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 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)	)))))))))	Case No. TR-2002-251

AFFIDAVIT OF DR. BRIAN K. STAIHR

STATE OF KANSAS)
) ss.
COUNTY OF JOHNSON)

Comes the Affiant, and after being duly sworn, does hereby depose as follows:

1. My name is Brian K. Staihr. I am employed by Sprint as Senior Regulatory Economist. My work address is 6450 Sprint Parkway, Overland Park, Kansas 66251.

2. The purpose of this affidavit is to clarify, in economic terms, a significant inaccuracy contained in the reply comments filed by Office of Public Counsel's consultant Mr. Thomas Regan. Throughout his reply comments Mr. Regan confuses an economic exercise—*calculating a cost*—with a policy decision—*how that cost should be recovered*. As a result of this confusion he misstates the economic fundamentals that drive loop costs, and he makes the critical mistake of suggesting that "joint use" implies "joint cost".

3. In simplest terms, an economic exercise asks the question "What is?" and a policy decision answers the question "What should be?"[1] In the case at hand, the economic question is: What cost is incurred by the telephone company when it provides basic local service? A separate policy question, not at issue in this proceeding, is: How should this cost be recovered? A clear example of how Mr. Regan has confused these two can be found on page 12 of his testimony. In attempting to defend his (erroneous) position that the loop is a common cost of multiple services, Mr. Regan produces a quote from NARUC that says nothing about the costs a company incurs, but rather discusses which parties should pay for the loop.

4. The confusion comes from the often-misunderstood relationship between *joint use* and *joint cost*. Mr. Regan would have the Commission believe that joint use implies joint cost. In other words, Mr. Regan would have the Commission believe that if something is used by more than one service it must be part of the cost of more than one service. Mr. Regan is incorrect. In economic terms, "cost" is the value of resources dedicated to an activity. The cost of a local loop is the value of the resources dedicated to building that loop: the materials, the labor, *etc.* The cost of the loop is whatever it is, regardless of how the loop is used. The cost of the loop is not affected by whether a customer makes 1000 calls a month or zero, whether the customer has Caller ID or not, whether the customer uses his/her loop to dial-up the Internet or not.

5. So, given that the loop itself is *used* for various services, parties often mistakenly assume that it is part of the cost of each of those various services. It is not. But how do we determine where the cost of the loop belongs? Recall, the definition of "cost" is the value of resources dedicated to some activity. To know where the cost of the loop belongs we must identify what drives the company to expend the resources required to build the loop. And as

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[1] Economists use the term "positive" to describe questions of *what is* and the term "normative" to describe questions of *what should be*. See, for example, Dr. N. Gregory Mankiw, Principles of Economics, 2004.

discussed in the affidavit of Mr. Kent Dickerson, it is the customer's demand for basic local service that drives the telephone company to build the loop; the reason that the company incurs the cost of building the loop is because the customer demanded basic local service. Basic local service provides the customer with access to the first point of switching and the ability to place and receive local calls. The loop is the device that provides the user with this ability.

6. At this point some might make the case "Yes, but the loop is a device that provides the user with the ability to do more than that." And that is true. Yet this fact in no way suggests that the cost of the loop should be considered part of the cost of those other activities. For example:

- When I purchase a television set this device provides me with the ability to enjoy network television programming, cable programming, pay-per-view movies and video rentals. I must *use* the device when doing any of these things. Yet there is no economic rationale for suggesting that the cost of a pay-per-view movie should include part of the cost of my television set.
- When I purchase a new computer this device provides me with the ability to do many things: run software, access the Internet, download music from i-Tunes. I must *use* the device when doing any of these things. Yet there is no economic rationale to suggest that the cost of accessing the Internet should include part of the cost of my computer.

Some others might contend that the examples above are inapplicable because although the local loop is a device, like the television set and the computer, the customer does not purchase the device itself. The customer purchases a service—basic local service—that is made possible through the device. The examples above can be easily modified to reflect the costs of services only:

- It is only after I have purchased cable television service that I am able to purchase and enjoy a pay-per-view movie. But it is my purchase of the basic cable service that drives the cable company to incur the cost of cable, and there is no economic justification for suggesting that the cost of pay-per-view includes part of the cost of cable service.
- It is only after I have purchased Internet access service that I am able to purchase and enjoy downloaded music on i-Tunes. But it is my purchase of Internet access that causes my ISP to incur the cost of the access, and there is no economic justification for suggesting that the cost of i-Tunes includes part of the cost of Internet access.
- It is only after I have purchased basic local telephone service that I am able to purchase and enjoy a vertical service such as Caller ID. But it is my purchase of basic service that causes the phone company to incur the cost of providing that service, including the cost of the loop, and there is no economic justification for suggesting that the cost of Caller ID includes pert of the cost of the loop.

7. In short, it is easy to find examples where one service must be purchased before another service can be enjoyed. But it is the demand for the *first* service that causes the costs of deploying the equipment (used by both services) to be incurred by the company. This is the case with basic local service and the local loop. Mr. Regan writes, on page 16 of his reply testimony, that Caller ID "shares" the loop with local service. For that matter, my dial-up Internet access "shares" the loop with my local service. But it is doubtful that Mr. Regan would suggest that the "cost" of Internet access should include a portion of the cost of the local loop.

8. Mr. Regan's support for his position rests on a hypothetical argument that, while possibly interesting in an academic debate, has no place in real-world cost calculation. He contends that "If Sprint's basic local service were eliminated, while Sprint continued to provide toll, switched access and vertical services" Sprint would not avoid the cost of the loop; therefore

the loop is not a part of the LRIC (or TSLRIC) of basic local service.[2] This is a nonsensical application of costing theory. The premise of any hypothetical must be at least *plausible* before it can be a useful tool for analysis, and this premise is not. To see why, one need only ask if Mr. Regain, in his hypothetical, is assuming that when Sprint's local service is eliminated the customer is no longer taking local service from *any* provider. If so, we could assume the customer has (for example) "cut the cord" and is using only his or her wireless phone. And in that case it is a physical impossibility for Sprint to continue to provide services such as switched access and vertical features to this customer. If, on the other hand, Mr. Regan is assuming in his hypothetical that Sprint's local service is eliminated but the customer is taking local service from another provider, that other provider would be providing that service over a local loop and again, the cost of the loop would be incurred in the provision of basic local service. Either that provider would build his or her own loop, or the provider would purchase Sprint's loop and in either case the cost of a loop would be driven by the provision of basic service.

9. In conclusion, below I include a quote from Dr. Alfred Kahn that summarizes the situation we are faced with in this proceeding. This quote has been included in earlier testimony filed before the Missouri Commission, but its unique applicability in this situation warrants its inclusion in this affidavit.

> "The arguments proffered by these witnesses [that the loop is a shared cost] are the most persistent weeds in the regulatory garden. Other mainstream economists and I have dealt with and debunked these claims for years—and I suppose this will remain our task for as long as parties to proceeding such as this insist on conflating the politics of setting prices with the economics of determining costs."[3]

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2 When the "increment" of a service being examined in a LRIC study is the entire demand for the service, the LRIC of the service is TSLRIC.

3 Rebuttal testimony of Dr. Alfred Kahn before the Pennsylvania Public Utility Commission, Docket No. I-940035, February 15, 1996.

Further affiant sayeth not.

BRIAN K. STAIHR

Subscribed and sworn to me this 7th day of June, 2004.

Sharon L. Yancey
NOTARY PUBLIC

My commission expires

SHARON L. YANCEY
Notary Public - State of Kansas
My Appt. Expires April 8, 2008