged here, the FCC accorded the greatest weight to its own estimates....") See also, 188 F.3d at 526: ("The FCC incorporated the aspects of AT&T's method that it deemed reasonable into its own method, see *1997 Order*, 12 FCC Rcd at 16,658, para. 33...")

<sup>66</sup> FNPRM at 11.

## **VI. Application Of The 1997 Staff Study To The Remand Period**

On September 10, 1999, USTA filed with the Commission an update of the Staff 1997 TFP Study. That update shows that the Court's concerns with the Commission's conclusions in the 1997 Price Cap Performance review were fully justified. Specifically, the X-Factors produced by the Staff 1997 TFP Study model for the years 1996-98 were 1.98, 3.62 and 3.03, respectively. Thus, the Court was clearly correct in its assertion that there was no strong upward trend in the X-Factor. The updated Staff 1997 TFP Study also reveals that the price cap LECs have not achieved an X-Factor as high as 6.5 percent in any year since price caps began. The average for the years 1991-1995 was 4.86 percent.<sup>67</sup> The average achieved X-Factor for the entire price cap period, 1991-98, is 4.12 percent. The achieved X-Factor for the most recent five year period, 1994-1998, is 4.06 percent.

Rather than simply admitting error and reducing the X-Factor to the level indicated by the updated 1997 Staff TFP Study, the FNPRM attempts to justify the Commission's prior decision by making wholesale changes to the 1997 Staff TFP Model in what is called the "1999 Staff TFP Study". The FNPRM also contains a new staff study, the "Staff Imputed-X Study" that abandons price cap regulation altogether in favor of a return to previously rejected cost-of-service regulation. The short answer to these studies for purposes of responding to the Court's remand is that Section 402(h) does not permit the Commission to rely on new studies for the remand period. Nothing in the Court's remand contemplated that the Commission would

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<sup>67</sup> This is a revised number that equates to the 5.22 average presented to the Court of Appeals, supplemented to incorporate updated and revised BLS data.

abandon the 1997 Staff TPF Study presented to the Court by the Commission and challenged by no party to the appeal.<sup>68</sup>

Nor is there anything in the record that would justify the Commission's decision to include the 0.5 percent CPD in its reinitialization of the price cap index.<sup>69</sup> The Court made it clear that the Commission could justify including a CPD in the reinitialization only if there was "evidence linking productivity gains to the anticipation of sharing's elimination."<sup>70</sup> The evidence is to the contrary.

In the 1995 LEC Price Cap Performance Review the Commission gave LECs the option of eliminating of sharing by electing a 5.3 percent X-Factor. As the Commission acknowledged in its brief to the Court, "substantially all" of the large LECs selected the "no sharing" option.<sup>71</sup> If the elimination of sharing produced any increase in LEC productivity, it would have shown up in the 1996-98 results. However, as the USTA update to the 1997 Staff TFP Study indicates, the achieved X-Factor declined from a high of 6.20 percent in 1995 to 1.98 percent in 1996, 3.62 percent in 1997 and 3.03 percent in 1998. If LEC productivity was stimulated by the elimination

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<sup>68</sup> See FCC Brief for Respondents at 22: "The Commission acted rationally in adopting the TFP methodology and in calculating yearly X-Factor estimates from that methodology, as can be inferred from the lack of any objection to those decisions."

<sup>69</sup> The FNPRM essentially concedes that the CPD can no longer be justified by the efficiency incentives related to the switch from rate of return regulation to price caps: "Note, however, that increased efficiency incentives created by the switch to price caps will dissipate when price caps have been in effect for some time and the historical period evaluated is on where price caps were in place. In this case, the historical data are already reflecting the increased incentives for efficiency created by price caps." FNPRM, Appendix B, at 43.

<sup>70</sup> 188 F.3d at 529.

<sup>71</sup> See FCC Brief for Respondents at 49: "The 1996 annual access tariff filings indicate that 'substantially all' of the large LECs had selected the 5.3% X-Factor option under the previous interim regime and thus had already removed themselves from any sharing obligations. Order, para. 157 (J.A. 81-82); Performance Review Order, para. 220, 10 FCC Rcd 9057-58 (detailing 5.3% option with no sharing obligations). The Order below therefore affects little change in the availability of sharing...."

of sharing, the impact was swamped by other factors that reduced the achieved X-Factor.<sup>72</sup> The Commission should not include a CPD in any reinitialization of the X-Factor for the remand period.<sup>73</sup>

Based on the evidence in the record, the 1997 Staff TFP Study demonstrates that the price cap LECs have actually achieved an X-Factor of 4.86 percent during the first five years of price cap regulation. This level of X-Factor is consistent with the 5.3 percent “no sharing” option, minus the CPD, found reasonable by the Commission in the 1995 Price Cap Performance Review. Since an X-Factor set at 4.86 percent assigns all of the average productivity gains achieved by the LECs to their customers, there is no-basis for an additional CPD.<sup>74</sup> There was no legitimate reason for the Commission to raise the X-Factor in the 1997 Price Cap Performance Review. Therefore, the Commission should set the “permanent” X-Factor at 4.86 percent for the remand period.<sup>75</sup> It should create a remedy to make the LECs whole for the difference between the access prices actually charged by the LECs based on the erroneous 6.5 percent X-Factor and the prices that would have been charged had the X-Factor been set at 4.86 percent.<sup>76</sup>

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<sup>72</sup> Indeed, the reduction in the achieved X-Factor after 1995 is consistent with the conclusion of the productivity-enhancing LEC downsizing efforts in the early 1990s, which is discussed more fully in Sections VII A 2 and Section VII C, below.

<sup>73</sup> As discussed below, evidence presented by Dr. William E. Taylor on behalf of USTA demonstrates that the CPD should be eliminated prospectively as well.

<sup>74</sup> The USTA proposal uses a five-year rolling average of historical productivity gains to set the subsequent year’s X-Factor. If adopted, this approach flows through all of the average productivity gains to LEC customers, while maintaining the incentive for each LEC to outperform the average. Adding a CPD would simply be a millstone around the necks of companies under-performing the average and a penalty tax on those out-performing the average.

<sup>75</sup> If the Commission updates the 1997 Staff TFP Study for the years 1996-98, it would be justified in prescribing an even lower X-Factor of 4.06 percent based on the most recent five years in the updated 1997 Staff TFP Study. See Section VII A 6, below.

<sup>76</sup> Adopting this approach will address the CPD issue for the remand period. If the Commission adopts some other approach, it may be required to address the CPD issue directly.

## **VII. The Commission Should Reduce The X-Factor Prospectively**

As shown above, the Commission's decision to raise the X-Factor to 6.5 percent in the 1997 Price Cap Performance Review was not justified by the 1997 Staff TFP Study. In the FNPRM the Commission tries to bolster its prior decision by introducing two new studies, the "1999 Staff TFP Study" and the "Staff Imputed X Study." As shown below, both of these studies are fundamentally flawed and form no lawful basis to rescribe the X-Factor.

In Appendix A to the FNPRM, a current staff member criticizes the Commission's 1997 Staff TFP Study and proposes changes to "correct" the prior study. Not surprisingly, each "correction" suggested has the effect of raising the X-Factor. In fact, with two exceptions, the changes proposed in Appendix A are not "corrections" at all, but simply biased choices designed to artificially inflate the X-Factor.

The most significant change proposed is to substitute an external "competitively determined historical cost of capital" for the internal "actual imputed cost of capital" used in the 1997 Staff TFP Study.<sup>77</sup> The use of an internal imputed cost of capital was one of the aspects of the AT&T TFP Model selected by the Commission in creating the 1997 Staff TFP Study.<sup>78</sup> It can thus hardly be characterized as a "conceptual error" that requires "correction".<sup>79</sup>

USTA asked Frank M. Gollop, Professor of Economics at Boston College to evaluate the staff's claim that the method of calculating the cost of capital input in the 1997 Staff TFP Model

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<sup>77</sup> FNPRM, Appendix A at 20. Stripped of jargon, the 1997 Staff TFP Model uses actual LEC earnings, not a contrived hypothetical, as the opportunity cost of capital.

<sup>78</sup> The USTA TFP model uses an external cost of capital estimate. Id. at 21.

<sup>79</sup> FNPRM, Appendix B at 45; Appendix A at 23.

constitutes a methodological error that should be corrected. Professor Gollop's paper is attached to the USTA comments in this proceeding.<sup>80</sup>

Professor Gollop notes that the 1997 Staff TFP Model begins from the premise that total revenues equal total costs.

Consistent with this framework, property income (total expense associated with capital input) is calculated as a residual formed as the difference between total revenues and the sum of labor and material expenses. Actual earnings are assumed to reflect LEC opportunity costs and therefore are considered part of the required return to capital. In contrast, the 1999 staff model is premised on the belief that total revenue does not equal total cost. As a result, property income is not defined as a residual as in the 1997 staff model but is formed from an independent calculation based on an external rate of return.<sup>81</sup>

Professor Gollop notes that the 1997 model adopts an "internal rate of return" framework in defining property income, whereas the 1999 staff models embrace an "external rate of return" model to define property income. Professor Gollop states that there are "strong a priori arguments in the economics literature supporting the use of either internal or external rates of return."<sup>82</sup> He notes that AT&T and its expert Dr. John Norsworthy advocated an internal rate of return in this proceeding, whereas USTA's model uses an external rate of return.

Book-length reports could be written on the relative merits of each approach in alternative applications and each could draw support from economic theory. However, once the decision is made to adopt an external rate-of-return framework, economic theory is uncompromising regarding how external rates of return are to be calculated and applied.<sup>83</sup>

Professor Gollop notes that both the 1997 Staff TFP Study and the 1999 Staff TFP Study quantify X by establishing TFP and input price differentials comparing the performance of the LECs with firms in the U.S. nonfarm business sector.

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<sup>80</sup> Gollop, Frank M., "Economic Assessment of the 1999 X-Factor Model Proposed by the FCC Staff." ("Gollop").

<sup>81</sup> Gollop at 5, Sect. 1.

<sup>82</sup> Id. at 5, Sect. 1.

In both models, the staff relies on BLS data for the nonfarm sector. BLS measures nonfarm TFP and input price growth using a model based on an internally calculated rate of return, i.e., total revenue equals total cost and all measured profits are assumed to reflect opportunity costs. One nice feature of the 1997 staff model is that its adoption of an internal rate of return framework for the LEC capital accounts guarantees symmetry with the BLS accounts so that the computation of the TFP and input price differentials are computed on like concepts. The 1999 staff model introduces an asymmetry.<sup>84</sup>

Professor Gollop's evaluation of the 1999 Staff TFP Model is discussed under Section VII A, below.

USTA asked Dr. James H. Vander Weide of Duke University to evaluate the proposal by the current staff to estimate the cost of capital input in its productivity studies. The new staff proposal is applied in both the 1999 Staff TFP Study and the Staff Imputed X Study. Dr. Vander Weide's affidavit is attached to USTA's Comments in this proceeding.

Dr. Vander Weide concludes that the staff's proposed methodology is inconsistent with the economic definition of the market cost of capital. Specifically, the staff's methodology incorrectly links changes in the market cost of capital to changes in the yield on Baa-rated bonds. The staff ignores any changes in the cost of equity and market value capital structures of competitive firms over the period 1991-1998. Dr. Vander Weide demonstrates that any changes in the market cost of capital from 1991-1998 was negligible because, while debt costs declined over the staff's study period, the cost of equity remained relatively constant and the percentage of equity in the capital structure of competitive firms increased significantly. As a result, the staff studies significantly underestimate the market cost of capital and hence overestimate LEC productivity over the study period.<sup>85</sup>

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<sup>83</sup> Id at 5-6, Sect. 1.

<sup>84</sup> Gollop at 17, Sect. 1.e.

<sup>85</sup> USTA Comments, "Affidavit of James H. Vander Weide on Behalf of the United States Telephone Association" ("Vander Weide"), Executive Summary.

In Appendix A, the Staff begins with the assumption that LECs earned a normal, competitive rate of return in 1991, the first year of price caps. The staff then adjusts the cost of capital both forward and backwards using changes in Moody's Baa bond yields. The staff asserts that this "gives an independent competitive cost of capital for the LECs in each year of the historical period."<sup>86</sup> The staff then uses this derived cost of capital estimate in both the 1999 Staff TFP Study and the Staff Imputed-X Study.

Dr. Vander Weide demonstrates the fallacies of the staff's approach to calculating the LEC cost of capital. He notes that the staff's approach ignores the economic definition of cost of capital.

Economists define the market cost of capital as a weighted average of the cost of debt and the cost of equity, where the market value percentages of debt and equity in the firm's capital structure are used as weights in calculating the weighted average. Since the market weighted average cost of capital depends on the cost of debt, the cost of equity, and the percentages of debt and equity in the competitive firm's capital structure, the weighted average cost of capital will change with changes in any of the three components of the weighted average cost of capital, not just with changes in the cost of debt. By focusing only on changes in the market cost of debt, the Commission Staff is implicitly assuming that: (1) the cost of equity moves up and down by the same amount as the cost of debt; and (2) the market value capital structure of competitive firms remains constant at its 1991 level. If these basic assumptions of the Staff's TFP and Imputed X Studies are incorrect, . . . the Staff's proposed cost of capital methodology may significantly under- or over-estimate the competitive market cost of capital; and the resulting X-Factor in the Staff's TFP and Imputed X Studies may significantly under- or over-estimate the correct productivity factor in the price cap formula.<sup>87</sup>

Dr. Vander Weide performed three studies to test the assumptions implicit in the staff's methodology. First, he estimated the cost of equity for the S&P 500 at the end of each year from 1991 to 1998 and at November 1999 to determine whether the cost of equity of these competitive firms declined over the period. Dr. Vander Weide used the same annual Discounted Cash Flow

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<sup>86</sup> FNPRM, Appendix A at 22.

<sup>87</sup> Vander Weide at 6, Sect. IV, ¶ 9.

model used by the Commission to estimate the LECs cost of equity under rate of return regulation. His Table 3 shows that the cost of equity has varied much less than the yield on Baa bonds, and in November 1999 was almost identical to the cost of equity in December 1991.<sup>88</sup>

Dr. Vander Weide next performed a regression analysis to test statistically the Staff's assumption that the cost of equity of competitive firms changes by the same magnitude as the yield on Baa bonds. The analysis clearly shows that the Staff's assumption is incorrect. When the yield for Baa bonds varies by 100 basis points, the cost of equity for the S&P 500 changes by only 28 basis points.<sup>89</sup>

Finally, Dr. Vander Weide examined the change in the market value capital structures of both the S&P Industrials and the Bell Holding Companies from December 1991 to September 1999. The average percentage of equity in the market value capital structure of the S&P Industrials increased from 70.68 percent at year-end 1991 to 82.95 percent at September 30, 1999. The corresponding change in the Bell Holding Company average capital structure increased from 69.41 percent at December 1991 to 83.14 percent at September 1999. These data demonstrate that the Staff's cost of capital methodology incorrectly assumes that the percentage of equity in the capital structure of competitive firms has remained constant. It also demonstrates that the change in the Bell Holding Company average capital structure was approximately the same as that for the S&P Industrials.<sup>90</sup>

Dr. Vander Weide shows that "the Staff's proposed methodology produces results that significantly underestimate the competitive market cost of capital for the period 1991 to 1998."<sup>91</sup>

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<sup>88</sup> Vander Weide at 8-9, Sect. V, ¶ 13.

<sup>89</sup> Vander Weide at 10, Sect. V, ¶ 14.

<sup>90</sup> Vander Weide at 10-11, Sect. V.

<sup>91</sup> Vander Weide at 13, Sect. VI, ¶ 18.

He then examined whether a correct method of estimating the competitive market cost of capital would determine that the cost of capital has changed since 1991. His study determined that the market cost of capital declined only slightly from 1991 to 1995, and increased thereafter. The total change in the market cost of capital from 1991 to 1998 was negligible.<sup>92</sup>

While Dr. Vander Weide's studies prove the point empirically, BellSouth notes that the staff's estimates of the LEC's cost of capital are absurdly low, and could never have been imposed lawfully by regulators. Beginning with the LECs' achieved accounting earnings in 1991 of 11.81 percent, the staff's methodology estimates that the "competitive rate of return" falls to 9.65 percent in 1995 and to 8.68 percent in 1998.<sup>93</sup>

Although price cap regulation increases the risk, and hence the cost of capital, of firms subject to that form of regulation, the staff's proposed methodology implies that price cap regulation has been accompanied by a sharply reduced cost of capital for the price cap LECs.<sup>94</sup> Indeed, the estimated cost of capital produced by the staff model is so low that achieved earnings as low as those estimated by the Staff could not have occurred under price caps. Earnings that low would have triggered a lower formula adjustment, which would have allowed the price cap LECs to raise prices to the level needed to produce a 10.25% rate of return.<sup>95</sup> The Commission adopted the lower formula adjustment to avoid unconstitutional confiscation of LEC property—a result that would clearly have occurred if LEC earnings were driven to the levels of the cost of

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<sup>92</sup> Vander Weide at 14, Sect. VI, ¶ 19.

<sup>93</sup> FNPRM, Appendix C, Table C-3.

<sup>94</sup> The Staff estimates of a competitive rate of return are also inconsistent with the Commission's treatment of those LECs remaining under rate of return regulation. Despite the decline in interest rates noted by the Staff, the Commission has not found it necessary to re prescribe the authorized rate of return for non-price cap LECs, which has remained at 11.25% since 1990.

<sup>95</sup> The FNPRM implicitly concedes that an X-Factor high enough to drive LEC earnings to the level suggested by the Staff's alleged "competitive cost of capital" would not have been permitted by the Commission's rules. See FNPRM at 14, footnote 62.

capital estimates produced by the Staff's proposed methodology. Both the 1999 Staff TFP Study and the Staff Imputed X Study are contaminated by these absurd estimates, and must be rejected.

**A. The 1999 Staff TFP Study Is Fundamentally Flawed And Biased**

**1. The Staff Study Misstates The LECs' Opportunity Cost Of Capital**

Although the 1997 Staff TFP Study was not challenged before the Court of Appeals, the FNPRM asks for comment on a new 1999 Staff TFP Study. Despite the Commission's claim that the 1999 Staff TFP Study merely "corrects" errors in the 1997 Staff TFP Study, the fact is that there is hardly a variable left unaffected. Professor Gollop has analyzed the 1999 Staff TFP Study for USTA. He notes that:

Revenue, output, total labor expense, compensation per employee, the rental price of capital, capital expense, material expense, operating expense, taxes, and even the BLS input price series for the U.S. nonfarm sector are changed. The staff argues that each change is required to address "errors" in the 1997 model adopted by the Commission. Interestingly, the incremental effect of each and every proposed "adjustment" leads to an increase in the X-Factor otherwise found in the Commission's 1997 model.<sup>96</sup>

Professor Gollop's report examines each of the changes proposed in the 1999 Staff TFP Study. With two exceptions, he concludes that the 1999 Staff TFP Study violate "both economic theory and productivity accounting rules."<sup>97</sup> Professor Gollop developed a simulation of the 1999 staff model that properly implements these two methodological changes while correcting for other modeling and data errors by the Staff. The resulting average X-Factors for the 1991-98 and 1994-98 periods are 3.29 percent and 3.76 percent, respectively.

The most significant error in the Staff 1999 TFP Study is its treatment of the cost of capital. Economic theory requires that if an external rate of return is used in a TFP model, it

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<sup>96</sup> Gollop at 4, Introduction.

<sup>97</sup> Gollop at 4, Introduction. The two exceptions are the staff's call for adoption of an external rate of return and a new measure for local output.

should measure the opportunity costs of the LECs. Opportunity costs are defined as the return an investor can expect on the next best use of its funds. Professor Gollop finds the Moody's Baa bond rate to be a poor metric for LEC opportunity costs. He suggests that the rate of return series reported by Value Line for its Industrial Composite of 875 U.S. non-financial firms better represents the movement in LEC opportunity costs, since if the LECs exited the telecommunications market they would not likely be passive bond owners but proactive owners of some industrial enterprise. He charts the difference in the Value Line series and the Moody's Baa bond yields. In the post-1991 period, the trends diverge markedly. While inflation and interest rates have been under control, the economy has enjoyed record-setting growth. As a result, bond rates have trended downward while corporate earnings have increased. Professor Gollop finds that the earnings of large corporations better reflect the opportunity costs of the LECs than bond yields.<sup>98</sup>

Professor Gollop identifies a fundamental error in economic and accounting principles made by the staff in the 1999 Staff TFP Study. The staff takes its estimated change in opportunity costs and applies it to the entire capital input, rather than to just opportunity costs. Professor Gollop notes that in addition to opportunity costs, the capital input includes compensation for depreciation, amortization, rental payments, business transfers, capital gains and losses on assets, property taxes, and federal, state and local income taxes.<sup>99</sup> Based on data submitted by USTA, Professor Gollop determined that depreciation, amortization and income taxes alone account for approximately 70 percent of property income. Earnings (including interest payments), property taxes, rent paid, and business transfers account together for the

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<sup>98</sup> Gollop at 7, Sect. 1.a.

<sup>99</sup> Gollop at 9, Sect. 1.b. Professor Gollop notes that the very authority cited by the Staff in Appendix B makes clear that the rental price of capital includes far more than opportunity costs.

remaining 30 percent. For purposes of his simulation, Professor Gollop applied an external rate-of-return to 30 percent of property income, although he noted that formal adoption of the staff's methodology would require a far more detailed analysis of the LECs' capital accounts. The intensive effort required to properly adopt an external rate of return may have been one reason the Commission adopted an internal rate of return in the 1997 Staff TFP Study.<sup>100</sup>

Professor Gollop expresses bewilderment as to why the author of the 1999 Staff TFP Study adjusted the opportunity cost of capital for the years 1985-90, a period in which the LECs were subject to rate of return regulation.<sup>101</sup> He notes that the staff adjustment produces an opportunity cost of capital nearly five full percentage points below the returns earned under rate of return regulation in 1986 and 1987. This should have raised a "red flag" for the authors of the staff study that their Baa bond yield methodology was flawed.<sup>102</sup>

Professor Gollop also notes that the 1999 Staff TFP Study errs by modifying LEC revenues, taxes, and operating expenses when converting to an external rate of return framework. According to Professor Gollop, this "not only is incorrect but makes absolutely no sense."<sup>103</sup> For example, Professor Gollop notes that:

...the author's reassignment of some fraction of dollar earnings from the 'normal' (opportunity cost) to 'excess' categories will have absolutely no impact on the Internal Revenue Service's view of the LECs income tax liability.<sup>104</sup>

Professor Gollop also notes that converting LEC capital accounts from an internal to an external rate of return framework requires symmetric adjustments to the capital accounts of the

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<sup>100</sup> Gollop at 12, Sect. 1.b.

<sup>101</sup> Most states in BellSouth's region continued to apply rate of return regulation into the 1992-93 time frame.

<sup>102</sup> Gollop at 15, Sect. 1.c.

<sup>103</sup> Gollop at 15, Sect. 1.d.

<sup>104</sup> Gollop at 16, Sect. 1.d.

nonfarm business sector. This is another reason why the Commission may have opted to use an internal rate of return in the 1997 Staff TFP Study.<sup>105</sup>

## 2. The Staff Mistakenly Disallows Labor Severance Costs

The second area of major adjustment to the 1997 Staff TFP Study proposed in the FNPRM is a downward adjustment to reported LEC labor expense for the years 1991-98 to reflect LECs' severance payments. The staff justifies disallowing billions of dollars of actual labor severance payments in two sentences:

To have a labor price series meaningful for TFP analysis, it is necessary to adjust for the impact of exogenous changes in labor compensation and accounting rules. This is accomplished by adjusting the labor compensation series to net out one-time charges for such things as buy-outs and accounting rule changes.<sup>106</sup>

Professor Gollop notes that the first sentence is simply wrong. Incentive payments made to departing employees are not "exogenous" events imposed on management from an outside source.<sup>107</sup> They were management decisions reflecting the need to reduce labor costs to increase productivity. Moreover, even if a cost were "exogenous", that would be no valid grounds for disallowing the cost in calculating labor expense. Professor Gollop cites an increase in social security benefits as an "exogenous" cost that must still be included in the calculation of labor expense. The proposed disallowance reflects a fundamental misunderstanding of the economic

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<sup>105</sup> Gollop at 17, Sect. 1.e.

<sup>106</sup> FNPRM, Appendix B at 50. The Staff simply "assumes" that any increase in the proportion of benefits above 20% "to be the amount attributed to buyouts, accounting rule changes, and so on," and then characterizes these amounts as "excess benefits." *Id.*

<sup>107</sup> Gollop at 18, Sect. 2. The test for "exogenous" treatment has two prongs. "First, are the costs not within the control of the price cap carriers? And second, are the costs not reflected in the price cap formula, for example, in the GNP-PI?" In the Matter of Treatment of Local Exchange Carrier Tariffs Implementing Statement of Financial Accounting Standards, "Employers Accounting for Post Retirement Benefits other than Pensions", CC Docket No. 92-101, Memorandum Opinion and Order, FCC 93-47, released January 22, 1993, ¶ 52. Severance benefits fail both prongs of this test. They resulted from management decisions. Further, since