# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Tariffs Filed by Sprint	)	
Missouri, Inc., d/b/a Sprint, to Reduce the	)	
Basic Rates by the Change in the CPI-TS	)	
as Required by Section 392.245(4),	)	
Updating Its Maximum Allowable Prices	)	
for Non-basic Services and Adjusting	)	Case No. TR-2002-251
Certain Rates as Allowed by Section	)	
392.245(11), and Reducing Certain	)	
Switched Access Rates and Rebalancing	)	
to Local Rates, as Allowed By Section	)	
392.245(9)		

#### **AFFIDAVIT**

I, Christopher C. Thomas, am employed in the Telecommunications Department of the Missouri Public Service Commission (Commission). My business address is Governor Office Building, Suite 500, 200 Madison Street, Jefferson City, Missouri, 65101. I am employed as a regulatory economist in the Telecommunications Department Staff (Staff) of the Commission. The duties of my position include reviewing, analyzing, and writing recommendations for controversial or contested tariff filings and other cases. I also provide expert testimony on costing theory and economic policy issues. I have previously filed testimony before the Commission Case Nos. TO-98-329, TT-2000-527/513, TT-2001-298, TO-2001-439, TO-2001-455. TA-2001-475, TO-2002-222, TT-2002-472, IT-2004-0015, and TO-2004-0207. received my Bachelor's Degree in Business Administration with a concentration in Finance from Truman State University in 1998, and subsequently received my Master's Degree in Economics and Finance from Southern Illinois University-Edwardsville in May of 2000.

#### **Purpose**

The purpose of my affidavit is to respond to aspects of the testimony filed by Barbara Meisenheimer on behalf of the Office of the Public Counsel (OPC) and to provided additional analysis and support addressing the concerns of the Missouri Court of Appeals, Western District, Opinion in WD62016 State of Missouri ex rel. Acting Public Counsel v. Public Service Commission, issued on October 28, 2003 (Court Opinion).

As Ms. Meisenheimer points out in her testimony, for purposes of the investigation contemplated in Section 392.245.9 RSMo, the relevant definition of long-run incremental costs (LRIC) is found in 386.020 (32):

386.20 (32) "Long-run incremental cost", the change in total costs of the company of producing an increment of output in the long run when the company uses least cost technology, and excluding any costs that, in the long run, are not brought into existence as a direct result of the increment of output. The relevant increment of output shall be the level of output necessary to satisfy total current demand levels for the service in question, or, for new services, demand levels that can be demonstrably anticipated; (emphasis added)

There are two different ways to interpret the emphasized language. The first is that the loop is a shared and common cost of Sprint's operation and that it is not brought into existence as a direct result of Sprint provision of Basic Local Service. The second is that the loop is a direct cost of Basic Local Service, essentially because without Basic Local Service you are not able to receive any of the other services that Sprint offers. It should come as no surprise that there is little agreement among economists upon whether the loop is a direct cost of local service or a shared and common cost of Sprint's operation. This is a philosophical debate that the Commission has not addressed and in Staff's

opinion does not need to address to make a finding that Sprint's cost studies support the rate-rebalancing proposal in the present tariffs.

The Commission had to determine that Sprint met the statutory test:

392.245(9) ...the company's monthly maximum allowable average statewide prices for basic local telecommunications service after adjustment pursuant to this subsection will be equal to or less than the long run incremental cost, as defined in section 386.020, RSMo, of providing basic local telecommunications service and that the company's intrastate access rates after adjustment pursuant to this subsection will exceed the long run incremental cost, as defined in section 386.020, RSMo, of providing intrastate access services...

Sprint's studies are estimates of the long-run incremental cost of Basic Local and Access Services. Cost analysis relies not only upon precise quantitative skills, but also on subjective qualitative reasoning. In order to effectively apply the statutory test, the Commission must have determined that Sprint's estimates are a reasonable proxy for the long-run incremental costs that Sprint actually incurs in the provision of both Basic Local and Access Services.

# Sprint's Studies and Methodology

Sprint chose to conduct its study in a manner that treats Residential Basic Local Service and Business Basic Local Service as two separate services. Sprint's method entailed finding the average Long Run Incremental Cost (LRIC) of a loop in each exchange. Sprint then determined the overall company cost of residential and business access lines by weighting the loop cost in each exchange by the total proportion of both business and residential access lines in each exchange. Since most business loops are concentrated in higher density areas, it is intuitive that Sprint's LRIC for business

customer loops on average is lower than Sprint's LRIC for residential customer loops. Sprint also found the LRIC of Network Interface Devices (NIDs) and Switch Ports. Sprint's Basic Local Service Long Run Incremental Cost studies allocate a large portion of the loop, NID, switch port and common costs to the <a href="intrastate">intrastate</a> jurisdiction. The resulting Business and Residential Basic Local Service LRICs also include a component to represent local service usage. The LRICs of Business and Residential Basic Local Service are different by the difference in loop LRICs and the difference in the LRIC average usage costs of each customer class.

Sprint could also have simply examined Basic Local as one service to meet the statutory requirements. Instead of calculating the LRIC for business loops and residential loops, Sprint could have weighted the average loop cost in each exchange by the proportion of total statewide access lines. The results of Sprint's cost study methodology are more conservative than the results of the hypothetical company wide average methodology in that further analysis demonstrates slimmer margins for Basic Local Business Service than it does for Basic Local Residential Service. (I'll refer to the company wide average LRIC as the Average throughout this document). Although not necessary for the Commission to approve Sprint's tariff filings at question, in order to give the Commission an accurate picture of the LRIC that Sprint is proposing, I performed additional analysis under both methodologies.

## **Staff's Subsequent Analysis**

The Court Opinion stated there were no findings regarding the accuracy or credibility of the Sprint cost study, no findings regarding the comparison of the costs of providing Basic Local and Intrastate Access Services in relation to the rates being charged for those services, and no findings that the methodology employed by the Sprint cost studies was appropriate. In short, the Court Opinion found the Commission's order failed to provide sufficiently detailed findings to permit the Court to conduct a meaningful review.

In response to the Court Opinion, Staff has completed additional review and analysis. I have attached four exhibits to this affidavit. In order for the other parties to effectively consider and evaluate my analysis, there is a considerable amount of information contained within each exhibit. Each exhibit contains the calculations I performed in completing the analysis and the bottom portion of each exhibit displays the summary information (Staff's Analysis Summary) that is most relevant for the Commission's consideration and findings. The exhibits can be described as follows:

- Exhibit 1 demonstrates the weighting of Basic Local Service Rates and the line count information that was attached to the Staff Recommendation filed on December 5, 2001 as used in the other exhibits.
- Exhibit 2 examines Sprint's proposed LRIC of Basic Local Service and compares
   Sprint's proposed costs to Sprint's Basic Local Service Rates after four
   rebalancings as contemplated by statute. This information was also derived from
   the information that was attached to the Staff Recommendation filed on
   December 5, 2001,
- Exhibit 3 examines Sprint's proposed LRIC of Switched Access, or Exchange
   Access, Service and compares Sprint's proposed costs to Sprint's Switched

Access rates after four rebalancings as contemplated by statute. This information was also derived from the information that was attached to the Staff Recommendation filed on December 5, 2001.

• Exhibit 4 addresses concerns that Ms. Meisenheimer raised with the analysis performed by Dr. Ben Johnson on behalf of Staff in Case No. TR-2001-65. Dr. Johnson's analysis was performed after the Commission issued its order in the instant proceeding. As described in more detail below, the exhibit demonstrates the effect of reallocating part of the intrastate portion of the Loop, Switch Port, and NID from Basic Local Service to Switched Access service.

The analyses in Exhibits 1 through 3 can be used to demonstrate that a significant portion of costs can be shifted from Sprint's identified costs for providing Basic Local Service to the cost of providing Switched Access Service and still meet the statutory test to allow rate rebalancing to take place. For example, rate rebalancing can take place if the costs of providing Basic Local Service are higher than the rates being charged for Basic Local Service and that the cost of providing Switched Access Service is lower than the price charge for Switched Access Service. Stated differently rate rebalancing is not allowed if Basic Local Service rates exceed Basic Local Service costs or if Switched Access rates are lower than the cost of providing Switched Access Service. The respective rate/cost differentials for Basic Local Service and Switched Access Service are currently very large so that a significant portion of costs can be reallocated from Basic Local Service to Switched Access and other local services and still allow rate rebalancing to occur. Specifically Exhibits 1 through 3 demonstrate the following:

## **Basic Local Service**

- For the Average, 59.8% of Sprint's Switch Port, Loop, and NID costs can be reallocated from Basic Local Service to other services and still demonstrate that Sprint meets the statutory test (Exhibit 2).
- For Residential Basic Local Service, 66.0 % of Sprint's Switch Port, Loop, and NID costs can be reallocated from Basic Local Service to other services and still demonstrate that Sprint meets the statutory test (Exhibit 2).
- For Business Basic Local Service, 25.8 % of Sprint's Switch Port, Loop, and NID costs can be reallocated from Basic Local Service to other services and still demonstrate that Sprint meets the statutory test (Exhibit 2).

## Switched Access

 For the Average, 100% of the Sprint's Switch Port, Loop, and NID costs can be reallocated from Basic Local Service to Switched Access Service and still allow Sprint to meet the statutory test. (Schedule 3).

# Additional Analysis on Information Outside of the Original Record

Ms. Meisenheimer discusses Dr. Ben Johnson's approach to loop allocation in her testimony. Dr. Johnson was a consultant hired by Staff to conduct an investigation of Switched Access costs in Case No. TR-2001-65. Dr. Johnson's Direct Testimony filed on July 1, 2002, proposed four costing methodologies: Stand Alone, TSLRIC, Fully Distributed Pro-rata, and Fully-Distributed Weighted. In relative terms, Stand Alone cost would be the cost ceiling, or the cost of providing Switched Access if the company provided no other services, and TSLRIC would be the cost floor, or the minimum cost at which Sprint is able to provide Switched Access Service. The two Fully-Distributed methodologies fall somewhere in between the ceiling and the floor, and allocate the costs that Dr. Johnson considered to be shared and common costs to Intrastate-Switched Access. The Fully-Distributed Pro-rata methodology allocates these costs based upon the proportionate share of the total minutes of use (MOUs) for which the facilities are used to

provide Intrastate-Switched Access. The Fully-Distributed Weighted methodology allocates these costs based upon an assumption that interexchange MOUs are more valuable to end-users. Ms. Meisenheimer states, "Dr. Johnson, testifying on behalf of the Commission Staff, said that the loop cost was not incremental to basic local service, and to include[d] it would substantially increase the cost of that service." Dr. Johnson, within his four methodologies did not make a specific loop allocation recommendation. However, based upon Dr. Johnson's findings as described in his testimony in Case No. TR-2001-65, I have performed a further analysis of Sprint's cost studies and have included a copy of my analysis as Exhibit 4. Of all his methodologies, Dr. Johnson's Fully-Distributed Weighted methodology allocates the highest percentage of the Loop, NID and Switch Port to Intrastate Switched Access. Even though the Fully-Distributed Weighted methodology allocates the highest percentage to Intrastate Switched Access, Dr. Johnson still allocates less than 15% of the Loop Switch Port, and NID, making it his most stringent methodology by which to analyze Sprint's LRIC Studies. My analysis demonstrates that utilizing this Fully-Distributed Weighted methodology results in:

#### Basic Local Service

- For the Average, 40.2% of Sprint's Switch Port, Loop, and NID costs can be reallocated from Basic Local Service to other services and still demonstrate that Sprint meets the statutory test (Exhibit 4),
- For Residential Basic Local Service, 46.4 % of Sprint's Switch Port, Loop, and NID costs can be reallocated from Basic Local Service to other services and still demonstrate that Sprint meets the statutory test (Exhibit 4),
- For Business Basic Local Service, 6.3 % of Sprint's Switch Port, Loop, and NID
  costs can be reallocated from Basic Local Service to other services and still
  demonstrate that Sprint meets the statutory test (Exhibit 4),

The Court Opinion also stated that a central issue raised by OPC was that the costs of the basic loop were incorrectly assigned in their entirety to the "Basic Local

Service" category. As more fully discussed by Staff Economist Natelle Dietrich, the Commission has not addressed the proper allocation of the Loop, Switch Port, and NID to all of the various services provided by those facilities. However, assuming that the costs of the basic loop were incorrectly assigned to the "Basic Local Service" category, Staff's analysis indicates that:

- A reallocation of up to 40.2% of the Switch Port, Loop and NID intrastate costs that Sprint assigned to Basic Local Service to other local services still allows Sprint to meet the statutory test. (Exhibit 4)
- A reallocation of greater than 100% of the Switch Port, Loop and NID intrastate costs that Sprint assigned to Basic Local Service to Switched Access Service still allows Sprint to meet the statutory test. (Exhibit 2)

Staff has not seen evidence in this case or any other case that would suggest that reallocating 40.2% or greater of the Switch Port, Loop and NID intrastate costs that Sprint assigned to Basic Local Service to other local services is reasonable. The Commission has closely tied other local services to the provision of Basic Local Service in the past. For instance, in the recent Sprint effective competition docket, Case No. IO-2003-0281, the Commission found that directory assistance, operator services, and optional MCA service are closely tied to Basic Local Service. Previously in the Southwestern Bell effective competition docket, Case No. TO-2003-281, the Commission found "...that vertical services and custom calling features are inseparable from the underlying Basic Local Services because vertical services and custom calling features are not available to the customer without that customer being provided the Basic Local Service."

After the additional review and analysis, Staff continues to support Sprint's filings and supporting documentation and provides additional support for the Commission in issuing

its findings in response to the Court Opinion. My analysis demonstrates that the additional investigation suggested by Ms. Meisenheimer is unnecessary given the margins I have shown exist between Sprint's proposed LRIC studies and Sprint's Basic Local Service and Switched Access Service rates after 4 rebalancings as contemplated by statute. As can be seen in the Staff's Analysis Summary section of Exhibit 2, Sprint's cost for basic local service is significantly greater than Sprint's rate for basic local service even after all four rebalancings. Also, as can be seen in the Staff's Analysis Summary section of Exhibit 3, Sprint's cost for intrastate access service is significantly less than Sprint's rate for intrastate access rates even after all four rebalancings.

I certify that I have read the foregoing statement and that the facts therein are complete, true and accurate to the best of my knowledge and belief.

Staff Regulatory Economist II

Subscribed and sworn to before me this 10th day of May, 2004.

DAWN L. HAK Notary Public Notary Public - State of Missouri

County of Cole My commission expires My Commission Expires Jan 9, 2005