24 20

Exhibit No.: 20
Issues: Access-Line Related Services; Analysis of Non-Wireline Services

Witness: Adam McKinnie
Sponsoring Party: MO PSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: TO-2005-0035
Date Testimony Prepared: December 17, 2004

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

ADAM MCKINNIE

SOUTHWESTERN BELL TELEPHONE, L.P., d/b/a SBC MISSOURI

CASE NO. TO-2005-0035

Jefferson City, Missouri
December 2004

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Second Investigation into the State of Competition in the Exchanges of Southwestern Bell Telephone, L.P., d/b/a SBC Missouri	))))	Case No. TO-2005-0035

AFFIDAVIT OF ADAM MCKINNIE

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Adam McKinnie, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 32 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Adam McKinnie

Subscribed and sworn to before me this 16th day of December, 2004.

Notary Public

DAWN L. HAKE
Notary Public – State of Missouri
County of Cole
My Commission Expires Jan 9, 2005

My commission expires

TABLE OF CONTENTS

Introduction, Education and Experience 1
Purpose of Testimony 2
Residential and Business Line-Related Services 6
ISDN Services 8
TDM – DS1 services 11
Access Advantage Plus 13
Plexar 13
VoIP and Cable Telephony 14
Wireless 23
Summary 31

REBUTTAL TESTIMONY

OF

ADAM MCKINNIE

SOUTHWESTERN BELL TELEPHONE, L.P., d/b/a SBC MISSOURI

CASE NO. TO-2005-0035

Introduction, Education and Experience

Q. Please state your name and business address.

A. My name is Adam McKinnie. My business address is 200 Madison Street, Jefferson City, MO 65102-0360.

Q. By whom are you employed?

A. I am employed by the Missouri Public Service Commission (MoPSC or Commission) as a regulatory economist for the Telecommunications Department Staff (Staff) of the Commission.

Q. What is your educational background?

A. I hold a Bachelor of Arts degree in English and Economics that I received from Northeast Missouri State University (now called Truman State University) in May 1997. I also hold a Master of Science degree in Economics (with electives in Labor, Tax, and Industrial Organization) that I received from the University of Illinois in May 2000.

Q. What are your current responsibilities at the Commission?

A. I review, analyze, and prepare recommendations on controversial tariff filings for both competitive and non-competitive companies, interconnection agreements, certificate applications and merger agreements. I also analyze cost studies and models related to cost structures of companies for various contentious tariff filings. I have also conducted research and worked on special projects related to telecommunications and economics.

Q. Have you worked on any projects that are related to your testimony in this case?

A. Yes, I have. I have conducted research on Internet-related issues, such as availability for both narrowband and broadband Internet; worked on the Voice over Internet Protocol (VoIP) Task Force report in Case No. TW-2004-0324; researched wireless telephony issues for cases concerning applications of wireless companies applying for Eligible Telecommunications Carrier (ETC) status; and was the Staff witness in the Sprint Missouri, Inc. (Sprint) effective competition case.

Q. Have you testified in any previous Commission cases?

A. Yes, I have testified in IO-2003-0281, *In the Matter of the Investigation of the State of Competition in the Exchanges of Sprint Missouri, Inc.* (Sprint Case), and TO-2003-0531, *In the Matter of the Application of Missouri RSA No. 7 Limited Partnership, d/b/a Mid-Missouri Cellular, for Designation as a Telecommunications Company Carrier Eligible for Federal Universal Service Support Pursuant to Section 254 of the Telecommunications Act of 1996.*

Purpose of Testimony

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to respond to the testimony of Southwestern Bell Telephone, L.P., d/b/a SBC Missouri (SBC) witnesses Fernandez, Stoia, Shooshan, Dr. Aron, and Unruh. I address the requests of SBC for competitive classification for services other than residential and business basic local telephone service throughout their entire SBC Missouri service territory. My testimony will explain why

Staff only supports SBC's request for a finding of effective competition in limited circumstances. More specifically, Staff supports the competitive classification of SBC's Plexar service on a statewide basis. For all other SBC line-related services, Staff supports the competitive classification of those services only where the underlying basic local service is competitive. For ISDN and DS-1-related services Staff supports SBC's request for competitive classification where business basic local telecommunications service is found to be competitive and the service is offered from a facilities-based CLEC.

I also address the affect that non-wireline companies, such as wireless, VoIP, and cable, have on effective competition for the underlying basic local service. Specifically, I will explain why, in Staff's opinion, the survey results sponsored by SBC witness Shooshan about wireless telephony do not provide a good basis for supporting a request for effective competition.

Staff is also sponsoring Rebuttal Testimony by Bill Peters, who is addressing SBC's request for a finding that residential and business basic local telephone lines are subject to effective competition in each SBC exchange, and Walter Cecil, who is addressing SBC's request for a finding that Directory Assistance is subject to effective competition statewide.

Q. What services has SBC Missouri (SBC) requested be classified as competitive in this case?

A. The answer to that question is not entirely clear. On pages 8-9 of his Direct Testimony, SBC witness Unruh states,

> *SBC Missouri is seeking a competitive classification for its access line and related services, except for switched access*

> *service, and directory services that have not already been declared competitive.* Generally speaking, these include residential access line services, residential line-related services (e.g., vertical services), business access line services, business line-related services (e.g., vertical services), and directory services. *SBC Missouri seeks a competitive classification for these services in every SBC Missouri exchange that has not already been declared competitive.* SBC Missouri's residential services have been declared competitive in the exchanges of Harvester and St. Charles. SBC Missouri's business services have been declared competitive in the exchanges of St. Louis and Kansas City. SBC Missouri has 160 exchanges in Missouri, so SBC Missouri seeks a competitive classification for its residential services in 158 exchanges and a competitive classification for its business services in 158 exchanges. A listing of the specific services is attached as Unruh – Schedule 2. (italics added)

On page 18 of his Direct Testimony, SBC witness Unruh writes:

> Q. Do SBC Missouri's services meet the definition of effective competition?
>
> A. Yes. *SBC Missouri's services identified in Unruh – Schedule 2* meet the definition of effective competition in all SBC Missouri exchanges.
>
> Q. The first and second criteria for evaluating effective competition is that there are alternative providers providing functionally equivalent or substitutable services. Are there alternative providers providing functionally equivalent or substitutable services to the *services identified in Unruh – Schedule 2* in all of SBC Missouri' exchanges?
>
> A. Yes. As my direct testimony and the direct testimony of the other SBC Missouri witnesses demonstrate, there are several alternate providers who are providing functionally equivalent and substitutable services in SBC Missouri's exchanges. These alternative providers range from traditional landline competitors like CLECs to wireless providers, cable providers and VoIP providers. (emphasis added)

Q. What is your analysis of the first response?

A. The first response implies that SBC Missouri is seeking competitive classification for all its services (except switched access), and that those services are listed in Unruh Direct Schedule 2. However, there are SBC services that are not listed in Unruh Direct Schedule 2 that have not previously been declared as competitive services, lending this response to be confusing at best. Schedule 2 only shows 39 groups of services. Staff estimates SBC has over 5000 individually tariffed services. For instance, SBC's General Exchange Tariff, PSC MO No. 35, includes the CompleteLink service, which is not listed on Schedule 2. Therefore, it is not clear if certain services were excluded from the Schedule. Keeping this in mind, Staff completed its analysis under the assumption that SBC is requesting a finding of effective competition for all services, whether basic or non-basic, except switched access service.

Q. What is your analysis of the second response?

A. Although SBC is asking for a determination that all of its services, except switched access service, in all exchanges are subject to effective competition, this response implies that **only** the services in Unruh Direct Schedule 2 satisfy the definition of **effective** competition where an alternative provider is providing functionally equivalent or substitutable services in SBC territory. Staff does not recommend competitive classification of services in areas where no alternate provider is currently providing comparable services in the marketplace. As previously stated, Staff completed its analysis under the assumption that SBC is requesting a finding of effective competition for all services except switched access service.

Residential and Business Line-Related Services

Q. Do you agree with SBC witness Unruh that all business and residential access line-related services should be declared competitive in all exchanges (Unruh Direct, page 8, line 17)?

A. No. Generally speaking, Staff recommends that the residential and business access line-related services be declared competitive only in the exchanges where the corresponding underlying residential or business basic local telecommunications service is found subject to effective competition. In the previous two effective competition cases, the Commission decided that business and residential access-line related services were too closely tied to basic local telecommunications service to have them declared effectively competitive without the underlying service (in this case, business or residential basic local telecommunications service) being declared competitive. In Case No. TO-2001-467, *In the Matter of the Investigation of the State of Competition in the Exchanges of Southwestern Bell Telephone Company*, the Commission wrote in its Report and Order on page 22:

> The Commission finds that vertical services and custom calling features are inseparable from the underlying basic local service because vertical services and custom calling features are not available to the customer without that customer being provided the basic local service.

Staff witness Mr. Peters discusses, in his Rebuttal Testimony, in what exchanges Staff supports SBC's request that business and/or residential basic local services be declared effectively competitive. Exceptions to this recommendation include Integrated Digital Services Network (ISDN), DS-1 services, and Access Advantage Plus, for which Staff supports SBC's request for an effective competition determination only in exchanges where the business access line service is competitive, and then only where a facilities-based provider is providing that service. A further exception is Staff's support of SBC's request for a finding that Plexar service is facing effective competition throughout SBC's service territory.

Q. What comments do you have regarding Ms. Fernandez's discussion about the overall competitive landscape in Missouri for business services?

A. Staff completed its review of evidence on an exchange-specific, service-by-service analysis when making recommendations regarding effective competition as much as possible. Information such as the total access line loss in Missouri, increased amount of bundling and reasons why companies may wish to compete for business telephony services state little about the current amount of effective competition, especially on an exchange specific basis. Therefore, Staff gave this information little, if any, weight in its exchange and service specific analysis.

Q. What comments do you have regarding Ms. Fernandez's discussion about SBC competitor's advertising expenses?

A. In her analysis of the overall business climate, SBC witness Fernandez focuses on the amount of money SBC competitors have spent on advertising. Very little if any factual information about the current amount of effective competition SBC is facing can be gleaned from the amount of advertising its competitors are doing. If the question was whether or not SBC is facing *any* competition, then information such as the advertising expenses of potential competitors could be useful. At most, this information provides some background information about competition in Missouri, and should not be relied upon to declare any specific service effectively competitive in any specific exchange.

Q. What comments do you have regarding Ms. Fernandez's discussion about the effect of granting SBC competitive classification for services on a statewide level?

A. This information is of secondary value and should not determine whether or not SBC currently faces effective competition for all its business access line related services. This case is about whether SBC faces effective competition in individual exchanges and for individual services. A discussion as to what SBC would do with competitive classification, while providing insight into future plans, is not indicative of the existence of effective competition as defined in 386.020(13) RSMo.

<u>ISDN Services</u>

Q. Does SBC witness Fernandez, in her Direct Testimony, provide any analysis that is specific to any one service or group of services?

A. Yes, she does. Beginning on page 7 of her Direct Testimony, SBC witness Fernandez groups a list of services under the heading "High Capacity Exchange Access Line Services". This group includes all services that "provide customers with up to 24 56/64 Kbps channels of switched access to the local Public Switched Telephone Network (PSTN) on a single DS-1 (1.544 Megabits per second) transport facility." (Fernandez, Direct, page 7, starting on line 13.)

She then offers three specific subgroups:

- ISDN and ISDN related services
    - Smart Trunk
    - Select Video Plus
    - SelectData

- Services utilizing time division multiplexing (TDM) for digital trunking over a DS-1 (DS-1 services)
    - SuperTrunk
    - Digital Loop Service
- Integrated Access Services
    - Access Advantage Plus

Q. What is Staff's recommendation with regard to ISDN services?

A. Staff recommends that ISDN be deemed competitive only where the underlying business access line service is found to be subject to effective competition and where a facilities-based carrier is providing ISDN service. In the first SBC effective competition case, the Commission grouped the basic ISDN service with the "core business switched services" that also included the business basic local telecommunications service. In the Sprint Case, Sprint only requested to have ISDN declared competitive in exchanges where they were requesting competitive status for the business basic local telecommunications service. In the Sprint case, the Commission ruled that effective competition existed for ISDN service only where business basic local telecommunications service was competitive, and then only where a facilities-based provider was providing ISDN.

Q. What analysis does SBC witness Fernandez offer with regard to the ISDN services?

A. Ms. Fernandez describes ISDN services as "standard products for CLECs selling to the large business PBX market or the ISP inbound dial access networking market." (Fernandez Direct, page 9, lines 10-12; this clause refers to both PRI and Digital

Trunking services). Furthermore, she notes CLECs can provision this service using unbundled network elements or their own facilities.

Q. Assuming that these alternative services exist today and into the future, does the mere existence of alternatives compel Staff to support a request for effectively competitive status for this service?

A. No. The existence of alternatives for a service is just one of the many components one has to take into account in considering whether or not effective competition exists for a service. As Staff performed an exchange-by-exchange, service-by-service analysis of SBC's request for effective competition, Staff would need to see information about the offerings and availability of these services from alternative providers on an exchange-specific level, plus any information on market share lost to these providers for this service, in order to paint an accurate picture of whether a service is effectively competitive in any one exchange.

Q. Does Staff see any analysis to change its recommendation on ISDN services from the Commission's earlier decisions that ISDN services should be declared effectively competitive only where the business access line is competitive and where ISDN services are available?

A. No, Staff does not. Staff continues to recommend that ISDN service is so closely related to the underlying business loop that it should only be declared competitive where the main service for that loop, the business access line service, is declared competitive, and then only where a facilities-based provider is offering ISDN.

Q. All of your analysis so far has been for the ISDN service. What is your opinion on optional services that require the underlying ISDN service to be purchased first?

A. Much like Staff's opinion on how line-related access services (vertical services) should only be declared competitive where the corresponding underlying basic local telecommunications service is competitive, Staff recommends competitive classification of the optional ISDN-related services only where the basic ISDN service is declared competitive.

Q. Where does Staff recommend that the ISDN (and ISDN-related services) be declared competitive?

A. Staff was able to verify, through Peters Rebuttal HC Schedule IV and a review of company tariffs, that a facilities-based provider offers ISDN service in each of the 17 exchanges where Mr. Peters supports SBC's request for effective competitive status for business access line telephone service. Therefore, Staff supports SBC's request to have ISDN and ISDN-related services declared competitive in each of these exchanges. The exchanges are: Farley, Harvester, Fenton, Chesterfield, Springfield, Greenwood, Valley Park, Manchester, St. Charles, Grain Valley, Marionville, Pond, Smithville, Eureka, Imperial, High Ridge, and Maxville.

TDM – DS1 services

Q. What analysis does SBC witness Fernandez offer in her Direct Testimony with regard to TDM requiring DS-1 services?

A. Similar to the ISDN analysis, SBC witness Fernandez discusses the existence of competitors and their ability to compete using either their own facilities or through the purchase of UNEs from SBC.

Q. Does SBC witness Fernandez discuss where CLECs provide DS-1 services over their own facilities on an end-to-end basis (that is, completely facilities-based)?

A. No, she does not. SBC witness Fernandez only discusses CLECs providing these services through the direct resale of SBC's facilities or through the purchasing of UNEs. As discussed in greater detail in Staff witness Peters' testimony, Staff has concerns with supporting a request for effective competition when the main provisioning of competitive services is through resale or UNEs.

Q. As SBC has provided no evidence, exchange-specific or otherwise, about the ability of CLECs to provide facilities-based DS1 competition, can Staff support a request for statewide competitive classification of services that require a DS-1?

A. No, it cannot. As in the first SBC effective competition case, Staff supports SBC's request for competitive classification of DS1 services where the business access line is found to be subject to effective competition. Staff was able to verify, through Peters Rebuttal HC Schedule IV and a review of company tariffs, that a facilities-based provider offers DS-1 service in each of the 17 exchanges where Mr. Peters supports SBC's request for effective competitive status for business access line telephone service. Therefore, Staff supports SBC's request to have DS-1 and DS-1-related services declared competitive in each of these exchanges. The exchanges are: Farley, Harvester, Fenton, Chesterfield, Springfield, Greenwood, Valley Park, Manchester, St. Charles, Grain Valley, Marionville, Pond, Smithville, Eureka, Imperial, High Ridge, and Maxville.

Access Advantage Plus

Q. For Access Advantage Plus, is Staff's recommendation the same as it is for ISDN and the T-1 services?

A. Yes it is. As Access Advantage Plus needs a DS-1 connection for implementation, my recommendation is the same as on the TDM – DS1 services above. Staff supports SBC's recommendation that Access Advantage Plus be deemed competitive in the following exchanges: Farley, Harvester, Fenton, Chesterfield, Springfield, Greenwood, Valley Park, Manchester, St. Charles, Grain Valley, Marionville, Pond, Smithville, Eureka, Imperial, High Ridge, and Maxville.

Plexar

Q. Does Staff support SBC's request to classify Plexar service as a competitive service?

A. Yes. Staff supports SBC's request to have Plexar classified as competitive on a statewide basis. According to Section 392.200.8 RSMo:

> 8. Customer specific pricing is authorized for dedicated, nonswitched, private line and special access services and for central office-based switching systems which substitute for customer premise, private branch exchange (PBX) services, provided such customer specific pricing shall be equally available to incumbent and alternative local exchange telecommunications companies.

For many years, carriers throughout the state have been able to price central office based switching systems (or Centrex services) on an Individual Case Basis (ICB). This pricing flexibility allows all telecommunications carriers, including SBC, to match the prices of their competitors on a case-by-case basis for central office based switching services such as SBC's Plexar service. This can lead to downward price pressure, with many companies competing to offer services to any one consumer. Furthermore, consumers have the choice of purchasing Primary Branch Exchange (PBX) equipment or key-stations that replicate many of the same features as Centrex services.

Q. SBC witness Dr. Aron, on page 24, lines 9-13 of her Direct Testimony, discusses PBX as a substitute for Centrex system. Do you agree with this characterization?

A. Yes, I do. The substitution of PBX systems for Plexar is one of the factors I cite above as why Staff supports SBC's request to have Plexar being classified competitive on a statewide basis.

VoIP and Cable Telephony

Q. What information has SBC presented with regard to VoIP and Cable Modem technology?

A. In Staff's opinion, SBC witness Unruh has provided speculative evidence about the future of VoIP and cable telephony. He has provided information about the purported availability of cable broadband through a map (Unruh Schedule 17), but provided no information about the methodology involved in its creation. Similarly, he provided a map purporting to show VoIP providers (Unruh Schedule 16), again with no information about its methodology. Without knowing the methodology behind the construction of the maps, it is difficult to analyze their effect on basic local telecommunication service and the associated access line-related services. In response to a data request asking for the methodology used in the construction of the schedules, SBC replied as follows:

> SBC keeps track of where companies are offering VoIP by reviewing public information such as advertising, press releases, newspaper articles, etc. This information is tracked by carrier.

> For Vonage, this information was compared to third party information purchased from Nielson Communications (3rd Qtr. 2003) that provided corresponding areas in the state that had cable modem service available. From internal sources, the areas where SBC DSL was available were also included.
>
> For Time Warner, a list of cities from the SBC data where Time Warner was active was compared to Nielson data to pull those cities out and mark them as VoIP active.
>
> For AT&T, a list of cities where AT&T is active was compared to the various Core Based Statistical Areas (CBSAs) that these cities fell within to indicate that AT&T could offer VoIP in these areas. CBSA boundaries were purchased from Geographic Data Technologies.

This response does not give any of the rationale that either SBC or their third party provider of data used for the inclusion of an area as a "VoIP Active Market". Furthermore, when asked for the source data to verify the validity of the schedule, SBC replied as follows:

> For Unruh Schedules 16 and 17 the source data is a combination of public information such as press releases, advertising, etc., information purchased from Nielson Communications and Geographic Data Technologies and some internal SBC data. This information resides in a *data base* that interfaces graphically with mapping software to produce the maps. Spreadsheets and other typical types of source data are not created in this process. Generally the information purchased from outside sources contains data for the United States, not just Missouri. (italics added)

SBC in their response admits that they have a database of source data, yet has not provided that database or the information contained within to Staff as requested. Without this source data, Staff is not able to verify the validity of the schedule.

Staff continues to try and gather the source data and criteria used for inclusion in these schedules through discussions with SBC. If Staff receives this information, an analysis of this data will be included in surrebuttal testimony.

Q. There appear to be areas on Unruh Schedule 16 listed as a "Vonage VoIP Active Market" that are not listed in Unruh Schedule 17 as having cable broadband service available. Do you have any concerns with this discrepancy?

A. Yes, I do. It is difficult to give any weight toward the impact of VoIP service where the customer, presumably, would have to purchase DSL facilities from an SBC affiliate to have broadband Internet access, which is necessary to usage of VoIP service.

Further, without SBC providing the methodology behind the construction of the maps, it is difficult to analyze this effect. It is difficult to give any weight towards the impact of VoIP service where the customer, presumably, would have to purchase DSL facilities from an SBC affiliate to have broadband Internet access, which is necessary for the usage of VoIP service.

Q. Unruh Schedule 16 purports to show where the "Vonage VoIP Active Market" is on a series of maps overlaying SBC's Missouri footprint. Does this map line up with the availability of telephone numbers listed on the Vonage website?

A. No, it does not. Vonage currently offers numbers in the following locations in Missouri according to http://www.vonage.com/avail.php):

- 314 Area Code - Creve Coeur, Kirkwood, Ladue, Mehlville, Sappington, and St. Louis

- 636 Area Code - Chesterfield MCA, Fenton MCA, Harvester MCA, Manchester MCA, St. Charles MCA, Valley Park MCA
- 816 Area Code - Kansas City

There are numerous exchanges in Unruh Schedule 16 that do not match up to this list of exchanges. Vonage only has Missouri NPA-NXX codes in the major metropolitan areas of St. Louis and Kansas City. SBC exchanges such as Poplar Bluff, Fulton, and Kirksville do not have any local numbers available through Vonage according to the Vonage website.

Q. What is Staff's position on the ability of VoIP as a substitutable service to basic local telecommunications service?

A. For VoIP to be considered substitutable to basic local telecommunications service, for either business or residential service, the customer must be able to get a local number from the VoIP provider. That is, a number that can be called by a non-VoIP landline telephony customer in the same exchange without incurring toll charges. According to its website, Vonage currently does not offer telephone numbers in the area codes of 417, 660, or 573. Therefore, if customers have Vonage service in those areas, they can only be reached by a toll call from non-Vonage customers in those areas.

Q. In Staff's opinion, why is that important?

A. One of the basic tenets of basic local telecommunications service is the ability to make and receive telephone calls within a community of interest. Outbound "all-you-can-eat" long distance, a component of many VoIP plans, does not help a neighbor or a potential business customer who is trying to contact you. The neighbor or business trying to contact you would incur toll charges to complete the call.

Q. Is there any regulatory uncertainty regarding VoIP?

A. The FCC currently has various dockets before it regarding VoIP. The FCC has several petitions seeking clarifications on issues related to specific VoIP offerings. The FCC also has a generic docket, WC Docket No. 04-36, addressing many aspects of IP-enabled services. It is unclear at this time what type of regulatory treatment, if any, the different flavors of VoIP will have on a going forward basis. This could affect the sustainability of VoIP in the future. For instance, if there is a determination that VoIP providers must pay switched access charges or that VoIP in some form is a telecommunications service, then it is reasonable to assume that the VoIP marketplace could change substantially. In Staff's opinion, it is not appropriate to rely on the potential competitive pressure of VoIP when making a determination of effective competition. Much uncertainty remains for VoIP.

Q. Do you have any other comments regarding SBC's testimony regarding VoIP?

A. Yes. I will comment on SBC witness Unruh's testimony on the decrease of second lines and VoIP pricing plans. In addition I will comment on Mr. Unruh's statements regarding cable telephony. In this discussion I will attempt to highlight a significant distinction in SBC's testimony between potential and actual competition. Specifically SBC witnesses appear to place strong emphasis on "potential" sources of competition rather than "existing" sources of competition.

Q. What comments do you have regarding SBC's testimony on the decrease in the number of second lines?

A. SBC states that the company has experienced a decrease in the number of second lines. According to SBC, many of these second lines were previously used for dial-up Internet access. SBC asserts that customers have switched to broadband Internet access, such as DSL or a cable modem.

Unfortunately, SBC provides no quantification of the amount of second lines they have lost to broadband Internet access. It is difficult to assess how big of a problem / how much competition SBC is facing for second lines without this information. It is also important to point out that an SBC affiliate offers DSL access within the SBC Missouri local service, and that the SBC parent corporation will still benefit from a customer who chooses DSL from that SBC affiliate.

Q. SBC witness Unruh talks about the pricing structure of VoIP plans. What is a key issue to consider when discussing VoIP pricing plans?

A. When discussing VoIP services that are add-ons (i.e., not provided by the local cable company through their own facilities) such as Vonage and AT&T CallVantage, a consumer must first purchase broadband Internet Access. SBC does not currently offer standalone "naked" DSL (one must purchase a basic local telephone line to receive DSL service from SBC). Unlike SBC wireline products or wireless products, the user must first purchase a broadband Internet connection (at additional cost) in order to begin using the service.

Q. How does this affect a consumer's decision to use VoIP as a substitutable service for basic local telephone lines?

A. A potential candidate for substitution must purchase at least two services in order to substitute for one SBC basic local telephone line. Therefore, substituting wireline telephone service with a broadband-based service may only begin to be an option for consumers who already maintain a broadband connection or are willing and able to purchase a broadband connection in conjunction with VoIP service.

Q. What percentage of Americans currently have broadband access?

A. According to a September 2004 U.S. Department of Commerce Study entitled "*A Nation Online:* **Entering the Broadband Age**"[1], approximately 20% of Americans currently have a broadband connection at home. Furthermore, out of all Americans, 12.6% currently have broadband access through a cable modem. These numbers are trending upward.

Q. With the current penetration of broadband, is it reasonable to expect VoIP to provide a significant amount of competition to residential service in the near future?

A. At this time it is difficult to predict. Residential customers currently without broadband access would have to also pay for the broadband connection, and would implicitly add this cost onto the VoIP price. Therefore, the price of broadband access, which is necessary for a VoIP plan, should be included when considering the comparability of a VoIP plan.

Q. Do you have any comment about the use of VoIP by businesses?

A. SBC has not provided evidence about the current business levels of VoIP usage, so Staff cannot support a recommendation of effectively competitive status based on VoIP services. It is possible that VoIP will provide some degree of competition in the business market. Still, where there is no facilities-based CLEC or alternative technology (such as a cable provider) providing connections to businesses, this transmission would

[1] Found online at http://www.ntia.doc.gov/reports/anol/NationOnlineBroadband04.htm

need to take place over an SBC owned loop. Staff does see a future in which VoIP could be providing potentially significant competition.

Q. Does SBC present any conclusive information about the current amount of VoIP usage?

A. No, they do not. On page 39, line 3 of his Direct Testimony, SBC witness Unruh admits he does not have information on the number of customers in Missouri using VoIP services. On line 13 of the same page, he notes that the Yankee Group reports there will be 1.2 million VoIP subscribers nationwide by year-end 2004. Most of SBC witness Unruh's Direct Testimony on VoIP is spent describing VoIP as a "hot issue" (Unruh Direct, page 37, line 15) with a huge potential future source of competition instead of analyzing the competition currently in the Missouri marketplace. Other studies, as cited in the final report in Case No. TW-2004-0324, project there will be 4.5 million residential VoIP subscribers in the United States by 2007. Unfortunately, these studies are just projections, and are provided on a nationwide basis. Staff is concerned that this information presents evidence based on potential competition, not actual competition. Further, the information presents evidence on potential nationwide competition. Little, if any, reliable Missouri-specific data is presented.

Q. What is the significance of drawing the distinction of "potential" source versus "existing" source of competition?

A. One of the factors listed in the definition of effective competition, 386.020(13)(a), states:

> (a) The extent to which services *are* available from alternative providers in the relevant market; (emphasis added)

The statute specifically mandates a review of services that *are* available in the present. If the legislature expected the Commission to consider what was to come, the statute could have included the word "will" – The extent to which services are or will be available from alternative providers in the relevant market.

The Commission, in the Sprint effective competition case, previously found that "potential" competition was not sufficient in making a determination of effective competition. The Commission, in its Report and Order, stated on page 35:

> However, it currently does not have facilities in place to serve more than a few customers in the Platte City exchange. Although ExOp is an ETC in Platte City, and may someday be able to serve a larger proportion of the customers in that exchange, its status as an ETC does not immediately make it an effective competitor for Sprint. *The Commission must decide whether there is effective competition now, not whether there will be competition someday.* The Commission concludes that effective competition does not exist in the Platte City exchange. (italics added)

Q. What comments do you have regarding SBC witness Unruh's statements that cable telephony is a means of effective competition for SBC?

A. In much the same manner as with VoIP, and traditional wireline telecommunications service, evidence as to the presence of cable telephony should be Missouri-specific in order for the Commission to be able to make a decision on its impact on services in Missouri. As previously stated, SBC provided maps as to the alleged existence of cable telephony, but did not provide the specifics or the source data for those maps in order for Staff to verify the extent to which cable telephony provides effective competition for SBC services. Without criteria or source data for maps, Staff cannot properly evaluate whether this potential or actual source of effective competition exists except for in limited circumstances such as Time Warner Cable Information Services (Missouri), LLC, d/b/a Time Warner Cable providing service in the Kansas City area. Since Time Warner was certificated in Case No. LA-2004-0133, Staff has actual evidence of its presence.

Q. What is Staff's recommendation concerning SBC's evidence of effective competition through VoIP and cable telephony?

A. Staff recommends the Commission continue along its path of waiting to see actual physical competition before granting effective competitive status. Projections and forecasts of future business trends are only that: forecasts and projections.

Wireless

Q. SBC witness Unruh discusses wireless service as a substitute for basic local service. What is a substitute, especially when examining telecommunications services?

A. Economically speaking, substitutes are goods that are used in place of each other. An individual would use either one good or the other. As the price of one good increases, the individual would be more likely to purchase the other good. For example, if the price of bagels increases, and people buy more English muffins, then English muffins and bagels could be considered substitutes. The following pairs of goods are additional examples of potential substitutes: coffee and tea, butter and margarine, and hamburgers and hot dogs.

In contrast, some goods can be considered complements. This term is also relevant to the discussion of effective competition. Complements are goods that are most often used jointly with other goods. Individuals tend to use these goods together. As the price of a good goes up, people are more likely to purchase fewer complements of that good. For example, if the price of peanut butter goes up, and people buy less jelly, then peanut butter and jelly could be considered complements. These pairs of goods are additional examples of potential complements: lemons and tea, coffee and cream, hamburgers and hamburger buns, and cars and gasoline.

Price is not the only factor when considering the definition of "complement." Webster's Seventh New Collegiate Dictionary defines complementary as, "Mutually supplying each other's lack." These two factors need to be used jointly when applying the term "complementary" to telecommunications services because of additional concerns such as customer service and quality of service.

Q. Previously, the Commission indicated it needed Missouri-specific data on wireless to consider its impact on competition in Missouri. Does SBC present any Missouri-specific evidence in this case?

A. Yes. SBC witness Shooshan sponsored Direct Testimony that included a survey of both SBC wireline and wireless telephone users who live inside the three Missouri Metropolitan Calling Area (MCA) regions.

Q. According to Mr. Shooshan, what is the purpose of his Direct Testimony?

A. On page 3, beginning on line 3, SBC witness Shooshan writes:

> My testimony establishes the existence of effective competition from wireless providers in the St. Louis, Kansas City, and Springfield metropolitan areas.

Q. Assuming that his evidence and conclusions are true, does SBC witness Shooshan's Missouri-specific survey provide evidence as to whether wireless service is providing effective competition throughout all of SBC's service territory in Missouri?

A. No, it does not. The evidence represents a sampling in the MCA regions of Springfield, Kansas City, and St. Louis. If the Commission relies on this evidence as support for a determination of effective competition, it is Staff's opinion that it should only be used to support findings in the Springfield, Kansas City and St. Louis MCAs.

Q. Why are you recommending the findings be limited to the Springfield, Kansas City and St. Louis MCA?

A. These three areas are the three major metropolitan areas in the state of Missouri. They have a greater population density, where a wireless network can serve more people on a per dollar basis. In many wireless cases before this Commission, the incumbent local exchange carriers (ILECs) have argued that the wireless carriers tend to serve the high-density population centers of the state, especially along the highways or in urban areas. Furthermore, the MCA itself is a unique calling plan, which only exists in these metropolitan areas. These reasons make it difficult to extrapolate the MCA findings to the entire SBC service territory and, at least, provide enough concern to urge caution when reviewing the data and making general assumptions about wireless usage throughout the state.

Q. On page 4 of his Direct Testimony, beginning on line 5, SBC witness Shooshan lists what he sees as "key findings" of his summary results. Would you care to comment on any of them?

A. Yes, I would. Beginning on line 8 of page 4, SBC witness Shooshan states:

> 18 percent of wireless customers do not have traditional telephone service in their homes; furthermore, of the remainder that still use traditional telephone service:

- 64 percent nevertheless frequently use their cell phones in their homes to make and receive calls
  - 16 percent use their cell phones as their primary home phone;
- 72 percent believe that cellular service would be a satisfactory replacement for *all* the calls that they make or receive in their homes;

The first statistic, stating that 18 percent of those wireless phone users surveyed in the St. Louis, Kansas City, and Springfield MCA area, can easily be misleading because it only represents the wireless phone users in a limited area, and is not representative of wireline and wireless users or households. The more typical percentage, as noted by the FCC, is that 5 to 6 percent of **households who have at least one wireless or wireline telephone bill** have no wireline telephone. SBC witness Shooshan cites this figure himself later on in his Direct Testimony, on page 12, line 2. This 5 to 6 percent number is the percentage that should be given credence when discussing total wireless substitution, as it is a percentage of households using wireless and / or wireline telephones. SBC witness Shooshan's 18 percent statistic, in contrast, just refers to wireless users in the three Missouri MCA regions.

The remainder of Mr. Shooshan's statistics cited above should be read in context of each other as a complete sentence as the following example illustrates:

> *Of wireless customers surveyed who have both a wireless and wireline telephone line, 72 percent believe that cellular service would be a satisfactory replacement for all home-based calls.*

Q. Please explain how the statistics could be misconstrued.

A. Referring to the bulleted item above, referencing 72 percent in and of itself, one could potentially conclude that 72 percent of the entire population believe that cellular service would be a satisfactory replacement for all calls. A more precise reading indicates that 72 percent of only those **wireless customers surveyed who have both wireless and wireline telephone service** hold this belief.

Q. What is the next part of Shooshan's survey on which you would like to provide comment?

A. On page 4, beginning on line 17 of his Direct Testimony, SBC witness Shooshan writes:

> There is a wireless user in 70 percent of households; in those households:
>
> - 56 percent frequently use their cell phones in their homes
>   - 7 percent use their cell phones as their primary home phone;
> - Consumers use their cell phones in their homes to make and receive both local and long-distance calls, with about one in four using cell phones primarily to make and receive local calls;
> - 61 percent believe that cellular service would be a satisfactory replacement for *all* the calls that they make or receive in their homes; and
> - 26 percent have considered discontinuing traditional telephone service and relying entirely on their cell phones.

Q. What are your concerns with this data?

A. According to the survey, of the 70 percent of the households surveyed, only 26 percent said they have actually considered discontinuing their traditional wireline telephone service and relying solely on their wireless telephone (Shooshan Schedule 3, page 19, Question 12).

In order to provide more clarity to the survey results, information could have been presented on how seriously these 26 percent have considered switching, what might need to happen for them to switch, or any other follow up questions to know more information about the potential willingness of customers to substitute.

Q. On page 22, lines 3-4 of her Direct Testimony, SBC witness Dr. Aron states that whether customers see alternatives as substitutes is important. With regard to the above survey result, do you have any comment?

A. If only 26 percent of wireline customers surveyed who have a wireless phone have even considered switching to wireless telephone service only, I think it would be fair to say that the majority of customers do not see this alternative as a substitute.

Q. Is there any other information in the survey that indicates the potential amount of total substitution?

A. The survey notes that only 7 percent of wireline telephone users surveyed "primarily use cell phones" for calls that members of their household make or receive in their home. This seems to further indicate that a large number of consumers are not yet ready to disconnect their wireline telephone and rely on their wireless telephone for all calling purposes.

Q. On page 7, beginning on line 3 of his Direct Testimony, SBC witness Shooshan discusses "usage substitution" in relation to wireless telephones. Can you briefly summarize "usage substitution" in this context?

A. In the context of wireless and wireline telephones, usage substitution refers to minutes of use that have been transferred from a wireline telephone to wireless telephone (though, presumably, they could also go the other way). Calls that were initiated and received previously using a wireline telephone may now be initiated or received using a wireless telephone. He uses this usage substitution as another example of how, even though many consumers purchase both wireless and wireline telephones, the goods could still be substitutable.

Q. Does Staff share SBC witness Shooshan's opinion on this subject?

A. No, Staff does not. Usage substitution, in this case, is the total substitution of a minute of use of telephone service. SBC is not asking for a minute of use to be declared competitive. In terms of actual substitution, usage substitution is not crucial. The fact that the vast majority of wireless telephone users have their wireline telephones seems to indicate that consumers see them as providing a separate set of benefits. Even as some usage substitution takes place, the majority of consumers continue purchasing and using both products.

Staff looks at the vast number of both wireless and wireline telephones and sees them as complements, as they mutually supply each other's lack. For instance, a wireline telephone is consistently available in a household for calling purposes (including emergency calling purposes), has unlimited local and inbound calling, is capable of being used for fax machines, and has multiple connections / extensions in many homes and businesses. A wireless telephone, in contrast, is mobile, has a different calling scope, has a wide variety of available calling plans, and most wireless calling plans are usage sensitive for both out-going and incoming calls. The benefits come with some drawbacks: the wireline telephone is not mobile and has a limited local calling scope; the wireless telephone has a much higher possibility of dropped calls, a possibility of not receiving service in "dead spots", and a potential unavailability to make an emergency telephone call (if a wireless only house has only one handset and it leaves the house, those within the house would not be able to use that handset for emergency calling purposes).

Q. SBC witness Shooshan's testimony makes no distinction between the business and residential wireless usage. How do you interpret his testimony on this matter?

A. As the surveys referenced in his testimony discuss whether or not anyone in a household uses wireless service (Shooshan Schedule 3, page 7, Question 3), I interpret his data as being exclusive to residential usage of wireless service. What weight I would ultimately give his testimony would be in relation to residential service.

Q. Does any other SBC witness address wireless competition for business service?

A. On page 21 of her Direct Testimony, beginning on line 19, SBC witness Fernandez discusses how a business customer could give up some or all of their wireline service for wireless service.

Q. Does she provide any statistics as to the number of business customers that have discontinued their wireline telephones and switched over to wireless telephony exclusively?

A. No, she does not.

Q. Some of SBC witness Fernandez's analysis involves jobs for "mobile users", such as landscapers, choosing to have only a wireless telephone. Does she provide any information about the number of business lines, or any information about the number of businesses total, that involve solely "mobile" users?

A. No, she does not.

Q. For a large majority of business users, is it realistic to think that the business will switch to wireless telephones for all their telephony needs?

A. No, it is not. I find it difficult to believe that a business in a large office park environment would give up their landline telephones for wireless telephones for the contrasting reasons I cited earlier. It is conceivable that a business would have landlines in a home office and also choose to equip their "mobile" employees with wireless telephones to complement their landlines in their office.

Q. SBC witness Unruh, on page 36, beginning on line 8 of his Direct Testimony, presents information about the number of wireless carriers in SBC exchanges. Would you like to comment on this information?

A. Yes, I would. The number of wireless providers in an exchange is not, in of itself, indicative of any particular level of competition. The Commission, in previous effective competition cases, has never given much weight to just a count of the number of potential competitors.

Summary

Q. Can you summarize your testimony?

A. Staff supports the competitive classification of SBC's Plexar service on a statewide basis. For all other SBC line-related services, Staff supports the competitive classification of those services only where the underlying basic local service is competitive. In other words, for business line-related services, if the business basic local service is found competitive in an exchange, then the business line-related services should also be deemed competitive in that exchange. For residential line-related services, if the underlying residential basic local service is competitive in an exchange, then the residential line-related services should also be deemed competitive in that exchange. For ISDN and DS-1-related services Staff supports SBC's request for competitive classification where business basic local telecommunications service is found to be competitive and the service is offered from a facilities-based CLEC. Staff supports SBC's request for competitive classification for ISDN and DS-1 services (including Access Advantage Plus) in the following exchanges: Farley, Harvester, Fenton, Chesterfield, Springfield, Greenwood, Valley Park, Manchester, St. Charles, Grain Valley, Marionville, Pond, Smithville, Eureka, Imperial, High Ridge, and Maxville.

Alternative services, such as wireless services, VoIP, and cable telephony, can contribute to effective competition but do not provide effective competition in and of themselves. Based on the evidence reviewed, it is likely that wireless service will contribute to effective competition for residential services in the future. Furthermore, it is likely VoIP and cable telephony will contribute to effective competition in the future.

Q. Does this conclude your testimony?

A. Yes, it does.