

PUBLIC DISCLOSURE DOCUMENT

BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

In re: )  
Petition of Supra Telecommunications and )  
Information Systems, Inc. to Review and )  
Cancel BellSouth's Promotional Offering Tariffs )  
Offered in Conjunction with its New Flat Rate )  
Service Known as PreferredPack )  
\_\_\_\_\_ )

Docket No. 040353-TP

Filed: October 14, 2004

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Direct Testimony of

William E. Taylor, Ph.D.

On Behalf Of

Bellsouth Telecommunications, Inc.

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FLORIDA PUBLIC SERVICE COMMISSION**

**Direct Testimony of William E. Taylor, Ph.D.**

**Table of Contents**

I. Statement of Qualifications.....	1
II. Purpose of Testimony and <b>Conclusions</b> .....	2
III. “Winback” Campaigns, Supported by Promotional Offerings, are Pro-competitive and Beneficial to Customers.....	4
IV. Section 364.01(4)(g): Preventing Anticompetitive Behavior.....	7
V. Section 364.051(5)(c): Nonbasic Service Prices Must Cover Costs .....	9
A. Economic and Statutory Tests.....	9
1. Price.....	12
2. Direct Cost.....	14
B. Under the Statutory Test, BellSouth’s Price for PreferredPack Plan Service is Procompetitive ...	17
1. Compensatory pricing of a package when a component service is priced below cost.....	17
2. Application of the Statutory Test.....	22
C. Even Under an Imputation Test, BellSouth’s Price for PreferredPack Plan Service is Procompetitive .....	25
VI. Section 364.08: No Free Service.....	28
VII. Supra’s Charge of Discrimination Among Similarly-Situated Customers is Unfounded.....	30
A. Economic and Statutory Definitions of Unfair Discrimination.....	31
B. BellSouth’s Promotional Offerings in Conjunction with its PreferredPack Plan Service Do Not Discriminate Among Similarly-Situated Customers .....	34
VIII. Conclusions.....	36

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**DIRECT TESTIMONY OF WILLIAM E. TAYLOR, Ph.D.**

**I. STATEMENT OF QUALIFICATIONS**

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is William E. Taylor. I am Senior Vice President of NERA Economic Consulting ("NERA"), head of its Communications Practice, and head of its Boston office located at 200 Clarendon Street, 35<sup>th</sup> Floor, Boston, Massachusetts 02116.

**Q. PLEASE SUMMARIZE YOUR EDUCATION, WORK EXPERIENCE AND PRESENT RESPONSIBILITIES**

A. I have been an economist for thirty years. I earned a Bachelor of Arts degree from Harvard College in 1968, a Master of Arts degree in Statistics from the University of California at Berkeley in 1970, and a Ph.D. from Berkeley in 1974, specializing in Industrial Organization and Econometrics. For the past thirty years, I have taught and published research in the areas of microeconomics, theoretical and applied econometrics, and telecommunications policy at academic and research institutions. Specifically, I have taught at the Economics Departments of Cornell University, the Catholic University of Louvain in Belgium, and the Massachusetts Institute of



Technology. I have also conducted research at Bell Laboratories and Bell Communications Research, Inc.

I have appeared before state and federal legislatures, testified in state and federal courts, and participated in telecommunications regulatory proceedings before state public utility commissions, as well as the Federal Communications Commission (“FCC”), the Canadian Radio-television Telecommunications Commission, the Mexican Federal Telecommunications Commission, and the New Zealand Commerce Commission. I have appeared before the Florida Public Service Commission (“FPSC” or “Commission”) in several proceedings, including Docket Nos. 020119-TP, 020578-TP, and 021252-TP (consolidated) concerning the “Key Customer” promotional offerings of BellSouth Telecommunications, Inc. In addition, I have appeared before the Commission in proceedings for, among others, fair and reasonable local service rates, interLATA authorization, DSL policy, inter-carrier compensation, structural separation, and wholesale service quality performance measurement. I filed an affidavit covering some of the same topics as this testimony with the Commission on August 17, 2004.<sup>1</sup> My vita is attached as Exhibit WET-1.

## **II. PURPOSE OF TESTIMONY AND CONCLUSIONS**

### **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. I have been asked by BellSouth Telecommunications, Inc. (“BellSouth”) to respond to the economic issues identified by the Commission in its *Order Establishing Procedure*.<sup>2</sup> The case stems from a petition from Supra Telecommunications and Information Systems (“Supra”) concerning BellSouth’s promotional offerings in

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<sup>1</sup> Affidavit of William E. Taylor, before the Florida Public Service Commission. *In re: Petition of Supra Telecommunications and Information Systems, Inc. to Review and Cancel BellSouth’s Promotional Offering Tariffs Offered in Conjunction with its New Flat Rate Service Known as PreferredPack*, Docket No. 040353-TP, August 26, 2004 (“Taylor Affidavit”).

<sup>2</sup> *In re: Petition to review and cancel, or in the alternative immediately suspend or postpone BellSouth Telecommunications, Inc.’s PreferredPack Plan tariffs by Supra Telecommunications and Information Systems, Inc.*, Docket No. 040353-TP, Order Establishing Procedure (Order No. PSC-04-0931-PCO-TP), September 22, 2004 (“FPSC OEP”).



conjunction with its PreferredPack Plan service.<sup>3</sup> The tariffed promotional offerings that are available in conjunction with BellSouth's PreferredPack service are designed to reacquire customers of competitive LECs ("CLECs") in Florida, of which Supra is one. Specifically, BellSouth offers a current CLEC customer a \$100 Cash Back coupon and a waiver of the line connection charge (worth \$40.88) as inducements ("Promotions") to switch carriers and obtain BellSouth's PreferredPack Plan service (which combines a flat-rated access line with several vertical features plus Privacy Director for \$26.95 per month).<sup>4</sup>

The Commission has set three issues for consideration in this proceeding:<sup>5</sup>

1. What criteria should be used to evaluate whether or not BellSouth's PreferredPack Plan and/or its related promotional offerings (i.e., the \$100 Cash Back, waiver of the subscriber line connection charge, and the \$25 gift card) have violated 364.01(4)(g), 364.051(5)(c), or 364.08 Florida Statutes?
2. a) Based on the criteria identified in Issue 1, does BellSouth's PreferredPack Plan and/or its related promotional offerings (i.e., the \$100 Cash Back, waiver of the subscriber line connection charge, and the \$25 gift card) violate 364.01(4)(g), 364.051(5)(c), or 364.08 Florida Statutes?  
b) If so, what action should be taken by the Commission?
3. Should this docket be closed?

My testimony addresses Issues 1 and 2(a).

#### **Q. WHAT ARE YOUR CONCLUSIONS?**

- A. From an economic perspective, no promotion that is compensatory (as discussed in the Commission's *Key Customer Order*)<sup>6</sup> is anticompetitive in the sense of Section

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<sup>3</sup> *Petition of Supra Telecommunications and Information Systems, Inc. to Review and Cancel, or in the Alternative, Immediately Suspend or Postpone Tariffs* ("Supra's Petition"), dated April 20, 2004. Supra also raised additional arguments that were not previously pled in its *Motion for Summary Final Order* ("Supra's Motion"), dated July 27, 2004.

<sup>4</sup> Originally, this offering included a \$25 gift card as well; however, I understand that BellSouth no longer offered the gift card as a part of any promotion after August 20, 2004.

<sup>5</sup> *FPSC OEP*, Attachment A.



364.01(4)(g). Similarly, no promotion that covers its direct cost (modified to account for the pricing of basic exchange service below direct cost) violates Section 364.051(5)(c). Offering components of a packaged service at no additional cost does not constitute free service in the sense of Section 364.08, and offering different promotions to differently situated customers does not constitute undo discrimination in the sense of Section 364.051(5)(a)(2) or anticompetitive behavior in the sense of Section 364.01(4)(g).

My economic analysis of BellSouth's Promotions, in light of the requirements of the three cited sections of the Florida Statutes, shows that Supra's complaints are unfounded. Even with its Promotions, BellSouth's pricing of its PreferredPack Plan service is not anticompetitive or discriminatory, covers its direct costs and does not amount to any provision of free service.

### **III. "WINBACK" CAMPAIGNS, SUPPORTED BY PROMOTIONAL OFFERINGS, ARE PRO-COMPETITIVE AND BENEFICIAL TO CUSTOMERS.**

#### **Q. ARE CUSTOMER REACQUISITION PROGRAMS NECESSARILY ANTICOMPETITIVE?**

A. No. Winback campaigns, supported by promotional offerings, are generally beneficial to consumers, and when they are priced at a compensatory level, as is the case with the PreferredPack Plan promotions, they are procompetitive. Imaginative "winback" campaigns that telecommunications service providers routinely use to regain customers lost to competitors are generally thought by economists and regulators to be pro-competitive, beneficial to consumers and beneficial to society at large. The FCC's view on the matter was best expressed several years ago in an important proceeding pertaining to the legitimate use of customer proprietary network information ("CPNI") by incumbent and competitive LECs alike:

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<sup>6</sup> Commission's *Final Order on BellSouth's Key Customer Tariffs* ("Key Customer Order") in Docket Nos. 020119-TP, 020578-TP, and 021252-TP (consolidated), Order No. PSC-03-0726-FOF-TP, June 19, 2003, at 40.

Customers expect carriers to attempt to win back their business by offering better-tailored service packages, and that such precise tailoring is most effectively achieved through the use of CPNI. Winback restrictions may deprive customers of the benefits of a competitive market. Winback facilitates direct competition on price and other terms, for example, by encouraging carriers to “out bid” each other for a customer's business, enabling the customer to select the carrier that best suits the customer’s needs.<sup>7</sup>

Some commenters argue that ILECs should be restricted from engaging in winback campaigns, as a matter of policy, because of the ILECs’ unique historic position as regulated monopolies. Several commenters are concerned that the vast stores of CPNI gathered by ILECs will chill potential local entrants and thwart competition in the local exchange. We believe that such action by an ILEC is a significant concern during the time subsequent to the customer’s placement of an order to change carriers and prior to the change actually taking place. Therefore, we have addressed that situation at Part V.C.3, *infra*. However, once a customer is no longer obtaining service from the ILEC, the ILEC must compete with the new service provider to obtain the customer’s business. We believe that such competition is in the best interest of the customer and see no reason to prohibit ILECs from taking part in this practice.<sup>8</sup>

Because winback campaigns can promote competition and result in lower prices to consumers, we will not condemn such practices absent a showing that they are truly predatory.<sup>9</sup>

**Q. HAS THE FLORIDA COMMISSION CONSIDERED THE PROPRIETY OF WINBACK PROGRAMS?**

- A. Yes. This Commission took due note of this FCC policy on winback promotions not only by reproducing the cited passages from the *CPNI Reconsideration Order* in its *Key Customer Order*, but also by conducting its own analysis from which it concluded:

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<sup>7</sup> FCC, *In the Matter of Implementation of the Telecommunications Act of 1996, Telecommunications Carriers’ Use of Customer Proprietary Network Information and Other Customer Information, and Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended*, CC Docket Nos. 96-115 and 96-149. Order on Reconsideration and Petitions for Forbearance (“*CPNI Reconsideration Order*”), released September 3, 1999. See ¶68.

<sup>8</sup> *CPNI Reconsideration Order*, ¶69.

<sup>9</sup> *CPNI Reconsideration Order*, ¶70.



We believe a win-back promotion such as the Key Customer offering is not, in and of itself, detrimental. In fact, win-back promotions can be very beneficial to Florida consumers by giving them a choice of providers with varied services at competitive prices.<sup>10</sup>

In other words, the Commission has accepted the competitive benefits from—indeed, the competitive necessity of—customer reacquisition campaigns as long as they do not violate the provisions of Section 364.051(5)(c) of the Florida Statutes.

**Q. DO CARRIERS OTHER THAN BELL SOUTH USE WINBACK PROGRAMS?**

- A. Yes. Several customer reacquisition programs (many of them based on a waiver of the customer’s switching and re-connection charges and other direct cash incentives) have been—and are being—used by Florida carriers that offer a wide range of telecommunications services, including programs offered by MCI, AT&T, Z-Tel, Vonage and even Supra.<sup>11</sup> Indeed, Supra’s own Total Solution service (a competitor to BellSouth’s Complete Choice service) promises, among other things, “no conversion fees,” which amounts to a waiver of the line connection charge. In addition, Supra offers one month free service to customers that switch from BellSouth to Supra.<sup>12</sup> Winback programs in the telecommunications industry have become so standard a competitive device that some observers regard them as possibly even more cost-effective and productive than programs designed to attract new or first-time customers.<sup>13</sup>

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<sup>10</sup> Commission’s *Final Order on BellSouth’s Key Customer Tariffs* (“Key Customer Order”) in Docket Nos. 020119-TP, 020578-TP, and 021252-TP (consolidated), Order No. PSC-03-0726-FOF-TP, June 19, 2003, at 40.

<sup>11</sup> See, e.g., BellSouth’s Response to Staff’s 1<sup>st</sup> Request for Production in this proceeding, Item No. 4, May 28, 2004.

<sup>12</sup> See Supra’s Responses to Staff’s First Set of Interrogatories, No. 1(c).

<sup>13</sup> See Carol Parenzan Smalley, “Overlooked Opportunity: The Win Back Customer,” originally published July 17, 2000 by *SearchCRM.com*, reprinted April 2002 by *StakeholderPower.com*. Ms. Smalley cites independent sources as having estimated the probability of successfully selling to (i.e., reacquiring) lost customers to be between 20 percent and 40 percent, and that for prospective new customers to be only between 5 percent and 20 percent. The article also cites Jill Griffin who (along with Michael Lowenstein) co-authored the best-selling book *Customer Winback: How to Recapture Lost Customers and Keep Them*



**Q. HOW SHOULD THE COMMISSION APPROACH CLAIMS OF ANTICOMPETITIVE BEHAVIOR BY TELECOMMUNICATIONS FIRMS?**

- A. In general, this Commission should be extremely wary of any attempt by an industry or firm (ILEC or CLEC) to use regulatory authority to prevent firms from entering a market, competing, or lowering prices. To economists, the major problem with predatory pricing is that it is often used as an argument by firms to control and reduce the amount of price competition in a market, and it is precisely that price competition that produces the main benefits that consumers expect to receive from the competitive process. For example, in a recent summary of the U.S. experience with economic regulation, FCC economist Peyton Wynn concluded that “[l]imiting entry to ensure a healthy industry is an inherent contradiction” and that “It would be hard to find economists who think that predatory pricing is a reasonable worry.”<sup>14</sup>

**IV. SECTION 364.01(4)(G): PREVENTING ANTICOMPETITIVE BEHAVIOR**

**Q. WHAT DOES SECTION 364.01(4)(G) ACTUALLY SAY?**

- A. The statute reads

(4) The commission shall exercise its exclusive jurisdiction in order to: (g) Ensure that all providers of telecommunications services are treated fairly, by preventing anticompetitive behavior and eliminating unnecessary regulatory restraint.

**Q. FROM AN ECONOMIST’S PERSPECTIVE, WHAT IS MEANT BY THE PHRASE “ANTICOMPETITIVE BEHAVIOR”?**

- A. Economists view competition as a process, so while there is no formal definition of “anticompetitive behavior” in the economics literature with which I am familiar, such a definition would probably identify behavior which has the effect of substantially lessening competition. Examples from U.S. antitrust law include

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*Loyal*, San Francisco: Jossey-Bass (Wiley), 2001. Ms. Griffin believes that some of the most successful winback programs have come from the telecommunications industry.

<sup>14</sup> Peyton Wynn, “The Limits of Economic Regulation: The U.S. Experience,” Federal Communications Commission, International Bureau Working Paper Series, Vol. 2, June 2004, at 12.

predation, collusion, exclusion, foreclosure and tying, and eliminating competition through mergers.

**Q. WHAT FORMS OF ANTICOMPETITIVE BEHAVIOR ARE ALLEGED TO BE PRESENT IN BELL SOUTH'S PREFERRED PACK SERVICE AND ITS ASSOCIATED PROMOTIONS?**

A. Supra devotes considerable space to the argument that BellSouth's promotional offering is predatory and anticompetitive.<sup>15</sup> Their argument is two-pronged:

1. BellSouth's PreferredPack Plan service, sold at retail for \$26.95 per month, is "priced below cost" in violation of Section 364.051(5)(c) of the Florida Statutes.<sup>16</sup>
2. The offering of \$100 Cash Back, \$25 gift card, and the waiver of the \$40.88 line connection charge (collectively termed "Incentive Offerings" by Supra)<sup>17</sup> *only* to current customers of CLECs, rather than to *all* customers, "seriously damages competition" by undercutting prices that Supra or any other CLEC "can profitably offer a customer" and by "unlawfully discriminat[ing] against similarly situated customers" in violation of Section 364.051(5)(a)(2) of the Florida Statutes.<sup>18</sup>

With respect to the latter argument, Supra claims that the cost of the promotion (or, essentially, the cost to reacquire lost customers) can be offset by BellSouth from the more than \$21 billion that it allegedly makes in annual net income and other retained profits "accumulated over 100 years of cost plus accounting [it] was allowed to earn as the incumbent monopoly provider."<sup>19</sup> Supra also claims that BellSouth's recent success at raising the price of flat-rated single residential access line service to Florida customers who take only that service gives it additional latitude to offer

<sup>15</sup> See, e.g., *Supra's Motion*, at 7-12.

<sup>16</sup> *Supra's Motion*, at 10.

<sup>17</sup> *Id.*

<sup>18</sup> *Supra's Motion*, at 12.

<sup>19</sup> *Supra's Motion*, at 11.

promotions that Supra and other CLECs allegedly cannot match.<sup>20</sup> Supra suggests that this may amount to a cross-subsidy to the PreferredPack Plan service.<sup>21</sup>

Finally, Supra argues that the alleged damage that BellSouth's promotional offerings can do to Supra and other competitors would ultimately prove detrimental to Florida consumers. That is because, Supra argues, once such pricing has "eliminated" BellSouth's CLEC competitors, consumers "will have fewer competitive choices and will eventually be subject to higher prices."<sup>22</sup>

**Q. DO BELLSOUTH'S PREFERREDPACK PLAN PROMOTIONS  
CONSTITUTE ANTICOMPETITIVE BEHAVIOR?**

A. No. I show below that the PreferredPack Plan and its promotions are priced at a compensatory level, *i.e.*, one that recovers the relevant costs of the promotions. From an economic perspective, service offerings that cover their costs are *procompetitive*, not anticompetitive.

**V. SECTION 364.051(5)(C): NONBASIC SERVICE PRICES MUST COVER COSTS**

**A. Economic and Statutory Tests**

**Q. HOW DO ECONOMISTS DEFINE PREDATORY OR ANTICOMPETITIVE  
PRICING?**

A. Simply stated, a price below an appropriate measure of cost is predatory if it is implemented to drive competitors from the market with the goal of recouping lost profits by charging above-market prices. Precisely what measure of cost should be used has long been debated, although it has become conventional in telecommunications regulation for that cost to be long run incremental cost

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<sup>20</sup> *Id.*

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

<sup>22</sup> *Supra's Motion*, at 12

(“LRIC”) although, in some cases, the total service long run incremental cost (“TSLRIC”) has been adopted instead.<sup>23</sup>

It is important, however, to note that, while a predatory price, by definition, must be below cost (whatever the applicable cost standard), not all prices below cost are predatory.<sup>24</sup> For example, it is widely recognized that a profit-maximizing firm may well reduce its price as a necessary (and even desirable) response to competitive forces, an act that carries immediate benefits for consumers.<sup>25</sup> And, because predation is necessarily a long-run business strategy, cutting the price below cost temporarily (for example, through promotions) cannot be viewed as predatory unless other long-run circumstances are also taken into account. This would involve, for example, assessing the probability and the firm’s eventual success at recouping its losses from temporary, below-cost prices; its ability to expand output to deter

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<sup>23</sup> Courts have frequently adopted the *short* run marginal (or average incremental) cost as the price floor to apply in predatory pricing cases. The origin of this rule lies in Philip Areeda and Donald Turner, “Predatory Pricing and Related Practices Under Section 2 of the Sherman Act,” *Harvard Law Review*, 88, 1975, 697-733. Recognizing that the calculation of that cost may prove extremely difficult, particularly for multiproduct firms, others have advocated the use of *long* run incremental costs. See Frank Easterbrook, “Predatory Strategies and Counterstrategies,” *University of Chicago Law Review*, 48, 1981, 263-337. Still others do so by recognizing that a firm that maximizes profits in the long run may well, for various reasons, move to prices that are lower than the short run marginal cost but not below the long run version of that cost. See Dennis Carlton and Jeffrey Perloff, *Modern Industrial Organization*, 3<sup>rd</sup> edition, New York: Addison-Wesley, 2000, Chapter 11. Still more sophisticated and complex *economic* tests of predatory pricing have been proposed. See, e.g., the discussion in W. Kip Viscusi, John Vernon, and Joseph Harrington, Jr., *Economics of Regulation and Antitrust*, 2<sup>nd</sup> edition, Cambridge, MA: The MIT Press, 1995, Chapter 9. In particular, the framework proposed in Paul Joskow and Alvin Klevorick, “A Framework for Analyzing Predatory Pricing Policy,” *Yale Journal on Regulation*, 1979, is arguably formally similar to the two-stage rule first adopted by the U.S. Supreme Court in *Matsushita Electric Industrial Co., Ltd. v. Zenith Radio Corporation et al.*, 106 S. Ct. 1348, 1986 and then applied again in *Brooke Group v. Brown and Williamson Tobacco*, 113 S. Ct. 2578, 1993. This two-stage rule looks at *both* market structure (particularly at the structural conditions that either raise or lower the probability of successful predation) and the level of price relative to cost. From an antitrust perspective at least, it does not appear that *Supra* has demonstrated that current market structure in Florida (particularly with respect to entry barriers and the opportunity to recoup losses incurred initially under a predation strategy) favors the adoption by BellSouth of a *designed* predatory pricing strategy.

<sup>24</sup> This matter is clearly recognized by the Joskow-Klevorick rule and the Supreme Court’s test for predatory pricing in *Matsushita* and *Brooke*.

<sup>25</sup> See Robert Pitofsky, Harvey Goldschmid, and Diane Wood, *Trade Regulation*, 5<sup>th</sup> edition, New York: Foundation Press, 2003, esp. Chapter 8, Section 2.

competitive entry; or, once it has monopolized the market, its ability to *maintain* that monopoly power by preventing further entry.<sup>26</sup>

**Q. WHAT ARE THE APPLICABLE ECONOMIC CRITERIA THE COMMISSION SHOULD USE TO DETERMINE WHETHER THE PREFERREDPACK PROMOTIONS VIOLATE SECTION 364.051(5)(C) OF THE FLORIDA STATUTES?**

A. The statute requires that

The price charged to a consumer for a nonbasic service shall cover the direct costs of providing the service and shall, to the extent a cost is not included in the direct cost, include as an imputed cost the price charged by the company to competitors for any monopoly component used by a competitor in the provision of its same or functionally equivalent service.

**Q. HAS THE COMMISSION PREVIOUSLY EXAMINED CONDUCT WITH RESPECT TO THIS STATUTE?**

A. Yes. The Commission has had occasion to interpret this and other related (or relevant) sections of the Florida Statutes in past proceedings.<sup>27</sup> In particular, the Commission recognized that Sections 364.051(5)(b) and 364.3381(2) of the Florida Statutes, which specified the TSLRIC as a price floor, focused only on the issue of cross-subsidization.<sup>28</sup> In contrast, it considered Section 364.051(5)(c) to be more directly related to charges of unfair, anticompetitive, or discriminatory pricing of a nonbasic service, and the cost standard applicable in that instance is “direct costs,” which the Commission did not further define.<sup>29</sup> Specifically, in the context of promotional offerings and winback campaigns (as represented, for example, by

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<sup>26</sup> See Viscusi et al., *op cit.*, at 286-289.

<sup>27</sup> See, e.g., *Key Customer Order*.

<sup>28</sup> *Key Customer Order*, at 21.

<sup>29</sup> *Key Customer Order*, at 21-22. The issues that fall within the purview of this Section would thus include specific forms of anticompetitive pricing such as predatory pricing and, where “monopoly components” or essential facilities are involved, price squeeze.



BellSouth's Key Customer service in Florida), the Commission issued an important opinion:

Section 364.051(5)(c), Florida Statutes, examines direct costs, and we believe an examination of direct cost is needed to make a determination of whether the post-discounted rates offered in a Key Customer contract remain "compensatory" for BellSouth. If a determination revealed that the [sic] such rates were "non-compensatory," such a finding would sway us to conclude that the tariff offerings are unfair, anticompetitive, or discriminatory.

In Florida it would appear (from both the statement and the Commission's interpretation of the Florida Statutes) that the relevant cost standard under Section 364.051(5)(c) is direct costs and the relevant test is whether or not the price of the nonbasic service in question (in the present instance, BellSouth's PreferredPack Plan service) is compensatory (i.e., sufficient to recover the direct cost, subject to Section 364.051(5)(c)'s qualification for monopoly components of the service).

**Q. WHAT MUST THE COMMISSION MEASURE TO DETERMINE IF THE PREFERREDPACK PROMOTIONAL PRICE IS COMPENSATORY UNDER SECTION 364.051(5)(C)?**

A. To implement this standard, the Commission needs to measure the price and direct cost of the PreferredPack Plan service.

**1. Price**

**Q. WHAT IS THE RELEVANT PRICE OF THE SERVICE?**

A. "Price," as used in Section 364.051(5)(c) is comparatively unambiguous. The current monthly charge for BellSouth's PreferredPack Plan service is \$26.95. In addition, BellSouth charges each such customer \$6.50 for the SLC. Although this is a discretionary charge for CLECs, the relevant point here is that BellSouth charges every PreferredPack Plan customer \$6.50 per month in addition to the \$26.95

price.<sup>30</sup> Hence, the SLC is an additional part of the monthly price of PreferredPack Plan service that is paid by *all* BellSouth customers of that service and, importantly, is received and *retained* as revenue by BellSouth.<sup>31</sup>

**Q. HAS THE COMMISSION EVER DETERMINED WHETHER THE FEDERAL SLC IS PART OF THE PRICE OF LOCAL EXCHANGE SERVICE?**

A. Yes. This Commission previously determined (in its 1999 Report to the Legislature on Fair and Reasonable Residential Basic Rates),<sup>32</sup> that revenue from the SLC constitutes both a source of revenue for BellSouth and a price paid by the consumer. In its calculations, the Commission explicitly included revenue from the SLC in its measure of LEC Contribution, which it defined as “the difference between total revenues and total costs” for the service.<sup>33</sup> Similarly, it explicitly included the SLC as a price paid by the consumer in its affordability analysis comparison of rates for residential basic local service across the states.<sup>34</sup>

**Q. DOES SUPRA AGREE THAT THE FEDERAL SLC SHOULD BE TREATED AS PART OF THE PRICE OF PREFERREDPACK PLAN SERVICE FOR THE PURPOSE OF IMPLEMENTING SECTION 364.051(5)(C)?**

A. No. Supra claims that the SLC should not count as revenue because “the charge is still discretionary and need not be imposed.”<sup>35</sup> However, whether BellSouth *must* charge its customers the \$6.50 SLC is irrelevant in assessing the price of

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<sup>30</sup> BellSouth assesses the SLC at its maximum level to partially recovery the interstate portion of its non-traffic sensitive costs.

<sup>31</sup> The fact that BellSouth retains it as revenue makes the SLC unlike a tax whose proceeds are passed on to the levying authority. Thus, a tax would not count as revenue to BellSouth but the SLC would.

<sup>32</sup> Florida Public Service Commission, *Report on the Relationship of the Costs and Charges of Various Services Provided by Local Exchange Companies and Conclusions as to the Fair and Reasonable Florida Residential Basic Local Telecommunications Service Rate*, February 1999 (“*FPSC Report*”).

<sup>33</sup> *FPSC Report* at 23.

<sup>34</sup> *Ibid.*, at 86.

<sup>35</sup> *Supra*’s *Petition*, at ¶25.

PreferredPack Plan service. The fact is that BellSouth *does* charge the \$6.50 SLC to customers, and that \$6.50 is revenue that BellSouth keeps, just like any other source of revenue. Similarly, whether Supra is *permitted* or required to charge a SLC is irrelevant in this analysis, though it is my understanding that Supra does charge its residential customers a \$6.50 per month subscriber line charge in addition to price of the package. Of course, Supra is free to set its basic exchange rates at whatever level it pleases and, if it wishes, it could price its Total Solutions package—currently \$27.95 per month<sup>36</sup>—at \$34.45 and assess its customers a \$0 SLC without changing its revenues or the price its customers pay.

**Q. WHAT PRICE SHOULD THE COMMISSION USE FOR PREFERREDPACK PLAN SERVICE IN APPLYING SECTION 364.051(5)(C)?**

- A. Based on these considerations, the total monthly price to a PreferredPack Plan service customer—reacquired or otherwise—should include the Federal SLC and will be considered in all subsequent analyses to be  $\$26.95 + \$6.50 = \$33.45$ .

**2. Direct Cost**

**Q. HOW SHOULD “DIRECT COST” BE INTERPRETED IN SECTION 364.051(5)(C)?**

- A. The phrase “direct cost” in the context of Section 364.051(5)(c), to my knowledge, is not explicitly defined in the Florida Statutes or in the Commission’s decisions implementing the Florida Statutes. However defined, the costs in question here must account for:
- BellSouth’s recurring costs for basic exchange access including local usage, vertical services and Privacy Director, and
  - BellSouth’s non-recurring costs for subscriber connection and for the one-time costs associated with the PreferredPack promotion. These costs consist of the \$100 Cash Back Offer and the waiver of the \$40.88 line connection charge to win back CLEC customers to BellSouth.

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<sup>36</sup> *Supra’s Petition*, at ¶14.



The data required for measuring recurring costs were obtained directly from previous BellSouth filings, using methods approved by the Commission. For reasons discussed below, I use the statewide average retail price of IFR services (including the SLC) as the economically appropriate measure of the direct recurring cost of basic exchange service in this circumstance. For the remaining direct recurring costs (for vertical services and Privacy Director), I follow the Commission’s analysis in its Key Customer decision, where in determining whether the discounted service prices were compensatory and covered the “direct costs” of the service, the Commission compared prices with the corresponding service-level TSLRICs.<sup>37</sup> This measure of direct cost generally results in a more conservative test for anticompetitive pricing than the antitrust standard of average variable cost or LRIC discussed above, because TSLRIC includes volume-insensitive fixed costs that LRIC by definition excludes.

**Q. HOW SHOULD THE NON-RECURRING COSTS OF THE PREFERREDPACK PLAN PROMOTIONS BE CALCULATED?**

A. The non-recurring costs of the PreferredPack Plan promotion were calculated as follows. Following the discontinuance of the \$25 gift card offer to reacquired customers,<sup>38</sup> the total upfront cost of BellSouth’s promotional offerings is the sum of the cost of the Cash Back offer (\$100) and the cost of waiving the line connection charge. The price of the line connection charge is \$40.88, and the non-recurring TSLRIC of line connection is **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY**. These costs—the \$100 offer and the **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** line connection cost—would have to be amortized

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<sup>37</sup> *Key Customer Order* at 21-22.

<sup>38</sup> Since BellSouth has discontinued the \$25 gift card offer, I did not include its cost in these calculations. However, if the \$25 offer were included and treated as cash, the effect on non-recurring costs would be small, and there would be no change in my conclusions. For a **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** month amortization and a **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** percent redemption rate, the non-recurring cost would rise by 51 cents from **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** to **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY**. These assumptions are conservative because the cost of a \$25 gift coupon is smaller than \$25 cash, and the redemption rate for a gift coupon is likely to be significantly smaller than the redemption rate for cash.

and recovered over the average duration of consumption by a reacquired customer in the PreferredPack Plan service. BellSouth reports in Mr. Shell's testimony that the average duration a winback customer stays with BellSouth is **BEGIN PROPRIETARY** ■ **END PROPRIETARY** months and that, on average, only **BEGIN PROPRIETARY** ■ **END PROPRIETARY** percent of eligible customers actually redeem Cash Back-type offers.<sup>39</sup> This translates into a monthly amortized customer reacquisition cost of **BEGIN PROPRIETARY** ■ **END PROPRIETARY**.<sup>40</sup>

**Q. HOW DOES SUPRA CALCULATE THE NONRECURRING COSTS OF THE PROMOTIONAL OFFERINGS?**

A. Supra measures the upfront cost of the promotional offerings as \$125 for the combined Cash Back and gift card offers and \$165.88 for the combined Cash Back, gift card, and connection charge waiver offers. It then translates this one-time cost into months of "free" service to which that cost would be equivalent.

**Q. IS THIS ANALYSIS CORRECT?**

A. No. First, as discussed below, BellSouth does not, in fact, give away PreferredPack Plan service for free for any number of months. Second, it is my understanding from the testimony of Ms. Blake in this proceeding that BellSouth ceased the gift card portion of the promotion on August 20, 2004. Third, what matters in this calculation is the *cost* of Cash Back promotion, not its face value. As discussed above, not all eligible customers actually redeem the Cash Back offer. Finally, the cost of the waiver of the line connection charge is not the price that customers ordinarily would pay for line connection, but the cost that BellSouth actually incurs to provide the service. As long as the price of the PreferredPack Plan promotion covers these nonrecurring costs—amortized over the expected life of the customer—in addition to

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<sup>39</sup> This is a region-wide average, not specific to any state or winback program.

<sup>40</sup> This is based on a "principal" of **BEGIN PROPRIETARY** ■ **END PROPRIETARY** an amortization period of **BEGIN PROPRIETARY** ■ **END PROPRIETARY** months, and an annual discount rate of 11.25%.

the ordinary recurring costs of the service, the price is compensatory under Section 364.051(5)(c).

**B. Under the Statutory Test, BellSouth's Price for PreferredPack Plan Service is Procompetitive**

**Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

A. In this section, I examine the economically reasonable application of the measure of "direct cost" and show that BellSouth's pricing of its PreferredPack Plan service is not anticompetitive by the Section 364.051(5)(c) standard.

**1. Compensatory pricing of a package when a component service is priced below cost.**

**Q. WHAT PROBLEM ARISES WHEN BASIC EXCHANGE SERVICE IS PRICED BELOW COST?**

A. In determining how to apply the concept of "direct cost" in Section 364.051(5)(c), a fundamental inconsistency between two of the Commission's important public policy objectives arises: pricing residential basic exchange below cost to foster universal service on the one hand and encouraging competition among all potential providers of local exchange service on the other. The problem is that PreferredPack Plan service combines non-basic services with a basic exchange service whose standalone price is regulated and set below its direct cost. Now, if Section 364.051(5)(c) were interpreted to mean that the price of PreferredPack Plan service had to equal or exceed its direct cost as measured by the sum of the TELRICs or TSLRICs that make up the bundle,<sup>41</sup> then severe competitive distortions would be imposed on the market for telecommunications services.

In particular, as explained below, that interpretation of Section 364.051(5)(c) would frequently prevent BellSouth from offering bundles of basic and non-basic services at a competitive price when the standalone basic service was priced below direct

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<sup>41</sup> I ignore, for the moment, the requirement to impute the price of monopoly components that the CLEC must purchase.

cost. This interpretation of “direct cost” would thus violate Section 364.051(5)(a)(2) of the Florida Statutes, which states, in part:

Nothing contained in this section shall prevent the local exchange telecommunications company from *meeting offerings* by any competitive provider of the same, or functionally equivalent, nonbasic services in a specific geographic market or to a specific customer by deaveraging the price of any nonbasic service, *packaging nonbasic services together or with basic services*, using volume discounts and term discounts, and offering individual contracts. However, the local exchange telecommunications company shall not engage in any anticompetitive act or practice, nor unreasonably discriminate among similarly situated customers.<sup>42</sup>

In addition, that interpretation of Section 364.051(5)(c) would restrict the market for packaged offerings in a way that would be unsustainable and economically inefficient and thus harmful to customers as well as to the competitive process.

**Q. PLEASE EXPLAIN.**

- A. A simple example shows the problem. Suppose (hypothetically) that the prices and direct costs (as measured by TSLRIC or TELRIC) of the basic and non-basic services that make up PreferredPack Plan service are as given in Table 1:<sup>43</sup>

**Table 1.**  
**Analysis Using Hypothetical Prices and Direct Costs for PreferredPack Plan Components**

<b>Service</b>	<b>Stand-Alone Price</b>	<b>Direct Cost</b>	<b>Contribution</b>
Basic Exchange	\$15	\$20	(\$5)
Non-Basic	\$20	\$3	\$17
Total	\$35	\$23	\$12

If the services are offered as a bundle—and if Section 364.051(5)(c) is interpreted to set the price floor for the bundle at the sum of the direct costs of its constituent services—the price floor for the bundle would be \$23. On the other hand, when the

<sup>42</sup> Emphasis added for key terms.

services are offered separately, the price floor for both of them together would be \$18.<sup>44</sup>

**Q. IS THIS DIFFERENCE IN THE TWO PRICE FLOORS ECONOMICALLY SIGNIFICANT?**

A. Yes. In a market where firms compete by offering bundled services to high-margin, price-sensitive customers, a bundle priced no lower than \$23 cannot compete with equivalent standalone services that can be offered as low as \$18. Bundling these basic and non-basic services would cause BellSouth's price floor to rise from \$18 to \$23, and if the market price fell below \$23,<sup>45</sup> BellSouth's bundled service would be priced out of the market, but its standalone services would not. This interpretation of the Section 364.051(5)(c) price floor is thus unsustainable in the market, and because it would prevent BellSouth from bundling non-basic services with basic services whose standalone price is below direct cost, it would appear to violate Section 364.051(5)(a)(2) of the Florida Statutes.

**Q. WHAT WOULD BE THE ECONOMIC EFFECTS OF THIS INTERPRETATION OF SECTION 364.051(5)(C)?**

A. Economically, imposing a TELRIC or TSLRIC-based price floor on bundles containing basic services whose regulated standalone price is set below direct cost extends that distortion into a much more competitive segment of the market. Effectively, BellSouth would be *required* to price its standalone IFR service below

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<sup>43</sup> In this Table and discussion, "loss" and "contribution" are measured by price less direct cost, and I assume that the cost of the bundle is the sum of the costs of its components.

<sup>44</sup> Buying the services separately means that regulated basic exchange service must be sold for its regulated price of \$15, while the Section 364.051(5)(c) direct cost price floor for the non-basic services requires that the non-basic services be priced no lower than their direct cost of \$3. The effective price floor for these services sold separately is thus  $\$15 + \$3 = \$18$ .

<sup>45</sup> The market price could fall to this level in several ways. First, CLECs that buy an unbundled loop (by assumption) for \$20 could have lower costs for supplying non-basic services. Second, BellSouth and CLECs could have the same costs but still find it profitable to serve customers at a price below \$23 because of additional revenues (e.g., from carrier access charges or Internet access service) associated with supplying basic exchange service to the customer. Third, intermodal carriers that do not use BellSouth's loop (e.g., wireless suppliers or cable companies) may have lower costs to provide substitute services.

cost to customers for whom there is less competition and, at the same time, *required* to recover its full cost of IFR service in bundles offered to the more competitive sector of the market. Such an inconsistent requirement obviously penalizes BellSouth, but more importantly, it harms consumers and the competitive process.

**Q. HOW WOULD SUCH AN INTERPRETATION HARM CUSTOMERS AND THE COMPETITIVE PROCESS?**

A. First, consumers would be harmed because they would be denied the ability to buy bundled services from BellSouth at attractive, procompetitive prices. When the services are offered separately, the price floor is \$18, and BellSouth prices at or above that level are procompetitive. That is, competitive market forces that push the BellSouth price for the two services separately down from \$35 but above \$18 are good for customers.

Second, the competitive process would be harmed if BellSouth were prevented from meeting competitive offerings in that price range. If competitive pressure forces the market price down to \$19, for example, when BellSouth offers non-basic services at \$4, it earns \$1 in contribution rather than pricing them higher and earning nothing. That the \$1 contribution from non-basic services is too small to offset entirely the \$5 loss on basic exchange service doesn't change the fact that a \$4 loss from selling both services is better than a \$5 loss from selling basic exchange service alone.

**Q. BUT WOULDN'T A PRICE FOR THE PREFERREDPACK PLAN SERVICE SET BELOW ITS DIRECT COST BE PREDATORY AND ANTICOMPETITIVE?**

A. Not in this case, because the regulated price of IFR service is set below cost by the Commission. As long as competitors can buy BellSouth's unbundled loops at a price approximating BellSouth's economic cost, BellSouth and its competitors are on an equal footing with respect to competing for customers for individual and bundled services, irrespective of the retail price BellSouth charges for basic residential service (*i.e.*, IFR service).

Because BellSouth's 1FR price is below its direct cost, it must obtain a higher margin from the other services that it sells that customer in order that it be profitable to acquire that customer. And as long as CLECs can purchase unbundled loops at BellSouth's economic cost, the CLEC can compete by doing exactly the same thing.

This logic applies equally to discounted bundled services like PreferredPack service. As long as BellSouth prices the bundle of basic and non-basic services to cover the retail price of the basic service and the direct costs of the non-basic services, the CLEC can compete on an equal footing. Such pricing may not be economically efficient, (because it is below cost) but it is not anticompetitive, particularly in the market for customers who buy bundled telecommunications services.<sup>46</sup> As long as CLECs can purchase (or self-provide) loops at a price commensurate with BellSouth's economic loop costs, there is nothing anticompetitive about selling standalone 1FR service at a price below cost or in selling a bundle of services that includes the loop at a price that reflects the price of the standalone 1FR service.<sup>47</sup>

Thus, the Section 364.051(5)(c) direct cost price floor of \$18 is procompetitive when the services are offered separately, and there is nothing inherent in the packaging of the two sets of services that would make \$18 anything but a procompetitive price for the services offered together as a bundle. Any price floor higher than \$18 (the sum of the regulated basic exchange price and the non-basic service direct cost) would make both BellSouth's customers and BellSouth worse off, in the sense described above.

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<sup>46</sup> Under these assumptions, a CLEC could not profitably compete with BellSouth for a customer that purchases no toll or vertical services, but CLECs have no interest in acquiring such customers. BellSouth loses money when it serves those customers solely because the Commission has set the price of residential basic exchange service below cost.

<sup>47</sup> Hypothetically, if BellSouth loses \$5 per month on every 1FR service it sells to its retail customers, then it must obtain at least a \$5 per month contribution from other services in order to break even. An efficient CLEC that buys an unbundled loop from BellSouth at BellSouth's cost is in precisely the same position: it must also recover at least \$5 per month in contribution from other services if it is to break even. And, if BellSouth offers a package of non-basic and basic exchange services for which the non-basic service components are priced at cost and the basic exchange service component is priced at the retail price, then BellSouth would have to recover its \$5 shortfall from other services outside the package, as would its competitors.

**Q. WHY WOULD IT BE PROCOMPETITIVE TO SET THE SECTION 364.051(5)(C) PRICE FLOOR FOR BUNDLES OF BASIC AND NONBASIC SERVICES USING THE DIRECT COST OF THE NONBASIC SERVICE COMPONENTS AND THE RETAIL PRICE OF THE BASIC SERVICE COMPONENT?**

- A. This arbitrage problem arises only because the basic exchange component of a bundle of basic and non-basic services is regulated and priced below cost. If, in this case, the Section 364.051(5)(c) price floor were interpreted to be the sum of the non-basic services' direct costs and the regulated price for basic exchange service, the problem would go away. First, the economic distortion caused by pricing basic exchange service below cost would then apply equally to bundled and à la carte services, so that the regulatory distortion would not affect consumers' or suppliers' decisions regarding the packaging of services. Second, BellSouth and potential customers would be better off because the bundled service would have the same pricing flexibility currently possessed by the basic and non-basic services that make up the bundled service. Finally, competitors would be no worse off under this price floor because BellSouth could always price the component basic and non-basic services separately at this floor.<sup>48</sup>

**2. Application of the Statutory Test**

**Q. DOES THE BELLSOUTH PREFERREDPACK PLAN PROMOTIONAL OFFERING VIOLATE THIS INTERPRETATION OF THE SECTION 364.051(5)(C) TEST?**

- A. No. Given the economic and statutory foundations for conducting the price/cost comparisons under Section 364.051(5)(c) of the Florida Statutes, I next show that

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<sup>48</sup> Although BellSouth could always achieve a \$18 price floor by selling the basic and non-basic services separately, the competitive process would remain distorted. BellSouth would be unable to offer a bundled service, and since IFR prices vary geographically across Florida, it would be unable to offer its equivalent PreferredPack service at a single statewide rate. Moreover, customers who prefer bundled services and compare the bundles offered by different suppliers would be worse off if BellSouth could not offer a comparable bundle.



BellSouth's current pricing of PreferredPack Plan service, along with its promotional offerings, does not violate the prohibition against predatory and anticompetitive pricing. All of my results discussed below are also shown in a convenient tabular format in the proprietary Exhibit WET-2.

Assume for simplicity that direct costs alone matter (*i.e.*, there are no "monopoly services" and no imputation is necessary).<sup>49</sup> As I noted earlier, the monthly price of PreferredPack Plan service (\$33.45) is uncontroversial, and the direct non-recurring customer acquisition costs, although controversial, amount to about **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** per month. The PreferredPack Plan service bundles a flat-rate access line (loop-port combination and usage) with various vertical services and Privacy Director service. The direct cost of PreferredPack Plan service is treated as the sum of the direct costs of the component services.

In this interpretation of the price floor in Section 364.051(5)(c), I use the retail price of the basic exchange component of PreferredPack service as its direct cost. According to BellSouth, the statewide average of its retail monthly residence flat-rate access line service (1FR service) is **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** (as of April 2003)<sup>50</sup> to which we must add the \$6.50 SLC that all customers pay. In addition, the monthly TSLRIC of the composite features and Privacy Director Service is **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY**. This cost *includes* BellSouth's direct TSLRIC monthly cost of the Privacy Director service, which is **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** per month<sup>51</sup> and presumes that all PreferredPack Plan customers obtain all of the available features.

#### **Q. DO THE PREFERREDPACK PLAN PROMOTIONAL OFFERINGS PASS**

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<sup>49</sup> The case where imputation is necessary is addressed below

<sup>50</sup> See BellSouth's response to Item No. 4(a) in Staff's 1<sup>st</sup> Set of Interrogatories in this proceeding.

<sup>51</sup> BellSouth's Response to Supra's 2<sup>nd</sup> Request for Admissions (Proprietary) in this proceeding, Item No 30, July 15, 2004.

**THIS INTERPRETATION OF THE SECTION 364.051(5)(C) TEST?**

- A. Yes. Based on this information, the direct recurring cost of the service components is **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY**. When the properly amortized monthly customer reacquisition cost of **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** is added to this, the total monthly direct cost of providing PreferredPack Plan service to an average reacquired customer (that also receives the promotional offerings) is **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** per month.

From a comparison of the total direct cost of PreferredPack Plan service (inclusive of the cost of customer reacquisition) with the monthly total rate of \$33.45, it is evident that the rate exceeds the direct cost by **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY**, a significant positive margin. Therefore, when direct costs are calculated in the manner described above, no violation of Section 364.051(5)(c) can be said to have occurred, and since price exceeds direct cost, that price cannot be construed as predatory.<sup>52</sup>

**Q. SHOULD THE STATUTORY TEST UNDER SECTION 364.051(5)(C) BE APPLIED TO EACH INDIVIDUAL CUSTOMER?**

- A. No. In its *Petition*, Supra asserts that

This Commission should also note that BellSouth's PreferredPack Tariff does not require a contractual arrangement between BellSouth and the winback/re-acquisition customers that will ensure retention of these customers for a period of time sufficient to allow BellSouth to break even on each individual winback customer<sup>53</sup>

implying that the test requires BellSouth to break even on *every* reacquired customer. However, nothing in the regulatory principles governing BellSouth's Florida operations suggests that revenue must recover cost for each *individual*

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<sup>52</sup> That conclusion is unchanged even with the higher **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** estimate of the monthly amortized customer reacquisition cost, assuming that *every* eligible customer redeems the \$100 Cash Back offer.

<sup>53</sup> *Supra's Petition*, ¶24.

*customer*. Rather, the recovery of costs in revenues is expected to occur at the *service* level, as is evident from a literal reading of Section 364.051(5)(c). Similarly, in economics, a price that prevents an equally-efficient firm from profitably serving a particular customer is not predatory. Rather, the test is whether an equally-efficient firm can profitably serve the *market* at that price. And at the *market* level, what matters is the behavior of the *average* customer: her usage, her duration of stay and the likelihood that she claims her \$100 Cash Back promotion.

**C. Even Under an Imputation Test, BellSouth's Price for PreferredPack Plan Service is Procompetitive**

**Q. IF THE COMMISSION INTERPRETS SECTION 364.051(5)(C) TO REQUIRE CONVENTIONAL MEASURES OF DIRECT COST AND IMPUTATION OF THE PRICE OF MONOPOLY COMPONENTS, WOULD THE PROMOTIONAL OFFERINGS OF THE PREFERREDPACK PLAN STILL PASS THE TEST?**

A. Yes. For the reasons discussed, I believe the **BEGIN PROPRIETARY** [REDACTED] **END PROPRIETARY** price floor calculated above represents the proper implementation of the price floor required in Section 364.051(5)(c). However, if the Commission construes that rule differently and requires imputation of prices of monopoly components, a properly conducted price/cost comparison shows that BellSouth's PreferredPack plan service with its promotions is still priced consistently with that rule. All of the results discussed below are also shown in a convenient tabular format in the proprietary Exhibit WET-2.

**Q. HOW DOES THIS CALCULATION CHANGE FROM THE STATUTORY TEST DISCUSSED ABOVE?**

A. This interpretation of Section 364.051(5)(c) assumes that the price charged by BellSouth for any monopoly component of its PreferredPack Plan service must be imputed into (*i.e.*, recovered by) the price charged by BellSouth for the PreferredPack Plan service itself.

**Q. WHAT SERVICES OR FACILITIES SHOULD BE TREATED AS  
“MONOPOLY COMPONENTS” IN IMPLEMENTING SECTION  
364.051(5)(C)?**

- A. In economic theory and regulatory practice, an imputation requirement only applies to essential facilities, *i.e.*, elements or components of services that (1) are not available competitively (BellSouth is the sole source) or through resale of a BellSouth retail service, (2) have no close or feasible substitutes, and (3) are essential for the provision of downstream retail services for which BellSouth and other carriers compete. In this circumstance, the direct cost would pertain to all service components that are *not* essential facilities (*i.e.*, we would use the TSLRIC of those components), and the imputed cost would pertain only to essential facilities (*i.e.*, the prices of those components would be used rather than their costs in determining the price floor).

Of all the components of BellSouth’s PreferredPack Plan service, only the access line itself (the loop) can arguably be considered an essential facility, and even for the loop, the presence of “last mile” alternatives in the form of wireless local loops, cellular wireless service, and cable connections are becoming increasingly available. The switching function and switch-based features and services can be self-supplied or can be obtained from non-BellSouth sources, and I observe that Supra has deployed its own switches in Florida. While Supra may currently resell BellSouth’s Privacy Director service, alternatives including self-supply are readily available, and Privacy Director has never been considered a UNE that BellSouth would have to unbundle and sell at TELRIC prices in order that CLECs not be impaired in their efforts to compete.<sup>54</sup> Therefore, if any imputation is required by Section 364.051(5)(c), the facts of the present-day telecommunications marketplace limit that imputation to the loop component of the service.

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<sup>54</sup> Thus Supra’s calculation of its costs to purchase the components of PreferredPack service from BellSouth in its *Motion* (¶¶ 8-12) is irrelevant. The Florida pricing standard in Section 364.051(5)(c) refers to BellSouth’s direct costs (with the exception of imputation applied to monopoly services), not to the costs that Supra chooses to incur to supply the service.

**Q. IN SUMMARY, HOW WOULD THE CALCULATION DIFFER UNDER THIS INTERPRETATION OF THE STATUTE?**

- A. The only change from the earlier cost calculation would arise from regarding the loop as an essential facility which, under FCC rules that were extant until recently, is to be provided to requesting carriers as a UNE at a price based on its TELRIC. This means that instead of employing the direct cost of BellSouth's IFR service, the "direct cost" of the loop should be measured by its TELRIC-based UNE price, while the cost of the other components of the service would be measured by their respective TSLRICs.

**Q. DO THE PREFERREDPACK PLAN PROMOTIONAL OFFERINGS PASS THIS INTERPRETATION OF THE SECTION 364.051(5)(C) TEST?**

- A. Yes. According to Mr. Shell's testimony, the state-wide average UNE rate in Florida for the unbundled loop is **BEGIN PROPRIETARY [REDACTED]**<sup>55</sup> **END PROPRIETARY**. Further, the combined TSLRIC of all non-monopoly components of BellSouth's IFR service in Florida is **BEGIN PROPRIETARY [REDACTED]** **END PROPRIETARY**.<sup>56</sup> As noted earlier, the TSLRIC of the vertical features plus Privacy Director service is **BEGIN PROPRIETARY [REDACTED]** **END PROPRIETARY**.

Based on this information, the combined direct and imputed cost of the service components of PreferredPack Plan service is **BEGIN PROPRIETARY [REDACTED]** **[REDACTED]** **END PROPRIETARY**. When the properly amortized monthly customer reacquisition cost of **BEGIN PROPRIETARY [REDACTED]** **END PROPRIETARY** is added to this, the total monthly direct and imputed cost of providing PreferredPack Plan service to a reacquired customer (that also receives the

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<sup>55</sup> This statewide weighted average is calculated by BellSouth from deaveraged zone-specific UNE loop rates established by the Commission in Docket No. 990649-TP.

<sup>56</sup> Mr. Shell's testimony indicates that the TSLRIC of the port is **BEGIN PROPRIETARY [REDACTED]** **END PROPRIETARY** and that of average usage is **BEGIN PROPRIETARY [REDACTED]** **END PROPRIETARY**, making a total of **BEGIN PROPRIETARY [REDACTED]** **END PROPRIETARY**.

promotional offerings) is **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY.**

Comparing the total direct and imputed cost of PreferredPack Plan service (inclusive of the cost of customer reacquisition) with the monthly total price of \$33.45, it is evident that the rate exceeds the direct and imputed costs by **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY**, a positive margin. Therefore, when direct and imputed costs are calculated in the manner described above, no violation of Section 364.051(5)(c) can be said to have occurred, and the price of PreferredPack service, including its promotions, cannot be said to be predatory.<sup>57</sup>

## **VI. SECTION 364.08: NO FREE SERVICE**

### **Q. WHAT PRICING BEHAVIOR DOES SECTION 364.08 ADDRESS?**

A. The statute reads:

(1) A telecommunications company may not charge, demand, collect, or receive for any service rendered or to be rendered any compensation other than the charge applicable to such service specified in its schedule on file and in effect at that time. A telecommunications company may not refund or remit, directly or indirectly, any portion of the rate or charge so specified or extend to any person any advantage of contract or agreement or the benefit of any rule or regulation or any privilege or facility not regularly and uniformly extended to all persons under like circumstances for like or substantially similar service.

(2) A telecommunications company subject to this chapter may not, directly or indirectly, give any free or reduced service between points in this state. However, it shall be lawful for the commission to authorize employee concessions if in the public interest.

To an economist, it appears to prohibit off-tariff discounts, and to require equal treatment of similarly situated customers. I show in Section VII below that the PreferredPack Plan promotional offerings do not discriminate among persons under

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<sup>57</sup> That conclusion is unchanged even with the higher **BEGIN PROPRIETARY [REDACTED] END PROPRIETARY** estimate of the monthly amortized customer reacquisition cost, assuming that every eligible customer redeems the \$100 Cash Back offer.

like circumstances, and I address here Section 364.08(2)'s apparent prohibition against the provision of free services.

**Q. HOW IS THIS STATUTE RELEVANT TO THE PREFERREDPACK PLAN PROMOTIONS?**

A. According to *Supra*, the net effect of the PreferredPack Plan promotional offerings is to offer CLEC customers up to four months of “free” service and a fifth month of service at a non-compensatory rate, i.e., a price below cost.<sup>58</sup> *Supra*'s analysis does not include the monthly subscriber line charge (“SLC”) in the total monthly price paid by a PreferredPack Plan customer, arguing that such a charge is “discretionary and need not be imposed.”<sup>59</sup> However, *Supra* argues, even if the SLC were to be included in the total monthly rate, BellSouth's promotional offerings would still amount to three months of “free service” for a PreferredPack Plan customer.<sup>60</sup>

**Q. WHAT CRITERIA WOULD AN ECONOMIST USE TO INTERPRET THE PHRASE “FREE SERVICE”?**

A. A customer would receive a service for free if she were not required to pay anything to the supplier for anything, including but not limited to the alleged free service. Thus, an offering of “free installation” is not an offering of free service, because it amounts to a package of services that includes installation at no additional cost.<sup>61</sup> In general, any offer of “free” service must be examined in light of other services purchased and the behavior of the average customer. Toothpaste companies frequently send “free” samples to prospective customers, and long distance carriers send checks that may more than cover a month's service. From an economic perspective, such offerings would not constitute a “free” service. Since they expect

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<sup>58</sup> *Supra's Petition*, at 5-6. With the value of the waived line connection charge factored in, *Supra* claims that BellSouth offers, in effect five months of “free” service and a sixth month of service at a non-compensatory price.

<sup>59</sup> *Supra's Petition*, at 8.

<sup>60</sup> *Supra's Petition*, at 9.

<sup>61</sup> The customer can't get the installation without buying the service.

to entice additional purchases from the customer, these offerings are merely part of a discount package, and if unregulated firms in competitive markets voluntarily offer such services, one expects that they find them profitable, on average.

**Q. DO BELLSOUTH'S PREFERREDPACK PLAN PROMOTIONS AMOUNT TO THE OFFERING OF FREE SERVICE?**

A. No. BellSouth charges its customers a levelized price for every month of service, and that price covers the properly amortized average cost of the promotional offers that BellSouth experiences over the expected duration of the customer relationship. For customers that stay with BellSouth for less than the average duration, that recovery may be partial; but, for customers that stay with BellSouth for more than the average duration, BellSouth would more than recover the customer reacquisition costs. What matters is not how BellSouth fares with an *individual* customer; rather, it matters only that BellSouth recovers its costs across *all* reacquired customers. That is why it is appropriate to use the average duration of stay to amortize the customer reacquisition costs.<sup>62</sup>

**VII. SUPRA'S CHARGE OF DISCRIMINATION AMONG SIMILARLY-SITUATED CUSTOMERS IS UNFOUNDED**

**Q. DOES SUPRA CLAIM THAT THE PREFERREDPACK PLAN PROMOTIONAL OFFERINGS ENTAIL UNLAWFUL DISCRIMINATION?**

A. Yes. Citing parts of the Commission's *Key Customer Order*, Supra alleges in its *Motion for Final Summary Order* that BellSouth is in violation of Section 364.051(5)(a)(2) of the Florida Statutes because its promotional offerings only target CLEC customers and are not offered to customers that are presently with

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<sup>62</sup> Nonetheless, even analyzing the upfront costs as Supra does, BellSouth will more than recover the upfront costs for the entire group of customers that sign up for the PreferredPack plan service, given the average length of time customers are expected to retain the service.



BellSouth.<sup>63</sup> *Supra* claims that such offerings violate the dictum that “similarly situated” customers must be offered service on the same terms and conditions.

**A. Economic and Statutory Definitions of Unfair Discrimination**

**Q. WHAT DO ECONOMISTS MEAN BY UNFAIR OR UNDUE DISCRIMINATION?**

A. In economics, price discrimination has a very specific meaning, namely, the offering of a product to different customers or groups of customers at different prices or under different terms and conditions. However, the word “discrimination” has no normative content, nor is it used pejoratively, unless it can be shown that the discriminating act in question leads to an avoidable loss of economic and social welfare to at least some customers or customer groups. That is, while *unfair*, *undue*, or *unreasonable* discrimination may be prohibited, the forms of discrimination that actually *increase* economic and social welfare are not (and should not be).

It is quite often the case that customers of the very same product differ among themselves, perhaps even substantially, in their economic traits and characteristics. Some customers may be more sensitive to the *level* of the product’s price than others, perhaps because they have to be more budget-conscious or because they are generally more aware of alternatives available from other sources. Some customers may find it more costly than others to change an economic decision once made (such as to buy a particular product), perhaps because the transaction costs (such as search costs, cost of gaining information about the product, etc.) of changing their minds are greater. Economic theory shows, and practical experience bears out, that when customers differ among themselves in these ways, offering a product at different prices (or terms and conditions) may actually induce more customers to consume than if the product were available at a single price (or under uniform terms and conditions). Greater consumption and purchases by customers with different traits are a sign of greater economic and social welfare; therefore, the offering of a product

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<sup>63</sup> *Supra’s Motion*, at 12-15.

at different prices (or terms and conditions) is actually beneficial to society. For example, discrimination in the form of volume or term discounts is commonly observed, primarily because such discrimination taps the interest of diverse consuming groups. That is, under some circumstances, such discrimination is actually worthwhile and an improvement over uniformity.<sup>64</sup>

**Q. DO THE FLORIDA STATUTES RECOGNIZE THESE ECONOMIC DISTINCTIONS?**

- A. Yes. Possibly in recognition of these economic considerations, Section 364.051(5)(a)(2) states, in part:

Nothing contained in this section shall prevent the local exchange telecommunications company from *meeting offerings* by any competitive provider of the same, or functionally equivalent, nonbasic services in a *specific geographic market* or to a *specific customer* by deaveraging the price of any nonbasic service, packaging nonbasic services together or with basic services, using volume discounts and term discounts, and offering individual contracts. However, the local exchange telecommunications company shall not engage in any anticompetitive act or practice, nor *unreasonably* discriminate among *similarly situated* customers.<sup>65</sup>

**Q. HAS THE FLORIDA COMMISSION INTERPRETED ANY OF THESE STATUTORY TERMS?**

- A. Yes. In its *Key Customer Order*, the Commission gave operational meaning to some of the key terms in this passage, such as “meeting offerings,” “specific geographic market,” and “similarly situated.”<sup>66</sup> The Commission also cited a paragraph from my Direct Testimony in the *Key Customer* proceeding:

From an economic standpoint, the proper interpretation should be that “similarly situated” or “substantially similar” customers are those whose objective circumstances with respect to a specific service are similar. For example, customers with similar willingness to pay (or price elasticity of

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<sup>64</sup> See, e.g., a comprehensive treatment of this issue in Carlton and Perloff, *op cit.*, Chapter 9

<sup>65</sup> Emphasis added for key terms.

<sup>66</sup> *Key Customer Order*, at 10-15.

demand) for a service, or facing similar competitive alternatives in the same geographic market, could be considered similarly situated. Differential pricing (i.e., price discrimination in the economic sense) should not be permitted for similarly-situated or substantially similar customers. In the context of BellSouth's Key Customer promotional offering, similarly situated customers are those for whom BellSouth faces competition from rivals offering substitute services. Those customers are, however, *not* similarly situated to BellSouth's other customers who do not have the same competitive options.

Specifically, the Commission agreed with my statement that "similarly situated customers are those for whom BellSouth faces competition from rivals offering substitute services."<sup>67</sup> Extending that line of thought, the Commission went on to find that BellSouth customers in wire centers with vigorous competition (or "hot" wire centers) were not similarly situated with BellSouth customers in wire centers with little or no competition, justifying the differential offering of the Key Customer service between the two types of wire centers (geographic markets) on the grounds that those customers faced different competitive alternatives.

**Q. SUPRA INTERPRETS THE *KEY CUSTOMER ORDER* TO REQUIRE THAT ALL CUSTOMERS IN THE SAME GEOGRAPHIC MARKET BE TREATED AS SIMILARLY SITUATED.<sup>68</sup> IS THAT INTERPRETATION CORRECT?**

A. No. First, Supra omits a key phrase of the Commission's *Order* in its citation at 14. The complete citation (from page 15 of the *Key Customer Order*) reads:

*Therefore, we find that for purposes of this docket, "similarly situated" or "substantially similar" shall be interpreted as customers facing similar competitive alternatives in a "specific geographic market" as defined in Section IV.D of this Order.*

where the italicized words were omitted from Supra's citation. Second, the relevant issue in the Key Customer Docket was "to determine whether geographic targeting in a BellSouth promotional tariff is unfair, anti-competitive or discriminatory."<sup>69</sup>

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<sup>67</sup> *Key Customer Order*, at 15.

<sup>68</sup> *Supra's Motion* at 14-15.

<sup>69</sup> *Key Customer Order* at 8.

*For purposes of that docket*, then, what mattered was whether BellSouth’s customers in different geographic markets were similarly situated. The Commission’s finding that customers in hot wire centers were differently situated from customers in other wire centers does not, as a matter of logic, imply that all customers in the same wire center are similarly situated. Third, the cited language does not, on its face, imply that *all* customers in a specific geographic market are similar situated; rather, it is only “customers facing similar competitive alternatives” in a specific geographic market are determined, for the purposes of the Key Customer promotion, to be similarly-situated. Finally, Section 364.051(5)(a)(2) of the Florida Statutes explicitly allows local exchange companies to meet offerings of competing non-basic services “in a specific geographic market *or to a specific customer*” by deaveraging, bundling, discounting and contracting (emphasis supplied).

**B. BellSouth’s Promotional Offerings in Conjunction with its PreferredPack Plan Service Do Not Discriminate Among Similarly-Situated Customers**

**Q. WHAT ASPECT OF THE PREFERREDPACK PLAN PROMOTIONAL OFFERINGS ALLEGED TO BE DISCRIMINATORY?**

A. At issue is whether BellSouth’s decision to promote its PreferredPack Plan service to customers presently served by CLECs (using the Cash Back offer and the line connection charge waiver) but not to its own customers for that service violates Section 364.051(5)(a)(2)’s prohibition against discrimination against similarly-situated customers.

**Q. WHAT CRITERIA WOULD AN ECONOMIST USE TO DETERMINE IF CUSTOMERS WERE SIMILARLY SITUATED?**

A. In economics, this question comes down to a simple comparison of traits and characteristics: those of customers presently served by CLECs with those of BellSouth’s present customers.

In general, the observed behaviors of CLEC and BellSouth customers can be compared in terms of the differences of the price elasticities of demand of the two customer groups.<sup>70</sup> It is precisely this kind of difference that marketing managers seek in order to design campaigns that induce their rivals' customers to switch to them. Clearly, offering the very same terms and conditions that are available to its current customers will not entice its former customers away from its competitors. Presumably they left for its competitors precisely because they preferred the terms and conditions available elsewhere. That is why winning back those former customers would necessarily require the firm to offer *more* attractive (necessarily different) terms to those customers. It would *not* be unreasonable discrimination, however, because by staying, the firm's existing customers have already demonstrated their preference for BellSouth's services at the terms and conditions offered to them. Thus, one can conclude that current CLEC and BellSouth customers differ in their price elasticities of demand or other preference characteristics that determine service choice.

**Q. HOW DO CURRENT CLEC AND BELLSOUTH RESIDENTIAL CUSTOMERS DIFFER?**

- A. On average, current CLEC residential customers are likely to be more price-sensitive than BellSouth's residential customers for several reasons. First, most current CLEC customers used to be BellSouth customers, and they, unlike the BellSouth customers who remain, did choose to switch to a CLEC in response to some price or service offering. Second, customers who find it worthwhile to go to the effort of switching service providers are likely to purchase more telecommunications services on average than those who stay with the incumbent firm, and small differences in price matter more to customers who purchase large quantities of service than to low-volume customers. Third, a higher fraction of customers who value packages of services are likely to be CLEC customers because (i) the incumbent firm generally

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<sup>70</sup> The own-price elasticity of demand measures the percentage change in demand occasioned by a one percent change in price.

retains customers who make little use of telephone service and (ii) CLECs market such packaged services heavily. Fourth, current CLEC customers, by definition, have an attractive competitive alternative to BellSouth's service, while not all current BellSouth customers—particularly low-volume customers who do not value long distance service or vertical features—may have an attractive competitive alternative.

Thus, on average, current CLEC customers perceive the attractiveness of their competitive choices and the substitutes available to them differently from current BellSouth customers. Following the logic of the Commission's *Key Customer Decision*, then, current CLEC and current BellSouth customers are not similarly-situated because—on average—they face different competitive choices and have different sets of substitute services available to them or they value those choices and substitute services differently.

For all of these reasons, I conclude that, as a matter of economics, BellSouth can regard its current customers and CLECs current customers as not being similarly situated. Thus, the promotional offerings designed to entice current CLEC customers to switch to BellSouth are not unreasonably discriminatory in economics and following previous Commission decisions.

## **VIII. CONCLUSIONS**

### **Q. FROM THE PERSPECTIVE OF AN ECONOMIST, DO THE BELLSOUTH PREFERREDPACK PLAN PROMOTIONS VIOLATE ANY OF THE TERMS OF SECTIONS 364.01(4)(G), 364.08 OR 364.051(5)(C)?**

- A. No. The PreferredPack Plan promotions are priced at a compensatory level and thus are procompetitive, not anticompetitive. The fact that these promotions offer upfront discounts does not mean that BellSouth actually or effectively provides free service, because average customers of the promotions actually purchase sufficient BellSouth services to make the promotions compensatory. Finally, the fact that these promotions are offered only to customers currently served by CLECs and not to

BellSouth's current customers does not constitute undue or anticompetitive discrimination because those customers face different competitive choices or value the choices they face differently.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes.

## **William E. Taylor**

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Dr. Taylor received a B.A. *magna cum laude* in Economics from Harvard College, an M.A. in Statistics and a Ph.D. in Economics from the University of California at Berkeley. He has taught economics, statistics, and econometrics at Cornell and the Massachusetts Institute of Technology and was a post doctoral Research Fellow at the Center for Operations Research and Econometrics at the University of Louvain, Belgium.

At NERA, Dr. Taylor is a Senior Vice President, heads the Cambridge office and is Director of the Telecommunications Practice. He has worked primarily in the field of telecommunications economics on problems of state and federal regulatory reform, competition policy, terms and conditions for competitive parity in local competition, quantitative analysis of state and federal price cap and incentive regulation proposals, and antitrust problems in telecommunications markets. He has testified on telecommunications economics before numerous state regulatory authorities, the Federal Communications Commission, the Canadian Radio-Television and Telecommunications Commission, the New Zealand Commerce Commission, the Comisión Federal de Telecomunicaciones de México, federal and state congressional committees and courts. Recently, he was chosen by the Mexican Federal Telecommunications Commission and Telmex to arbitrate the last two renewals of the Telmex price cap plan in Mexico. Other recent work includes studies of the competitive effects of major mergers among telecommunications firms and analyses of vertical integration and interconnection of telecommunications networks. He has appeared as a telecommunications commentator on PBS Radio and on The News Hour with Jim Lehrer.

He has published extensively in the areas of telecommunications policy related to access and in theoretical and applied econometrics. His articles have appeared in numerous telecommunications industry publications as well as *Econometrica*, the *American Economic Review*, the *International Economic Review*, the *Journal of Econometrics*, *Econometric Reviews*, the *Antitrust Law Journal*, *The Review of Industrial Organization*, and *The Encyclopedia of Statistical Sciences*. He has served as a referee for these journals (and others) and the National Science Foundation and has served as an Associate Editor of the *Journal of Econometrics*.



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## Education

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## Professional Experience

1988- NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC. (NERA)  
Senior Vice President, Office Head, Telecommunications Practice Director.

1983-1988 BELL COMMUNICATIONS RESEARCH, INC. (Bellcore)  
Division Manager, Economic Analysis, formerly Central Services Organization, formerly American Telephone and Telegraph Company: theoretical and quantitative work on problems raised by the Bell System divestiture and the implementation of access charges, including design and implementation of demand response forecasting for interstate access demand, quantification of potential bypass liability, design of optimal nonlinear price schedules for access charges and theoretical and quantitative analysis of price cap regulation of access charges.

1975-1983 BELL TELEPHONE LABORATORIES  
Member, Technical Staff, Economics Research Center: basic research on theoretical and applied econometrics, focusing on small sample theory, panel data and simultaneous equations systems.

Fall 1977 MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
Visiting Associate Professor, Department of Economics: taught graduate courses in econometrics.

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1972-1975 Assistant Professor, Department of Economics. (On leave 1974-1975.) taught graduate and undergraduate courses on econometrics, microeconomic theory and economic principles.

**Miscellaneous**

1985-1995 Associate Editor, *Journal of Econometrics*, North-Holland Publishing Company.  
1990- Board of Directors, National Economic Research Associates, Inc.  
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**Publications**

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Page 6  
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4. Alabama Public Service Commission (Docket No. 25980), on behalf of BellSouth Telecommunications: rebuttal testimony regarding revenue benchmarks and other matters in universal service funding. Filed February 13, 1998.
5. Alabama Public Service Commission (Docket No. 27091), on behalf of BellSouth Telecommunications, rebuttal testimony regarding intercarrier compensation for Internet-bound traffic, filed October 14, 1999.
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## 2. Alaska

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## 3. Arizona

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12. Arizona Corporation Commission (Docket No. T-01051B-99-0497), on behalf of US West Communications, Inc., rebuttal testimony regarding economic issues arising in the proposed merger between U S WEST and Qwest. Filed April 3, 2000.
13. Arizona Corporation Commission (Docket No. T-01051B-99-105), on behalf of Qwest Corporation., rebuttal testimony regarding rate design. Filed August 21, 2000.
14. Arizona Corporation Commission (Docket Nos. T-03654A-00-0882,T-01051B-00-0882), on behalf of Qwest Corporation, direct testimony regarding intercarrier compensation for internet-bound traffic. Filed January 8, 2001.
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#### **4. Arkansas**

16. Arkansas Public Service Commission (Docket No. 83-042-U) on behalf of Southwestern Bell Telephone Company: economic analysis of non-traffic sensitive cost recovery proposals. Filed October 7, 1985.

#### **5. California**

17. California Public Utilities Commission (Case 88-04-029) on behalf of Pacific Bell: commission payment practices, cross-subsidization of pay telephones, and compensation payments to competitive pay telephone suppliers. Filed July 11, 1988.
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32. Colorado Public Utilities Commission (Docket No. 00B-103T), on behalf of US West Communications, Inc., rebuttal testimony regarding intercarrier compensation for Internet-bound traffic in arbitration with ICG. Filed June 19, 2000.
33. Colorado Public Utilities Commission (Docket No. 00B-601T), on behalf of Qwest. Rebuttal testimony regarding intercarrier compensation for internet-bound traffic in arbitration with Level 3. Filed January 16, 2001.
34. Colorado Public Utilities Commission (Docket No. 04A-411T), on behalf of Qwest. Direct testimony regarding reclassification of services as deregulated. Filed July 21, 2004. Revision filed October 1, 2004.

## **7. Connecticut**

35. State of Connecticut, Department of Public Utility Control, (DPUC Docket No. 95-03-01) on behalf of Southern New England Telephone Company, testimony concerning productivity growth targets in a proposed state price cap regulation plan. Filed June 19, 1995.
36. State of Connecticut, Department of Public Utility Control, (DPUC Docket No. 95-06-17) on behalf of Southern New England Telephone Company: testimony concerning economic



- principles of costing and cost recovery. Filed July 23, 1996.
37. Connecticut Department of Public Utilities (DPUC Docket No. 96-09-22), on behalf of the Southern New England Telephone Company. Rebuttal testimony regarding alternative models of cost. Filed January 24, 1997.
  38. Connecticut Department of Public Utilities (DPUC Docket No. 96-11-03), on behalf of the Woodbury Telephone Company, statement regarding the effects of resale and the provision of unbundled network elements on a rural telephone company. Filed February 11, 1997.
  39. State of Connecticut, Department of Public Utility Control (Docket Nos. 95-03-01, 95-06-17 and 96-09-22), on behalf of Southern New England Telephone Company: direct testimony discussing economic principles the DPUC should use in evaluating SNET's joint and common overhead and network support expenses. Filed August 29, 1997. Rebuttal testimony filed December 17, 1998.
  40. State of Connecticut, Department of Public Utility Control (Docket No. 96-04-07) on behalf of Southern New England Telephone Company: direct testimony regarding economic principles guiding access charge reform. Filed October 16, 1997.
  41. State of Connecticut, Department of Public Utility Control (Docket No. 98-02-33), on behalf of Southern New England Telephone Company: direct testimony regarding reclassification of custom calling services as emerging competitive. Filed February 27, 1998.
  42. Connecticut Department of Public Utility Control, on behalf of SBC Communications Inc. and Southern New England Telecommunications Corporation: direct testimony regarding the SBC-SNET merger, filed June 1, 1998.
  43. Connecticut Department of Public Utility Control (Docket No. 95-06-17RE02), on behalf of The Southern New England Telephone Company, rebuttal testimony regarding local competition and reseller market. Filed June 8, 1999.
  44. Connecticut Department of Public Utilities (Docket No. 99-03-17), on behalf of The Southern New England Telephone Company, rebuttal testimony regarding market power and termination liabilities in contracts. Filed June 18, 1999.
  45. Connecticut Department of Public Utilities (Docket No. 00-07-17), on behalf of The Southern New England Telephone Company, testimony regarding local competition and pricing. Filed November 21, 2000.
  46. State of Connecticut, Department of Public Utility Control, (Docket No. 03-09-01PH01) on behalf of SBC SNET, direct testimony concerning geographic market definition for unbundled network elements. Filed December 2, 2003. Rebuttal testimony filed January 9, 2004.

## **8. Delaware**

47. Delaware Public Service Commission (Docket No. 86-20, Phase II) on behalf of The Diamond State Telephone Company: appropriate costing and pricing methods for a regulated firm facing competition. Filed March 31, 1989. Rebuttal testimony filed November 17, 1989.
48. Delaware Public Service Commission (Docket No. 89-24T) on behalf of The Diamond State Telephone Company: rebuttal testimony describing the appropriate costing and pricing methods for the provision of contract Centrex services by a local exchange carrier. Filed August 17, 1990.

49. Delaware Public Utilities Commission, (Docket No. 33), on behalf of Diamond State Telephone Company, "Incentive Regulation of Telecommunications Utilities in Delaware," filed June 22, 1992.
50. Delaware Public Utilities Commission, (Docket No. 33), on behalf of Diamond State Telephone Company, analysis of productivity growth and a proposed incentive regulation plan: "Reply Comments," June 1, 1993, "Supplementary Statement," June 7, 1993, "Second Supplementary Statement," June 14, 1993.
51. Delaware Public Utilities Commission, (Docket No. 42), on behalf of Bell Atlantic - Delaware, rebuttal testimony concerning the historical effects of equal access competition in interstate toll markets and the likely future effects of competition under 1+ presubscription in Delaware. Filed October 21, 1994.
52. Delaware Public Utilities Commission, on behalf of Bell Atlantic - Delaware, direct testimony regarding costs and pricing of interconnection and network elements. Filed December 16, 1996. Rebuttal testimony (proprietary) filed February 11, 1997.
53. Delaware Public Utilities Commission, on behalf of Bell Atlantic - Delaware: statement regarding costs and benefits from Bell Atlantic entry into interLATA telecommunications markets. Filed February 26, 1997. Rebuttal testimony filed April 28, 1997.
54. Delaware Public Service Commission (PSC Docket No. 00-205), on behalf of Bell Atlantic - Delaware, direct testimony responding to the Petition for Arbitration of Focal Communications Group. Filed April 25, 2000.

## 9. District of Columbia

55. Affidavit to the U.S. District Court for the District of Columbia on behalf of Bell Atlantic Corporation in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, re relief from the interLATA restrictions of the MFJ in connection with the pending merger with Tele-Communications, Inc. and Liberty Media Corporation. Filed January 14, 1994, (with A.E. Kahn).
56. Affidavit to the U.S. District Court for the District of Columbia on behalf of Southwestern Bell in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding provision of telecommunications and information services across LATA boundaries outside the regions in which its local exchange operations are located. Filed May 13, 1994, (with A.E. Kahn).
57. District of Columbia, Public Service Commission (Case No. 962), on behalf of Bell Atlantic - Washington, D.C., direct testimony regarding costing and pricing of interconnection and network elements. Filed January 17, 1997. Rebuttal testimony filed May 2, 1997.
58. Public Service Commission of the District of Columbia (Case No. 962), on behalf of Bell Atlantic - Washington, D.C., direct testimony regarding costing and pricing of interconnection and network elements. Filed July 16, 2001. Rebuttal testimony filed January 11, 2002.
59. United States District Court for the District of Columbia, (MDL No. 1285, Misc. No 99-0197 (TFH)), Declaration regarding statistical issues in measuring damages from price fixing in the vitamin industry, filed October 31, 2002. Reply Declaration filed January 15, 2003.
60. Public Service Commission of the District of Columbia on behalf of Verizon District of

Columbia, Direct testimony regarding forecasts of incremental hot cut demand, filed December 15, 2003.

## **10. Florida**

61. Florida Public Service Commission (Docket No. 820537-TP) on behalf of Southern Bell Telephone and Telegraph Company: economic analysis of premium intraLATA access charges. Filed July 22, 1983.
62. Florida Public Service Commission (Docket No. 820400-TP) on behalf of Southern Bell Telephone and Telegraph Company: economic principles underlying a proposed method for calculating marginal costs for private line services. Filed June 25, 1986.
63. Florida Public Service Commission (Docket No. 880069-TL) on behalf of Southern Bell Telephone and Telegraph Company: economic incentives for firms under the proposed Florida Rate Stabilization Plan. Filed June 10, 1988.
64. Florida Public Service Commission (Docket No. 900633-TL) on behalf of Southern Bell Telephone and Telegraph Company: alternative measures of cross-subsidization. May 9, 1991.
65. Florida Public Service Commission (Docket No. 920260-TL) on behalf of Southern Bell Telephone and Telegraph Company: economic analysis of a proposed price cap regulation plan. December 18, 1992.
66. Florida Public Service Commission (Docket No. 920385-TL) on behalf of Southern Bell Telephone and Telegraph Company: the economic relationship between depreciation rates, investment, and infrastructure development. September 3, 1992.
67. Florida Public Service Commission on behalf of BellSouth, "Local Telecommunications Competition: An Evaluation of a Proposal by the Communications Staff of the Florida Public Service Commission," filed November 21, 1997 (with A. Banerjee).
68. Florida Public Service Commission (Docket No. 980000-SP) on behalf of BellSouth Telecommunications, Inc.: "Costing and Pricing Principles for Determining Fair and Reasonable Rates Under Competition," economic principles for pricing local exchange services, filed September 24, 1998.
69. Florida Public Service Commission (Docket No. 980000-SP) on behalf of BellSouth Telecommunications, Inc.: "Determining Fair and Reasonable Rates Under Competition: Response to Major Themes at the FPSC Workshop," economic principles for pricing local exchange services, filed November 13, 1998.
70. Florida Public Service Commission (Docket No. 980696-TP) on behalf of BellSouth Telecommunications, Inc.: rebuttal testimony regarding measurements of cost for sizing a universal service fund, filed September 2, 1998.
71. Florida Public Service Commission (Docket No. 990750-TP), on behalf of BellSouth Telecommunications, Inc.: rebuttal testimony regarding intercarrier compensation for Internet-bound traffic, filed September 13, 1999.
72. Florida Public Service Commission (Docket No. 000075-TP) on behalf of BellSouth Telecommunications, Inc.: rebuttal testimony regarding intercarrier compensation for Internet-bound traffic, filed January 10, 2001.
73. Florida Public Service Commission (Docket No. 000121-TP) on behalf of BellSouth Telecommunications, Inc.: direct testimony regarding properties of a service quality

- performance assurance plan. Filed March 1, 2001. Rebuttal filed March 21, 2001.
74. Florida Public Service Commission (Docket No. 000075-TP) on behalf BellSouth Telecommunications, Inc., rebuttal testimony regarding efficient intercarrier compensation, filed April 12, 2001.
  75. Florida Public Service Commission (Docket No. 960786-TL) on behalf BellSouth Telecommunications, Inc.: surrebuttal testimony regarding the state of local competition in Florida, filed August 20, 2001.
  76. Florida Public Service Commission (Docket Nos. 020119-TP and 020578-TP) on behalf of BellSouth Telecommunications, Inc., regarding competitive promotional offerings. Direct testimony filed October 23, 2002, rebuttal filed November 25, 2002.
  77. Florida Public Service Commission (Docket No. 020507-TP) on behalf of BellSouth Telecommunications, Inc., regarding bundling of basic and non-basic services. Rebuttal testimony filed December 23, 2002.
  78. U.S. District Court, Southern District of Florida (Case No. 99-1706), on behalf of BellSouth Telecommunications, Confidential Reply Affidavit (“Economic Assessment of Damages”). Filed April 25, 2003.
  79. Florida Public Service Commission (Docket No. 030869-TL), on behalf of BellSouth Telecommunications, Inc., regarding rate rebalancing in the Florida Statutes. Direct testimony filed August 27, 2003.
  80. Florida Public Service Commission, (Docket No. 030851-TP) on behalf of Verizon Florida, Direct Testimony regarding forecasts of incremental hot cut demand, filed December 4, 2003.
  81. Florida Public Service Commission, (Docket No. 030851-TP) on behalf of Verizon Florida, Rebuttal Testimony regarding geographic market definition for unbundled network elements, filed January 7, 2004.
  82. Florida Public Service Commission (Docket No. 040353-TP), on behalf of BellSouth Telecommunications, Inc., regarding predatory pricing, promotional offerings and discrimination. Affidavit filed August 16, 2004.

## **11. Georgia**

83. Georgia Public Service Commission (Docket No. 3882-U) on behalf of Southern Bell Telephone and Telegraph Company: analysis of incentive regulation plans. Filed September 29, 1989.
84. Georgia Public Service Commission (Docket No. 6863-U) on behalf of BellSouth Long Distance, Inc., direct testimony concerning benefits from BellSouth participation in long distance service markets. Filed January 3, 1997. Rebuttal testimony filed February 24, 1997.
85. Georgia Public Service Commission (Docket No. 10767-U), on behalf of BellSouth Telecommunications, rebuttal testimony regarding intercarrier compensation for Internet-bound traffic, filed October 25, 1999.
86. Georgia Public Service Commission (Docket No. 10854-U), on behalf of BellSouth Telecommunications, direct testimony regarding intercarrier compensation for Internet-bound traffic, filed November 15, 1999, rebuttal testimony filed November 22, 1999.

87. Georgia Public Service Commission (Docket No. 7892-U), on behalf of BellSouth Telecommunications, rebuttal testimony regarding implementation of service quality standards, filed June 27, 2000.
88. CPR Institute for Dispute Resolution Arbitral Tribunal, Rebuttal Affidavit in Arbitrations III and IV between BellSouth Telecommunications and Supra Telecommunications & Information Systems. Filed November 5, 2001.
89. Georgia Public Service Commission (Docket No. 11901-U) on behalf of BellSouth Telecommunications, Inc., regarding the provision of DSL service to competitors' voice customers. Rebuttal testimony filed November 8, 2002.
90. CPR Institute for Dispute Resolution Arbitral Tribunal, Rebuttal Affidavit in Arbitration V between BellSouth Telecommunications and Supra Telecommunications & Information Systems. Filed November 21, 2003.

## **12. Idaho**

91. Idaho Public Utilities Commission (Case No. GST-T-99-1), on behalf of US West Communications, Inc., direct testimony regarding intercarrier compensation for ISP-bound traffic, November 22, 1999, rebuttal testimony filed December 2, 1999.

## **13. Illinois**

92. Illinois Commerce Commission (Docket No. 88-0412) on behalf of Illinois Bell Telephone Company: analysis of pricing issues for public telephone service. Filed August 3, 1990. Surrebuttal testimony filed December 9, 1991.
93. United States Bankruptcy Court, Northern District of Illinois, Eastern Division Telesphere Liquidating Trust vs. Francesco Galesi, Adv. Proc. Nos. 95 A 1051 & 99 A 131: expert opinion regarding the condition of alternative operator service provider and 900 service markets. Report filed August 23, 2002.
94. Illinois Commerce Commission (Docket No. 03-0595) on behalf of SBC Illinois. Direct testimony concerning geographic market definition for unbundled network elements. Filed December 2, 2003.

## **14. Iowa**

95. Iowa Utilities Board, on behalf Qwest Communications Intl, Inc., rebuttal testimony regarding public interest effects of the proposed merger, filed December 23, 1999
96. Iowa Utilities Board, on behalf of Qwest Corporation, (Docket No. INU-04-01), Counterstatement regarding reclassification of services as competitive. Filed August 2, 2004.

## **15. Kentucky**

97. Kentucky Public Service Commission on behalf of South Central Bell Telephone Company, testimony concerning telecommunications productivity growth and price cap plans, April 18, 1995.

98. Kentucky Public Service Commission (Administrative Case No. 96-608) on behalf of BellSouth Long Distance, Inc., testimony regarding the economic effects of BellSouth entry into interLATA services. Filed April 14, 1997. Rebuttal testimony filed April 28, 1997, supplemental rebuttal testimony filed August 15, 1997.
99. Kentucky Public Service Commission (Docket No. 98-292), on behalf of Cincinnati Bell Telephone Company, direct testimony regarding proposed price regulation plan containing earnings sharing requirements. Filed April 5, 1999.
100. Kentucky Public Service Commission (Docket No. 99-218), on behalf of BellSouth Telecommunications, direct testimony regarding intercarrier compensation for Internet-bound traffic, filed October 21, 1999. Rebuttal testimony filed November 19, 1999.
101. Kentucky Public Service Commission (Docket No. 99-296), on behalf of GTE & Bell Atlantic, direct testimony on the effects of the Bell Atlantic-GTE merger on competition in Kentucky and on the benchmarking abilities of regulators. Filed July 9, 1999, rebuttal testimony filed August 20, 1999.
102. Kentucky Public Service Commission (Docket No. 2001-105), on behalf of BellSouth Telecommunications, Inc.: local competition in Kentucky and BellSouth's performance measurements plan to support its application for interLATA authority. Rebuttal testimony filed July 30, 2001. Surrebuttal testimony filed September 10, 2001.

## **16. Louisiana**

103. Louisiana Public Service Commission (Docket No. U-17949, Subdocket E) on behalf of South Central Bell Telephone Company, rebuttal testimony concerning productivity growth accounting and other aspects of a price regulation plan, July 24, 1995.
104. Louisiana Public Service Commission (Docket No. U-17949, Subdocket E) on behalf of South Central Bell Telephone Company, supplemental and rebuttal testimony concerning economic issues in depreciation accounting in the presence of competition and price cap regulation, November 17, 1995. Surrebuttal testimony, December 13, 1995, Further Surrebuttal testimony, January 12, 1996.
105. Louisiana Public Service Commission (Docket No. U-20883) on behalf of South Central Bell Telephone Company, "Price Regulation and Local Competition in Louisiana," affidavit evaluating a framework for local competition and price regulation in Louisiana, November 21, 1995.
106. Louisiana Public Service Commission (Docket No. U-20883, Subdocket A) on behalf of South Central Bell Telephone Company, rebuttal testimony concerning methods for measuring the cost of providing universal service, August 16, 1995.
107. Louisiana Public Service Commission (Docket No. U-U-22020) on behalf of South Central Bell Telephone Company, testimony concerning economic principles determining wholesale prices for resold services. Filed August 30 1996. Rebuttal testimony filed September 13, 1996.
108. Louisiana Public Service Commission, on behalf of BellSouth Long Distance, Inc. (Docket No. U-22252), direct testimony regarding the probable economic benefits to consumers in Louisiana from entry by BellSouth into the interLATA long distance market. Filed March 14, 1997. Rebuttal testimony filed May 2, 1997. Supplemental testimony filed May 27, 1997.
109. Louisiana Public Service Commission (Docket No. U-24206), on behalf of BellSouth

Telecommunications, direct testimony regarding intercarrier compensation for Internet-bound traffic. Filed September 3, 1999, rebuttal filed September 17, 1999.

110. Louisiana Public Service Commission (Docket No. U-22632) on behalf of BellSouth Telecommunications, rebuttal testimony concerning payphone access services, July 17, 2000.
111. Louisiana Public Service Commission (Docket No. U-22252, Subdocket E), on behalf of BellSouth Telecommunications, economic properties of service quality penalty plans. Reply affidavit filed June 25, 2001.
112. United States District Court, Eastern District of Louisiana, Civil Action No. 02-0481: *Dwayne P. Smith, Trustee v. Lucent Technologies, Inc.*, on behalf of Lucent Technologies, Inc., damage calculation from alleged equipment failure. Expert Report filed June 16, 2003.

## **17. Maine**

113. State of Maine Public Utilities Commission (Docket No. 89-397) on behalf of New England Telephone & Telegraph Company: theoretical and historical analysis of incentive regulation in telecommunications, entitled "Incentive Regulation in Telecommunications," filed June 15, 1990.
114. State of Maine Public Utilities Commission (Docket Nos. 94-123/94-254) on behalf of New England Telephone & Telegraph Company: analysis of appropriate parameters for a price regulation plan. Filed December 13, 1994. Rebuttal testimony filed January 13, 1995.
115. Maine Public Utilities Commission (Docket No. 96-388) on behalf of NYNEX, testimony regarding the economic effects of the proposed merger between Bell Atlantic and NYNEX, Direct Testimony filed September 6, 1996. Rebuttal Testimony filed October 30, 1996.
116. Maine Public Utilities Commission (Docket No. 97-505) on behalf of NYNEX: direct testimony regarding economic principles for setting prices and estimating costs for interconnection. Filed April 21, 1997. Rebuttal testimony filed October 21, 1997.
117. Maine Public Utilities Commission on behalf of NYNEX: affidavit regarding competitive effects of NYNEX entry into interLATA markets. Filed May 27, 1997 (with Kenneth Gordon, Richard Schmalensee and Harold Ware).
118. Maine Public Utilities Commission (Docket No. 99-851) on behalf of Verizon: direct testimony regarding the review of Maine's alternative regulation plan. Filed January 8, 2001. Rebuttal filed February 12, 2001.
119. Maine Public Utilities Commission (Docket No. 99-851), on behalf of Verizon- Maine, affidavit regarding economics of price cap regulation. Filed April 29, 2003.

## **18. Maryland**

120. Maryland Public Service Commission (Case No. 8462) on behalf of The Chesapeake and Potomac Telephone Company of Maryland: competition and the appropriate regulatory treatment of Yellow Pages. Filed October 2, 1992.
121. Maryland Public Service Commission (Case No. 8584) on behalf of The Chesapeake and Potomac Telephone Company of Maryland: appropriate pricing and regulatory treatment of interconnection to permit competition for local service. Filed November 19, 1993, (with A.E.

- Kahn). Rebuttal testimony filed January 10, 1994, surrebuttal testimony filed January 24, 1994.
122. Maryland Public Service Commission (Case No. 8584, Phase II) on behalf of Bell Atlantic - Maryland: geographically deaveraged incremental and embedded costs of service. Filed December 15, 1994. Additional direct testimony concerning efficient rate structures for interconnection pricing filed May 5, 1995. Rebuttal testimony filed June 30, 1995.
  123. Maryland Public Service Commission (Case No. 8659) on behalf of Bell Atlantic - Maryland: appropriate pricing of interconnection among competing local exchange carriers. Filed November 9, 1994.
  124. *FreBon International Corp. vs. BA Corp. Civil Action*, No. 94-324 (GK): Defendants' Amended Expert Disclosure Statement, regarding markets for teleconferencing services. Filed under seal February 15, 1996.
  125. Maryland Public Service Commission (Case No. 8715), on behalf of Bell Atlantic - Maryland: rebuttal testimony on the economic criteria for the reclassification of telecommunications services. Filed March 14, 1996, surrebuttal testimony filed April 1, 1996.
  126. Maryland Public Service Commission, on behalf of Bell Atlantic-Maryland, (Case No. 8731-II), statement regarding costing and pricing of interconnection and unbundled network elements. Filed January 10, 1997. Rebuttal testimony filed April 4, 1997.
  127. Maryland Public Service Commission, on behalf of Bell Atlantic - Maryland: statement regarding consumer benefits from Bell Atlantic's provision of interLATA service, filed March 14, 1997.
  128. Maryland Public Service Commission (Case No. 8786), on behalf of Bell Atlantic - Maryland: rebuttal testimony regarding economic principles underlying costs and prices for non-recurring services and access to operations support systems. Filed November 16, 1998.
  129. Maryland Public Service Commission (Case No. 8745), direct testimony on behalf of Verizon Maryland Inc. regarding efficient pricing of carrier access charges. Filed March 23, 2001. Rebuttal filed May 21, 2001. Surrebuttal filed June 11, 2001.
  130. Before the Public Service Commission of Maryland (Case No. 8879), direct testimony on behalf of Verizon Maryland Inc. regarding costing principles for network elements. Filed May 25, 2001. Rebuttal testimony filed September 5, 2001. Surrebuttal filed October 15, 2001.
  131. Circuit Court For Prince George's County, Maryland. Case No: CAL 99-21004, Jacqueline Dotson, et al. v. Bell Atlantic - Maryland, Inc. and Maryland Public Service Commission, affidavit on behalf of Bell Atlantic Maryland regarding late payment fees. Filed October 14, 2002.
  132. Maryland Public Service Commission (Case No. 8927), on behalf of Verizon Maryland, rebuttal testimony regarding complaint by CloseCall America alleging anti-competitive tying of Verizon's residential and small business local service with voice messaging and high-speed Internet access, filed September 24, 2002. Supplemental rebuttal testimony filed March 3, 2003. Surrebuttal testimony filed April 11, 2003.
  133. Maryland Public Service Commission (Case No. 8988) on behalf of Verizon Maryland, forecasts of the demand for incremental hot cuts, January 9, 2004.



## 19. Massachusetts

134. Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-50), on behalf of NYNEX: analysis of appropriate parameters for a price regulation plan. Filed April 14, 1994. Rebuttal testimony filed October 26, 1994.
135. Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-185) on behalf of NYNEX: economic analysis of terms and conditions for efficient local competition. Filed May 19, 1995. Rebuttal testimony filed August 23, 1995.
136. Affidavit to the Superior Court Department of the Trial Court (Civil Action No. 95-6363F), on behalf of New England Telephone and Telegraph Company, d/b/a NYNEX: in opposition to Plaintiffs' Motion for Class Certification. Filed July 1996.
137. Massachusetts Department of Public Utilities (Docket Nos. D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94) on behalf of NYNEX: economic analysis of costs avoided from resale of local exchange services. Testimony filed September 27, 1996. Rebuttal Testimony filed October 16, 1996.
138. Massachusetts Department of Public Utilities (Docket Nos. D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94) on behalf of NYNEX: Arbitration of interconnection agreements under the Telecommunications Act of 1996. Filed October 11, 1996. Rebuttal Testimony filed October 30, 1996.
139. Massachusetts Department of Public Utilities (Docket No. DTE 98-15), on behalf of Bell Atlantic – MA: direct testimony regarding the method used to determine wholesale (avoided cost) discount that applies to resold retail services. Filed January 16, 1998.
140. Massachusetts Department of Public Utilities (Docket No. D.P.U./D.T.E. 94-185-C) on behalf of Bell Atlantic: economic analysis of the usefulness of a regulatory price floor for wholesale services. Affidavit filed February 6, 1998. Reply Affidavit filed February 19, 1998.
141. Massachusetts Department of Telecommunications and Energy (D.P.U. 96-3/74, 96-75, 96-80/81, 96-83, & 96-94), on behalf of Bell Atlantic – Massachusetts: rebuttal testimony discussing the types of costs for OSSs, filed April 29, 1998.
142. Massachusetts Department of Telecommunications and Energy (Docket No. 85-15, Phase III, Part 1), on behalf of Bell Atlantic – Massachusetts: rebuttal testimony discussing appropriate forward-looking technology for costing network elements, filed August 31, 1998.
143. Massachusetts Department of Telecommunications and Energy (Docket No. 98-15, Phase II), on behalf of Bell Atlantic – Massachusetts: rebuttal testimony concerning the avoided costs of resold services, filed September 8, 1998.
144. Massachusetts Department of Telecommunications and Energy (Docket No. 98-67), on behalf of Bell Atlantic-Massachusetts: direct testimony regarding regulatory rules/economic principles pertaining to exogenous adjustment factors in Bell Atlantic's price cap formula, filed September 25, 1998.
145. Massachusetts Department of Telecommunications and Energy (Docket No. 98-85), on behalf of Bell Atlantic-Massachusetts: direct testimony regarding efficiency changes from intraLATA presubscription, filed October 20, 1998.
146. Massachusetts Department of Telecommunications and Energy (Docket No. D.T.E. 97-116-B), on behalf of Bell Atlantic-Massachusetts, affidavit regarding consequences for economic efficiency of different intercarrier compensation rules for ISP-bound traffic. Filed March 29,

- 1999.
147. Massachusetts Department of Telecommunications & Energy (Docket No. 94-185-E), on behalf of Bell Atlantic, rebuttal testimony re: inclusion of overhead costs in the calculation of price floors for BA-MA services. Filed July 26, 1999.
  148. Massachusetts Department of Telecommunications and Energy (Docket DTE –1-20), on behalf of Verizon New England Inc., D/B/A/ Verizon Massachusetts, direct testimony regarding cost concepts and pricing principals for UNEs, filed May 4, 2001. Rebuttal testimony filed December 17, 2001.
  149. Massachusetts Department of Telecommunications and Energy, testimony on behalf of Verizon New England Inc. d/b/a/ Verizon Massachusetts, regarding benefits of alternative regulation in Massachusetts since adoption of price cap plan.. Filed April 12, 2001. Rebuttal testimony filed September 21, 2001. Reply filed November 14, 2001.
  150. Massachusetts Department of Telecommunications and energy (Docket No. 03-60) on behalf of Verizon Massachusetts, forecast of incremental hot cut demand, filed November 12, 2003.
  151. Massachusetts Department of Telecommunications and Energy (Docket No. 03-60) on behalf of Verizon Massachusetts, Reply Panel Testimony regarding geographic market definition. Filed February 25, 2004, Rebuttal Panel Testimony regarding hot cuts. Filed February 25, 2004.

## **20. Michigan**

152. Testimony before the Michigan Circuit Court (Case No. 87-709234-CE and 87-709232-CE) on behalf of Combustion Engineering, Inc., in *Her Majesty the Queen, et al., v. Greater Detroit Resource Recovery Authority, et al.*, re statistical analysis of air pollution data to determine emissions limits for the Detroit municipal waste-to-energy facility, February, 1992.
153. Michigan Public Service Commission (Case No. U-11756), on behalf of Ameritech Michigan: direct testimony regarding efficient prices for services supplied to independent phone payers, filed October 9, 1998.
154. Michigan Public Service Commission (Case No. U-13796), on behalf of SBC Michigan: direct testimony regarding geographic markets for local exchange services, filed December 19, 2003. Reply testimony filed February 10, 2004. Response testimony filed March 5, 2004.

## **21. Minnesota**

155. Minnesota Public Utilities Commission (Docket No. P3009, 3052, 5096, 421, 3017/PA-99-1192), on behalf of US WEST Communications, Inc., rebuttal affidavit regarding the effects of the proposed Qwest-US West merger on economic welfare. Filed January 14, 2000.
156. Minnesota Public Utilities Commission (Docket No. P3009, 3052, 5096, 421, 3017/PA-99-1192), direct testimony regarding the effects of the proposed Qwest-US West merger on economic welfare. Filed March 29, 2000.
157. Minnesota Public Utilities Commission (PUC Docket No. P-421/C1-01-1372, OAH Docket No. 7-2500-14487-2) on behalf of Qwest Corporation, economic aspects of separate affiliate requirements, affidavit filed December 28, 2001, Surrebuttal Affidavit filed January 16, 2002.

## **22. Mississippi**

158. Mississippi Public Service Commission (Docket No. 95-UA-313) on behalf of BellSouth Telecommunications, Inc. d/b/a South Central Bell Telephone Company, rebuttal testimony addressing cost issues, as they pertain to price regulation raised in the direct testimony by intervenors. Filed October 13, 1995.
159. Mississippi Public Service Commission (Docket No. 95-UA-358) on behalf of BellSouth Telecommunications, Inc. d/b/a South Central Bell Telephone Company, testimony regarding universal service fund issues. Filed January 17, 1996. Rebuttal testimony filed February 28, 1996.
160. Mississippi Public Service Commission (Docket No. 97-AD-0321), on behalf of BellSouth Long Distance, Inc., direct testimony regarding the likely economic benefits to consumers in Mississippi from entry by BellSouth into the interLATA long distance market. Filed July 1, 1997. Rebuttal testimony filed September 29, 1997.
161. Mississippi Public Service Commission (Docket No. 97-AD-544), on behalf of BellSouth Telecommunications: rebuttal testimony regarding economic issues of costing and pricing unbundled network elements. Filed March 13, 1998.
162. Mississippi Public Service Commission (Docket No. 98-AD-035), on behalf of BellSouth Telecommunications: direct testimony regarding universal service funding and price benchmark issues. Filed February 23, 1998, rebuttal testimony filed March 6, 1998.
163. Mississippi Public Service Commission (Docket No. 99-AD-421), on behalf of BellSouth Telecommunications, direct testimony regarding intercarrier compensation for Internet-bound traffic, filed October 20, 1999. Rebuttal testimony filed November 12, 1999.
164. Mississippi Public Service Commission (Docket No. 97-AD-321), on behalf of BellSouth Telecommunications, Inc.: local competition in Mississippi and BellSouth's performance measurements plan to support its application for interLATA authority. Rebuttal testimony filed August 2, 2001.

## **23. Montana**

165. Montana Public Service Commission (Docket No. 90.8.46) on behalf of US West Communications: theoretical and historical analysis of incentive regulation plans in telecommunications. Filed October 4, 1990.
166. Montana Public Service Commission (Docket No. 90.12.86) on behalf of US West Communications: economic analysis of a proposed incentive regulation plan. Filed November 4, 1991. Additional testimony filed January 15, 1992.
167. Montana Public Service Commission (Docket No. D99.8.200), on behalf of US West Communications, Inc., rebuttal testimony regarding the effects of the proposed Qwest-US West merger on economic welfare. Filed February 22, 2000.
168. Montana Department of Public Service Regulation (Docket No. D2000.6.89), on behalf of US West Communications, Inc., direct testimony regarding efficient intercarrier compensation for Internet-bound traffic. Filed July 24, 2000. Rebuttal testimony filed February 7, 2001.
169. Montana Department of Public Service Regulation (Docket No. D2000.8.124), on behalf of Qwest Corporation., direct testimony in arbitration with TouchAmerica regarding efficient

intercarrier compensation for Internet-bound traffic. Filed October 20, 2000. Rebuttal testimony filed December 20, 2000.

170. **Montana Public Service Commission (Docket No. D2002.12.153) on behalf of Qwest Long Distance Corp.:** rebuttal testimony regarding alleged anticompetitive practices in long distance services. Filed July 18, 2003.

## **24. Nebraska**

171. Nebraska Public Service Commission, on behalf of US WEST, (Application No. C-1628), economic analysis of local exchange and exchange access pricing, direct testimony filed October 20, 1998; reply testimony filed November 20, 1998.
172. Nebraska Public Service Commission, *In the Matter of the Petition of Sprint Communications Company L.P. for Arbitration of Interconnection Rates, Terms, Conditions, and Related Arrangements with US WEST Communications, Inc. N/K/A Qwest Corporation*, (Docket No. C-2328), Direct testimony regarding intercarrier compensation for Internet-bound traffic filed September 25, 2000. Rebuttal testimony filed October 4, 2000.

## **25. Nevada**

173. United States District Court, District of Nevada (Case No. CV-S-99-1796-KJD(RJJ) on behalf of Broadwing Communications Services, Inc., affidavit regarding damages from alleged misuse of trade secret information. Filed December 28, 2000.

## **26. New Hampshire**

174. New Hampshire Public Service Commission (Docket 89-010) on behalf of New England Telephone & Telegraph Company: appropriate level and structure of productivity adjustments in a proposed price regulation plan. Filed March 3, 1989.
175. New Hampshire Public Service Commission, (Docket DE 90-002), on behalf of New England Telephone & Telegraph Company: the appropriate relationship between carrier access and toll prices. Filed May 1, 1992. Reply testimony filed July 10, 1992. Rebuttal testimony filed August 21, 1992.
176. Science, Technology and Energy Committee of the New Hampshire House of Representatives on behalf of New England Telephone Company, "An Economic Perspective on New Hampshire Senate Bill 77," an analysis of resale of intraLATA toll services. April 6, 1993
177. New Hampshire Public Service Commission, (Docket DE 96-252) on behalf of NYNEX: economic analysis of costs avoided from resale of local exchange services. Filed October 1, 1996.
178. New Hampshire Public Service Commission (Docket DE 96-220) on behalf of NYNEX, testimony regarding the economic effects of the proposed merger between Bell Atlantic and NYNEX. Filed October 10, 1996.
179. New Hampshire Public Service Commission, (Docket DE 96-252) on behalf of NYNEX: Arbitration of interconnection agreements under the Telecommunications Act of 1996. Filed October 23, 1996.

180. New Hampshire Public Service Commission (Docket No. 97-171, Phase II), on behalf of Bell Atlantic – New Hampshire: direct testimony discussing the basic economic principles regarding costs and prices of interconnection and unbundled network elements, filed March 13, 1998. Rebuttal filed April 17, 1998.
181. New Hampshire Public Utilities Commission (Docket No. 99-018), on behalf of Bell Atlantic, direct testimony regarding the use of Total Element Long Run Incremental Cost (TELRIC) methodology as the basis for prices in special contracts. Filed April 7, 1999. Rebuttal testimony filed April 23, 1999.
182. New Hampshire Public Utilities Commission (Docket No. DT 02-111) on behalf of Verizon – New Hampshire, rebuttal testimony regarding private line pricing. Filed May 2, 2003.
183. New Hampshire Public Utilities Commission (Docket No. DT 02-165) on behalf of Verizon – New Hampshire, rebuttal testimony regarding Yellow Pages revenue imputation. Filed June 4, 2003. Surrebuttal filed November 10, 2003.

## **27. New Jersey**

184. New Jersey Board of Public Utilities (Docket No. TX90050349) on behalf of New Jersey Bell Telephone Company: theoretical and empirical analysis of the Board's intraLATA compensation policy. Filed December 6, 1990.
185. New Jersey Board of Regulatory Commissioners, (Docket No. TX93060259), Affidavit analyzing statistical evidence regarding the effect of intraLATA competition on telephone prices. Filed October 1, 1993.
186. New Jersey Board of Public Utilities (Docket Nos. TX90050349, TE92111047, TE93060211) on behalf of Bell Atlantic -New Jersey: economic impacts of intraLATA toll competition and regulatory changes required to accommodate competition. Filed April 7, 1994. Rebuttal testimony filed April 25, 1994. Summary Affidavit and Technical Affidavit filed April 19, 1994.
187. New Jersey Board of Public Utilities (Docket No. TX94090388) on behalf of Bell Atlantic - New Jersey: economic analysis of issues regarding proposed presubscription for intraLATA toll traffic in New Jersey. Amended direct testimony filed April 17, 1995. Rebuttal Testimony filed May 31, 1995.
188. New Jersey Board of Public Utilities on behalf of Bell Atlantic - New Jersey: "Economic Competition in Local Exchange Markets," position paper on the economics of local exchange competition filed in connection with arbitration proceedings, August 9, 1996 (with Kenneth Gordon and Alfred E. Kahn).
189. New Jersey Board of Public Utilities (Docket No. TX95120631) on behalf of Bell Atlantic - New Jersey, incremental costs of residential basic exchange service. Filed August 15, 1996. Rebuttal testimony filed August 30, 1996.
190. New Jersey Board of Public Utilities (Docket No. TO96070519) on behalf of Bell Atlantic - New Jersey: evaluation of proxy models of the incremental cost of unbundled network elements, testimony filed September 18, 1996.
191. New Jersey Board of Public Utilities (Docket No. TX95120631) on behalf of Bell Atlantic - New Jersey: economic analysis of the avoided costs from resale of local exchange services. Rebuttal testimony filed September 27, 1996.

192. New Jersey Board of Public Utilities (Docket No. T096080621: MCI/Bell Atlantic Arbitration) on behalf of Bell Atlantic-New Jersey. Rebuttal testimony concerning the pricing of unbundled network elements, November 7, 1996.
193. New Jersey Board of Public Utilities on behalf of Bell Atlantic - New Jersey (Docket No. T097030166) economic analysis of costs and benefits from Bell Atlantic provision of interLATA services, statement filed March 3, 1997, reply affidavit filed May 15, 1997.
194. New Jersey Board of Public Utilities (Docket No. TX95120631) on behalf of Bell Atlantic - New Jersey: economic analysis of proposed universal service funds. Direct testimony filed September 24, 1997. Rebuttal testimony filed October 18, 1997.
195. New Jersey Board of Public Utilities (BPU Docket No. TO97100808, OAL Docket No. PUCOT 11326-97N) on behalf of Bell Atlantic - New Jersey: economic analysis of imputation rules for long distance services. Direct testimony filed July 8, 1998, rebuttal testimony filed September 18, 1998.
196. The New Jersey Board of Public Utilities (OAL DOCKET Nos. PUCOT 11269-97N, PUCOT 11357-97N, PUCOT 01186-94N AND PUCOT 09917-98N) on behalf of Bell Atlantic - New Jersey: economic issues regarding alleged subsidization of payphone services. Rebuttal testimony filed March 8, 1999; surrebuttal testimony filed June 21, 1999.
197. New Jersey Board of Public Utilities (Docket No. TO 00031063), on behalf of Bell Atlantic - New Jersey, direct testimony regarding the measurement of economic costs of ISP-bound traffic and economic issues concerning intercarrier compensation for such traffic. Filed April 28, 2000. Rebuttal testimony filed May 5, 2000.
198. New Jersey Board of Public Utilities (Docket No. TO 99120934), on behalf of Bell Atlantic - New Jersey, direct testimony regarding reclassification of services as competitive. Filed May 18, 2000.
199. New Jersey Board of Public Utilities (Docket No. TO00060356), on behalf of Bell Atlantic-New Jersey, affidavit regarding the measurement of economic costs for unbundled network elements. Filed July 28, 2000.
200. The New Jersey Board of Public Utilities (Docket No. TO01020095), on behalf of Verizon-New Jersey, panel testimony regarding parameters in an incentive regulation plan. Filed February 15, 2001. Rebuttal filed June 15, 2001. Supplemental rebuttal filed September 25, 2001.
201. The New Jersey Board of Public Utilities (Docket No. TO01020095), on behalf of Verizon-New Jersey, panel testimony regarding measurement of cross-subsidies. Filed February 15, 2001. Rebuttal filed June 15, 2001.
202. The New Jersey Board of Public Utilities (Docket No. TO01020095), on behalf of Verizon-New Jersey, panel testimony regarding reclassification of business services as competitive. Filed February 15, 2001. Rebuttal filed June 15, 2001.
203. New Jersey Board of Public Utilities (Docket No. TT97120889), on behalf of Verizon - New Jersey, updated rebuttal testimony (with Michael Falkiewicz) regarding reclassification of directory assistance services as competitive, filed February 13, 2003.
204. New Jersey Public Utilities Commission on behalf of Verizon New Jersey, Direct Testimony regarding forecasts of incremental hot cut demand, filed December 10, 2003.
205. New Jersey Board of Public Utilities (Docket No. T003090705), on behalf of Verizon New Jersey. Rebuttal testimony regarding geographic market definition in applying the FCC's

Page 24  
William E. Taylor  
National Economic Research Associates, Inc.

switching triggers. Filed February 26, 2004.

206. New Jersey Board of Public Utilities on behalf of Verizon New Jersey, Rebuttal Panel Testimony regarding forecasts of incremental hot cut demand, filed February 27, 2004.

## **28. New Mexico**

207. New Mexico Public Regulation Commission (Case No. 3131), On behalf of U S WEST Communications, direct testimony regarding intercarrier compensation for Internet-bound traffic, filed October 14, 1999. Rebuttal testimony filed October 18, 1999.
208. New Mexico Public Regulation Commission (Utility Case No. 3147), on behalf of US West Communications, Inc., direct testimony regarding efficient pricing and policies towards investment and new service implementation, filed December 6, 1999, rebuttal testimony filed December 28, 1999.
209. New Mexico Public Regulation Commission, on behalf of US West Communications, Inc., direct testimony regarding pricing flexible and alternatives to rate of return regulation, filed December 10, 1999.
210. New Mexico Public Regulation Commission (Case No. 3008), On behalf of U S WEST Communications, rebuttal testimony regarding local exchange rate levels and structure, filed May 19, 2000.
211. New Mexico Public Regulation Commission (Case No. 3225), on behalf of Qwest Corporation, direct testimony regarding the subsidy in existing telephone rates. Filed August 18, 2000.
212. New Mexico Public Regulation Commission (Case No. 3300), on behalf of Valor Telecommunications of New Mexico, LLC, rebuttal testimony regarding the subsidy in existing telephone rates. Filed October 19, 2000.

## **29. New York**

213. New York State Public Service Commission (Case 28961 - Fifth Stage) on behalf of New York Telephone Company: appropriate level and structure of productivity adjustments in a proposed price regulation plan. Filed September 15, 1989.
214. Testimony before the United States District Court, Eastern District of New York on behalf of Jancyn Manufacturing Corp., in *Jancyn Manufacturing Corp. v. The County of Suffolk*. Commercial damages. Depositions: September 19, 1991, November 22, 1993; Testimony and Cross-Examination: January 11, 1994.
215. New York Public Service Commission (Case No. 28425) on behalf of New York Telephone Company, "Costs and Benefits of IntraLATA Presubscription," (with T.J. Tardiff). Filed May 1, 1992.
216. New York State Public Service Commission (Case 92-C-0665, Proceeding on Motion of the Commission to Investigate Performance-Based Incentive Regulatory Plans for New York Telephone Company) on behalf of New York Telephone Company: appropriate level and structure of productivity adjustments and competitive pricing safeguards in a proposed incentive regulation plan. Filed as part of panel testimony, October 3, 1994.

217. New York Public Service Commission (Case 94-C-0017) on behalf of New York Telephone Company, testimony regarding competition and market power in intrastate toll markets. Filed August 1, 1995.
218. New York Public Service Commission (Case Nos. 95-C-0657, 94-C-0095, 91-C-1174) on behalf of New York Telephone Company, costing principles for resold services. Filed May 31, 1996. Costing and pricing principles for unbundled network elements. Filed June 4, 1996. Rebuttal testimony filed July 15, 1996.
219. New York Public Service Commission (Case Nos. 93-C-0451 and 91-C-1249) on behalf of New York Telephone Company, statistical issues in the calculation of damages in the provision of Mass Announcement Services: Rebuttal testimony filed July 23, 1996.
220. New York Public Service Commission (Case 96-C-0603) on behalf of NYNEX and Bell Atlantic, *Initial Panel Testimony*, regarding the economic effects of the proposed merger between Bell Atlantic and NYNEX. Filed November 25, 1996. *Reply Panel Testimony* filed December 12, 1996.
221. Affidavit to the U.S. District Court, Southern District of New York, on behalf of Multi Communication Media Inc., *Multi Communications Media Inc., v. AT&T and Trevor Fischbach*, (96 Civ. 2679 (MBM)) regarding the application of the filed tariff doctrine to contract tariffs in telecommunications. Filed December 27, 1996.
222. New York Public Service Commission on behalf of New York Telephone Company, "Competitive Effects of Allowing NYNEX To Provide InterLATA Services Originating In New York State," public interest analysis of NYNEX's proposed entry into in-region long distance service. Filed February 18, 1997 (with Harold Ware and Richard Schmalensee).
223. State of New York Public Service Commission (Case 94-C-0095 and 28425), on behalf of NYNEX, *Initial Panel Testimony*: direct testimony regarding InterLATA Access Charge Reform. Filed May 8, 1997. *Rebuttal Panel Testimony* filed July 8, 1997.
224. State of New York Public Service Commission (Cases 95-C-0657, 94-C-0095, 91-C-1174 and 96-C-0036), on behalf of Bell Atlantic, *Panel Testimony of Bell Atlantic – New York on Costs and Rates for Miscellaneous Phase 3 Services*: panel testimony regarding statistical sampling issues in cost studies for non-recurring charges. Filed March 18, 1998. Rebuttal filed June 3, 1998.
225. New York Public Service Commission, (Case 98-C-1357), on behalf of Bell Atlantic-New York, Panel Testimony on costs for wholesale services, Panel Testimony filed February 7, 2000. Panel Rebuttal Testimony filed October 19, 2000.
226. New York Public Service Commission, (Case 00-C-1945), on behalf of Verizon-New York, Panel Testimony on price regulation, filed May 15, 2001.
227. New York Public Service Commission, (Case 00-C-1945), on behalf of Verizon-New York, Panel Testimony on the New York competitive marketplace, filed May 15, 2001.
228. American Arbitration Association, New York, MCI WorldCom Communications Inc. v. Electronic Data Systems, Corporation, Expert Report on prices and incentives in a disputed contract filed June 25, 2001. Supplemental Expert Report filed July 13, 2001.
229. New York Public Service Commission (Case 01-C-0767), on behalf of Verizon-New York, panel testimony regarding incremental costs and pricing of mobile interconnection services. Filed October 31, 2001.



230. New York Public Service Commission, (Case 00-C-1945), economic issues in renewing the New York incentive regulation plan, (panel testimony), filed February 11, 2002.
231. American Arbitration Association, on behalf of Verizon – New York, direct testimony regarding events in telecommunications markets affecting employment. February 2003.
232. American Arbitration Association (Case No: 50-T-180-00458-02), *Global Crossing USA, Inc. v. Softbank Corp.*, on behalf of Softbank Corp., damage calculations regarding undersea optical fiber capacity. Direct and Supplemental direct testimonies filed July 2003.
233. New York Public Service Commission, (Case 02-C-1425), on behalf of Verizon New York, forecasts of incremental hot cut demand (panel testimony), filed October 24, 2003.

### **30. North Carolina**

234. North Carolina Utilities Commission (Docket No. P-7, Sub 825; P-10, Sub 479) on behalf of Carolina Telephone and Telegraph Company and Central Telephone Company, direct and rebuttal testimony regarding price cap regulation for small telephone companies, February 9, 1996.
235. North Carolina Utilities Commission (Docket No. P-55, Sub 1022) on behalf of BellSouth Long Distance, Inc.: direct testimony regarding the likely economic benefits to consumers in North Carolina from entry by BellSouth into the interLATA long distance market. Filed August 5, 1997. Rebuttal testimony filed September 15, 1997.
236. North Carolina Utilities Commission (Docket No. P-100, SUB 133d), on behalf of BellSouth Telecommunications: direct testimony on the proper economic basis for determining costs and prices of interconnection, unbundled network elements, and operating support systems. Filed December 15, 1997. Rebuttal filed March 9, 1998.
237. North Carolina Utilities Commission (Docket No. P-100, SUB 133g), on behalf of BellSouth Telecommunications: direct testimony on appropriate economic principles for sizing the state universal service fund. Filed February 16, 1998. Rebuttal filed April 13, 1998.
238. North Carolina Utilities Commission, *In re: Petition for Arbitration of ITC^DELTA COM Communications, Inc., with BellSouth Telecommunications, Inc., Pursuant to the Telecommunications Act of 1996*, (Docket No. P-500, Sub 10), testimony regarding economic interconnection issues, filed July 9, 1999.
239. North Carolina Utilities Commission, *In the Matter of Bell South Telecommunications, Inc., Complainant vs. US LEC of North Carolina, Respondent*, (Docket No. P-561, Sub 10), rebuttal testimony regarding economic efficiency and reciprocal compensation. Filed July 30, 1999.
240. North Carolina Utilities Commission (Docket No. P-100, SUB 133k), on behalf of BellSouth Telecommunications: rebuttal testimony regarding properties of a service quality performance assurance plan. Filed May 21, 2001.
241. North Carolina Utilities Commission (Docket No. P-55, SUB 1022), on behalf of BellSouth Telecommunications: rebuttal testimony regarding status of local competition in North Carolina. Filed October 8, 2001.

### **31. North Dakota**

242. North Dakota Public Service Commission, on behalf of US WEST Communications, rebuttal testimony in support of US WEST's filing for a residential basic local service rate increase, filed May 30, 2000.

### **32. Ohio**

243. The Public Utilities Commission of Ohio (Case No. 94-1695-TP-ACE) on behalf of Cincinnati Bell Telephone Company: economic analysis of terms and conditions for efficient local competition. Filed May 24, 1995.
244. Ohio Public Utility Commission (Case No. 96-899-TP-ALT) on behalf of Cincinnati Bell Telephone Company: direct testimony regarding CBT's proposed rate rebalancing and price regulation plan. Filed February 19, 1997.
245. Ohio Public Utility Commission (Case No. 97-152-TP-ARB), on behalf of Cincinnati Bell Telephone Company: direct testimony regarding the application of MCI Telecommunications Corporation Petition for Arbitration Pursuant to Section 252 (b) of the Telecommunications Act of 1996. Filed April 2, 1997.
246. Ohio Public Utility Commission (Docket No. 98-1398-TP-AMT), on behalf of Bell Atlantic and GTE, rebuttal testimony concerning economic effects of the proposed merger of Bell Atlantic and GTE. Filed June 16, 1999, substitute rebuttal testimony filed October 12, 1999.

### **33. Oregon**

247. Oregon Public Utility Commission (ARB 154) on behalf of US WEST Communications, direct testimony regarding intercarrier compensation for ISP-bound traffic, November 1, 1999, rebuttal testimony filed November 5, 1999.

### **34. Pennsylvania**

248. Pennsylvania Public Utility Commission, (Docket No. P-009350715), on behalf of Bell Atlantic: a study of inflation offsets in a proposed price regulation plan. Filed October 1, 1993. Rebuttal testimony filed January 18, 1994.
249. Pennsylvania Public Utility Commission, (Docket No. I-940034) on behalf of Bell Atlantic: issues regarding proposed presubscription for intraLATA toll traffic. Filed as part of panel testimony, December 8, 1994. Reply testimony filed February 23, 1995. Surrebuttal testimony filed March 16, 1995.
250. *US WATS v. AT&T*: Retained by counsel for US WATS, a reseller of AT&T long distance services, plaintiff in an antitrust suit alleging monopolization and conspiracy in business long distance markets. Antitrust liability and damages. Confidential Report, August 22, 1995. Depositions September 30, October 1, October 12, December 3, 1995. Testimony October 18-20, 25-27, 30, 1995. Rebuttal testimony December 4, December 11, 1995.
251. Pennsylvania Public Utility Commission (Docket Nos. A-310203F0002, A-310213F0002, A-310236F0002 and A-310258F0002), on behalf of Bell Atlantic - Pennsylvania: rebuttal

- testimony to evaluate costing and pricing principles and cost models. Filed March 21, 1996.
252. Pennsylvania Public Utility Commission (Docket No. P-00961024), on behalf of Commonwealth Telephone Company: economic appraisal of a price cap regulation proposal, Direct testimony filed April 15, 1996. Rebuttal testimony filed July 19, 1996.
  253. Pennsylvania Public Utility Commission (Docket No. R-00963550), on behalf of Bell Atlantic - Pennsylvania: economic consequences of rate rebalancing, Direct testimony filed April 26, 1996. Rebuttal testimony filed July 5, 1996.
  254. Pennsylvania Public Utility Commission (Docket No. R-963550 C0006), on behalf of Bell Atlantic - Pennsylvania: economic consequences of rate rebalancing, Direct testimony filed August 30, 1996.
  255. Pennsylvania Public Utility Commission (Docket No. A-310258F0002 - Interconnection Arbitration, Eastern Telelogic Corporation/Bell Atlantic) on behalf of Bell Atlantic - Pennsylvania, direct and rebuttal testimony on economic costs of interconnection and unbundled network elements, September 23, 1996.
  256. Pennsylvania Public Utility Commission, on behalf of Bell Atlantic-Pennsylvania, statement regarding costs and benefits from Bell Atlantic entry into interLATA telecommunications markets. Filed February 10, 1997. Rebuttal testimony filed March 21, 1997.
  257. Pennsylvania Public Utility Commission (Docket No. I-00960066), on behalf of Bell Atlantic: direct testimony providing an economic framework for the intrastate carrier switched access rates charged by Bell Atlantic. Filed June 30, 1997. Rebuttal testimony filed July 29, 1997. Surrebuttal testimony filed August 27, 1997.
  258. Pennsylvania Public Utility Commission (Docket No. I-00940035), on behalf of Bell Atlantic: direct testimony regarding the relationship between access charge reform and universal service funding. Filed October 22, 1997.
  259. Pennsylvania Public Utility Commission (Docket No. P-00971307), on behalf of Bell Atlantic: direct testimony concerning the classification of Bell Atlantic's business services in Pennsylvania as competitive and the calculation of an imputation price floor for those services. Filed February 11, 1998. Rebuttal filed February 18, 1998.
  260. Pennsylvania Public Utility Commission (Docket No. P-00981410), on behalf of The United Telephone Company of Pennsylvania: direct testimony regarding role of productivity offset in a price cap plan, filed October 16, 1998. Rebuttal testimony filed February 4, 1999.
  261. Pennsylvania Public Utility Commission, on behalf of Bell Atlantic-Pennsylvania: A report entitled "Promises Fulfilled; Bell Atlantic-Pennsylvania's Infrastructure Development." Filed January 15, 1999 (with Charles J. Zarkadas, Agustin J. Ros, and Jaime C. d'Almeida).
  262. Pennsylvania Public Utility Commission (Docket Nos. A-310200F0002, A-311350F0002, A-310222F0002, A-310291F0003), on behalf of Bell Atlantic Corporation and GTE Corporation, rebuttal testimony regarding economic issues raised in the proposed merger of Bell Atlantic and GTE. Filed April 22, 1999.
  263. Pennsylvania Public Utility Commission (Docket No. A-310630F0002), on behalf of Bell Atlantic, direct testimony regarding the measurement of economic costs of ISP-bound traffic and economic issues concerning intercarrier compensation for such traffic. Filed April 14, 2000. Rebuttal testimony filed April 21, 2000.
  264. Pennsylvania Public Utility Commission, (Docket No. M-00001435) on behalf of Verizon-

- Pennsylvania, Inc.: affidavit regarding the public interest benefits of Verizon entry into interLATA services. Filed January 8, 2001.
265. Pennsylvania Public Utility Commission (Docket No. P-00981449), on behalf of Verizon North, testimony regarding parameters in a Chapter 30 price cap plan. Filed October 31, 2000. Rebuttal testimony filed February 20, 2001.
  266. Pennsylvania Public Utility Commission, (Docket No. P-00032020), on behalf of Commonwealth Telephone Company. Affidavit regarding exogenous events in price cap plans. Filed February 3, 2003.
  267. Pennsylvania Public Utility Commission, (Docket No. P-00930715F0002), on behalf of Verizon – Pennsylvania. Rebuttal testimony regarding broadband development and productivity growth in the context of a price cap plan. Filed February 4, 2003.
  268. Pennsylvania Public Utility Commission on behalf of Verizon-PA Inc. and Verizon North Inc., surrebuttal testimony (proprietary) to support Verizon-PA rate rebalancing plan. Filed August 4, 2003.
  269. Pennsylvania Public Utility Commission (Docket No. P-00951005) on behalf of the Frontier Companies, testimony regarding a price regulation plan. November 7, 2003.
  270. Pennsylvania Public Utility Commission (Docket No. I-00030099) on behalf of Verizon Pennsylvania, rebuttal testimony regarding geographic market definition for unbundled network elements. January 20, 2004.
  271. Pennsylvania Public Utility Commission (Docket No. M-0031754) on behalf of Verizon Pennsylvania, declaration regarding forecasts of incremental hot cuts. Filed January 28, 2004.

### **35. Rhode Island**

272. Rhode Island Public Utilities Commission (Docket No. 1997) on behalf of New England Telephone & Telegraph Company, “Rhode Island Price Regulation Plan,” analysis of proposed price regulation plan and evidence of the effects of incentive regulation on prices and infrastructure development. Filed September 30, 1991.
273. Rhode Island Public Utilities Commission on behalf of NYNEX (Docket No. 2252), testimony addressing the economic conditions under which competition in the local exchange and intraLATA markets will bring benefits to customers. Direct testimony, November 17, 1995.
274. Rhode Island Public Utilities Commission (Docket No. 2370), on behalf of New England Telephone and Telegraph Company, D/B/A NYNEX: economic review and revision of the Rhode Island price cap plan. Direct testimony, February 23, 1996. Rebuttal testimony filed June 25, 1996.
275. Rhode Island Public Utilities Commission, on behalf of Bell Atlantic – Rhode Island: direct testimony discussing basic economic principles regarding costs and prices of interconnection and unbundled network elements. Filed November 25, 1997.
276. Rhode Island Public Utilities Commission (Docket No. 2681), on behalf of Bell Atlantic -Rhode Island: rebuttal testimony regarding costs for OSSs, filed September 18, 1998.
277. Rhode Island Public Utilities Commission (Docket No. 2681), on behalf of Bell Atlantic: rebuttal testimony regarding entry into the local services telecommunications market. Filed January 15, 1999.

278. Rhode Island Public Utilities Commission (Docket No. 2681), on behalf of Bell Atlantic Rhode Island, direct testimony regarding incremental costs and switched access rates. Filed October 22, 1999.
279. Rhode Island Public Utilities Commission (Docket No. 2681), on behalf of Verizon Rhode Island, direct testimony regarding incremental costs and switched access rates. Filed May 1, 2002.
280. Rhode Island Public Utilities Commission (Docket No. 3179), on behalf of Verizon Rhode Island, direct testimony regarding alternative regulation. Filed July 1, 2002. Rebuttal Testimony filed October 22, 2003.
281. Rhode Island Public Utilities Commission on behalf of Verizon Rhode Island, Direct Testimony regarding forecasts of incremental hot cut demand, filed December 8, 2003.

### **36. South Carolina**

282. South Carolina Public Service Commission, on behalf of BellSouth Long Distance, Inc., (Docket No. 97-101-C) : direct testimony regarding the probable economic benefits to consumers in South Carolina from entry by BellSouth into the interLATA long distance market. Filed April 1, 1997. Rebuttal testimony filed June 30, 1997.
283. South Carolina Public Service Commission (Docket No. 97-374-C), on behalf of BellSouth Telecommunications, Inc.: rebuttal testimony concerning general economic principles for the pricing and costing of interconnection and unbundled network elements. Filed November 25, 1997.
284. South Carolina Public Service Commission (Docket No. 97-124-C), on behalf of BellSouth Telecommunications, Inc.: rebuttal testimony concerning economic principles for pricing interconnection services supplied to payphone providers. Filed December 7, 1998.
285. South Carolina Public Service Commission, *In re: Petition for Arbitration of ITC^DELTA COM Communications, Inc., with BellSouth Telecommunications, Inc., Pursuant to the Telecommunications Act of 1996*, (Docket No. 1999-259-C), on behalf of BellSouth Telecommunications, testimony regarding economic interconnection issues. Filed August 25, 1999.
286. South Carolina Public Service Commission (Docket No. 2001-209-C), on behalf of BellSouth Telecommunications, Inc.: economic aspects of BellSouth's application to provide long distance services in South Carolina. Rebuttal testimony filed July 16, 2001.
287. South Carolina Public Service Commission (Docket No. 2001-209-C), on behalf of BellSouth Telecommunications, Inc.. Direct testimony regarding statistical issues in performance penalty plans, filed March 5, 2003.
288. Public Service Commission of South Carolina, Docket Nos. 2002-367-C and 2002-408-C on behalf of BellSouth Telecommunications, Inc.. Economic interpretation of "abuse of market position" and "inflation-based index" in legislation. Direct testimony filed July 23, 2003, Responsive testimony filed July 30, 2003.

### **37. Tennessee**

289. Tennessee Public Service Commission (*In re: The Promulgation of Agency Statements of General Applicability to Telephone Companies That Prescribe New Policies and Procedures for Their Regulation*) on behalf of South Central Bell Telephone Company: theoretical analysis and appraisal of the proposed Tennessee Regulatory Reform Plan. Filed February 20, 1991.
290. Tennessee Public Service Commission (Docket No. 95-02499) on behalf of BellSouth Telecommunications, Inc. d/b/a BellSouth Telephone Company, testimony addressing the definition and measurement of the cost of supplying universal service. (Direct testimony filed October 20, 1995. Rebuttal testimony filed October 25, 1995). Additional testimony regarding economic principles underlying the creation of a competitively-neutral universal service fund: direct testimony filed October 30, 1995. Rebuttal testimony filed November 3, 1995.
291. Tennessee Public Service Commission (*In re: The Avoidable Costs of Providing Bundled Services for Resale by Local Exchange Telephone Companies*) on behalf of BellSouth Telecommunications, Inc. (Docket No. 96-00067): economic costing and pricing principles for resold and unbundled services. May 24, 1996. Refiled with the Tennessee Regulatory Authority (Docket No. 96-00067), August 23, 1996.
292. Tennessee Regulatory Authority (*In re: The Avoidable Costs of Providing Bundled Services for Resale by Local Exchange Telephone Companies*) on behalf of BellSouth Telecommunications, Inc. (Docket No. 96-01331): economic costing and pricing principles for resold and unbundled services. Filed September 10, 1996. Rebuttal testimony filed September 20, 1996.
293. Tennessee Regulatory Authority (*In re: Petition to Convene a Contested Case Proceeding to Establish "Permanent Prices" for Interconnection and Unbundled Network Elements*) on behalf of BellSouth Telecommunications, Inc. (Docket No. 97-01262): rebuttal testimony regarding costing principles on which to base prices of unbundled network elements. Filed October 17, 1997.
294. Tennessee Regulatory Authority (Docket No. 97-00888), on behalf of BellSouth Telecommunications, Inc.: direct testimony regarding appropriate economic principles for sizing the state universal service fund, Filed April 3, 1998. Rebuttal filed April 9, 1998.
295. Tennessee Regulatory Authority (Docket No. 99-00377), on behalf of BellSouth Telecommunications, direct testimony regarding intercarrier compensation for Internet-bound traffic in Arbitration with ICG Telecom Group, filed October 15, 1999. Rebuttal testimony filed October 25, 1999.
296. Tennessee Regulatory Authority (Docket No. 99-00430), on behalf of BellSouth Telecommunications, direct testimony regarding intercarrier compensation for Internet-bound traffic in Arbitration with ITC-DeltaCom, filed October 15, 1999. Rebuttal testimony filed October 25, 1999.
297. Tennessee Regulatory Authority, (Docket No. 97-00409), on behalf of BellSouth Telecommunications, rebuttal testimony regarding efficient pricing for pay telephone services. Filed October 6, 2000.
298. Tennessee Regulatory Authority, (Docket No. 01-00193), on behalf of BellSouth Telecommunications: rebuttal testimony regarding performance measurements and self-effectuating penalties. Filed August 10, 2001.

### **38. Texas**

299. *Darren B. Swain, Inc. d/b/a U.S. Communications v. AT&T Corp.*, United States District Court for the Northern District of Texas, Dallas Division, Civil Action 394CV-1088D: Retained by counsel for U.S. Communications, a reseller of AT&T long distance services, plaintiff in an antitrust suit alleging monopolization in inbound business long distance markets. Antitrust liability and damages. Confidential Report, November 17, 1995.
300. Public Utility Commission of Texas (Docket No. 8585) on behalf of Southwestern Bell Telephone Company: analysis of Texas intrastate switched access charges and bypass of switched access. Filed December 18, 1989.
301. **Texas Public Utility Commission (Docket No. 21982), on behalf of Southwestern Bell Telephone Company**, direct testimony regarding CLEC's rate for transport and termination of ISP-bound traffic. Filed March 13, 2000. Rebuttal testimony filed March 31, 2000.
302. Texas Public Utility Commission (Docket No. 28607), on behalf of SBC Texas. Direct testimony regarding geographic market definition for local telephone service. Filed February 9, 2004. Rebuttal testimony filed March 19, 2004.

### **39. Utah**

303. Utah Public Service Commission (Docket No. 99-049-41), on behalf of US West Communications, Inc., rebuttal testimony regarding the effects of the proposed Qwest-US West merger on economic welfare. Filed February 28, 2000.
304. **Utah Public Service Commission (Docket No. 00-999-05), on behalf of Qwest Corporation**, direct testimony regarding intercarrier compensation for Internet-bound traffic. Filed February 2, 2001. Rebuttal testimony filed March 9, 2001.
305. Utah Public Service Commission on behalf of Qwest Corporation, direct testimony regarding productivity offsets in a price cap plan. Filed October 5, 2001. Rebuttal testimony filed November 22, 2001.

### **40. Vermont**

306. Vermont Public Service Board, Petition for Price Regulation Plan of New England Telephone on behalf of New England Telephone Company, Dockets 5700/5702: analysis of appropriate parameters for a price regulation plan. Filed September 30, 1993. Rebuttal testimony filed July 5, 1994.
307. Vermont Public Service Board, (Open Network Architecture Docket No. 5713) on behalf of New England Telephone Company, economic principles for local competition, interconnection and unbundling, direct testimony filed June 7, 1995. Rebuttal testimony filed July 12, 1995.
308. Vermont Public Service Board (Docket No. 5713), on behalf of Bell Atlantic – Vermont, direct testimony regarding economic principles for setting prices and estimating costs for interconnection. Filed July 31, 1997. Rebuttal testimony filed January 9, 1998. Surrebuttal testimony filed February 26, 1998. Supplemental rebuttal testimony filed March 4, 1998.
309. Vermont Public Service Board (Docket No. 5900) on behalf of NYNEX, testimony regarding the economic effects of the proposed merger between Bell Atlantic and NYNEX. Filed September 6, 1996.

310. Vermont Public Service Board (Docket no. 6000), on behalf of Bell Atlantic: direct testimony examining the likely benefits from adopting a price regulation plan. Filed January 19, 1998.
311. Vermont Public Service Board (Docket No. 6077), on behalf of Bell Atlantic-Vermont: rebuttal testimony regarding application of imputation standard, filed November 4, 1998.
312. Vermont Public Service Board (Docket No. 6167), on behalf of Bell Atlantic, rebuttal testimony regarding reduction of access charges & pricing of new services. Filed May 20, 1999. Supplemental testimony filed May 27, 1999.

#### **41. Virginia**

313. Affidavit to the U.S. District Court for the Eastern District of Virginia (Alexandria Division) on behalf of United States Telephone Association, *United States Telephone Association, et al., v. Federal Communications Commission, et al.*, (Civil Action No. 95-533-A) regarding the Section 214 process for local exchange companies providing cable television services. Filed October 30, 1995, (with A.E. Kahn).
314. State Corporation Commission of Virginia (Case No. PUC 950067) on behalf of Bell Atlantic - Virginia, Inc., rebuttal testimony concerning economic standards for the classification of services as competitive for regulatory purposes, January 11, 1996.
315. State Corporation Commission of Virginia, on behalf of Bell Atlantic-Virginia, (Case No. PUC960), direct testimony regarding costing and pricing of interconnection and unbundled network elements. Filed December 20, 1996. Rebuttal testimony filed June 10, 1997 (Case No. PUC970005).
316. State Corporation Commission of Virginia *In re: Joint Petition of Bell Atlantic Corporation and GTE Corporation for approval of agreement and plan of merger*, economic effects of the proposed merger of Bell Atlantic and GTE. File May 28, 1999, rebuttal testimony filed October 8, 1999.
317. Virginia State Corporation Commission, (Case No. PUC000079) on behalf of Bell Atlantic - Virginia, direct testimony regarding intercarrier compensation for Internet-bound traffic in arbitration with Focal Communications Group. Filed April 25, 2000.
318. Virginia State Corporation Commission, (Case No. PUC 000003) on behalf of Bell Atlantic - Virginia, direct testimony regarding efficient pricing of carrier access charges. Filed May 30, 2000.
319. State Corporation Commission of Virginia (Case No. PUC-2003-00091) on behalf of Verizon - Virginia, Inc.. Affidavit concerning pricing of carrier access charges. Filed March 31, 2004.
320. State Corporation Commission of Virginia (Case No. PUC-2004-) on behalf of Verizon - Virginia, Inc.. Affidavit concerning alternative regulation of telecommunications services. Filed July 9, 2004.

#### **42. Washington**

321. Washington Public Utilities Commission (Docket No. UT-990300), on behalf of US WEST, regarding US WEST's interconnection arbitration with AirTouch Paging in Washington. Direct testimony filed February 24, 1999; rebuttal testimony filed March 8, 1999.



322. Washington Utilities and Transportation Commission (Docket No. UT-991358), on behalf of US West Communications, Inc., rebuttal testimony regarding the effects of the proposed Qwest-US West merger on economic welfare. Filed February 22, 2000.
323. Washington Utilities and Transportation Commission (Docket No. UT-003006), on behalf of US West Communications, Inc., direct testimony regarding intercarrier compensation for internet-bound traffic. Filed April 26, 2000. Rebuttal testimony filed May 10, 2000.
324. Washington Transportation and Utilities Commission, *In the Matter of the Petition of Qwest Corporation for Competitive Classification of Business Services in Specified Wire Centers*, Docket No. UT-000883. Rebuttal testimony regarding economic criteria for classification of services as competitive. Filed October 6, 2000.
325. Washington Utilities and Transportation Commission (Docket No. UT-02-11-20), on behalf of Qwest, rebuttal testimony regarding economic aspects of the sale of Qwest Dex (Yellow Pages). Filed April 17, 2003.

#### **43. West Virginia**

326. Public Service Commission of West Virginia (Case No. 94-1103-T-GI) on behalf of Bell Atlantic - West Virginia: economic analysis of issues regarding proposed presubscription for intraLATA toll traffic in West Virginia, March 24, 1995.
327. Public Service Commission of West Virginia (Case Nos. 96-1516-T-PC, 96-1561-T-PC, 96-1009-T-PC, and 96-1533-T-T) on behalf of Bell Atlantic - West Virginia: direct testimony regarding costing and pricing of interconnection and unbundled network elements. Filed February 13, 1997. Rebuttal testimony filed February 20, 1997.
328. Public Service Commission of West Virginia on behalf of Bell Atlantic - West Virginia: economic analysis of issues regarding Bell Atlantic's entry into the interLATA long distance market. Filed March 31, 1997.

#### **44. Wisconsin**

329. Wisconsin Public Service Commission, (Docket No. 6720-TI-173) on behalf of SBC Wisconsin, economic analysis of competition for small business customers. Filed October 31, 2003.
330. Wisconsin Public Service Commission, (Docket No. 05-TI-908) on behalf of SBC Wisconsin, geographic market analysis for local exchange service. Filed February 9, 2004.

#### **45. Wyoming**

331. Wyoming Public Service Commission (Docket No. 70000-TR-99), on behalf of US West Communications, direct testimony evaluating proposed prices of non-competitive US West services with regards to cost, pricing, competition, & regulation. Filed April 26, 1999.
332. Wyoming Public Service Commission (Docket Nos. 74142-TA-99-16, 70000-TA-99-503, 74037-TA-99-8, 70034-TA-99-4, 74089-TA-99-9, 74029-TA-99-43, 74337-TA-99-2, Record No. 5134), on behalf of US West Communications, rebuttal testimony regarding economic issues arising in the proposed merger between U S WEST and Qwest. Filed April 4, 2000.

## Canada

333. Canadian Radio-Television and Telecommunications Commission (Docket No. 1990-73) on behalf of Bell Canada: "The Effect of Competition on U.S. Telecommunications Performance," (with L.J. Perl). Filed November 30, 1990.
334. Canadian Radio-Television and Telecommunications Commission (Docket No. 92-78) on behalf of Alberta General Telephone: "Lessons for the Canadian Regulatory Structure from the U.S. Experience with Incentive Regulation," and "Performance Under Alternative Forms of Regulation in the U.S. Telecommunications Industry," (with T.J. Tardiff). Filed April 13, 1993.
335. Canadian Radio-Television and Telecommunications Commission (Application of Teleglobe Canada for Review of the Regulatory Framework of Teleglobe Canada Inc.): on behalf of Teleglobe Canada, Inc., structure of a price regulation plan for the franchised supplier of overseas telecommunications services in Canada. Filed December 21, 1994.
336. Canadian Radio-Television and Telecommunications Commission, Response to Interrogatory SRCI(CRTC) 1Nov94-906, "Economies of Scope in Telecommunications," on behalf of Stentor. Filed January 31, 1995.
337. Canadian Radio-Television and Telecommunications Commission, Implementation of Regulatory Framework and Related Issues, Telecom Public Notices CRTC 94-52, 94-56 and 94-58, "Economic Welfare Benefits from Rate Rebalancing," on behalf of Stentor. Filed February 20, 1995.
338. Canadian Radio-Television and Telecommunications Commission, "Imputation Test to be Applied to Competitive Local Exchange Services," position paper on imputation for local exchange services filed in response to Telecom Public Notice CRTC 95-36 on behalf of Stentor on August 18, 1995.
339. Canadian Radio-Television and Telecommunications Commission, in response to CRTC Telecom Public Notice CRTC 96-8, "Economic Aspects of Canadian Price Cap Regulation," on behalf of the Stentor companies. Filed June 10, 1996.
340. Canadian Radio-Television and Telecommunications Commission, in response to CRTC Telecom Public Notice CRTC 96-8, "Economic Aspects of Price Cap Regulation for MTS NetCom Inc.," on behalf of MTS Net Com, Inc. Filed June 10, 1996.
341. Canadian Radio-Television and Telecommunications Commission, in response to CRTC Telecom Public Notice CRTC 2000-108, "MTS Communications Inc., Recovery of 2000 and 2001 Income Tax Expense" on behalf of MTS Communications, Inc. Oral panel testimony, January 11, 2001.
342. Canadian Radio-Television and Telecommunications Commission (Public Notice CRTC 2001-37) on behalf of Aliant Telecom Inc., Bell Canada, MTS Communications Inc., and Saskatchewan Telecommunications: "Price Cap Review and Related Issues," filed May 31, 2001. Rebuttal evidence filed September 20, 2001.

## **Federal Communications Commission**

### **1988**

343. Federal Communications Commission (Docket No. 87-313) on behalf of Bell Communications Research, Inc.: empirical analysis of price cap regulation of interstate access service, entitled "The Impact of Federal Price Cap Regulation on Interstate Toll Customers." Filed March 17, 1988.
344. Federal Communications Commission (Docket No. 87-313) on behalf of Bell Communications Research, Inc.: "The Impact of the FCC Proposed Price Cap Plan on Interstate Consumers," Filed August 18, 1988. Rebuttal analysis filed November 18, 1988.

### **1989**

345. Federal Communications Commission (Docket No. 87-313) on behalf of Cincinnati Bell Telephone Company, "Incentive Regulation and Estimates of Productivity," (with J. Rohlfs), June 9, 1989.
346. Federal Communications Commission (Docket No. 87-313) on behalf of the United States Telephone Association: "Analysis of AT&T's Comparison of Interstate Access Charges Under Incentive Regulation and Rate of Return Regulation." Filed as Reply Comments regarding the FCC's Report and Order and Second Further Notice of Proposed Rulemaking in CC Docket 87-313, August 3, 1989.
347. Federal Communications Commission (Docket No. 87-313) on behalf of Southwestern Bell Telephone Company, "Taxes and Incentive Regulation," filed as Exhibit 3 to the Reply Comments of Southwestern Bell regarding the FCC's Report and Order and Second Further Notice of Proposed Rulemaking in CC Docket 87-313, August 3, 1989.

### **1990**

348. Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: "Local Exchange Carrier Productivity Offsets for the FCC Price Cap Plan," May 3, 1990.
349. Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: "Productivity Offsets for LEC Interstate Access," June 8, 1990.
350. Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: "Interstate Access Productivity Offsets for Mid-Size Telephone Companies," June 8, 1990.
351. Federal Communications Commission (Docket 87-313) on behalf of the United States Telephone Association: analysis of total factor productivity calculations, entitled "Productivity Measurements in the Price Cap Docket," December 21, 1990.

### **1991**

352. Federal Communications Commission (Docket 87-313) on behalf of BellSouth Corporation, "The Treatment of New Services under Price Cap Regulation," (with Alfred E. Kahn), June 12, 1991.
353. Federal Communications Commission (Docket 91-141, Expanded Interconnection with Local Telephone Company Facilities) on behalf of Bell Atlantic, "Effects of Competitive Entry in the

U.S. Interstate Toll Markets.” August 6, 1991.

354. Federal Communications Commission (Docket 91-141, Expanded Interconnection with Local Telephone Company Facilities) on behalf of Southwestern Bell, “Economic Effects of the FCC’s Tentative Proposal for Interstate Access Transport Services.” Filed September 20, 1991.

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355. Federal Communications Commission, (Pacific Bell Tariff F.C.C. No. 128, Transmittal No. 1579) on behalf of Pacific Bell, “The Treatment of FAS 106 Accounting Changes Under FCC Price Cap Regulation,” (with T.J. Tardiff). Filed April 15, 1992. Reply comments filed July 31, 1992.
356. Federal Communications Commission, (CC Docket 92-141, In the Matter of 1992 Annual Access Tariff Filings) on behalf of Bell Atlantic, “Effects of Competitive Entry in the U.S. Interstate Toll Markets: An Update,” filed July 10, 1992.
357. Federal Communications Commission (ET Docket 92-100) on behalf of BellSouth Corporation, “Assigning PCS Spectrum: An Economic Analysis of Eligibility Requirements and Licensing Mechanisms,” (with Richard Schmalensee). Filed November 9, 1992.

## 1993

358. Federal Communications Commission (Petition for Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region) on behalf of Ameritech: “Price Cap Regulation and Enhanced Competition for Interstate Access Services,” filed April 16, 1993, Reply Comments, July 12, 1993.
359. Federal Communications Commission (Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems) PR Docket No. 93-61 on behalf of PacTel Teletrac, “The Economics of Co-Channel Separation for Wideband Pulse Ranging Location Monitoring Systems,” (with R. Schmalensee). Filed June 29, 1993.
360. Federal Communications Commission (In the Matter of Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorization Therefor) on behalf of four Regional Bell Holding Companies, Affidavit “Interstate Long Distance Competition and AT&T’s Motion for Reclassification as a Nondominant Carrier,” filed November 12, 1993, (with A.E. Kahn).

## 1994

361. Federal Communications Commission (CC Docket 94-1) on behalf of the United States Telephone Association: “Economic Performance of the LEC Price Cap Plan,” filed as Attachment 5 to the United States Telephone Association Comments, May 9, 1994, “Economic Performance of the LEC Price Cap Plan: Reply Comments,” filed as Attachment 4 to the United States Telephone Association Reply Comments, June 29, 1994.
362. Federal Communications Commission (CC Docket 94-1) on behalf of the United States Telephone Association: “Comments on the USTA Pricing Flexibility Proposal,” filed as Attachment 4 to the United States Telephone Association Comments, May 9, 1994, “Reply Comments: Market Analysis and Pricing Flexibility for Interstate Access Services,” filed as Attachment 3 to the United States Telephone Association Reply Comments, June 29, 1994 (with Richard Schmalensee).

Page 38  
William E. Taylor  
National Economic Research Associates, Inc.

363. Federal Communications Commission (File Nos. W-P-C 6912 and 6966) on behalf of Bell Atlantic Corporation, affidavit supporting Section 214 applications to provide video dialtone services, August 5, 1994.
364. Federal Communications Commission (File Nos. W-P-C 6982 and 6983) on behalf of NYNEX: affidavit supporting Section 214 applications to provide video dialtone services in Massachusetts and Rhode Island, September 21, 1994.

## 1995

365. Federal Communications Commission on behalf of Bell Atlantic Corporation, affidavit examining cost support for Asymmetric Digital Subscriber Loop (ADSL) video dialtone market trial. Filed February 21, 1995.
366. Federal Communications Commission on behalf of Bell Atlantic Corporation, affidavit examining cost support for Bell Atlantic's video dialtone tariff. Filed March 6, 1995.
367. Federal Communications Commission on behalf of the United States Telephone Association, study entitled "Competition in the Interstate Long-Distance Markets: Recent Evidence from AT&T Price Changes," *ex parte* filing in CC Docket No. 94-1, March 16, 1995.
368. Federal Communications Commission (CC Docket No. 79-252) on behalf of Bell Atlantic, BellSouth, SBC, and Pacific Telesis, "An Analysis of the State of Competition in Long-Distance Telephone Markets," study attached to *ex parte* comments examining the competitiveness of interstate long-distance telephone markets, (with J. Douglas Zona), April 1995.
369. Federal Communications Commission (File Nos. W-P-C 7074) on behalf of Southern New England Telephone Company, affidavit supporting Section 214 applications to provide video dialtone services, July 6, 1995.
370. Federal Communications Commission (CC Docket No. 95-145) on behalf of Bell Atlantic Corporation, affidavit examining economic issues raised in the investigation of Bell Atlantic's video dialtone tariff. Filed October 26, 1995. Supplemental Affidavit filed December 21, 1995.
371. Federal Communications Commission (CC Docket No. 94-1) on behalf of the United States Telephone Association, "Economic Evaluation of Selected Issues from the Fourth Further Notice of Proposed Rulemaking in the LEC Price Cap Performance Review," Attachment C to the United States Telephone Association "Comments," filed December 18, 1995 (with T. Tardiff and C. Zarkadas). Reply Comments filed March 1, 1996.

## 1996

372. Federal Communications Commission (CC Docket No. 95-185) on behalf of NYNEX, "Affidavit Concerning Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers," filed March 4, 1996.
373. Federal Communications Commission (CC Docket No. 96-45) on behalf of BellSouth Corporation, "Comments on Universal Service," (with Kenneth Gordon), analysis of proposed rules to implement the universal service requirements of the Telecommunications Act of 1996, filed April 12, 1996.
374. Federal Communications Commission (CC Docket No. 96-46), on behalf of Bell Atlantic, BellSouth, GTE, Lincoln, Pacific Bell and SBC Communications, Inc., *ex parte* affidavit on costing principles and cross-subsidization in broadband, joint-use networks, April 26, 1996.
375. Federal Communications Commission (CC Docket No. 96-98) videotaped presentation on

- economic costs for interconnection, FCC Economic Open Forum, May 20, 1996.
376. Federal Communications Commission (CC Docket No. 96-112), on behalf of the Southern New England Telephone Company: cost allocation between telephony and broadband services, Affidavit filed May 31, 1996.
  377. Federal Communications Commission (CC Docket No. 96-112), on behalf of Bell Atlantic: reply comments concerning cost allocations between telephony and broadband services, Affidavit filed June 12, 1996.
  378. Federal Communications Commission (CC Docket No. 96-46), on behalf of Bell Atlantic, BellSouth, GTE, Lincoln, Pacific and SBC, Declaration concerning the use of efficient component pricing in open video systems. Filed July 5, 1996.
  379. Federal Communications Commission (CC Docket No. 96-98), on behalf of the United States Telephone Association, Affidavit concerning technical qualities of the Staff Industry Demand and Supply Simulation Model. Filed July 8, 1996; *ex parte* letters filed July 22, 1996 and July 23, 1996.
  380. Federal Communications Commission (CC Docket No. 96-45), on behalf of BellSouth Corporation, comments concerning the use of proxy cost models for measuring the cost of universal service. Filed August 9, 1996 (with Aniruddha Banerjee).
  381. Federal Communications Commission (CC Docket No. 96-149), on behalf of Bell Atlantic, Affidavit concerning safeguards for in-region supply of interexchange services by local exchange carriers. Filed August 15, 1996.
  382. Federal Communications Commission (CC Docket No. 96-45), on behalf of the United States Telephone Association, "Not the Real McCoy: A Compendium of Problems with the Hatfield Model." Filed October 15, 1996
  383. Federal Communications Commission (Tracking No. 96-0221) on behalf of NYNEX and Bell Atlantic, affidavit concerning the competitive effects of the proposed NYNEX-Bell Atlantic merger. Filed October 23, 1996 (with Richard Schmalensee).
  384. Affidavit to the Federal Communications Commission, on behalf of SBC Communications, Inc., (Docket No. 96-149), regarding Commission's proposed rules and their impact on joint marketing. Filed November 14, 1996 (with Paul B. Vasington).

## 1997

385. Federal-State Joint Board on Universal Service, on behalf of the United States Telephone Association, *Remarks on Proxy Cost Models*, CC Docket No. 96-45 (videotape filed in docket). Filed January 14, 1997.
386. Federal Communications Commission, on behalf of Bell Atlantic: "An Analysis of Conceptual Issues Regarding Proxy Cost Models", a response to FCC Staff Report on issues regarding Proxy Cost Models. Filed February 13, 1997.
387. Federal Communications Commission (CC Docket No. 96-262 et. al.), statement on behalf of United States Telephone Association, "Economic Aspects of Access Reform." Filed on January 29, 1997 (with Richard Schmalensee). Rebuttal filed on February 14, 1997.
388. Federal Communications Commission (CC Docket 96-262 et al.), on behalf of USTA: a report entitled, "An Analysis of the Welfare Effects of Long Distance Market Entry by an Integrated Access and Long Distance Provider", *ex parte* filed March 7, 1997 (with Richard Schmalensee,

- Doug Zona and Paul Hinton).
389. Federal Communications Commission (CC Docket 96-262 et al.), on behalf of the United States Telephone Association: a report entitled, "An Update of the FCC Short-Term Productivity Study (1985-1995)", *ex parte* filed March 1997.
  390. Federal Communications Commission (CC Docket No. 96-149), on behalf of Bell Atlantic, BellSouth, NYNEX, Pacific Bell and SBC: affidavit concerning economic issues raised by the BOC supply of interLATA services to an affiliate. Filed April 17, 1997.
  391. Federal Communications Commission (CC Docket Nos. 93-193, Phase 1, Part 2, 94-65), on behalf of Bell Atlantic: affidavit concerning allocation of earnings sharing and refunds in the local exchange carrier price cap plan. Filed May 19, 1997.
  392. Federal Communications Commission (File No. SCL-97-003), on behalf of ATU Long Distance: affidavit concerning the economic effects of classifying a proposed undersea cable between Alaska and the lower 48 states as a private carrier. Filed December 8, 1997.
  393. Federal Communications Commission (CC Docket No. 80-286), on behalf of Bell Atlantic: affidavit concerning proposed reforms of jurisdictional separations. Filed December 10, 1997.

## 1998

394. Federal Communications Commission (*ex parte* CC Docket No. 96-262 et. al.), "The Need for Carrier Access Pricing Flexibility in Light of Recent Marketplace Developments: A Primer," research paper prepared on behalf of United States Telephone Association. Filed on January 21, 1998 (with Richard Schmalensee).
395. Federal Communications Commission, *In the Matter of Applications of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.* (CC Docket No. 97-211), affidavit on behalf of GTE Corporation analyzing the likely economic effects of the proposed acquisition of MCI by WorldCom, (with R. Schmalensee), March 13, 1998, reply affidavit filed May 26, 1998.
396. Federal Communications Commission, *In the Matter of Customer Impact of New Access Charges* (CC Docket Nos. 96-262 and 96-45), affidavit on behalf of the United States Telephone Association analyzing long distance price reductions stemming from recent access charge reductions. Filed March 18, 1998.
397. Federal Communications Commission, *In the Matter of MCI Telecommunications Corp. Petition for Prescription of Tariffs Implementing Access Charge Reform* (CCB/CPD 98-12), affidavit on behalf of Bell Atlantic analyzing economic issues in MCI's petition for changes in the level and structure of interstate access charges. Filed March 18, 1998.
398. Federal Communications Commission, Merger of SBC Communications Inc. and Ameritech Corporation, comments on behalf of SBC and Ameritech analyzing the likely effects of the proposed merger on competition. (with R. Schmalensee ) Filed July 21, 1998, reply affidavit filed November 11, 1998.
399. Federal Communications Commission, *In the Matter of United States Telephone Association Petition for Rulemaking—1998 Biennial Regulatory Review*, "Economic Standards for the Biennial Review of Interstate Telecommunications Regulation," economic rationale for regulatory simplification, Attachment to the Petition for Rulemaking of the United States Telephone Association, filed September 30, 1998 (with Robert W. Hahn).

400. Federal Communications Commission, (CC Docket No. 96-262), "Assessment of AT&T's Study of Access Charge Pass-Through," study of long distance pricing, filed *ex parte* on behalf of the United States Telephone Association, October 22, 1998 (with P.S. Brandon)
401. Federal Communications Commission, (CC Docket No. 96-262), "AT&T, MCI, and Sprint Failed to Pass Through the 1998 Interstate Access Charge Reductions to Consumers," study of long distance pricing, filed *ex parte* on behalf of the United States Telephone Association, October 16, 1998 (with P.S. Brandon)
402. Federal Communications Commission, (CC Docket No. 98-137), Affidavit on behalf of the United States Telephone Association, Review of Depreciation Requirements for Incumbent Local Exchange Carriers, November 23, 1998. (with A. Banerjee).
403. Federal Communications Commission, (CC Docket Nos. 96-262, 94-1, 97-250 and RM 9210), "Access Reform Again: Market-Based Regulation, Pricing Flexibility and the Universal Service Fund," Attachment A to the Comments of the United States Telephone Association, filed October 26, 1998; "Productivity and Pricing Flexibility: Reply Comments," Attachment A to the Reply Comments of the United States Telephone Association, filed November 9, 1998.

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404. Federal Communications Commission (Docket No. 99-24), affidavit on behalf of Bell Atlantic: economic requirements for regulatory forbearance for special access services. Filed January 20, 1999 (with Karl McDermott). Reply affidavit responding to claims that Bell Atlantic retains market power in the provision of special access filed April 8, 1999.
405. Federal Communications Commission, *In the Matter of Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York* (CC Docket No. 99-295), Declaration on behalf of Bell Atlantic analyzing public interest issues in connection with Bell Atlantic long distance entry in New York. Filed September 29, 1999.
406. Federal Communications Commission (Docket No. 96-262), on behalf of United States Telephone Association, comments regarding rate structures for the local switching service category of the traffic-sensitive basket and common line basket, filed October 29, 1999. Reply comments filed November 29, 1999.
407. Federal Communications Commission (Docket No. 99-68), "An Economic and Policy Analysis of Efficient Inter-carrier Compensation Mechanisms for Internet-Bound Traffic," on behalf of U S WEST Communications, *ex parte* analysis of inter-carrier compensation plans for ISP-bound traffic, November 12, 1999 (with A. Banerjee and A. Ros). Reply Comments: "Efficient Inter-Carrier Compensation for Internet-Bound Traffic," (with A. Banerjee), October 23, 2000.

## 2000

408. Federal Communications Commission (Docket Nos. 94-1, 96-26), comments on behalf of the United States Telecom Association regarding the proposed prescription of the productivity offset in the FCC's price cap plan, January 7, 2000. Reply comments filed January 24, 2000, *Ex parte* presentation filed May 5, 2000.
409. Federal Communications Commission, *In the Matter of Reciprocal Compensation for CMRS Providers* (CC Docket Nos. 96-98, 95-185, WT Docket No. 97-207), "Reciprocal Compensation for CMRS Providers," on behalf of United States Telecom Association, reply comments



- regarding interconnection with CMRS providers, June 13, 2000 (with Charles Jackson).
410. Federal Communications Commission, *In the Matter the Remand of the Commission's Reciprocal Compensation Declaratory Ruling by the U.S. Court of Appeals for the D.C. Circuit* (CC Docket Nos. 96-98, 99-68), on behalf of Verizon, declaration regarding intercarrier compensation for Internet-bound traffic, filed July 21, 2000. Reply declaration filed August 4, 2000.
411. Federal Communications Commission, *In the Matter of Application by Verizon New England Inc., et. al. for Authorization to Provide In-Region, InterLATA Services in Massachusetts*, on behalf of Verizon New England, Appendix A, declaration regarding competition in Massachusetts and the public interest benefits of interLATA entry, September 19, 2000, Reply Declaration filed November 3, 2000. Supplemental Reply Declaration filed February 28, 2001.

## 2001

412. Federal Communications Commission, *In the Matter of Application by Verizon New England Inc., et. al. for Authorization to Provide In-Region, InterLATA Services in Connecticut*, on behalf of Verizon New England, Appendix A, declaration regarding competition in Connecticut and the public interest benefits of interLATA entry, May 24, 2001.
413. Federal Communications Commission, *In the Matter of Application by Verizon Pennsylvania Inc., et. al. for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*, on behalf of Verizon Pennsylvania, Appendix A, declaration regarding competition in Pennsylvania and the public interest benefits of interLATA entry, June 21, 2001.
414. Federal Communications Commission (CC Docket No. 01-92), on behalf of BellSouth Corporation: Reply Declaration (with Aniruddha Banerjee) on a unified regime of inter-carrier compensation (calling party's network pays or bill and keep?). Filed November 5, 2001.
415. Federal Communications Commission (CC Docket No. 01-277), on behalf of BellSouth Corporation: Reply Affidavit on BellSouth's application for interLATA authority in Georgia and Louisiana. Filed November 13, 2001.

## 2002

416. Federal Communications Commission (CC Docket Nos. 99-273, 92-105, 92-237), on behalf of BellSouth Corporation, Qwest Communications International, Inc., SBC Communications, Inc., and Verizon Telephone Companies: Affidavit: "Competition and Regulation for Directory Assistance Services" (with Harold Ware) regarding incremental costs and benefits from 411 presubscription. Filed April 1, 2002.
417. Federal Communications Commission (CC Docket Nos. 01-338, 96-98, 98-47), on behalf of BellSouth Corporation: Reply Declaration (with Aniruddha Banerjee, Charles Zarkadas and Agustin Ros) regarding unbundling obligations of local exchange carriers. Filed July 17, 2002.
418. Federal Communications Commission (RM No. 10593) on behalf of BellSouth Corporation, Qwest Corporation, SBC Communications, Inc., and Verizon, regarding pricing flexibility for interstate special access services (with A.E. Kahn), filed December 2, 2002.

## 2003

419. Federal Communications Commission (WC Docket No. 03-173) on behalf of BellSouth Corporation, , comments regarding economic costs of unbundled network elements, filed

December 16, 2003 (with A. Banerjee and H. Ware).

## 2004

420. Federal Communications Commission (WC Docket No. 03-173) on behalf of BellSouth Corporation, , reply comments regarding economic costs of unbundled network elements, filed January 30, 2004 (with A. Banerjee and H. Ware).
421. Federal Communications Commission (WCB Docket No. 02-112, CC Docket No. 00-175) on behalf of BellSouth Corporation, SBC and Verizon. Ex Parte Statement regarding imputation standards for in-region long distance service. Filed August 10, 2004. Ex parte October 6, 2004. (with T. Tardiff and H. Ware).
422. Federal Communications Commission (WCB Docket No. 04-313, CC Docket No. 01-338) on behalf of Verizon. Declaration regarding pricing history for special access services. Filed October 4, 2004.
423. Federal Communications Commission (WCB Docket No. 04-313, CC Docket No. 01-338) on behalf of Verizon. Declaration regarding incremental hot cuts and workforce requirements. Filed October 4, 2004.

## Mexico

424. Mexican Secretariat of Communications and Transport on behalf of Southwestern Bell International Holdings Corporation, affidavit on interconnection regulation (with T.J. Tardiff). Filed October 18, 1995.
425. Comisión Federal de Telecomunicaciones de México (“Cofetel”), “Economic Parameter Values in the Telmex Price Cap Plan,” arbitrator’s report on behalf of COFETEL and Telmex regarding the renewal of the price cap plan for Telmex, February 15, 1999.
426. Comisión Federal de Telecomunicaciones de México, on behalf of the Commission, “Telmex’s 2003-2006 Price Cap Tariff Proposal,” expert report regarding the renewal of the price cap plan for Telmex, (with A. Ros, G. Martinez and A. Banerjee), filed December 13, 2002.

## New Zealand

427. Commerce Commission of New Zealand on behalf of New Zealand Telecom, “Review of CostQuest Associates’ Benchmarking Survey” En banc hearings May 13-17, 2002.
428. Commerce Commission of New Zealand on behalf of New Zealand Telecom, “The Wholesale Discount” En banc hearings February 10, 2003

## United States Department of Justice

429. Affidavit to the U.S. Department of Justice on behalf of NYNEX in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding provision of telecommunications services across LATA boundaries for traffic originating or terminating in New York State. Filed August 25, 1994.

Page 44  
William E. Taylor  
National Economic Research Associates, Inc.

430. Affidavit to the U.S. Department of Justice on behalf of SBC Communications Inc. in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding Telefonos de Mexico's (Telmex's) provision of interexchange telecommunications services within the United States. Filed May 22, 1995.
431. Affidavit to the U.S. Department of Justice on behalf of SBC Communications Inc. in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding provision of interexchange telecommunications services to customers with independent access to interexchange carriers. Filed May 30, 1995.

### **United States Senate**

432. Subcommittee on Communications of the Senate Committee on Commerce, Science and Transportation, *Statement* and oral testimony regarding long distance competition and Section 271 of the Telecommunications Act of 1996. Filed March 25, 1998.

**Direct Testimony of William E. Taylor, Ph.D.**  
**Exhibit WET-2**  
**Docket No. 040353-TP**  
**October 14, 2004**

**Price and Cost Comparisons for BellSouth's PreferredPack Plan Service with Promotional Offerings**

**Price**

PreferredPack Plan (tariff)	\$ 26.95
Subscriber Line Charge	<u>\$ 6.50</u>
Total	<u>\$ 33.45</u>

**Cost**

Statewide average 1FR rate	
Subscriber Line Charge	
Features plus Privacy Director	
Customer reacquisition	
Total	

Unbundled loop UNE rate	
Port and usage TSLRIC	
Features plus Privacy Director	
Customer re-acquisition	
Total	

**Margin**

Price	
Cost	
Margin	<u>          </u>

Price	
Cost	
Margin	<u>          </u>