

ORIGINAL



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October 31, 2003

Mrs. Blanca S. Bayo, Director
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

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In re: Docket No. 030867-TL, Petition by Verizon Florida Inc. to reform intrastate network access and basic local telecommunications rates in accordance with Section 364.164, Florida Statutes.

In re: Docket No. 030868-TL, Petition by Sprint-Florida, Incorporated to reduce intrastate switched network access rates to interstate parity in revenue-neutral manner pursuant to Section 364.164(1), Florida Statutes.

In re: Docket No. 030869-TL, Petition for implementation of Section 364.164, Florida Statutes, by rebalancing rates in a revenue-neutral manner through decreases in intrastate switched access charges with offsetting rate adjustments for basic services, by BellSouth Telecommunications, Inc.)

Dear Mrs. Bayo:

Enclosed for filing in the above referenced dockets please find the Direct Testimony of John W. Mayo with Exhibits Nos. JWM-1 through JWM-3, filed on behalf of AT&T Communications of the Southern States, LLC and MCI WorldCom Communications, Inc. (WorldCom). 10848-03

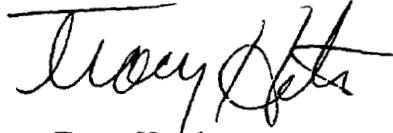
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OTH

Also enclosed for filing in the above referenced dockets please find the Direct Testimony of Wayne Fonteix, with Exhibits WF-1 through WF-3 filed on behalf of AT&T Communications of the Southern States, LLC. 10849-08

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If you have any questions, please do not hesitate to call me at (850) 425-6360.

Sincerely,

A handwritten signature in black ink, appearing to read "Tracy Hatch". The signature is written in a cursive style with a horizontal line above the first few letters.

Tracy Hatch

Enclosures

CERTIFICATE OF SERVICE

I hereby certify that copies of the Direct Testimony and Exhibits of John W. Mayo and Wayne Fonteix filed in Docket Nos. 030867-TL, 030868-TL, and 030869-TL were sent via U.S. Mail on October 31, 2003 to the following parties of record:

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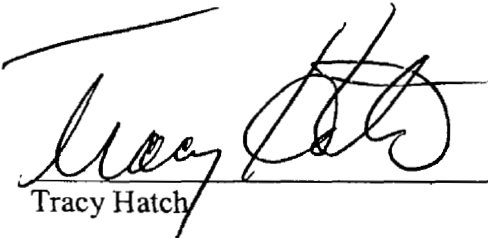
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Tracy Hatch

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition by Verizon Florida Inc. to reform)
intrastate network access and basic local)
telecommunications rates in accordance with)
Section 364.164, Florida Statutes.)
_____)

Docket No. 030867-TL

In re: Petition by Sprint-Florida, Incorporated to)
reduce intrastate switched network access rates to)
interstate parity in revenue-neutral manner)
pursuant to Section 364.164(1), Florida Statutes.)
_____)

Docket No. 030868-TL

In re: Petition for implementation of Section)
364.164, Florida Statutes, by rebalancing rates in a)
revenue-neutral manner through decreases in)
intrastate switched access charges with offsetting)
rate adjustments for basic services, by BellSouth)
Telecommunications, Inc.)
_____)

Docket No. 030869-TL

DIRECT TESTIMONY OF

DR. JOHN W. MAYO

ON BEHALF OF

AT&T COMMUNICATIONS OF THE SOUTHERN STATES, LLC

AND

MCI WORLDCOM COMMUNICATIONS, INC.

OCTOBER 31, 2003

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I. INTRODUCTION, QUALIFICATIONS AND PURPOSE OF TESTIMONY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is John W. Mayo. My business address is Georgetown University, McDonough School of Business, Old North Building, 37th and O Streets, N.W., Washington, D.C. 20057.

Q. WHAT IS YOUR OCCUPATION?

A. I am Dean of the McDonough School of Business at Georgetown University and Professor of Economics, Business and Public Policy at Georgetown University in the McDonough School of Business. I am also the Executive Director of the Center for Business and Public Policy in the McDonough School at Georgetown University.

Q. WOULD YOU PLEASE SUMMARIZE YOUR QUALIFICATIONS?

A. Yes. I hold a Ph.D. in economics from Washington University, St. Louis (1982), with a principal field of concentration in industrial organization, which includes the analysis of antitrust and regulation. I also hold both an M.A. (Washington University, 1979) and a B.A. (Hendrix College, Conway, Arkansas, 1977) in economics.

1 I have taught economics, business and public policy courses at
2 Georgetown University, Washington University, Webster University, the
3 University of Tennessee and at Virginia Tech (VPI). Beginning in the fall of
4 1999 and continuing until July 2001, I served as Senior Associate Dean of the
5 McDonough School of Business. Also, I have served as the Chief Economist,
6 Democratic Staff of the U.S. Senate Small Business Committee. Both my
7 research and teaching have centered on the relationship of government and
8 business, with particular emphasis on regulated industries.

9 I have authored numerous articles and research monographs, and have
10 written a comprehensive text entitled Government and Business: The Economics
11 of Antitrust and Regulation (with David L. Kaserman, The Dryden Press, 1995).
12 I have also written a number of specialized articles on economic issues in the
13 telecommunications industry. These articles include discussions of competition
14 and pricing in the telecommunications industry and have appeared in academic
15 journals such as the RAND Journal of Economics, the Journal of Law and
16 Economics, the Journal of Regulatory Economics, and the Yale Journal on
17 Regulation. A more detailed accounting of my education, publications and
18 employment history is contained in Exhibit JWM-1.

19
20
21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

22
23 A. I have been asked by AT&T Communications of the Southern States, LLC and
24 MCI WorldCom Communications, Inc. to provide an economic evaluation of the

1 merits of the petitions of Verizon, BellSouth and Sprint to reduce intrastate
2 switched access charges and to rebalance local exchange rates in Florida.

3
4 **II. LEGISLATIVE AND POLICY GUIDEPOSTS**

5
6 **Q. CAN YOU PLEASE EXPLAIN WHAT VERIZON, SPRINT AND**
7 **BELLSOUTH ARE PROPOSING IN THIS CASE?**

8 A. Yes. These principal incumbent local exchange carriers are proposing to
9 rebalance rates in a revenue-neutral manner under the Florida Tele-Competition
10 Innovation and Infrastructure Enhancement Act (“2003 Act”). This rebalancing
11 involves the reductions in intrastate switched access charges along with a
12 commensurate (revenue-neutral) increase in local exchange rates.

13
14 **Q. IS THERE LEGISLATIVE GUIDANCE REGARDING THE CRITERIA**
15 **TO BE USED WHEN EVALUATING THE MERITS OF THE**
16 **PETITIONERS’ PROPOSALS?**

17 A. Yes. The 2003 Act requires that the Commission consider whether the
18 petitioners’ request for rebalancing will: (a) remove current support for basic
19 local telecommunications services that prevents the creation of a more attractive,
20 competitive local market for the benefit of residential customers; (b) induce
21 enhanced market entry; (c) require intrastate switched network access rate
22 reductions to parity over a period of not less than 2 years or more than 4 years;
23 and (d) be revenue neutral.

1 **Q. ARE THERE ADDITIONAL INSTRUCTIVE GUIDEPOSTS FOR THE**
2 **COMMISSION?**

3 **A.** Yes. While federal telecommunications policy had trended toward an
4 increasingly pro-competitive posture over the past thirty years, the passage of the
5 federal Telecommunications Act in 1996 (“the 1996 Act”) represented a true
6 watershed event in terms of the public policy that is to be directed toward the
7 telecommunications industry. Specifically, the purpose of the 1996 Act was to
8 bring the benefits of competition to all telecommunications markets by creating a
9 “pro-competitive, de-regulatory national policy framework.”¹ To do so, the 1996
10 Act endowed state and federal regulatory authorities with a host of responsibilities
11 for advancing the goals of the 1996 Act.

12
13 **Q. SPECIFICALLY, HOW HAS THE 1996 ACT CHANGED THE MISSION**
14 **OF THE PUBLIC UTILITY COMMISSIONS?**

15 **A.** The 1996 Act fundamentally altered the forward-going role of regulatory
16 commissions. Much of the language of the 1996 Act focuses on the specific
17 mechanisms to open local telecommunications markets; the obligations for
18 network interconnection; the requirements for interLATA entry for RBOCs; and
19 the objective of universal accessibility to the internet. Yet in the effort to
20 implement the specifics of the 1996 Act, policymakers must not lose sight of the
21 fundamental way in which it transformed the traditional role and function of
22 regulation.

¹ Senate Rpt. 104-023, entitled “Telecommunications Competition.” March 30, 1995

1 In particular, the traditional function of regulatory commissions had been
2 one of *disabling the potential ill-effects of monopoly power*. The 1996 Act
3 changed this primary role in telecommunications to one of *enabling competition*.
4 That is, a new and fundamental role of regulatory commissions in the wake of the
5 1996 Act is to develop a set of competition-enabling policies that will allow for
6 the introduction and development of competition. Under this new mandate, as
7 competition grows and becomes effective, markets can replace regulation as the
8 primary source of protection of consumers.

9
10 **Q. HAS THERE BEEN RECENT CLARITY PROVIDED ON THE ISSUE OF**
11 **THE NATIONAL GOAL OF ENABLING COMPETITION IN**
12 **TELECOMMUNICATIONS MARKETS?**

13 A. Yes. The United States Supreme Court opinion in 2002 clearly and persuasively
14 underscores the fact that the Congressional intent of the 1996 Act was to alter
15 prevailing regulatory structures as necessary to as fully as possible enable
16 competition.² For instance, the Opinion points out that “For the first time,
17 Congress passed a rate-setting statute with the aim not just to balance the interests
18 between sellers and buyers, but *to reorganize markets by rendering regulated*
19 *utilities’ monopolies vulnerable to interlopers...*” (emphasis added, Opinion,
20 p.16) Thus, rate setting in the Post-1996 Act world must seek to promote the
21 advent of competition. Exhibit JWM-2 provides a published review of the
22 Supreme Court Opinion for the Commission’s consideration.

² VERIZON COMMUNICATIONS INC. V. FCC 535 U.S. 467 (2002).

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III. BACKGROUND

Q. WHY HAS IT BEEN NECESSARY TO REGULATE LOCAL TELECOMMUNICATIONS PROVIDERS IN FLORIDA?

A. Local exchange carriers, including BellSouth, Verizon (formerly GTE) and Sprint historically enjoyed a monopoly in the provision of telecommunications services. Given their monopoly positions within their service territories, both the federal and state governments found it necessary to regulate the rates of the company in order to ensure that the local carrier did not exercise its monopoly power to the detriment of the state’s residents and businesses. Indeed, most state-level public utilities laws, including the law established in Florida, give public utility commissions the obligation to ensure that rates are “just and reasonable.” In this regard, it is important to note that price regulation is a substitute for rates set by competitive market forces. That is, economists commonly recommend that the rate setting exercise should, insofar as possible, try to establish rates that mimic the rates that would be set by competitive market forces.

Q. WITHIN THIS MONOPOLY ENVIRONMENT HOW HAS REGULATION TYPICALLY ESTABLISHED PRICES?

A. Traditionally, rates for local exchange telephone companies were set within the context of rate-of-return (ROR) regulation. Under ROR regulation, the magnitude of the firm’s capital stock or rate base was determined and then rates for the

1 various services offered by the telephone company were established to achieve
2 the “fair” rate of return on those assets. Because the local exchange company
3 offered multiple services, regulators were free to establish rates for individual
4 services that would achieve a fair overall ROR but which would also be seen to
5 further social goals such as the achievement of universal service.

6 The classic regulatory paradigm set rates for basic residential local
7 exchange telephone service “residually.” That is, rates for other services, for
8 example long distance and switched access services were set well above cost in
9 order to maximize the “contribution” to be made toward achieving the overall
10 target ROR for the company. Then, once the contributions from these services
11 were maximized, the rates for residential local exchange service were set at a
12 level as low as possible to achieve the desired return.³ In this form of regulation,
13 considerable uncertainty existed regarding the appropriate or desired mark-up of
14 access charges that was necessary to "promote" universal service and still allow
15 the firm to earn a fair rate of return.⁴ This residual pricing methodology led very
16 naturally to a set of largely inefficient prices for the portfolio of telephone
17 services offered by the local exchange company (LEC). In particular, access

³ In practice, it was often the case that rate cases chronologically reversed the order of the residual price-setting process. That is, local rates were selected, often by slightly raising or lowering the then-current rates, and long distance and access charges were set residually to achieve the desired ROR. Analytically there is little difference between the two approaches, both of which are referred to herein as the residual pricing approach.

⁴ I use the term "promote" in quotations because this regulatory pricing policy was a failure both in concept and practice as a means of promoting universal service in an economically efficient fashion. See, e.g., “Cross-Subsidization in Telecommunications: Beyond the Universal Service Fairy Tale,” Journal of Regulatory Economics, Volume 2, September 1990, pp. 231-250.

1 charges have been set at rates that have been widely acknowledged to be
2 economically inefficient.⁵

3
4 **Q. HAS THE ESTABLISHMENT OF PRICE-CAP REGULATION ENDED**
5 **THE INEFFICIENT PRICING OF LOCAL EXCHANGE AND ACCESS**
6 **SERVICES?**

7 A. No. In the vast majority of cases where price cap regulation was adopted,
8 including Florida, the initial prices established for the firm's regulated services
9 were those that prevailed under ROR regulation. Over time, the natural forces of
10 price-cap regulation with positive escalators for inflation and negative forces for
11 productivity modified the set of prices but failed to address the fundamental
12 pricing distortions brought about by residual pricing. In particular, the access
13 charges assessed on long distance carriers for the use of local exchange facilities
14 to originate and terminate calling continued to be significantly marked-up above
15 its economic cost, and residential local exchange rates continued to be priced at
16 levels below those warranted by economic efficiency.

17
18 **Q. WHAT SPECIFIC IMPLICATIONS FOR RESIDENTIAL TELEPHONE**
19 **SERVICE POLICIES FLOW FROM THE NEW GOAL AND EMPHASIS**
20 **ON ENABLING COMPETITION?**

21 A. Residual pricing of residential local exchange telephone services must end. This
22 pricing methodology simply fails to efficiently or effectively accomplish the goal

⁵ See David L. Kaserman and John W. Mayo « Cross-Subsidies in Telecommunications: Roadblocks on the Road to More Intelligent Telephone Pricing, » Yale Journal on Regulation, Vol. 11, Winter 1994, pp. 119-148.

1 of encouraging the efficient and widespread provision of residential local
2 exchange services throughout Florida.

3
4 **Q. PREVIOUSLY YOU MENTIONED THE SUPREME COURT OPINION.**
5 **IS THE COURT’S OPINION RELEVANT TO YOUR ADVOCACY OF**
6 **THE END TO RESIDUAL RATEMAKING IN FLORIDA?**

7 A. Yes. The Supreme Court was quite clear in its read of the Congressional intent
8 of the 1996 Act. Specifically, the Court noted that: “*Congress called for*
9 *ratemaking different from any historical practice, to achieve the entirely new*
10 *objective of uprooting the monopolies that traditional rate-base methods had*
11 *perpetuated.*” (Opinion, pp. 15-16, emphasis added) Thus, to be consistent with
12 the Act, it is now clear that the Commission must embrace the new “competition-
13 enabling” objective of the 1996 Act and, perforce, eliminate residual ratemaking.

14
15 **IV. SPECIFIC ISSUES RAISED BY THE PETITIONS**
16

17 **Q. TURNING TO THE SPECIFIC CRITERIA OF THE 2003 ACT, DOES**
18 **THE PROPOSED REBALANCING OF SWITCHED ACCESS CHARGES**
19 **SATISFACTORILY FULFILL THE FLORIDA LEGISLATIVELY-**
20 **MANDATED CONSIDERATIONS?**

21 A. Yes. As I noted earlier there are four legislatively-mandated considerations. Two
22 are relatively mechanistic – the achievement of parity within a two to four year
23 window and the requirement that the adjustments be revenue neutral. For

1 purposes of my testimony, I assume that these considerations are satisfied. The
2 remaining two criteria require further consideration, but are also fulfilled.

3

4 **Q. TURNING TO THE LATTER TWO REQUIREMENTS, HOW DOES THE**
5 **PROPOSED REBALANCING OF RATES “REMOVE CURRENT**
6 **SUPPORT FOR BASIC LOCAL TELECOMMUNICATIONS**
7 **SERVICES”?**

8 A. It does so by simultaneously reducing intrastate switched access rates that have
9 been established at economically inefficient levels through the residual rate
10 setting process and adjusting local exchange rates upward on a revenue neutral
11 basis. This movement unequivocally “removes support for basic local
12 telecommunications services” in Florida. Indeed, as I described in Section II
13 above, through the process of residual ratemaking intrastate switched access
14 charges have been historically elevated well above their relevant economic cost
15 and the surplus has served as residual support for basic local telecommunications
16 services. Thus, it is quite clear that the statutory requirement of removing support
17 for basic local services will be met by the plan described in the ILECs’ petitions.

18

19 **Q. REGARDING THE NEXT CRITERION, WILL THE PROPOSED**
20 **REBALANCING OF RATES “INDUCE ENHANCED MARKET ENTRY?”**

21 A. Yes. While the entry decisions of new competitive local exchange carriers
22 (CLECs) are multifaceted, economic theory clearly indicates that the decrease in
23 overpriced access charges together with the corresponding elevation in the retail

1 price of residential service in Florida will positively affect the likelihood of
2 market entry. Specifically, prices serve the very important role of signaling
3 prospective entrants regarding the desirability of entry. Higher prices relative to
4 cost provide greater inducements for entry. In this regard, the historical practice
5 of residual pricing of local exchange services in Florida has contributed to an
6 environment that is relatively unattractive for market entry. By moving toward a
7 set of prices that better reflect the cost of providing local exchange service,
8 market entry will be enhanced. Moreover, recent developments in the
9 telecommunications industry further enhance the pro-competitive, pro-entry
10 consequences of the carrier access charge reductions and local rate rebalancing.

11
12 **Q. YOU JUST REFERRED TO RECENT DEVELOPMENTS IN THE**
13 **INDUSTRY HAVING A “PRO-ENTRY” EFFECT. CAN YOU EXPLAIN**
14 **HOW SUCH RECENT DEVELOPMENTS IN THE EVOLUTION OF**
15 **TELECOMMUNICATIONS SERVICES OFFERINGS ENHANCE THE**
16 **PROSPECTS FOR MARKET ENTRY IN THE EVENT OF SWITCHED**
17 **ACCESS CHARGE REDUCTIONS?**

18 A. Yes. The recent re-integration of RBOCs such as BellSouth and Verizon create
19 opportunities for these firms to bundle local and long-distance services into what
20 might be referred to as “all-distance” telephony. While bundles hold the promise
21 of providing a variety of consumer benefits, the presence of excessive access
22 charges undermines these benefits in at least two important ways. First,
23 competitors that compete against a bundled offering cannot drive the flat-rate

1 prices down to squeeze out excess profits that may be earned by ILECs because
2 these competitors face asymmetrically higher costs as a consequence of the
3 excessive switched access charges that are assessed on a per minute basis. That
4 is, because access charges are presently set well above the incremental cost of
5 providing access, the lower bound to which the competitors can drive prices is
6 defined by the artificially high level of access charges. Thus, in the presence of
7 such elevated charges, the normal salutary effect of competitive markets -
8 eliminating excess profit - is eviscerated. Specifically, the entrant can only drive
9 prices down to its artificially high cost basis and not to a level sufficiently low to
10 squeeze out excessive profits that might be earned in the market.

11 Second, if high access charges are continued and widespread bundling of
12 telecommunications services continues to grow, it is likely that competitors may
13 not even be able to make a competitive offering, thereby assuring monopoly
14 control over some customers. For example, with the elimination of the
15 interLATA distinction, a set of flat-rate plans for bundled "all-distance" telephony
16 has developed in Florida. Specifically, as seen in Exhibit JWM-3, suppose a flat
17 fee of R_0 for a bundled local and long distance offering is established to be
18 compensatory for the ILEC for all customers with less than M_1 of usage. At the
19 same time, competitors of the ILEC which face switched access charges that
20 exceed the incremental cost of providing access will only find such flat-fee
21 bundled service offerings profitable for customers with usage levels less than M_2 .
22 Thus, the presence of excessive access charges will act to limit the ability of
23 competitors to enter the market as segments of the market are profitable only to

1 the ILEC. Alternatively stated for purposes here, to the extent that the
2 competitive standard for telecommunications service is evolving more toward an
3 all-distance format, reductions in the carrier access charge will afford new
4 entrants an improved opportunity to enter the market and compete.

5
6 **Q. BUT DON'T LOW RESIDENTIAL RATES PROMOTE THE GOAL OF**
7 **UNIVERSAL SERVICE BY MAKING TELEPHONE SERVICE MORE**
8 **AFFORDABLE?**

9 A. No. While consumers of residential telephone service (or any product for that
10 matter) would prefer low rates to high rates, the imposition of residually
11 determined, artificially low rates actually are quite harmful to the goal of efficient,
12 widespread provision of residential telephone services in Florida.

13
14 **Q. CAN YOU EXPLAIN?**

15 A. Yes. While nominally popular with consumers, perpetuation of artificially low
16 residential rates through residual pricing serves as a significant impediment to the
17 achievement of the goals established in the Act. Prices that do not – at a
18 minimum -- recover the incremental cost of providing a service will simply fail to
19 encourage any other parties to consider entry into the market. In this case, while
20 consumers are nominally “protected” from monopoly through a policy of low
21 prices, such a policy actually acts to prevent the introduction and growth of
22 competition.

1 Indeed, prices that are held below cost in the subsidized sector will tend to
2 discourage all entry, even efficient entry. This latter effect tends to have a self-
3 perpetuating influence on regulation in the affected industry. Specifically,
4 because entry is artificially restricted through the below-cost price realized in the
5 subsidized segment of the market, the incumbent firm will tend to maintain a
6 monopoly in that market, thereby justifying continuing regulation. That
7 regulation, in turn, tends to maintain the cross-subsidy, which prevents the entry,
8 which justifies the continuing regulation. Consequently, not only is competition
9 incompatible with cross-subsidies, but cross-subsidies tend to distort the
10 competitive process and delay the time when competition arrives. Thus, a
11 necessary (but not sufficient) condition for the emergence and growth of
12 competitors is the removal of regulatory barriers to entry, and there can be no
13 more effective barrier to entry than prices that are lower than the incremental cost
14 of providing a service.

15
16 **Q. SHOULD THE COMMISSION BE CONCERNED THAT HOUSEHOLDS**
17 **WILL BE HARMED BY LOCAL EXCHANGE PRICE INCREASES AND**
18 **WILL QUIT SUBSCRIBING TO THE PUBLIC SWITCHED NETWORK?**

19 **A.** No. Household subscription to telephone service in Florida is quite high and is in
20 no danger of eroding in the face of price increases, should they occur. The vast
21 majority of Florida households are fully able and willing to pay the full costs that
22 they impose on local exchange companies for their subscription to the public
23 switched network. Some households are at risk, but it is possible to identify these

1 and to target assistance (subsidies) toward these households. By targeting such
2 assistance rather than maintaining a grossly inefficient system of perpetuating
3 artificially low prices to all households, the subsidy mechanism can be made to
4 deliver more punch, precisely where it is needed.⁶

5
6 **Q. SPECIFICALLY, WHAT PUBLIC POLICY MEASURES IN FLORIDA**
7 **PROVIDE COMFORT THAT THE STATE'S UNIVERSAL SERVICE**
8 **GOALS ARE NOT AT RISK BY THE ADOPTION OF THE PETITIONS?**

9 A. There are several considerations that provide such comfort. First, the household
10 subscription decision is based on the value realized by the household by all of the
11 services that such subscription permits. Thus, while the elevation of local
12 exchange prices associated with the revenue-neutral rebalancing of switched
13 access charges will act to reduce the net value realized by consumers, the very
14 same rebalancing increases that net value as the household realizes lower
15 intrastate long distance rates. Second, while the demand curve for local exchange
16 service is normal in the sense that price and the quantity demanded are inversely
17 related, the price elasticity of the demand for access is exceedingly small. Most
18 empirical estimates place the price elasticity of demand for access in the practical
19 neighborhood of zero.⁷ Thus, the elevation of local exchange prices is unlikely to

⁶ For a study of the effectiveness of targeted versus untargeted subsidy mechanisms in telecommunications, see Ross Eriksson, David L. Kaserman and John W. Mayo "Targeted and Untargeted Subsidy Schemes: Evidence from Post-Divestiture Efforts to Promote Universal Telephone Service," Journal of Law and Economics, Vol. 41, October 1998, pp. 477-502.

⁷ Kaserman, Mayo and Flynn (Journal of Regulatory Economics, September, 1990, pp. 231-250.) find a price elasticity of the demand for access of -.068; Cain and MacDonald (Journal of Regulatory Economics, December 1991., pp. 293-308) find that "when measured service options are available, price changes for flat rate service have essentially no effect on access demand... These estimates suggest that universal

1 cause any serious erosion to the quite high levels of household subscription in
2 Florida.⁸ Third, the 2003 Act generally requires that the increases to local
3 exchange rates that will accompany the approval of the rebalancing petitions
4 would not apply to Lifeline customers. See Chapter 364.10(3)c, Florida Statutes.
5 It is these Lifeline customers that are the most susceptible to dropping off the
6 network when faced with a price increase. Thus, the 2003 Act effectively
7 insulates these vulnerable customers from any economic harm that may result
8 from the general escalation of rates. At the same time, it is important to note that
9 these same customers will benefit from the reduced intrastate toll charges that
10 accompany the intrastate carrier access charge reductions embedded in the
11 petitions. Finally, the 2003 Act goes even farther in its desire to protect the
12 universal service mission of the state by expanding the eligibility criterion for
13 Lifeline service to 125 percent of the federal poverty income level. Again, this
14 targeted approach has been shown to be the most economically efficient means of
15 protecting the widely held goal of universal service.⁹

service can be maintained and expanded, even while more of the NTS financial burden is shifted to local charges.” (p. 303); Garbacz and Thompson (Journal of Regulatory Economics, January 1997, pp. 67-78) provide a series of estimates, including state-specific estimates of the price elasticity of demand. For Florida, they find that the price elasticity is either -.006 or -.0058. (See their Tables 6 and 7) For six aggregate models they find that elasticities vary from -.001 to -.026. (See their Table 5). And Garbacz and Thompson (Journal of Regulatory Economics 2001) in a review of a telecommunications study by Crandall and Waverman (CW) note that CW “end up with a price elasticity for local telephones no different than zero (quite similar to our results).” They conclude, “The fact that studies using significantly different data sources ...rarely find economically meaningful price elasticities strongly indicates that such an effect is very unlikely.” (p.95)

⁸ The latest FCC data reveals that household subscription rates in Florida is nearly 95 percent (94.8) as of November 2002. See Industry Analysis and Technology Division, Wireline Competition Bureau, “Telephone Subscribership in the United States” (April 2003).

⁹ See Eriksson, et al, op cit., note 5.

1 **Q. ARE THERE OTHER ECONOMIC BENEFITS THAT ARE LIKELY TO**
2 **EMERGE FROM ADOPTION OF THE PETITIONS?**

3 A. Yes. To the extent that the price rebalancing brought about by approval of the
4 petitions gives rise to new competitors, the result will be a greater scramble
5 among competitors for the patronage of telecommunications customers in Florida.
6 The resulting heightened level of competition will promote the advent of
7 innovative telecommunications services that better fulfill the desires of Florida's
8 consuming public.

9
10 **Q. SHOULD THE COMMISSION BE MINDFUL OF OTHER**
11 **CONSIDERATIONS AS IT MOVES TO REDUCE INTRASTATE**
12 **CARRIER ACCESS CHARGES AND REBALANCE LOCAL EXCHANGE**
13 **RATES IN FLORIDA?**

14 A. Yes. Even as the Commission moves to rebalance rates, it should be mindful of
15 additional obstacles to the emergence of local exchange competition in Florida.
16 Specifically, several characteristics of the evolution of telecommunications policy
17 in Florida in general and residential markets in particular make this sector
18 especially vulnerable to efforts by the incumbent local exchange carrier (ILEC) to
19 protect its dominant position through anticompetitive means. For instance, as
20 input prices are transitioned to economically efficient levels the incentive by the
21 ILEC to engage in non-price discriminatory conduct – sabotage – of its new retail
22 stage rivals grows.¹⁰ Thus, the Commission must be especially mindful as it

¹⁰ See T. Randolph Beard, David L. Kaserman and John W. Mayo "Regulation, Vertical Integration and Sabotage", Journal of Industrial Economics, Volume 49, September 2001, pp. 319-334.

1 transitions to economically rational pricing policies that its efforts to promote
2 competition are not undermined by non-price exclusionary tactics by the
3 incumbent.¹¹

4 This is particularly important in residential markets because residential
5 customers' appetite for competitive alternatives and the ability of new entrants to
6 secure and retain these customers is especially tenuous. Residential customers
7 spend considerable less than business customers on local telephone services.
8 Thus, while having some affinity for the prospect of competitive alternatives, the
9 resistance to switch carriers is especially sensitive for residential customers. Bad
10 experiences with competitors – whether due to the shortcomings of the new
11 entrant or the incumbent underlying carrier of the wholesale input – will quickly
12 quash the residential consumers' appetite for competitive alternatives. That is,
13 for the amount of money that residential consumers spend on local exchange
14 telephone services, it is simply not worth the hassles to repeatedly test the
15 competitive waters, especially if the customer does not have a positive initial
16 experience with competitors. Moreover, any sabotage that does occur in
17 residential exchange services is likely to be long-lasting and widespread as the
18 “reputation” of the new entrants' larger portfolio of telecommunications services

¹¹ In addition to the heightened incentive for non-price exclusionary tactics (viz., sabotage), incumbent firms may be expected to use price as a vehicle for excluding new entrants. For example, it is my understanding that BellSouth has introduced a marginal retail long distance rate of 1 cent per minute as a recent promotional offering in Florida. This marginal rate has a *prima facie* anticompetitive quality about it as it is well below the cost imposed on BellSouth's rivals who must purchase access at rates of up to 4.6 cents per minute. That is, as a practical matter, there is a significant disadvantage facing new entrants that must pay 4.6 cents per minute for one of their inputs – access – when the marginal price established in the market by the incumbent is 1 cent per minute. While there is a fixed monthly charge associated with this offering, it is unclear whether BellSouth's offering passes a properly designed imputation test. More fundamentally, the higher are switched access charges, the greater the temptation for the incumbent to enact a vertical price squeeze and, hence, the greater the need for reducing intrastate switched access charges immediately.

1 (e.g., long distance) may be damaged by sabotage of the new entrants' local
2 exchange service offerings.

3
4 **Q. IS A REDUCTION IN INTRASTATE SWITCHED ACCESS RATES TO**
5 **INTERSTATE LEVELS SUFFICIENT TO ACHIEVE ECONOMIC**
6 **EFFICIENCY?**

7 A. No. My understanding is that interstate access charge rates continue be set at
8 rates that exceed the economic cost of providing access. The relevant target,
9 however, for the establishment of competition-enabling intrastate switched access
10 charges in Florida is the economically efficient rate as approximated by
11 incremental cost. Moreover, not only will establishment of this rate be
12 economically efficient but it also will eliminate the unsupportable differences that
13 currently exist in pricing between access provided to long-distance providers and
14 the essentially identical access provided to competitive local exchange carriers
15 when, in fact, the service and costs are the same regardless of the party receiving
16 the service. This efficient target is, in fact, embodied in the 2003 Act when it
17 notes that ILECs seeking regulatory parity must reduce their intrastate switched
18 network access rates to local reciprocal interconnection rates.¹²

19
20 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

21 A. Yes.

¹² Section 364.051 (7)(b)

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CONGRESSIONAL AND REGULATORY TESTIMONIES:

U.S. Senate (Commerce, Science and Transportation Committee; Energy and Natural Resources Committee, Subcommittee on Water and Power;); Tennessee State Legislature (Senate Finance, Ways and Means Committee; Special Joint Legislative Committee on Business Taxation; and, Senate State and Local Government Committee); Maryland State Legislature (Environmental Works Committee); Federal Communications Commission; Pennsylvania Public Utility Commission; Michigan Public Service Commission; Missouri Public Service Commission; Illinois Commerce Commission; West Virginia Public Utility Commission; Wyoming Public Utility Commission; Washington Utilities and Transportation Commission; Utah Public Service Commission; Wisconsin Public Service Commission; California Public Utilities Commission; Florida Public Service Commission; Delaware Public Service Commission; Montana Public Service Commission; Maryland Public Service Commission; Massachusetts Department of Public Utilities; Georgia Public Service Commission; Colorado Public Utilities Commission; North Carolina Public Utilities Commission; Texas Public Utility Commission; Arkansas Public Service Commission; Connecticut Department of Public Utility Control; Kansas State Corporation Commission; and New Jersey Board of Public Utility Commissioners.

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WORK IN PROGRESS:

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"Administrative Discretion and Investment Behavior: Evidence from the U.S. Electric Utility Industry," (with Thomas P. Lyon), June 2003.

EDITORIAL REVIEWER:

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EDITORIAL, CORPORATE BOARDS AND OVERSIGHT BODIES

Editorial Board, Journal of Regulatory Economics, 1999-present.

Editorial Board, Review of Industrial Organization, 2002-present.

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Board of Trustees, Occupational and Environmental Health Foundation, June 2003-present.

Research Advisory Committee, National Regulatory Research Institute (Ohio State University), 1993-1997.

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The Supreme Court Weighs in on Local Exchange Competition: The Meta-Message

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Docket Nos. 030867-TL, 030868-TL and
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John W. Mayo Exhibit JWM-2
Review of Networks Economics Article

Abstract

The Supreme Court Opinion on local exchange competition in general and on pricing and unbundling in particular was much anticipated and will be much discussed. Because of the very technical nature of the pricing and unbundling rules facing incumbent local exchange carriers there is a considerable risk that students of the Court's Opinion will be mired in the details of that Opinion and miss what we believe is a clear, unequivocal meta-message embedded in the Opinion. Specifically, this decision unequivocally affirms a fundamental shift in regulatory policy reflected in the Telecommunications Act of 1996. That is, the Act dictates that regulators act not merely to *disable monopoly* but to adopt policies that affirmatively *enable competition*. The Court's Opinion now confirms this interpretation of the congressional intent behind the legislation. Thus, while it is fair to say that the Court's specific decision with respect to the pricing and unbundling issues represents an important component of a regulatory policy designed to promote competition in local exchange telephony, there is a larger lesson embedded in the Court's reading of the Telecommunications Act. In this paper we first consider in some detail the Opinion and how it reflects an unambiguous endorsement of a competition-enabling framework for the development of local exchange competition. Next, we point out that, despite the Court's unambiguous and clear ruling, a dispassionate scrutiny of economic and regulatory conditions present in local exchange markets -- even in the wake of the Court's ruling -- reveals a number of extraordinary obstacles to the successful emergence of effective local exchange competition that still remain.

1 Introduction

As witnessed by this volume, the recent Supreme Court decision affirming the legality of the Federal Communications Commission's (FCC's) policies regarding the pricing and unbundling of incumbent local exchange company (ILEC) network elements will certainly draw immediate and critical attention. Much of this attention will likely be focused on the

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technical merits of the Court's decision, specifically with respect to the FCC's pricing and unbundling requirements. While such scrutiny is entirely appropriate, it raises the prospect that the larger message reflected in this decision will be missed.

In particular, we believe that there is an important message to be drawn from the Court's Opinion that goes well beyond the specific issues of TELRIC pricing and unbundling requirements. Specifically, this decision unequivocally affirms the fundamental shift in regulatory policy reflected in the Telecommunications Act of 1996. As we have argued elsewhere, that Act mandates a fundamental regime shift for federal and state regulators.¹ Namely, the Act imposes a new obligation not only to *allow* competition to emerge in formerly protected markets but also to adopt policies designed to *facilitate* such emergence. That is, the Act dictates that regulators act not merely to *disable monopoly* but to adopt policies that affirmatively *enable competition*.² The Court's Opinion now confirms this interpretation of the congressional intent behind the legislation.

Thus, while it is fair to say that the Court's specific decision with respect to the pricing and unbundling issues represents an important component of a regulatory policy designed to promote competition in local exchange telephony, there is a larger lesson embedded in the Court's reading of the Telecommunications Act. This lesson is developed in Section 2 below. Section 3, then, considers the implications of this new mandate for federal and state-level regulators that go beyond the more narrow issues dealt with in the Opinion. Specifically, we point out that, despite the Court's unambiguous and clear ruling, a dispassionate scrutiny of economic and regulatory conditions present in local exchange markets – even in the wake of the Court's ruling – suggests a number of extraordinary obstacles to the successful emergence of effective local exchange competition that still remain. Section 4 then concludes.

2 Competition-enabling policies: A fundamental shift in regulatory mandate

The Telecommunications Act of 1996 represents a path-breaking piece of legislation in a variety of ways. At the most basic level, however, the truly novel aspect of the Act was its subtle but, we believe, unequivocal call for a change in the regulatory mandate in the telecommunications industry. Specifically, unlike prior public policies towards the telecommunications industry, which had sought first to control monopoly and later to *disable monopoly*, the passage of the Telecommunications Act signaled a new mandate that regulators at both the federal and state levels should implement policies specifically designed to *enable competition*. As we shall see in this section, this last set of policies is fundamentally different from prior policies that had been applied to the telecommunications industry.

The traditional economic rationale for regulation of the telecommunication industry is that the services supplied over the public switched telephone network have been subject to

¹ See Kaserman and Mayo (1999).

² It is important at the outset to emphasize the distinction between policies designed to facilitate entry and thereby enable competition and policies designed to promote "infant firms" through subsidizing actions. While the former is, we believe, the best vehicle to promote the long-run viability of effective competition, economists have properly subjected the later approach to considerable criticism.

natural monopoly supply.³ Beginning with *Hush-a-Phone* and continuing through the divestiture agreement in 1982 which separated AT&T from the Bell operating companies, it was increasingly recognized that not all telecommunications services were necessarily subject to natural monopoly conditions. As the Court aptly notes in its most recent decision, however, “The [1982 divestiture] decree did nothing ...to increase competition in the persistently monopolistic local markets, which were thought to be the root of natural monopoly in the telecommunications industry”.⁴

Indeed, simplifying only slightly, it is fair to say that prior to the passage of the Telecommunications Act of 1996, two principal methods were utilized to deal with the monopoly problems created by the structure of the telecommunications industry. First, a surgical approach involving structural separation of the monopoly from competitive elements within the industry was used to prevent remaining monopoly elements from impeding the growth of competition in potentially non-monopoly segments. This approach was the central feature of the 1982 Modification of Final Judgment that led to the divestiture of AT&T from the Bell Operating Companies. The second, less draconian, approach has been to leave in place the combination of monopoly and potentially competitive elements of the industry, but to seek to protect competitors – both potential and actual – from monopolistic practices of the incumbent through regulatory rules, or safeguards. Certainly with respect to the services provided by the Regional Bell Operating Companies (RBOCs), the pre-1996 Act policies of the FCC and state regulatory commissions were largely consistent with this latter approach.

As we have argued elsewhere, however, both of these regulatory approaches toward the telecommunications industry suffer drawbacks.⁵ Specifically, while the structural separations approach can eliminate both the incentive and ability to engage in monopoly leveraging from non-competitive to competitive markets, it has the prospect of eliminating any economies of scope that may exist in the joint production of monopoly and potentially competitive services. Alternatively, the regulatory rules approach preserves the potential realization of economies of scope by permitting the firm to remain intact, but necessarily involves costly and potentially complex rules that seek to prevent the incumbent from using its monopoly power to impede the emergence of competition. Moreover, such regulatory rules often fail to achieve the intended effects, as incumbents are able to devise novel approaches that circumvent these constraints.⁶

A third approach, which we have advocated and which the Supreme Court has now found to be the bedrock of the Telecommunications Act of 1996 is for regulators to fundamentally shift their approach toward incumbent local exchange providers. Specifically, this approach calls upon regulators to shift their agendas from controlling or *disabling monopolies* to a more active policy of *enabling competition*. Such a shift requires that regulators affirmatively engage in a variety of non-traditional policies that are designed to facilitate the emergence of competition. Among these, competition enabling requires that regulators aggressively act to: (1) eliminate barriers to entry; (2) classify monopoly and “effectively competitive” services (moving expeditiously to deregulate the later); (3) adopt

³ As Justice Breyer notes in his dissenting opinion, “For decades experts justified regulation on the ground that telecommunications providers were ‘natural monopolists,’ i.e., telecommunications markets would not support more than one firm of efficient size.” (p. 7)

⁴ Opinion, p. 2.

⁵ For a more detailed discussion, see Kaserman and Mayo (1999).

⁶ See Stelzer (1997) and Beard, Kaserman and Mayo (2002).

efficient pricing policies, particularly for inputs required by competitors; and, (4) eliminate all internal cross-subsidies for retail regulated services. In recognition of the necessarily “mixed” monopoly and competitive environment that will inevitably exist in the short run, competition enabling also requires that regulators unbundle network elements, require unrestricted resale and ensure, insofar as possible, nondiscriminatory interconnection policies.

Importantly, the Court’s Opinion explicitly recognizes that the Telecommunications Act does indeed call for a fundamental regulatory regime shift that is consistent with a competition-enabling (C-E) policy agenda. For example, at page 15, the Opinion points out that Congress sought to reject the traditional regulatory approach that had prevailed prior to the Act.

{O}ne possible lesson was drawn by Congress in the 1996 Act, which was that regulation using traditional rate-base methodologies gave monopolies too great an advantage and that *the answer lay in moving away from the assumption common to all rate-base methods, that the monopolistic structure within the discrete markets would endure.*⁷ (emphasis added)

The call for a regulatory regime shift is further emphasized by the Court when it observes:

Congress called for ratemaking different from any historical practice, to achieve the entirely new objective of uprooting the monopolies that traditional rate-base methods had perpetuated.⁸ (emphasis added)

The desire by Congress to implement a C-E policy approach is underscored again by the Court when it states that:

For the first time, Congress passed a ratesetting statute with the aim not just to balance the interests between sellers and buyers, but to *reorganize markets by rendering regulated utilities’ monopolies vulnerable to interlopers...*⁹ (emphasis added)

and

Thus, the Act appears to be an explicit disavowal of the familiar public-utility model...in favor of novel ratesetting designed to give aspiring competitors every possible incentive to enter local retail telephone markets, short of confiscating the incumbents’ property.¹⁰ (emphasis added)

The importance of the intent of Congress to foster C-E policies cannot be overstated in an environment that has been, and certainly will continue to be, rife with uncertainty and contradictory interpretations of ambiguities that exist in either the law or economics regarding the implementation of the Act. For example, in its determination of the legality of the TELRIC standard for pricing, the Court is immediately drawn into the sticky issue of what is meant by the term “cost” in the 1996 Act.¹¹ The Court recognizes that in the absence of additional defining language, the term cost is a “virtually meaningless term” and “a chameleon”.¹² In light of this ambiguity, the Court finds – on legal grounds – that it cannot overturn the FCC’s interpretation of the term “cost”. Somewhat more subtly, but equally importantly for the future, is the Court’s implicit recognition that the FCC’s adoption of the TELRIC pricing principle is consistent with Congressional intent that calls

⁷ Opinion, p. 15

⁸ Opinion, pp. 15-16.

⁹ Opinion, p. 16.

¹⁰ Opinion, p. 17.

¹¹ Opinion, p. 26 ff.

¹² Opinion, pp. 28-29.

upon regulators to implement C-E policies. In so doing, the Court requires that regulators' policies be in harmony with Congress' intent to enable competition.

Another critical component of the Court's Opinion is its recognition that ILECs continue to enjoy substantial incumbency advantages and that passive policies or half-hearted attempts to "open" local exchange markets to competition are likely to fail. For instance, the Court notes that:

Thus, it is easy to see why a company that owns a local exchange...would have an almost insurmountable competitive advantage not only in routing calls within the exchange, but, through its control of this local market, in the markets for terminal equipment and long-distance as well.¹³

In sum, the Court's Opinion is likely to draw considerable attention regarding its support for the FCC's specific TELRIC pricing and unbundling requirements. Perhaps more important, however, is the endorsement by the Court of the need for regulators, acting under the Telecommunications Act, to aggressively pursue C-E policies and its recognition that unless such policies are pursued vigorously and steadfastly, the powers of incumbency and monopoly are likely to prevail. Indeed, as we shall argue in the next section, while the Court has given clear support for the unbundling and pricing rules of the FCC, a number of other "trouble spots" lie in the wings that, despite this ruling, stand to impede the growth of competition in local exchange telephony.

3 Impediments to competition

Significant hopes were raised that competition could be fostered in local exchange markets by the 1996 Act. Those hopes have been at least partially reignited by the Supreme Court's recent affirmation of the legal authority of the FCC to adopt and impose UNE pricing and unbundling/rebundling rules that are relatively favorable to entrants. Nonetheless, a number of "dark clouds" remain on the horizon that represent substantive obstacles that must still be overcome before effective competition can emerge in local exchange retail markets. Specifically, at least four types of impediments to local exchange competition remain looming on the horizon, the Supreme Court's Opinion notwithstanding.

3.1 Other, non-UNE distortions

The Supreme Court Opinion unequivocally provides authority to the FCC to implement TELRIC pricing for unbundled network elements. The breadth of inputs that constitute such "elements" and are, therefore, subject to TELRIC principles, however, is not addressed by the Court's decision. This issue of UNE definition potentially presents a set of critical obstacles still facing the CLECs. These obstacles fall into two categories: pricing and availability. In the realm of pricing, federal and state regulators must set prices for certain network "elements" or inputs that may not fall under the scope of the narrowly interpreted letter of the Telecommunications Act. The most obvious example, of course, is the pricing of access to the local exchange network when the transmission involves a long-distance call.

Although it may not be an "element" under the Act, such access is clearly a necessary input for any telephone company that wishes to compete either in the long-distance arena or, as is more and more likely, across both local and long-distance calling. Indeed, the

¹³ Opinion, p. 18.

access required by a long-distance carrier to complete a call to a given customer is virtually identical to the local call termination service required by a CLEC to complete a call to the same customer. While the former service (access) is not considered to be a network element under the Act, the later service (local call termination) is. But as has often been stated in regulatory arenas “a minute is a minute is a minute.” Historically, however, the prices for such access services have been held well above economically efficient prices. Indeed, despite the fact that economists have recognized the inefficiencies embedded in access charges for years and these charges have generally fallen, access continues to remain well above its economic costs.¹⁴

For example, in a recent study of state-level access charges, we found that they vary from rough parity with UNE rates for terminating access (e.g., in Illinois) to over 25 times the respective UNE rate for such access (e.g., in Virginia).¹⁵ The economic case to reconcile the level of access charges with the underlying TELRIC rates (which we make elsewhere) is compelling and should provide an impetus for regulators to further reform these access charges.¹⁶ The Court’s “green light” to the enactment of C-E policies hopefully will provide additional stimulus to state and federal regulatory commissions to implement such reform. This process, however, will necessarily involve numerous state-level regulatory proceedings that, unless expedited, may amount to providing mouth-to-mouth resuscitation to the already drowned victim.¹⁷

Another critical issue related to the pricing of “non-UNEs” centers on the one-time fees, known as non-recurring charges or NRCs that are assessed on the new entrants whenever a customer chooses to switch from the incumbent to the new entrant. Ostensibly, the same guiding principles that drive the pricing of recurring purchases of elements would drive the pricing of NRCs. This, however, has not necessarily been the case. For instance, costs are incurred in making a “hot cut” transition of a loop from an ILEC to a CLEC. The amount of the costs that should be recovered by the ILEC is, however, subject to considerable debate. In a recent case in New York, the prevailing NRC for a hot cut was about \$24. The incumbent, however, claimed that the forward-looking costs for providing this hot cut service were roughly \$225 and that any CLEC seeking such a hot cut should be made to pay this charge. Although the New York Public Service Commission initially ordered a rate of about \$135, the ultimate rate approved by the regulatory commission (\$35) as part of an overall settlement concerning the ILEC’s regulatory plan was considerably less than the ILEC’s claimed costs. Nevertheless, this example provides powerful testimony that the ability of incumbents to delay or forestall competition does not end with the recurring UNEs.¹⁸

Yet another critical pricing issue that is likely to continue to haunt the new entrants (and thus the competition that is sought under the Telecommunications Act) is the

¹⁴ For early discussions of the inefficiencies embedded in telephone pricing, see Kahn (1984) and Kaserman and Mayo (1994).

¹⁵ See Kaserman and Mayo (2001).

¹⁶ *Ibid.*

¹⁷ For a recent discussion of the rise and fall of the CLEC industry, see Burton, Kaserman and Mayo (2002).

¹⁸ Indeed, in support of the \$35 settlement rate, the Staff of the New York Public Service Commission argued that the \$185 charge initially ordered by the Commission (and, thus even greater charge sought by the incumbent) would create “a serious barrier to those CLECs trying to migrate their customer bases away from Verizon’s switches” and that the lower rate would improve “the likelihood that facilities-based competition will continue to develop.” See Prepared Testimony of Charles M. Dickson, et al., In the matter of Verizon-New York, Case 00-C-1945, February 2002.

perpetuation of cross subsidies in retail telecommunications markets. For many years, economic analysis suggested that the rates for residential, rural, primarily local exchange consumers were held artificially low and perhaps below the incremental cost of serving these customers.¹⁹ More recently, the Supreme Court acknowledged this cross-subsidization when it stated:

In order to hold down charges for telephone service in rural markets with higher marginal cost due to lower population densities and lesser volumes of use, urban and business users were charged subsidizing premiums over the marginal costs of providing their own service.²⁰

As the Court notes, the revenues necessary to continue to offer such low (and, arguably, subsidized) rates were derived by charging high rates to businesses and urban customers and to consumers with relatively large amounts of long-distance usage. While the existence of a subsidy to the aggregated set of local exchange services has increasingly been questioned, it certainly remains true that the long-standing practice of keeping rates artificially low for rural, residential local exchange customers remains very much in place in a number of locations around the country. Naturally, there can be no more effective barrier to entry into a market than rates that are held below costs. New entrants simply cannot be expected to enter retail residential markets where the rates for these services are artificially held below their respective economic cost. The result is that regulators are faced with a serious challenge: to allow the rates for subsidized services to rise to at least cover the economic cost of providing the services.²¹ At that point new entrants may find service to these segments of the communications sector profitable to serve.

Setting aside pricing issues, the second critical obstacle in this realm facing new entrants is – somewhat ironically in the face of the Court’s proper interpretation of the Act – access to economically efficient rates once they are established. Consider, for example, the following. In many situations, new entrants find that the most efficient type of access for the provision of local exchange service for businesses beyond a minimal size, is non-switched access. In these circumstances, the provision of non-switched access has been identified as an “element” under the Telecommunications Act. Accordingly, it would seem very natural to make this element available to new entrants at its TELRIC rates. To date, however, the ILECs have denied new entrants access to the economically efficient rate, making such access available only at “special access” rates, which are often well above the TELRIC levels. Indeed, special access rates generally exceed the forward-looking costs that are incurred by the ILEC if it were to provide the same service to a retail customer. This denial of access to economically efficient rates acts as a classic barrier to entry by creating a cost asymmetry between the new entrants the incumbent.²² Again, this problem is remediable. To salvage the hopes for the development of a truly competitive local exchange industry, however, regulators will need to move quickly and aggressively to

¹⁹ See, e.g., Palmer (1992)

²⁰ Opinion, p. 7

²¹ Concerns that such price increases will harm the ability to achieve the policy goal of universal telephone service are almost certainly misplaced. See, e.g., Kaserman and Mayo (1997) and Eriksson, Kaserman and Mayo (1998) who show that targeted programs to subsidize those consumers most in need of the subsidy to support subscription is far preferable on both theoretical and practical grounds to the present policy of repressing rates to the entire class of residential consumers.

²² See Stigler (1968) for a discussion of barriers to entry stemming from cost asymmetries between incumbents and prospective entrants.

ensure that new competitors are not denied economically efficient rates once they are established.

3.2 Non-price exclusionary practices

Perhaps the greatest obstacle to effective implementation of a C-E regulatory policy is the inherent inability of regulators to enforce non-discrimination rules on incumbents that hold monopoly power over inputs required by new entrants.²³ While input prices can be set and reasonably well enforced, it is nearly impossible for regulators to prevent degradation of the quality of these inputs. Particularly in network industries, the cause of a service disruption can be difficult to ascertain. And, once ascertained, the intent of the culpable party can be even more difficult to establish. Moreover, quality degradation can be just as (or, perhaps, more) effective as above-cost input prices in impeding entry into local exchange markets, because such degradation can adversely affect new firms' reputations and thereby inflict long-lasting effects.

A recent series of papers has shown that, under circumstances that closely approximate those exhibited by local exchange markets, such quality degradation or "sabotage" can be a profitable (and, therefore, likely) strategy.²⁴ And specific factual evidence of such behavior from the ILECs appears to corroborate the theory. For example, an investigation in New York recently revealed that Verizon has averaged 74% of its appointment met in the provisioning of Special Access to its downstream competitors while it has averaged 94% of its appointments met for its own retail operations. The Commission concluded that "the record suggests that Verizon treats other carriers less favorably than its own end users".²⁵ More general evidence that the ILECs have implemented this strategy is revealed in the substantial fines that regulatory commissions have levied for ILEC violations of the non-discrimination provisions of the 1996 Act. Nonetheless, despite these fines, we suspect that non-price discrimination will continue. The stakes are simply too high and detection too difficult for such behavior to be effectively discouraged.

Moreover, one of the papers on this subject demonstrates that the incentive for an incumbent monopolist to engage in sabotage increases with the stringency of regulation applied to the prices for the inputs purchases by those entrants.²⁶ In effect, the less profit the incumbent is able to extract on the inputs supplied to its rivals, the greater the incentive to exercise its monopoly power in other dimensions. This result, in turn, suggests, somewhat ironically, that the Court's endorsement of TELRIC pricing of UNEs is likely to exacerbate the quality degradation problem. That is, as UNE prices are pushed closer to their long-run incremental costs, the more sabotage we are likely to see.

3.3 Removal of the regulatory "carrot"

Recognizing both the need for ILECs to cooperate with entrants in providing essential inputs and the obvious incentive for ILECs to refuse such cooperation, Congress

²³ See Stelzer (1997).

²⁴ See, for example Economides (1998), Mandy (2000); Beard, Kaserman and Mayo (2002); and Reiffen and Ward (2002).

²⁵ See Opinion and Order Modifying Special Services Guidelines for Verizon New York, Inc., Conforming Tariff, and Requiring Additional Performance Reporting, Case 00-C-2051, Case 92-C-0665, Issued and effective June 15, 2001.

²⁶ See Beard, Kaserman and Mayo (2001).

incorporated the Section 271 provision of the 1996 Act. That provision attempts to provide an incentive for incumbent monopolists to facilitate entry by holding out a reward. Specifically, under this provision, RBOCs are allowed to reintegrate into in-region interLATA long-distance once they have sufficiently opened their local exchange markets to competition. The legislative standards that must be satisfied to meet this condition involve both an explicit checklist of entry-facilitating actions (e.g., installation of non-discriminatory operational support systems needed for processing new service orders for new entrants and maintaining billing and service functions once established) and a much less explicit requirement that the approval of reintegration be "in the public interest". Predictably, the regulatory proceedings to implement these provisions have been prolonged and contentious as the RBOCs have sought approval to re-enter the long-distance market and these petition have generally been seen as premature by the incumbent interexchange carriers.²⁷

To date, the FCC has approved RBOC reintegration in 15 states. Whether such reintegration will benefit consumers is an empirical question for which there is, as yet, insufficient data to meaningfully address. Nonetheless, regardless of the merits of the individual reintegration orders, it is clear that once RBOC reintegration is approved, the Section 271 incentive to cooperate with entrants disappears. Like the proverbial carrot, that incentive can exist only until the object that is providing the incentive is consumed. Thus, while the Court's Opinion may tend to facilitate CLEC entry, *ceteris paribus*, in fact, all else is not equal. To the extent that the FCC approves more Section 271 applications for reintegration, the incentives for ILEC cooperation will evaporate. Moreover, there is compelling evidence that these incentives are likely to affect firm behavior. Indeed, in a recent study of the post-Act behavior of RBOCs (which had not secured reintegration) and GTE (which was integrated into long-distance), Mini (2001) found that in the absence of the "carrot" for cooperation firms are markedly more likely to adopt aggressive tactics toward new entrants. This will, of course, pose additional challenges to prospective entrants and nascent competitors.

3.4 Litigation and regulatory uncertainties

While the Court's Opinion would nominally seem to put an end to costly, time-consuming and entry-retarding legal and regulatory wrangling over pricing and unbundling issues, a realistic assessment suggests that rather than putting an end to such debate it will only change the venue for continued legal and regulatory manoeuvring by the ILECs. Indeed, in the wake of the Court's opinion Verizon immediately announced that it would continue to fight the pricing and unbundling rules at the FCC.

As a Verizon spokesman stated: "Just because something is legal does not mean it is good public policy."²⁸ In light of statements such as this and the ongoing incentive by the ILECs to preserve their monopoly power, it is very likely that state and federal regulators – and in all likelihood, the courts – will continue to see efforts on the part of the ILECs to deter entry. For instance, in the immediate wake of the announced intention by AT&T to enter local exchange markets in Ohio, SBC has recently proposed to sharply increase UNE

²⁷ Under the Act, these proceedings take place before state regulatory commissions. The ultimate decision to approve RBOC reintegration, however, lies with the FCC.

²⁸ Stern (2002). See also the letter of William Barr, Executive Vice President and General Counsel, Verizon to Michael Powell, Chairman of the Federal Communications Commission, July 16, 2002.

rates. SBC's proposal is to increase existing loop rates of less than \$6 to over \$17.50 per loop per month. Similarly, SBC proposes to increase local switching charges by rates up to 6000 percent.²⁹ The willingness and ability by ILECs to fund such legal and regulatory maneuvers, even if they ultimately prove unsuccessful, are likely to serve to blunt whatever economic incentives the market may be otherwise sending to prospective entrants on the merits of entry.

Finally, the recent opinion fails to resolve an issue that will, most certainly, continue to preoccupy policymakers in the implementation of TELRIC prices. Specifically, low UNE prices and relatively favorable wholesale rates can obviously facilitate entry into the retail stage of local exchange telecommunications markets. They cannot, however, break the monopoly that the ILEC's continue to hold over the upstream network infrastructure that ultimately must be accessed to provide service to final customers. And, until that monopoly is broken, difficult regulatory problems will persist and complete deregulation will remain a distant dream.

Two separate arguments have appeared concerning the UNE pricing policy that is more likely to foster the upstream facilities-based entry needed to break the last-mile monopoly. First, the ILEC's and their supporters have argued that relatively high UNE prices are more likely to promote the necessary network-stage entry. Low resale and lease prices, they argue, will cause investment in facilities to be unattractive, as entrants can purchase these inputs from incumbents more cheaply than they can build them. In addition, resale (unintegrated) entry carries substantially less risk, as sunk costs are largely avoided. As a result, while low UNE and wholesale prices may create the illusion of competition by enticing firms to enter the retail stage of the industry, they will, in fact, discourage the sort of entry that is ultimately required if effective competition is ever to materialize. This view, then, sees resale and facilities-leased entry as substitutes – we can encourage one only at the expense of the other.

Potential (and actual) entrants have countered this argument, pointing out that resale entry can help to pave the way for subsequent facility investments. Under this logic, *de novo*, vertically integrated entry into local exchange markets through replication of the ILEC's network facilities is unlikely due to the substantial sunk costs associated with such entry. Those sunk cost, however, can be at least partially nullified by prior successful resale entry. Specifically, non-integrated entry at the retail stage can provide entrants an established customer base which reduces the likelihood that these firms subsequently will be forced to exit. This reduced profitability of exit, in turn, lowers the risk associated with upstream, sunk-cost facilities investments. Thus, these parties view resale entry as a vehicle for promoting facilities-based entry. That is, the two forms of entry are seen as complements, not substitutes. To support this view, they point to experience in the long-distance market, where substantial resale entry preceded much of the facilities-based entry that subsequently occurred.

Which of these two competing arguments is correct? Unfortunately, that question cannot be answered definitively on *a priori* theoretical grounds alone. Our own view is that, as long as UNE (and other input) prices are not pushed below the forward-looking, long-run incremental costs of constructing and maintaining the underlying network

²⁹ SBC Ameritech Ohio's Application for Approval of Unbundled Network Element Prices, In the Matter of the Review of Ameritech Ohio's TELRIC Costs for Unbundled Network Elements Case No. 02-1280-TP-UNC, Filed May 31, 2002.

facilities (i.e., as long as these prices are not subsidized), the latter argument is more convincing. Once retail-stage entrants have established sufficient customer bases, incentives to integrate backward to self-supply essential network facilities will encourage these firms to undertake the additional investments needed to break the final source of monopoly power in this industry.

At the same time, even in the presence of resale entry, the wherewithal to break that monopoly may have to await some further technological advancement. If that is the case, then, regardless of the level at which UNE prices are set, we are unlikely to observe sufficient entry at the network level to bring about effective competition at all stages until technological change enables that which regulatory rules cannot.

4 Conclusion

Most economists would agree that incumbent monopolists are unlikely to voluntarily cede their monopoly power. In the telecommunications industry, the mere fact that a law was passed which embraced competition should not realistically have been expected to be met by the incumbent monopolists with a warm embrace of new entrants. Indeed, as should have been expected, ILECs have deployed a number of tactics (economic, regulatory and legal) to retain their control of the principal source of their monopoly power; namely, access to the local loop or the so-called last mile monopoly. These tactics have resulted in arguments, *inter alia*, that regulators have overstepped their jurisdiction in their zeal to foster competition; that the prices chosen by regulators are confiscatory and, therefore, illegal; and that even if the regulators have the authority to establish these rates, the applicability of the prices set should be imposed only under the most narrow interpretation of the Act.

In this paper, we have argued that the most fundamental lesson to be drawn from the Supreme Court's ruling is that Congress did not intend to continue to allow monopolists to remain entrenched in local exchange telephone markets. Rather, Congress intended that regulators would pursue fundamentally different and more activist policies designed to enable competition in local exchange markets. While a narrow interpretation of the most recent Supreme Court Opinion – that TELRIC pricing is legal and that regulators can require ILECs to sell UNEs as a bundled set – is welcome, the Opinion's more basic message is that regulators should perceive a green light, indeed a mandate, to implement more active policies designed to open local exchange markets to competition. In this regard, we have identified a number of critical issues that continue to confront new entrants in the wake of the Opinion and which will require that affirmative and decisive competition-enabling policies be adopted if local exchange competition is to take root anytime soon. Moreover, this must be accomplished in an environment in which the incumbents will, most certainly, continue to use whatever means are available to them to slow the erosion of their monopoly power.

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Carrier Access Charges in a Flat- Fee, Bundled Services Market

Docket Nos. 030867-TL, 030868-TL and 030869-TL
John W. Mayo Exhibit JWM-3

