Meredith E. Mays
Senior Regulatory Counsel

BellSouth Telecommunications, Inc.
150 South Monroe Street
Room 400
Tallahassee, Florida 32301
(404) 335-0750

December 2, 2003

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

Re: Docket No. 030869-TL

Dear Ms. Bayó:

Enclosed are an original and fifteen copies of BellSouth Telecommunications, Inc.'s Rebuttal Testimony of W. Bernard Shell which has been reformatted to include line numbers that we ask you to file in the captioned docket.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

Meredith E. Mays

Meredith E. Mays (KA)

Enclosure

cc: All Parties of Record
Marshall M. Criser III
R. Douglas Lackey
Nancy B. White
515658

CERTIFICATE OF SERVICE
Docket Nos. 030867-TP, 030868, 030869-TL and 030961-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via Electronic Mail, Hand Delivery* and FedEx this 2nd day of December, 2003 to the following:

Beth Keating, Staff Counsel *
Felicia Banks, Staff Counsel
Patricia Christensen, Staff Counsel
Lee Fordham, Staff Counsel
Florida Public Service Commission
Division of Legal Services
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
Phone: (850) 413-6212
Fax: (850) 413-6250
bkeating@psc.state.fl.us
fbanks@psc.state.fl.us
pchriste@psc.state.fl.us
cfordham@psc.state.fl.us

Charlie Beck
Deputy Public Counsel
Office of Public Counsel
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400
Phone: (850) 488-9330
Fax No. (850) 488-4491
Beck.Charles@leg.state.fl.us

Michael A. Gross
VP Reg. Affairs & Reg. Counsel
Florida Cable Telecomm. Assoc.
246 East 6th Avenue
Tallahassee, FL 32303
Tel. No. (850) 681-1990
Fax. No. (850) 681-9676
mgross@fcta.com

Richard A. Chapkis (+)
Verizon Florida, Inc.
One Tampa City Center
201 North Franklin Street (33602)
Post Office Box 110, FLTC0007
Tampa, Florida 33601-0110
Tel. No. (813) 483-2606
Fax. No. (813) 204-8870
Richard.chapkis@verizon.com

Verizon Florida, Inc.
Ms. Michelle A. Robinson
106 East College Avenue, Suite 810
Tallahassee, FL 32301-7704
Tel. No. (813) 483-2526
Fax. No. (813) 223-4888
Michelle.Robinson@verizon.com

Susan S. Masterton
Charles J. Rehwinkel
Sprint Comm. Co. LLP
1313 Blair Stone Road (32301)
P.O. Box 2214
MC: FLTLHO0107
Tallahassee, FL 32316-2214
Tel. No. (850) 847-0244
Fax. No. (850) 878-0777
Attys. for Sprint LP
Susan.masterton@mail.sprint.com
charles.j.rehwinkel@mail.sprint.com

John P. Fons (+)
Ausley & McMullen
227 South Calhoun Street
Tallahassee, FL 32301
Tel. No. (850) 224-9115
Fax. No. (850) 222-7560
jfons@ausley.com

Michael B. Twomey (+)
8903 Crawfordville Road
Tallahassee, FL 32305
Tel. No. (850) 421-9530
Fax No. (850) 421-8543
Email: miketwomey@talstar.com
Represents AARP
Represents Common Cause
Represents Sugarmill Woods

Mark Cooper (+)
504 Highgate Terrace
Silver Spring, MD 20904
Tel. No. (301) 384-2204
Fax. No. (301) 236-0519
markcooper@aol.com
AARP Witness

Floyd Self, Esq.
Messer, Caparello & Self, P.A.
215 South Monroe Street, Suite 701
Tallahassee, FL 32301
Tel. No. (850) 222-0720
Atty. for AT&T
Atty. for MCI
fself@lawfla.com

Tracy W. Hatch (+)
AT&T Communications
101 North Monroe Street
Suite 700
Tallahassee, FL 32301
thatch@att.com

Donna McNulty, Esq.
MCI WorldCom Comm., Inc.
1203 Governors Square Blvd.
Suite 201
Tallahassee, FL 32301-2960
donna.mcnulty@mci.com

George Meros
Gray, Harris & Robinson, P.A.
301 S. Bronough St., Suite 600
Tallahassee, FL 32301
Mail: P.O. Box 11189
Tallahassee, FL 32302-3189
Tel. No. (850) 577-9090
Fax. No. (850) 577-3311
GMeros@grayharris.com

John Feehan
Knology, Inc.
1241 O.G. Skinner Drive
West Point, Georgia 31833
Tel. No. (706) 634-2828
Fax. No. (706) 645-0148
john.feehan@knology.com

Charles J. Christ, Jr.
Jack Shreve
Office of the Attorney General
PL-01 The Capitol
Tallahassee, Florida 32399-1050
Tel. No. (850) 414-3300
Fax. No. (850) 410-2672
ag@oag.state.fl.us

Harris R. Anthony
BellSouth Long Distance, Inc.
400 Perimeter Center Terrace
Suite 350
Atlanta, GA 30346
Tel. No. (770) 352-3116
harris.anthony@bellsouth.com

Ben Wilcox
Executive Director
Common Cause Florida
704 West Madison Street
Tallahassee, FL 32304
Tel. No. (850) 222-3883
Fax. No. (850) 222-3906
cmncause@infionline.net

Meredith Mays (MM)

(+) Protective Agreement
(*) Hand Delivered

BELLSOUTH TELECOMMUNICATIONS, INC.

REBUTTAL TESTIMONY OF W. BERNARD SHELL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030867-TL, 030868-TL, 030869-TL & 030961-TI

NOVEMBER 19, 2003

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is W. Bernard Shell. My business address is 675 W. Peachtree St., N.E., Atlanta, Georgia. I am a Manager in the Finance Department of BellSouth Telecommunications, Inc. (hereinafter referred to as "BellSouth"). My area of responsibility relates to the development of economic costs.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

A. No, I am adopting the direct testimony of D. Daonne Caldwell filed in this proceeding on August 27, 2003.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I attended Clemson University, graduating with a Bachelor of Science Degree in Electrical Engineering in 1981. I received a Masters Degree in Business Administration from Georgia State University in 1997.

My career with BellSouth spans over twenty years. My initial employment was with Southern Bell in 1981, in Columbia, South Carolina in the Network Department as an Equipment Engineer. In that capacity, I was responsible for the ordering and installation of central office equipment. In 1984, I transferred to the Rates and Tariffs group in Atlanta, Georgia where I was responsible for the rates, costs, tariffs, and implementation of services. During my time in that organization, I worked with many services/offerings, such as Local Exchange Service, Service Order Charges, Operator Services, Mobile Interconnection, and Inside Wire. I moved to the Interconnection Marketing Unit in 1995, where I had various responsibilities, including negotiating with Competitive Local Exchange Carriers ("CLECs"), developing pricing strategies, and product managing Collocation. In December 2000, I moved to a position in the cost organization, a part of the Finance Department. My current responsibilities include cost methodology development and implementation.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to cost development issues raised in the testimony filed by other parties. I respond specifically to allegations made by Dr. David Gabel who represents the Office of Public Counsel ("OPC") and AARP witness Dr. Mark Cooper.

Q. DR. GABEL CONTENDS THAT BELLSOUTH'S COST METHODOLOGY DOES NOT FULFILL THE TOTAL SERVICE LONG RUN INCREMENTAL COST ("TSLRIC") STANDARDS. IS HE CORRECT?

A. No. Dr. Gabel claims that BellSouth and the other incumbents "rely on TELRIC-based estimates that include costs of the loop shared by residential, business, and data services which should not appear in a TSLRIC estimate." (Gabel testimony, page 12, lines 17-19) As will be discussed in greater detail later in this testimony, Dr. Gabel misrepresents the underlying definition of the service that the cost studies support, i.e., basic local exchange service. Population densities and loop lengths cause differences in cost between residence and business loops. However, the overall physical attributes of the network that provides this service (i.e., access to the telecommunications network) does not differ due to some artificial class-of-service designation designed to promote universal service. This total network that provides access, regardless of class of service, provides the foundation of BellSouth's cost calculations. Once costs associated with this network are determined, cost recovery dictated by rate structure (e.g., the formation of rate groups and class of service partitioning) can take place.

Dr. Gabel's contention that costs associated with trenching, conduit, poles, and cable placements are shared costs flows from this misunderstanding of the service under study. He has created two separate services – residential service and business service – when in actuality there is only one service - and then inappropriately classified costs as shared between these two "services". Dr. Gabel seems to confuse the concept of "shared facilities" with the concept of "shared costs." Almost every facility and piece of equipment used in a telecommunication provider's network is shared by more than one service. Just because a facility is "shared," however, does not imply that the costs of the facility should be treated as

shared costs. Indeed, many of these costs of shared facilities can be broken down into individual components driven by unit increments as volume grows. In a long run incremental analysis, the addition of incremental units of demand bring each of these network components closer to exhaust; thus, advancing future capital expenditure. The long run incremental cost impact is reflected as the unit (capacity) cost and is appropriately considered in the TSLRIC of a service.

Additionally, implementation of Dr. Gabel's "adjustments" would result in costs that do not reflect the long-run incremental costs incurred in providing access to basic local service; i.e., costs incurred in providing a working circuit from the customer's location to the central office that would allow the end-user to make and receive calls.

The proceeding that gave rise to the cost standards to be used to develop prices for individual retail services recognized that "certain inherent characteristics of a multi-product firm typical of the telephone industry – notably, the presence of economies of scale and scope, and the existence of significant amounts of joint and common costs – prohibit one from successfully performing a unique one-to-one mapping between component cost elements and specific services." (Memorandum in Docket No. 900633-TL, *Development of Local Exchange Company Cost Study Methodology* ("Cost Order"), April 25, 1991, page 4) Thus, the Florida Public Service Commission ("Commission") has acknowledged the difficulty faced in identifying direct costs associated with any telecommunication service – including access to basic local service. The Commission's identification of this problem does not, however, imply that reasonable approaches to overcome the hurdles

faced by the cost analysts do not exist. Indeed the Commission has accepted BellSouth's inclusion of the costs Dr. Gabel claims are shared in previous tariff filings that have been supported by TSLRIC results.

In numerous cost study filings supporting retail services, BellSouth has employed the identical methodology submitted in this proceeding. Specifically, BellSouth establishes relationships between total capitalized costs and material prices in order to capture associated labor and incidental materials required to install the piece of equipment, i.e., to determine the installed investment. Similarly, BellSouth develops loading factors based on relationships between investments to identify supporting structure costs (poles and conduit) and land and building costs in order to capture all costs directly related to provisioning a working circuit. The Commission has never found that this process violates TSLRIC principles.

Q. DR. GABEL CONCLUDES THAT: "IT IS HIGHLY PROBABLE THAT CURRENT RETAIL PRICES FOR RESIDENTIAL BLTS ALONE EXCEED THE DIRECT COSTS OF PROVIDING THESE SERVICES." (PAGE 12, LINES 6-7) IS HE CORRECT?

A. No. Dr. Gabel's conclusion is valid only if one accepts his erroneous exclusion of most of the loop costs as "shared costs," only then does residential basic local service rates cover costs. If one extends Dr. Gabel's approach and applies it to business basic local service then most, if not all, of the loop costs associated with this service are also "shared" costs. This exercise could be followed by similar studies of all of the remaining services offered by BellSouth. The final result

would be the shifting of costs from directly assignable costs to shared costs. In fact, it is interesting that Dr. Gabel stopped where he did with only removing labor-related loop costs. Since most components of any telecommunications network are used to provide multiple services, under his approach he could have lumped even more costs into the classification of "shared costs." Dr. Gabel is essentially shifting the problem from one of "cost identification" to one of "cost recovery". Given Dr. Gabel's approach of lumping much of the network costs into a shared "pot" of costs, this Commission would then be required to wrestle with how this ever-growing pot of shared costs would be recovered. Reclassification of costs does not eliminate the reality of these costs.

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF HOW BELLSOUTH CONDUCTS ITS TSLRIC STUDIES.

A. Any cost study begins with the identification of the cost object; i.e., it begins with the definition of the service/product/element. In this proceeding, the service (cost object) in question is access to the local telephone network – it is not long distance service, it is not vertical features, it is not data services. Therefore, costs associated with these other services have not been considered and the studies identified only those costs directly attributable to basic local exchange service.

Local exchange service provides the customer access to the telephone network and thus, allows the customer the capability to make and receive calls. This service is comprised of the serving central office terminating equipment, BellSouth plant facilities from the customer's serving central office up to and including the

network interface device, and usage, i.e., the network components required to make and receive calls in the local calling area. Section 364.02(2), Florida Statutes, defines basic local telephone service as:

> Voice grade, flat-rate residential and flat-rate single-line business local exchange services which provide dial tone, local usage necessary to place unlimited calls within a local exchange area, dual tone multi-frequency dialing, and access to the following: emergency services such as '911,' all locally available interexchange companies, directory assistance, operator services, relay services, and an alphabetical directory listing.

This definition comports with BellSouth's study. Additionally, since the purpose of this proceeding is to evaluate BellSouth's existing rates, the cost study must support the existing rate structure and definitions. BellSouth's General Subscriber Service Tariff (A.3.1) states that basic local exchange service is comprised of exchange access lines defined as:

> The serving central office line equipment and all Company plant facilities up to and including the Company-provided Standard Network Interface. These facilities are Company-provided and maintained and provide access to and from the telecommunications network for message toll service and for local calling appropriate to the tariffed use offering selected by the customer.

Both of the definitions above support BellSouth's contention that basic local telephone service is a single service – not separated into residential service and business service - thus, it makes no sense to talk about costs that are "shared" between two classes of service as Dr. Gabel has attempted to do.

Once the service has been defined, the following steps are taken:

1. BellSouth determines the forward-looking architecture, engineering, and provisioning procedures required to provide the functionality for each of the network components (e.g., loop, switch termination, end office switching, etc.) in the defined service through the use of models, special studies and the integrated involvement of necessary BellSouth personnel, such as cost analysts, product managers and network engineers.

2. BellSouth develops the costs associated with the material and equipment required to provision each network component.

3. BellSouth models the installation of the materials and equipment by ensuring that the costs associated with installation and supporting structures were appropriately included.

4. BellSouth determines the cost of each network component by converting the installed investment into its carrying charges and operating expenses. Also included in this step is the impact of taxes.

Q. HOW DOES BELLSOUTH'S MODELING DEVELOP THE COST OF THE NETWORK?

A. As Dr. Gabel states, the loop contributes most to the cost of basic local service. Thus, I will explain how the BellSouth Telecommunications Loop Model© ("BSTLM") models the narrowband, voice-grade telecommunications network and

---

develops the loop investment. First, contrary to Dr. Gabel's assertion, the BSTLM (or any of the other models filed in this proceeding) is not a "fully distributed cost mechanism." (Gabel testimony, page 23, line 17) Fully distributed cost methodology allocates all the costs of the company among the services offered by the company such that the total of all services' costs equal the total cost of the company. This is not what BellSouth has done.

The foundation of the BSTLM is geocoded customer addresses, as well as services purchased at each address. Once the BSTLM has determined where customers are located, cable routes to serve all customers in each wire center are determined based on a Minimum Spanning Road Tree ("MSRT") algorithm. This approach, as the name implies, determines the minimum distance to serve all customer locations assuming cable routes follow existing roadways. The BSTLM next "clusters" customer locations within each serving wire center boundary into Carrier Serving Areas ("CSAs") based on engineering guidelines. Once the routes and "clusters" have been determined, appropriate components, such as digital loop carrier ("DLC") and Feeder Distribution Interfaces ("FDIs"), are then located within each serving area.

Once the layout of the network is determined, the BSTLM's configuration process "configures" each network component along each route in each wire center. This procedure entails the determination of cable sizes, cable types (copper/fiber, aerial/buried/underground), FDI sizes, and selection of DLC sufficient to serve the demand expressed as DS0 equivalents. Each of the required network components for each service can be expressed in terms of pair equivalents for the copper cable

portion of the service or DS0 equivalents for the fiber and electronic components of the service. The network along each route and at each equipment location is sized to handle the sum of the pair equivalents and/or DS0 equivalents transported over that part of the network. In other words, the network built by the BSTLM is built (i.e., "caused") by pair equivalents and DS0 equivalents for the services provided along each segment of each route. Once the network has been configured and sized appropriately, the BSTLM calculates the material price of each network component, along each route and at each equipment location. Costs of the network (at each point along the network) are then assigned to services consistent with the way the network was "built" – copper costs are assigned to services riding on each copper cable based on the cost "causer" of the copper – i.e., the pair equivalent required for each service; and, fiber and electronic costs are assigned to the services utilizing the electronics and fiber based on the cost "causer" of the fiber and electronics costs – i.e., the DS0 equivalents of each service.

Once the total network costs have been determined, and those costs have been assigned to each service at each location based on the cost causers – either copper pairs or DS0s – then, reports can be obtained from the BSTLM. These reports provide average loop costs for customer locations with any specified category of service. The cost studies filed in this proceeding reflect reports of the basic local service loops terminating at residence and business customer locations.

Q. DR. GABEL TAKES ISSUE WITH BELLSOUTH'S INCLUSION OF CERTAIN INSTALLATION AND SUPPORTING STRUCTURE COST CALCULATIONS. HE ALSO CLAIMS THAT: "THE ABSENCE OF

RESIDENTIAL BLTS WOULD NOT HAVE AN IMPACT ON ILEC'S TRENCHING COSTS." (PAGE 17, LINES 19-20) IS HE CORRECT?

A. No. It is appropriate to consider all costs associated with providing the end-user a working circuit – not just a piece of wire. In order to make the loop functional, digital loop carrier common ("DLC") equipment is required to make the system functional, conduit is required to support underground cables, poles are required to attached aerial cable, etc. As I have described previously, the BSTLM sizes the equipment based upon DS0 (voice grade circuit) requirements. Recognizing equipment capacity constraints, each loop is apportioned a DS0's worth of equipment in the "per loop" calculation.

Dr. Gabel claims that residential basic local exchange service does not cause BellSouth to directly incur certain costs and that the absence of this service would have no direct effect on these costs. First, Dr. Gabel is starting with an incorrect premise. As I have explained, the foundation of BellSouth's study is NOT residential basic local service. Instead, it is access to basic local service. Nevertheless, his assertion that the "absence of residential BLTS would not have an effect on ILEC's trenching costs" is false. Consider that the vast majority of BellSouth's lines are residential. If BellSouth were to stop serving residential locations, i.e., if BellSouth eliminated this service in its entirety, its trenching costs (and other costs Dr. Gabel has defined as shared) would drop substantially since less cable and equipment would be required to serve the remaining demand.

Additionally, Dr. Gabel focuses on what happens to **existing** plant when a service

is eliminated rather than what happens to future plant (and the forward-looking capital expenditures associated with future plant) when a service is eliminated, or added, to the mix of services. If residential basic local service were eliminated from BellSouth's mix of service offerings, future placements of facilities, including the labor associated with placing those facilities, would be avoided. Therefore, by definition, costs associated with the placement (e.g., trenching) of those facilities are a part of the TSLRIC of that service. To further illustrate the problems with his approach, suppose for example that a route was entirely residential so even under Dr. Gabel's approach, 100% of the loop would be included in the TSLRIC for residential service. Now, suppose a business opens at the end of the cable route and orders one line. Under Dr. Gabel's methodology, that route suddenly becomes a shared cost and those costs are excluded from the TSLRIC for residential service as well as from the TSLRIC for business service. Then, if that business closes, the loop is once again included in the TSLRIC of residential service. Such a methodology is not manageable and clearly not correct.

Dr. Gabel's claim that "trenching is a shared cost of all services that have facilities running through the trench" is also false. (Gabel testimony, page 18, lines 1-2) The trench is a shared facility, however, the cost of digging the trench is not a shared cost. For example, assume the trench is in place today providing both residential and business basic local service. As each increment of service is added (whether it be residential or business), the cable in that trench gets closer and closer to exhaust and all future jobs are advanced by one unit of demand. Each unit of service added "causes" a portion of the cost of those future trenching jobs, as well as the cable in it. That unit capacity cost of the trench, as well as the cable

material, are a real part of the long run incremental cost (TSLRIC) of each service being transported in that trench.

Dr. Gabel also states that: "the TSLRIC estimate of residential BLTS equals the total cost of providing the combined services minus the stand-alone cost of providing all service with the exception of residential BLTS." (Gabel testimony, page 24, lines 12-14) This Commission has found that "SAC [stand alone costs] data are unnecessary" in evaluating the cost of basic local service. ("Report of the Florida Public Service Commission on the Relationship Among the Costs and Charges Associated with Providing Basic Local Service, Intrastate Access, and Other Services Provided by Local Exchange Companies, in Compliance with Chapter 98-277, Section 2(1), Laws of Florida," Florida Public Service Commission Tallahassee, Florida February 15, 1999, page 53) So his statement, which appears to rely on SAC estimates, is irrelevant.

Nonetheless, if residential service was removed entirely from BellSouth's list of products, the basic local exchange network would look entirely different and many of the economies of scale and scope reflected in the cost study and recognized by this Commission would be lost. For example, the BSTLM places digital loop carrier systems based on demand considerations. If there were a change to the underlying demand (for example if residential service is eliminated), the number of digital loop carrier systems, their locations, and the sizes of the systems would not be the same.

Q. IS IT APPROPRIATE TO REMOVE THE COSTS OF COMMON PLUG-

INS AND HARDWIRED EQUIPMENT COSTS AS DR. GABEL ASSERTS?

A. No. A DLC system is comprised of hardwire (cabinet) and commons which have a finite capacity based on DS0 equivalents (which equate to voice-grade lines) regardless of the DS0's use. Under TSLRIC methodology, investments should be calculated in a manner that best reflects cost causation. The DS0 approach utilized by the BSTLM to determine the cost of DLC equipment is reasonable, is competitively neutral, and best reflects cost causation. The DS0 cost causality link is supported by the vendors' technical specifications of DLC systems. For example, from the technical specifications of Nortel's Access Node:

> **2,688 DS0s per Network Element**
> Each AccessNode Network Element, using Universal Edge 9000 shelves in a dual bay configuration, may support up to 2,688 DS0s.
>
> The ABM supports up to seven (7) Copper Distribution or Universal Edge 9000 shelves or a combination of them, offering narrowband and xDSL services. One ABM shelf can support up to 2,688 DS0s, 98 DS1s, 9 DS3s or combination of DS1s, DS3s, along OC-3s and OC-3c optical tribs

Based on the vendor specifications, the DLC system has DS0-based capacity constraints. Thus, there is cost causality between DS0 quantities and all required DLC equipment including commons and hardwire equipment. Indeed, as one adds additional residential basic local service at a DLC site, the DLC common equipment capacity is used up and each added residential service advances the future placements of additional DLC common equipment. Therefore, DLC common equipment is a direct cost of residential service and is appropriately included in the TSLRIC of residential basic local service

Q. ON PAGE 19, DR. GABEL ASSERTS THAT HE CAN "DEMONSTRATE

THAT BELLSOUTH ESSENTIALLY RELIES ON TELRIC ESTIMATES TO INCORRECTLY ESTIMATE TSLRIC." HAS HE DONE THIS?

A. No. Dr. Gabel has entered into a game of semantics whereby any facility that can by some stretch of the imagination have a shared attribute must be disallowed from a TSLRIC study. Since he (incorrectly) assumes the study is for residential service, his study would require partitioning the network into residence and business. In doing so, the realities of the telecommunications network, a network that relies on "shared" capabilities to achieve efficient use of resources as reflected in the economies of scale and scope demonstrated in the cost studies, would be lost. Furthermore, he ignores the fact that in the long run, facilities will exhaust and new facilities will need to be deployed --- including DLC common equipment and additional conduit and poles. Finally, he ignores the fact that without these "shared" costs, the loop will not function --- this cannot possibly reflect the costs BellSouth incurs in providing this working service.

Q. DR. GABEL CLAIMS BELLSOUTH'S STATEWIDE TSLRIC FOR RESIDENCE IS BELOW $10. PLEASE COMMENT.

A. Based solely on this result, Dr. Gabel's manipulations should be suspect. As a sanity check, BellSouth filed a statewide cost of $31.52 in the Florida Universal Service Fund ("USF") proceeding, which was conducted to "determine and report to the Legislature the total forward-looking cost of providing **basic local telecommunications services**....." (Emphasis added, Order No. PSC-99-0835-FOF-TP, dated April 26, 1999, page 1) The Commission ordered adjustments to

BellSouth's proposed inputs[1], however, not a single wire center cost approached Dr. Gabel's statewide result[2], thus it is impossible for the statewide USF average to even come close. I am not proposing that the absolute values decided in the USF proceeding are now relevant, however, the magnitude of the difference between the USF results – conducted to determine the cost of basic local telecommunications services – and Dr. Gabel's results – also purportedly for basic local telecommunications service - should raise serious questions with respect to his testimony.

Q. ARE DR. GABEL'S ADJUSTMENTS TO THE IN-PLANT FACTORS APPROPRIATE?

A. No. Fundamentally, Dr. Gabel begins with an incorrect assumption and then attempts to contrive a mathematical construct to support his position. As I have emphasized, Dr. Gabel's classification of certain costs as "shared" results from (1) his belief that residential access constitutes a separate service and (2) his confusion with respect to the difference between shared facilities and shared costs. First, the service under study is access to basic local telecommunications service regardless of the class of service --- residential access is merely a subpart of the total study (and service). Second, while many of the network's facilities are "shared," the costs are not.

---

[1] These modifications include in part changes to depreciation inputs, decrease in the effective cost of capital, reduction in the number of pairs per unit, change to the feeder utilization, adoption of Sprint's fiber and copper cable and Service Area Interface inputs, use of an average DLC cost, adjustment to switch discounts and a reduction to the expense per line.

[2] The USF ordered costs range from $16.12 in FTDFLSGDS0 to $138.80 in STAGFLWGRS0.

In order to manipulate BellSouth's in-plant factors, Dr. Gabel develops "an excess loop length factor" that "equals the difference between the residential loop length and the business loop length divided by the residential loop length." (Gabel testimony, page 77, lines 8-11) He then outlines a mathematical exercise that he used to determine adjusted in-plant factors. Even if one were to accept Dr. Gabel's position that much of the loop's costs are shared between residence and business basic local service, his in-plant methodology is grossly over-simplistic. The underlying assumption in Dr. Gabel's calculations is that every cable route, in every wire center, has exactly the same characteristics as the statewide average residence and business loops. Every cable route has the same length, every cable route has the same distribution to code (aerial, underground, buried), and every cable route has the same split of copper and fiber cable.

It is interesting to note that Dr. Gabel admits that his adjusted in-plants can lead to an underestimate of the installed investment. He states that: "the extreme example would occur if every residential loop is built separately from every business loop." (Gabel testimony, page 81, lines 21-22) Dr. Gabel's view is just as "extreme." He has assumed that every residence and every business loop run along the same route. In fact he has assumed even more. His adjustments were made on an individual field reporting code ("FRC") basis. Thus, he is inherently assuming that every business loop and residential loop "share" the same type of cable placement – aerial, buried, and underground – along the same route. This simply is not the case. Backpedaling, Dr. Gabel also states that if the residential loop included any additional services "then the adjustment process described above would understate the amount of shared installation investment and overestimate the total installed

investment associated with residential services." (Gabel testimony, page 82, lines 13-15) Dr. Gabel is essentially advocating that the loop is a common facility and thus its costs should be allocated among all the services that ride the loop. As discussed in my direct testimony, this Commission has recognized the fallacy of this argument.

Q. IS DR. GABEL'S CALCULATION OF PER LINE RETAIL COSTS ACCURATE?

A. No. Dr. Gabel continues his argument that BellSouth has included "shared" costs in the development of its Customer Operations Cost factor. Again, the foundation of this assertion is that the service BellSouth studied is residential access. It is not. Instead the service studied is access to basic local exchange service. Thus, Dr. Gabel's lament that "BellSouth has not provided any information supporting the assumption that retail costs do not vary across customer classes" is moot and his claim that BellSouth included "shared costs in its retail costs is unfounded". (Gabel testimony, page 86, lines 16-17, line 11)

Furthermore, Dr. Gabel bases most of his retail adjustment on the ratio of residence to business marketing costs as developed in New England Telephone's ("NET's") 1992 Massachusetts Cost of Service Study that became a part of the FCC's 10th Report & Order on CC Docket 96-45 Universal Service released 11/02/99. This relationship is based solely on NET's Advertising costs for 1992 (it does not appear to fully consider other Customer Operations type costs such as Product Management, Sales, or Customer Service). Obviously, even if it were

appropriate to attempt to allocate these customer operations costs between residence and business (which it is not), 1992 data from a Massachusetts study of NET's operations would not be indicative of BellSouth's operations in Florida. Additionally, this NET analysis was conducted prior to the 1996 Telecommunications Act and prior to any real competition in the residential market, which forces the incumbent to expend additional resources devoted to maintaining its customer base. As evidenced by the telecommunications industry's current promotional offerings, residential customers are receiving more attention.

Q. DR. GABEL ELIMINATES BILLING & COLLECTION COSTS FROM BELLSOUTH'S CUSTOMER OPERATIONS COST FACTOR. IS THIS APPROPRIATE?

A. No. While costs associated with other services may be listed on the telephone bill, it is a customer's request for basic local exchange service that causes the bill to be generated. Each incremental service may generate a line of information on the bill, but the request for basic local service is the cost driver --- without access to basic local service no other billing information would take place. Additionally, the incremental cost of adding another line to a bill is insignificant in relationship to the cost of generating the bill in its entirety.

One must also consider the manner in which the factor was developed and how it is used. The factor reflects a relationship between the retail portion of customer related costs and total network costs. Since the factor is applied against the

TSLRIC results for basic local service, only a portion of the total billing and collection cost is ever captured.

Q. WOULD RESIDENTIAL RATES STILL BE BELOW TSLRIC EVEN IF THE HIGHER SUBSCRIBER LINE CHARGE FOR ADDITIONAL LINES WERE CONSIDERED?

A. Yes. Exhibit DDC-2, filed with my direct testimony, compared the existing rates to the cost study results. In developing this comparison only the SLC charge associated with the first line ($6.50) was considered. To develop the average SLC charge of $6.59, the average number of lines per residential household[3] was utilized. As Exhibit WBS-1 supports, even if the additional SLC rate for non-primary lines ($7.00) was considered, residential rates are still below cost. Thus, Dr. Gabel's concern that BellSouth "excludes the higher SLCs that are allowed for additional lines" does not change the outcome ---- residential rates are still below cost. (Gabel testimony, page 36, lines 3-4)

Q. DR. COOPER RESURRECTS THE CLAIM THAT THE LOOP IS A COMMON COST. PLEASE COMMENT.

A. Dr. Banerjee will address this issue in greater detail. As I discussed previously, from a cost development perspective, the cost object dictates what facilities should be considered in the cost study. In this case, basic local exchange service by

[3] See BellSouth's response to Staff's 4th Set, Item #81.

definition includes the loop: "all Company plant facilities up to and including the Company-provided Standard Network Interface." By introducing additional services, Dr. Cooper is confusing cost development with revenue requirements.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.