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BEFORE THE

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FLORIDA PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY OF

JEFFREY KING

ON BEHALF OF

AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC. AND

MCI WORLDCOM, INC.

Docket No. 990649-TP

Revised September 12, 2000

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1		REBUTTAL TESTIMONY OF
2		JEFFREY KING
3		ON BEHALF OF
4	AT	1&T COMMUNICATIONS OF THE SOUTHERN STATES,
5		INC. AND
6		MCI WORLDCOM, INC.
7		DOCKET NO: 990649-TP
8		
9	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS
10		AND TITLE.
11	А.	My name is Jeffrey King and my business address is 1200
12		Peachtree Street, N.E., Atlanta, Georgia 30309. I am employed
13		by AT&T as a District Manager in the Local Services & Access
14		Management organization.
15	Q.	BRIEFLY OUTLINE YOUR EDUCATIONAL
16		BACKGROUND AND BUSINESS EXPERIENCE IN THE
17		TELECOMMUNICATIONS INDUSTRY.
18	А.	I received a Bachelor of Arts degree in Business Administration
19		with a concentration in Industrial Administration from the
20		University of Kentucky, Lexington, KY, in 1983. I joined
21		AT&T's Access Information Management organization in April
22		of 1986 developing and testing the ordering and inventory Access
23		Capacity Management System (ACMS) for electronically

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interfacing High Capacity access orders with incumbent local 1 exchange carriers (ILECs). I worked closely with the Ordering & 2 Billing Forum (OBF) to insure industry standard specifications 3 were implemented and enforced by quality control edits to 4 maintain the integrity of the data. I joined the Integrated Access 5 Planning and Implementation organization in August of 1990 and 6 performed the national ACMS User Representative role for 7 implementing Business Unit requirements, enhancements, 8 Methods & Procedures, and training. This work function also 9 required subject matter expertise of the processes to plan, 10 provision and utilize special access circuits and facilities in order 11 to optimize the effectiveness of AT&T's operational support 12 systems (OSS) to manage these processes. I joined the Access 13 Management organization in December of 1992 and managed 14 customer/supplier relations on Interstate access price issues, 15 including access charge impacts and tariff, terms and conditions 16 analysis, with BellSouth Telecommunications, Inc. and Sprint 17 LTD. In addition, my responsibilities included ILEC cost study 18 analysis. 19

I began supporting AT&T's efforts to enter the local services market with the implementation of the Telecommunications Act of 1996. In particular, I support AT&T's efforts to obtain cost-based non-recurring rates for

AT&T's requests of unbundled network elements (UNEs) from ILECs by analyzing ILEC non-recurring cost studies and utilizing the AT&T/MCI Non-Recurring Cost Model. I also interface with subject matter experts ("SMEs") on the efficient processes and practices of ordering and provisioning UNEs based on a leastcost, forward looking telecommunications infrastructure. My organization also supports the cost models, such as the HAI Model, to develop the recurring costs (i.e., capital expenditure) to efficiently support the telecommunications infrastructure.

Since July 1998 my additional responsibilities include 10 analyzing ILEC costs and recommending all cost-based prices 11 charged by ILECs. My responsibilities also include managing 12 access charges paid by AT&T to ILECs in the nine state 13 BellSouth territory. Specifically, I advocate cost-based rates for 14 access to the ILECs' networks for the purpose of originating and 15 terminating local and toll traffic. Indeed, UNEs comprise the 16 same elements of the telecommunications network as offered by 17 BellSouth, and other ILECs, for access services. 18

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Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. On behalf of AT&T and MCI WorldCom, Inc. I am presenting in
 Exhibit JAK-1 a total summary of the Unbundled Network
 Element (UNE) recurring and non-recurring rates recommended

1		for interconnection with BellSouth. I am also testifying on the
2		necessary modifications to the cost models of BellSouth in order
3		to produce competitively efficient non-recurring rates.
4	Q.	HOW IS YOUR TESTIMONY STRUCTURED?
5	А.	I address the following subjects:
б		RECOMMENDED UNE RATES FOR BELLSOUTH4
7		COST MODELS
8		COST MODEL ASSUMPTIONS
9		NON-RECURRING COSTS
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	RECO)MMENDED UNE RATES FOR BELLSOUTH
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11	0	WHAT DECURRING AND NON-RECURRING RATES
11 12	Q.	WHAT RECURRING AND NON-RECURRING RATES
11 12 13	Q.	WHAT RECURRING AND NON-RECURRING RATES (INCLUDING DEAVERAGED RECURRING LOOP
11 12 13 14	Q.	WHAT RECURRING AND NON-RECURRING RATES (INCLUDING DEAVERAGED RECURRING LOOP RATES WHERE APPROPRIATE) SHOULD BELLSOUTH
11 12 13 14 15	Q.	WHAT RECURRING AND NON-RECURRING RATES (INCLUDING DEAVERAGED RECURRING LOOP RATES WHERE APPROPRIATE) SHOULD BELLSOUTH BE PERMITTED TO CHARGE?
11 12 13 14 15 16	Q. A.	WHAT RECURRING AND NON-RECURRING RATES (INCLUDING DEAVERAGED RECURRING LOOP RATES WHERE APPROPRIATE) SHOULD BELLSOUTH BE PERMITTED TO CHARGE? Exhibit JAK-1 contains a summary of the recurring and non-
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11 12 13 14 15 16 17 18 19	Q. A.	WHAT RECURRING AND NON-RECURRING RATES (INCLUDING DEAVERAGED RECURRING LOOP RATES WHERE APPROPRIATE) SHOULD BELLSOUTH BE PERMITTED TO CHARGE? Exhibit JAK-1 contains a summary of the recurring and non- recurring rates determined to better represent the ceiling for rates that BellSouth should be permitted to charge Alternative Local Exchange Carriers (ALECs) for the purpose of interconnecting
11 12 13 14 15 16 17 18 19 20	Q. A.	WHAT RECURRING AND NON-RECURRING RATES (INCLUDING DEAVERAGED RECURRING LOOP RATES WHERE APPROPRIATE) SHOULD BELLSOUTH BE PERMITTED TO CHARGE? Exhibit JAK-1 contains a summary of the recurring and non- recurring rates determined to better represent the ceiling for rates that BellSouth should be permitted to charge Alternative Local Exchange Carriers (ALECs) for the purpose of interconnecting and providing competitive communication services to over 6.8M

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COST MODELS

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2	Q.	WHAT COSTING MODEL WAS USED TO DEVELOP
3		THE RECURRING AND NON-RECURRING RATES
4		THAT AT&T AND MCI WORLDCOM ARE PROPOSING
5		IN THIS PROCEEDING FOR BELLSOUTH?
6	А.	AT&T and MCI WorldCom have chosen to use BellSouth's cost
7		model to develop the UNE rates, including UNE combination
8		rates, in this proceeding. Specifically I rely on the BellSouth
9		Cost Calculator Version 2.3 filed by BellSouth in Docket No.
10		990649-TP and necessary modifications to the inputs and
11		operation of that model.
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	COST	Γ MODEL ASSUMPTIONS
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14	Q.	PLEASE DESCRIBE THE BASIS FOR THE
15		RECOMMENDED CHANGES MADE TO BELLSOUTH'S
16		COST MODEL?
17	А.	Changes to BellSouth's cost studies are necessary in order to
		conform to non-discriminatory costing principles and efficient
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18 19		provisioning of the affected UNEs. I rely on a number of Subject

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21 testimony in this proceeding:

- Pitkin analyzed Witness Brian the BellSouth • 1 Telecommunications Loop $Model^{\mathbb{O}}$ ("BSTLM") and the 2 BellSouth Cost Calculator[©] ("BSCC"). This is the first cost 3 proceeding in which BellSouth has introduced this study and, 4 as such, required extensive review. Many of the model's 5 modifications are already under consideration for future 6 BellSouth releases. 7
- Witness John Donovan provides technical support for least cost forward-looking network investment and design choices
 of the telecommunications infrastructure, including the
 capabilities of this network to be efficiently provisioned.
 - Witness Cathy Pitts provides technical support on switching costs.

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- Witness Dr. Brenda Kahn addresses sub-loop UNEs. In
 particular, she analyzes efficient access to multi-dwelling
 units.
- Witness Greg Darnell addresses BellSouth's shared and common costs, as well as the development of expense and plant-specific cost factors. In addition, I am applying the weightings sponsored by witness Darnell for the deaveraging of BellSouth's recurring loop rates.
- Witness John Hirshleifer is recommending the cost of capital input data.

Witness Mike Majoros is recommending the depreciation input data.

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Q. PLEASE DESCRIBE THE RECOMMENDED CHANGES MADE TO BELLSOUTH'S COST MODEL INPUTS AND ASSUMPTIONS?

In addition to the non-recurring analysis I discuss later, I Α. 7 recommend that you take note of the testimony filed by the 8 witnesses previously mentioned to obtain greater detail of 9 necessary cost model modifications and the sound logic for these 10 modifications. Exhibit JAK-1 contains the total results of the 11 proposed modifications. An electronic copy of BellSouth's 12 modified cost models and the input files that were utilized to 13 develop the recommended UNE rates is attached as Exhibit JAK-14 4 (BellSouth). Underlying themes include: 15

- Least-cost engineering design, including investment choices;
- Forward-looking, yet currently available and deployed, technology; and
- Non-discriminatory, including competitive efficiencies such
 as direct access to OSS and removal of workgroups and
 activities that the ILECs' own retail operations do not
 experience. In other words, ALECs must only incur costs
 which the ILEC would incur using a forward looking network

architecture and efficient OSS or else the ALEC is burdened with an excessive barrier to entry and the ILEC has no incentive to become efficient

NON-RECURRING COSTS

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Q. HOW DO NON-RECURRING RATES DIFFER FROM 7 RECURRING RATES?

Non-recurring cost activities are those that only benefit the Α. 8 ALEC requesting the elements. If the activity being performed is 9 a one-time activity, but has the potential to benefit future users of 10 a particular telecommunications facility, the costs of the activity 11 should be characterized as recurring. The cost of constructing a 12 loop is one such example. Proper allocation of one-time costs is 13 particularly important in a competitive environment where more 14 than one local exchange access carrier (including the Incumbent 15 LEC, Alternative LEC or Data LEC) may use a particular facility 16 at different points in that facility's lifetime. If all the forward-17 looking costs of a one-time activity benefiting multiple users are 18 borne by the first telecommunications provider to use the facility, 19 then obviously the first user will be forced to pay more than its 20 fair share while subsequent users get a free ride. 21

22 Recurring rates recover the cost, including shared and 23 common cost, of the investment and expense necessary to install

and maintain a quality telecommunications network. These costs are then capitalized and appropriately taxed to earn a competitive return on the investment in order to derive the chargeable rates.

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HOW ARE NON-RECURRING RATES DEVELOPED?

The theory behind the development of a non-recurring cost model А. 6 is fairly simple. First, it is necessary to identify the non-recurring 7 actions required to provision unbundled network elements to 8 ALECs. Second, it is necessary to break down each action into 9 the detailed work activities that comprise each action, and 10 determine both the time necessary to complete these activities 11 and the associated labor rates. Finally, it is necessary to 12 determine, for each action, the probability that a particular work 13 activity will be required to provide the action. 14

The non-recurring cost of a particular action, then, is simply the sum of the costs of each of the necessary work activities, calculated as the product of (1) the required time, (2) the labor rate, and (3) the probability of occurrence of each work activity.

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Q. WHAT ARE THE NON-RECURRING COSTS FOR BELLSOUTH?

Non-recurring costs are the efficient, one-time costs associated А. 1 with establishing, disconnecting or rearranging unbundled 2 network elements purchased from an ILEC at the request of an 3 ALEC. The non-recurring cost components are (1) the required 4 time to perform a particular task, (2) the labor rate for each 5 affected work group that may perform tasks, and (3) the 6 probability of occurrence that each work activity is required on 7 any particular UNE provisioning order. 8

9 On average, manual worktimes should not differ 10 significantly between companies assuming efficient Operational 11 Support Systems (OSS) are in place. Probability of occurrence 12 for manual activities is mainly driven by two factors: (1) OSS 13 fallout and manual intervention and (2) additional work 14 associated with copper plant technology versus fiber plant 15 technology.

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Q. PLEASE DESCRIBE THE RECOMMENDED CHANGES MADE TO BELLSOUTH'S NON-RECURRING COST STUDIES?

A. Exhibit JAK-3 displays the NRC input worksheets that were modified. The affected worksheets also document the assumptions used to adjust each cost study.

I have eliminated costs that have no justification in a 1 forward-looking network architecture and efficient provisioning 2 For example, BellSouth introduces unnecessary process. 3 workgroups and costs in the ALEC provisioning process, which 4 BellSouth's own retail operations do not incur. Such workgroups 5 as the Local Customer Service Center (LCSC) and the UNE 6 Center (UNEC)/Access Customer Advocate Center (ACAC) are 7 intermediary work groups not intended for efficient operations. 8 In other words, these workgroups are the middlemen. 9

I adjusted work times for certain work group activities. Most of these changes entail consistent application of work times between individual UNE studies covering similar work routines.

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Fiber technology and the intelligent digital and optical 13 support equipment also provide for remote electronic access and 14 mechanized efficiencies for installing, disconnecting and re-15 arranging UNE and UNE combinations. BellSouth has assumed 16 100% manual work by a host of work centers. For those work 17 groups that should be involved if an electronic mechanized order 18 were to "fall-out" of the provisioning process, I have assumed 19 BellSouth's affected work centers will be manually involved 10% 20 of the time. 21

Activities associated with manual assistance due to errors in the network management systems and databases (Operational

Support Systems) are examples of activities that do not benefit 1 the customer. This is because efficiently managed systems do 2 not experience these errors. Most, if not all fallout from the OSS 3 is a result of mismatching data from one system to the other. 4 Maintaining the accuracy of these databases is a function of 5 normal day to day maintenance and is recovered through 6 recurring costs. Poorly maintained systems results in higher 7 Such manual activities are a function of recurring costs. 8 embedded inefficiencies, and result in costs for which ALECs 9 should not compensate an ILEC. Viewed another way, the 10 customer (ALEC) did not cause the error, they caused the ILEC 11 to discover the error and, therefore, should not be penalized 12 through additional charges. 13

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Q. DO YOU HAVE ANY ADDITIONAL CONCERNS WITH THE GENERAL OPERATION OF THE BELLSOUTH SPONSORED COST MODEL?

A. Yes. In particular, BellSouth's cost model is not user friendly. The Loop study requires hours and hours of CPU time to perform its computations, not to mention the requirement of upgraded state-of-the-art computer technology and software. Many computations were found to be in error. Such errors range from incorrect cell references to non-existent study references to hard

coding of input data to prevent proper sensitivity analysis. The 1 other rebuttal witnesses to this proceeding also point to input 2 assumption changes in order to account for network design and 3 technology mix flaws. My point is that the AT&T and MCI 4 WorldCom recurring and non-recurring rate proposals should 5 serve as a ceiling for rates because further investigation of the 6 model with all so-called fixes could very well produce lower 7 rates and enhance the viability of competition. 8

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10 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

11 A. Yes.