Edward Phillips
Attorney

NCWKFR0313
14111 Capital Blvd
Wake Forest, NC 27587-5900
Voice 919 554 7870
Fax 919 554 7913
edward phillips@mail sprint com

October 18, 2004

Chairman Pat Miller
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243

Re: Rebuttal Testimony of Brian K. Stahr
Docket No. 03-00391, Exemption of Certain Services

Dear Chairman Miller:

Enclosed for filing in the above-referenced docket is the original and thirteen copies of the Rebuttal Testimony of Witness Brian K. Stahr filed on behalf of United Telephone-Southeast, Inc. Under cover of this letter, copies of both versions of this filing are being served upon all parties of record. Information marked as proprietary should be afforded the usual protections by the Authority under the terms of the Protective Order issued by the Hearing Officer on April 30, 2004.

Please do not hesitate to call me at your convenience if there are any questions or concerns with this filing.

Sincerely yours,

Edward Phillips

HEP:sm

Enclosures

cc: All Parties of Record

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing Rebuttal Testimony of Witness Brian K. Staihr filed on behalf of United Telephone-Southeast, Inc. upon all parties of record to this Docket by depositing a copy addressed to each in the United States Mail, first-class postage prepaid.

This 18th day of October, 2004.

Henry Walker, Esquire
Boult, Cummings, et al.
414 Union Street, #1600
Nashville, TN 37219-8062

Guilford Thornton, Esquire
Stokes & Bartholomew
424 Church Street, #2800
Nashville, TN 37219

Martha M. Ross-Bain, Esquire
AT&T
1200 Peachtree Street, Suite 8100
Atlanta, GA 30309

Joelle Phillips, Esquire
BellSouth Telecommunications, Inc.
333 Commerce Street, Suite 2101
Nashville, TN 37201-2200

Joe Shirley, Esquire
Office of the Attorney General
Consumer Advocate Division
425 Fifth Avenue
P. O. Box 20207
Nashville, TN 37202

Charles B. Welch, Esquire
Farris, Mathews, et al.
618 Church St., #300
Nashville, TN 37219

Edward Phillips
United Telephone-Southeast, Inc.

REBUTTAL TESTIMONY OF BRIAN K. STAIHR

I. INTRODUCTION

Q. Please state your name and business address.

A My name is Brian K. Staihr. I am employed by Sprint as Senior Regulatory Economist in the Division of Law and External Affairs. My business address is 6450 Sprint Parkway, Overland Park, Kansas 66251. I am testifying in this proceeding on behalf of United Telephone-Southeast, Inc. ("UTSE or United").

Q. Please briefly summarize your educational background and work experience.

A. I hold a B.A. in Economics from the University of Missouri-Kansas City, and an M.A. and Ph.D. in Economics from Washington University in St. Louis. My field of specialization is Industrial Organization, including Regulation.

I have been a part of Sprint's Regulatory Policy Group since 1996. In my current position, I am involved with the development of state and federal regulatory and legislative policy for all divisions of Sprint Corporation. I am also involved with the coordination of policy across business units. My particular responsibilities include: 1) ensuring that Sprint's policies are

based on sound economic reasoning, 2) undertaking or directing economic/quantitative analysis to provide support for Sprint's policies, and 3) conducting original research. The specific policy issues that I address include universal service, pricing, costing (including cost of capital), access reform, reciprocal compensation and interconnection, local competition, and more.

In my position I have testified before Congress on telecommunications issues, and my research has also been used in congressional oversight hearings. I have appeared before the Texas Public Utilities Commission, the Florida Public Service Commission, the Kansas Corporation Commission, the New Jersey Board of Public Utilities, the Pennsylvania Public Utility Commission, the North Carolina Utilities Commission, the Public Service Commission of South Carolina, the Public Service Commission of Nevada, the Illinois Commerce Commission, the Oregon Public Utility Commission, the California Public Utilities Commission, the Georgia Public Service Commission, the New Mexico Public Service Commission, the Commonwealth of Virginia State Corporation Commission, the Nebraska Public Service Commission, and the Missouri Public Service Commission I have also worked extensively with the Federal Communication Commission's staff and presented original research to the FCC.

In January 2000 I left Sprint temporarily to serve as Senior Economist for the Federal Reserve Bank of Kansas City. There I was an active

participant in the Federal Open Market Committee process, the process by which the Federal Reserve sets interest rates. In addition, I conducted original research on telecommunication issues and the effects of deregulation. I returned to Sprint in December 2000.

Since 1996 I have also served as Adjunct Professor of Economics at Avila University in Kansas City, Missouri There I teach both graduate and undergraduate level courses.

Prior to my work in Sprint's Regulatory Policy Group I served as Manager-Consumer Demand Forecasting in Sprint's Local Telecom Division. There I was responsible for forecasting the demand for services in the local market, and producing economic and quantitative analysis and elasticity studies for such purposes as business cases and opportunity analyses.

Q. What is the purpose of your testimony?

A. In my Rebuttal Testimony, I will respond to the October 4, 2004 Direct Testimonies of Steve Brown and Terry Buckner of the Consumer Advocate and Protection Division ("CAPD") in the Office of the Attorney General for the State of Tennessee and to the testimony of Mark E. Argenbright of AT&T Communications of the South Central States, LLC ("AT&T").

First, I will respond to the claim that a market share analysis must be performed before the Tennessee Regulatory Authority ("TRA") may take any action regarding an exemption petition. Second, I will examine the claim that the incumbent local exchange carriers ("ILECs") in this proceeding should be viewed as "dominant firms" by using a dominant firm model. Third, I will examine the claim that granting the exemption of the ILECs' ISDN-PRI service will have an unfair negative affect on the ability of competitive local exchange carriers ("CLECs") to compete against ILECs.

Overall, I believe that the petition for exemption of United's ISDN-PRI services should be granted based upon the substantial evidence already presented in this proceeding.

II. MARKET SHARE ANALYSIS

Q. In their Direct Testimonies, both Mr. Buckner (page 6) and Dr. Brown (pages 9-10) state that the TRA should not grant exemption of ISDN-PRI services until there is a definition of the relevant market and then a market share analysis performed. Does Sprint believe that a market share analysis should be required?

A. No. Tenn. Code Ann §65-5-208(b) makes no mention of a market share analysis as any type of criterion or threshold to be examined before

granting pricing flexibility.[1] In fact, it could be argued that the statute implicitly rejects the notion of market share analysis. A market share analysis, by definition, suggests that it is the *quantity* of competitive activity, rather than the *existence* of competitive activity, that is of importance. The Tennessee statute ignores the issue of quantity altogether

Q. But wouldn't a market share analysis nevertheless be useful to this analysis?

A. No, for two main reasons. First, before any market share can ever be calculated it is necessary to define and measure the appropriate market, and there are considerable difficulties involved in accurately defining and measuring markets. These difficulties (discussed at length below) make any subsequent market share analysis suspect with regard to its accuracy. There is an inherently subjective nature to determining how *broadly* or how *narrowly* any market should be defined and measured for any purpose. And any market share calculation will be affected by whether the market is characterized broadly or narrowly.

Second, identifying a specific threshold for competitive pressure based on market share is also entirely subjective. Even if it were possible to define and measure the market correctly, and even if it were possible to calculate

[1] Throughout this testimony when I make reference to legal proceedings, outcomes, cites, etc. it is as an economist only. Any and all references made are not intended as legal opinions

an accurate market share, selecting some number at random to represent sufficient competitive pressure on prices is nothing more than guesswork. This is because market share analysis, while it can (in some cases) be a useful examination of the degree of *consolidation* found in a market, is not necessarily a useful measure of the degree of *competition* within a market. And it is competition (both existing and potential), and whether it is an effective regulator of price, which is the question under Tenn. Code Ann. §65-5-208(b).

Summarizing, Sprint believes that market share analyses are inappropriate and unnecessary when examining an exemption petition because:

1) Market share analyses are extremely difficult to do correctly, and when done incorrectly they provide flawed results;

2) Any market share number designed to represent a competitive threshold is 100% subjective in nature, and;

3) Market share is often not a useful or accurate measure of the degree of competition found in a market, and therefore not a useful measure of control on prices.

A. The Difficulty of Defining a Market

Q. How do economists define a market?

A. Standard economic literature defines a market as the set of buyers and sellers whose actions affect the price at which a particular good or service is sold.[2] The definition is specific and clear: The market is not limited to the supply and demand of a single, unique service or product. Rather, the market includes the supply and demand of other services that can act as forces upon the price of the first service.

Obviously in a regulated market many prices are set by regulators, and in those cases market forces play no role (or a limited role) in determining the prices that customers pay or the prices that providers receive. This is clearly not the situation economists have in mind when defining or discussing markets in general, and so for our purposes here we should restate the definition slightly: A market is the set of buyers and sellers whose actions *would* affect the price at which a particular good or service is sold if the price were determined only by market forces. If the market forces—supply, demand, price—that affect one product can also affect the supply/demand/price of another product then those two products operate in the same market. This is the standard set of circumstances in situations where two services can and do serve as substitutes for each other. And it is the reason that the courts and the FCC have found that the notion of *substitutability* serves as a key criterion in the proper definition and characterization of a market.

[2] Baumol, William J and Alan S Blinder, *Economics: Principles and Policy*; Harcourt Brace Jovanovich Inc., 1979 This text, often referred to by economists simply as "Baumol and Blinder," has served as a standard in the teaching of economic principles for several decades

Q. How do economists generally define substitutability?

A. Substitutability can take many forms. Two services can be considered substitutes if they are *functionally equivalent*. That is, if they do the same thing and do it in the same way. An example of two products that exhibit functional equivalence would be a laptop computer and a desktop computer.

However, functional equivalence is not a necessary condition for two products/services to act as substitutes. It is enough that substitutes satisfy a similar customer demand. In such cases, services that act as substitutes will exhibit *reasonable interchangeability of use*. This is a standard taken from antitrust case law.[3] An example of two services that exhibit reasonable interchangeability of use would be cross-city bus service and cross-city subway service. These two services satisfy a similar customer demand.

For purposes of defining markets, and for understanding market dynamics and the nature and extent of competition, either one of these characteristics—functional equivalence or reasonable interchangeability of use—may constitute substitutability. It is not necessary that two services exhibit both of these characteristics for those two services to be substitutes, and be in the same market. Substitutability is first and

[3] Brown Shoe Co. v United States, 370 U.S 294, 325 (1962).

foremost a characteristic of demand, and of customer perception. It is the thing that causes competitive pressure to exist across services, even services that are not functionally equivalent. In competitive markets it serves as a controlling factor on prices.

Of the two definitions, *reasonable interchangeability of use* is most appropriate when defining a market because it encompasses all degrees of substitutability (including functional equivalence). Specifically, it acknowledges that quality differences can exist between substitutes. And that two services that are not identical or functionally equivalent can still exert competitive pressure on each other. In fact, the courts have found many instances where products or services are not perfect substitutes—that is, they exhibit price differences and quality differences—yet they operate in the same market and exert competitive pressure on each other.[4] The key issue from an economic standpoint, and consistent with legal findings, is this: Do two services have the ability to take away significant amounts of business from each other. If they do, they are in the same market.

One further note: It is not necessary for all customers of all services, or even all customers of one service, to acknowledge this reasonable interchangeability of use in order for the services to operate in the same market. The fact that one service cannot or does not take away all

[4] See ABA Section of Antitrust Law, *Antitrust Law Developments* (4th Edition 1997) pp 500-508

customers from another service does not mean that the two are not substitutable services. All that is necessary is that an adequate number of customers might be willing to move between services so that competitive pressure exists between the services.

The existence and availability of substitutes have historically been key determinants in the FCC's approach to defining a market. In its SBC-Ameritech merger order the FCC found that one market was distinguishable from another if one set of services was not considered "adequate or feasible substitutes" for another set.[5] And in its Bell Atlantic-NYNEX merger order the FCC also made specific reference to service substitutability in terms of defining markets.[6]

Q. So how does substitutability affect the way that markets are defined?

A. A market will be defined incorrectly if it does not include all potential substitutes. And if the goal of the market analysis is to examine competition, and the forces that shape supply/demand/prices (or *would* shape supply/demand/prices in the absence of regulation) in that market, then omitting potential substitutes will result in the analysis being flawed.

Q. Can you give a very simple example of how the analysis would be flawed?

[5] SBC-Ameritech Order, 14 FCC Rcd at 14712
[6] Bell Atlantic/NYNEX Order, 12 FCC Rcd at 20016.

A. Certainly. Assume a small town has only one hamburger stand. If you define the market as the *market for hamburgers* then this one hamburger stand is a monopolist and it has 100% market share. And because monopolists sometimes posses market power (the ability to price above competitive levels) one might think that the owner of the hamburger stand could charge whatever price he/she chose. But if there is a subway sandwich shop across the street, and a sufficient number of customers view subway sandwiches as an acceptable substitute for hamburgers, the "monopolist" cannot charge whatever price he/she chooses. The supply and demand for subway sandwiches affects the price at which hamburgers will be sold. So in this case the appropriate market is not the market for hamburgers but rather the *market for fast food* because it is the buyers and seller in that market, not the market for hamburgers, that determine the prices at which both hamburgers and subway sandwiches will be sold. And in the *market for fast food* the hamburger stand does not have 100% market share, and the hamburger stand does not have market power.

Q. So is the primary difficulty associated with defining and measuring a market incorporating all substitutes?

A. It actually goes beyond that. In order to incorporate all substitutes properly it is necessary to identify and define all substitutes, and to be able to measure all substitutes. Identifying and defining substitutes is often

difficult, and *measuring* substitutes is often nearly impossible. As a result, estimates of the size of the total market will often be inaccurate and estimates of individual market share will also be inaccurate.

Q. Can you give an example of difficulty in identifying, defining and measuring substitutes in a market?

A. A good example is the market for second lines. There is no question that in the past few years ILECs across the entire country have seen a dramatic reduction in the demand for second lines. Under normal market conditions such a shift in demand would translate to a lower price. Therefore, whatever has caused the reduction in demand is part of the market for second lines, which (according to the definition) is the "set of buyers and sellers whose actions have an effect on the price" of, in this case, second lines.

General consensus among industry analysts is that it is the growth of mobile phone penetration, combined with the growth of high-speed data connections, that has accounted for much (if not most) of this decline in demand for second lines.[7] And indeed, this finding is completely consistent with the notion of substitutability discussed above: Whereas parents in the past might purchase a second line for their teenagers, now they just purchase a mobile phone. And in cases where households had,

[7] See, for example, *Wireless Voice and Broadband Access Unlock Local Line's Grip on Consumers*, research paper produced by The Yankee Group, October 17, 2002

in the past, purchased a second line primarily to access the Internet through a dial-up connection, that line has been replaced with a high-speed connection.

So there is no doubt that, to a clear extent, wireless phone providers are part of the market for second lines, because they are part of the "set of buyers and sellers" whose actions affect the demand/supply/price of second lines. And the same applies to high-speed connection providers. The difficulty lies in determining *to what extent*? Obviously not every wireless phone or high-speed connection is a substitute for a second line. But clearly some are. How can anyone identify the portion of wireless phones and high-speed connections that have replaced second lines? The answer is, it can't be done with any degree of accuracy. Therefore any market share analysis would be inaccurate.

On the other hand, if we attempt to avoid this problem by defining this market extremely narrowly, such as *the market for wireline lines that are non-primary with data speed capability less than 60kbps* we have lost the ability to examine the very thing we are attempting to ascertain: the degree to which prices can be deregulated. Because by defining the market this narrowly we have omitted the very things that operate as substitutes, which are the things that act as controlling factors on prices.

B. Limited Usefulness of Market Share as a Measure of Competition

Q. In the paragraphs above you state that selecting a number (market share) at random and using it as some type of threshold to represent sufficient competitive pressure on prices is purely guesswork. Please explain.

A. As I first mentioned above, the notion of using market share analysis suggests that it is the *quantity* of competition rather than the existence of competition that is important in determining whether market power might be exercised or not There are two obvious problems with this. The first is that whatever measure of market share one looks at is not necessarily an indication of the level of competition that exists. Rather it is an indication of choices that customers have made.

Secondly, economists know that often the potential for competition, rather than any specific quantity of competition, is sufficient to act as a controlling factor on prices. Economists use the term *contestable market* (in its broadest sense) to describe a market that is characterized by the possibility of competitive entry.[8] More specifically, a contestable market is one in which "the mere possibility of entry suffices to discipline the actions of incumbent suppliers."[9] In a contestable market the incumbent firm cannot act in an opportunistic manner with regard to pricing, output, or

[8] See, for example, Ekelund and Tollison, *Microeconomics: Private Markets and Public Choice*, Addison-Wesley, 2000 (Sixth Edition).

other firm-determined variables because (in such a case) competitors will enter and win customers from the incumbent. When a market is contestable "the possibility of entry by new firms can greatly constrain the exercise of monopoly power...the threat of entry, as well as actual entry, can have a significant impact on the pricing behavior of firms. In addition, it shows why the number of firms operating in a market does not always have a direct relationship with the amount of market power exercised."[10]

The Tennessee statute goes so far as to say that an exemption petition shall be granted on the basis of a market being contestable, given its mention of "existing and *potential* competition." The point to be made here is this: There is not some specific quantity of competition that controls the exercising of market power. In contestable markets the quantity is 0%. In markets with active competitors the quantity can be any number greater than 0%.

To summarize, any specific market share number is completely subjective. And any market share number reflects the choices customers have made, rather than the level of competition that exists. And any market share number may or may not represent an ability to control the exercising of market power. For these reasons, identifying some specific market percentage as a threshold is unnecessary and arbitrary in terms of an

[9] Browning and Zupan, *Microeconomic Theory and Applications*, Addison-Wesley, 1999 (Sixth Edition)
[10] *ibid*, pp.290-292

exemption from regulation under Tenn. Code Ann. §65-5-208(b) and should not be required by the TRA.

II. DOMINANT FIRM MODEL

Q. In their Direct Testimonies, both Mr. Buckner (pages 6-7) and Mr. Argenbright (pages 4, 8, 10) claim that BellSouth and by extension the other ILECs are "dominant providers" of ISDN-PRI service. Upon what basis do they make this claim?

A The CAPD and AT&T witnesses base their assertions of dominance upon rough estimates of the ILECs' retail market share combined with the ILECs' role as a wholesale provider of unbundled network elements (UNEs)

Q The Direct Testimony of Dr. Brown (page 8-10) states that the "dominant firm" model is the analytical tool that should be used to evaluate whether existing and potential competition is an effective regulator of price. Why does he say this?

A. Dr. Brown first adopts the analysis found in Mr. Buckner's Direct Testimony that BellSouth is a dominant provider for the reasons stated above. Dr. Brown then goes on to find that granting the exemption petition will permit the ILECs to raise ISDN-PRI prices above regulated ceilings and the dominant firm model is designed to test whether actual and

potential competition alone can be an effective regulator of price in these circumstances.

Q. Do you agree with Dr. Brown's that the dominant firm model is the analytical tool that must be used in this inquiry?

A. No, I agree that it is a tool that *could* be used in this inquiry but there is no reason it must be used in this inquiry nor is there any reason to use it the way Dr. Brown has suggested. The dominant firm model is an analytical framework well-recognized in economics. However, the dominant firm model (like all textbook models) makes use of assumptions. One assumption is that the competitors in the model (the competitive fringe) are capable of meeting different levels of demand. However, Dr. Brown has twisted this assumption somewhat by stating the model requires information regarding not just ISDN-PRI market definition and market share but "reliable data showing the expected rate at which competitors could expand their PRI capacity in response to UTSE's PRI pricing over the next 24 months." In the absence of such data Dr. Brown argues the petition is not sufficiently demonstrated. But Dr. Brown's argument is not quite correct. As I said above, the dominant firm model does make an assumption that competitors are able to meet different levels of demand. But Dr. Brown appears to be suggesting that there is some threshold *rate* at which competitors' capacity must expand to meet this demand. And he appears to be suggesting that below this threshold rate—whatever it might be—the model's results do not hold. This threshold rate of capacity

expansion is *not* a component of the dominant firm model. And even if it was, the question of how to establish such a threshold rate remains. Is Dr. Brown suggesting that he would be the party to determine whether any rate was or was not sufficiently rapid to meet the assumptions built into the model? Exactly how would such a determination be made? Dr. Brown suggests the dominant firm model requires information about such a threshold rate of capacity expansion and that there are rates that are sufficient and rates that are insufficient. There is simply no support for his contentions.

Q. Does this issue of capacity expansion have to do with elasticity of supply?

A. Not in the way Dr. Brown appears to be using it. I admit that the price elasticity of supply (and price elasticity of demand for that matter) are proper considerations in assessing whether competition is an effective regulator of a dominant firm's prices. But in general price elasticity of supply is a measure of the magnitude of response to a change in price; it is not a measure of the rapidity of that response.

Q. Do you believe that the price elasticity of supply (or demand) is an issue in this proceeding?

A. No. As a practical matter, I do not believe there is a serious concern because both the supply and demand sides of United's ISDN-PRI offering are more elastic than inelastic.

United was only providing **[Begin Sprint Proprietary] [End Sprint Proprietary]** ISDN-PRI access lines out of its tariff at the end of June 2004. United has five (5) off-tariff CSAs that account for at least another **[Begin Sprint Proprietary] [End Sprint Proprietary]** ISDN-PRI access lines. It is my belief that this modest amount of demand could be provisioned by the multiple switch-based competitors United has identified in this proceeding should United decide to use its exemption freedom to raise prices.

Q. So what then does price elasticity of demand have to do with whether competition is an effective regulator of price?

A. It is a well-known economic fact that the ability of any firm to exercise market power, that is, to charge a price above competitive levels, depends on the price elasticity of demand for the product or service being offered. All else held equal, a firm has less ability to exercise market power the more elastic the demand is for the firm's product.[11] So even a monopolist who faces no competitors is limited in his/her ability to exercise market power if the demand for the good being produced is relatively elastic.

[11] See, for example, Pindyck and Rubinfeld, *Microeconomics*, MacMillan Publishing Company, New York, 1989

A simple example of this is the service known as three-way calling. Three-way calling has a price elasticity of demand that is relatively high. This means that, in the absence of regulation, even in regions where there is no CLEC competing with an ILEC the ILEC is constrained with regard to how much the price can be set above competitive levels. The fact that the ILEC might have 100% share of the "three-way calling market" makes no difference; the ILEC cannot exercise market power because of the nature of the demand for the product.

Even more importantly, the nature of demand for goods that are very price-elastic is that providers have a much greater incentive to lower the price than to raise the price. This is because when a good has a demand that is elastic, lowering the price has the effect of increasing total revenues while raising the price has the effect of reducing total revenues.[12] So when a good has a demand that is elastic, not only is the firm limited in its ability to exercise market power, it has much less incentive to exercise market power.

Q. And what do we know about the price elasticity of demand for ISDN-PRI?

[12] If a good has a demand that is elastic, and the price is changed, the % change in quantity demanded is greater than the % change in price This means (for example) that if the firm raises the price by 10%, the quantity demanded will drop by MORE than 10% and the firm will actually lose money Conversely, if the firm *lowers* the price by 10%, the quantity demanded will increase by MORE than 10% and the firm will make money

A. Mr. Argenbright's Direct Testimony (page 10) recites that: "PRI service is a high capacity service that is typically purchased by larger, sophisticated telecommunications users that are accustomed to entering into contracts for such services." Not only do I believe this to be true but also believe it is a statement that strongly suggests the demand for ISDN-PRI service is much more elastic than inelastic. One of the key drivers of elasticity of demand is the number of substitutes available and the awareness (on the part of the buyer) of those substitutes. Sophisticated telecom customers who research choices before entering into contracts are much more likely to have demands that are price elastic.

In summary, Dr. Brown's analytical framework can be accepted (if for nothing else than discussion purposes) but need not lead to the negative conclusion found in his Direct Testimony regarding this petition. There is no need for the extensive market share analysis or price elasticity data he would require before the TRA could move forward with this proceeding.

III. WHOLESALE PROVIDER OF ESSENTIAL FACILITIES

Q. While Dr. Brown's focus is on ISDN-PRI being priced too high in the absence of regulation, the Direct Testimonies of Mr. Buckner (page 5) and Mr. Argenbright (pages 8-9) raise the prospect that granting the exemption petition for ISDN-PRI will open the door to below-cost pricing abuses such as predatory pricing and price squeezing by the ILECs. What is your response to their concerns?

A. Sprint Corporation is a CLEC as well as a ILEC in Tennessee and remains concerned about the potential for these kind of market abuses. However, Sprint believes that the CAPD and AT&T testimonies fail to appreciate the importance of Tenn. Code Ann. §65-5-208(c) and the nature of UNE pricing.

As far as predatory pricing, Tenn. Code Ann. §65-5-208(c) provides that "an incumbent local exchange telephone company shall adhere to a price floor for its competitive services" subject only to universal service determinations made by the TRA. Specifically, the statute states that the "price floor shall equal the incumbent local exchange telephone company's tariffed rates for essential elements utilized by competing telecommunications service providers plus the total long-run incremental cost of the competitive elements of the service."

While there could be some debate about the specific application of the statute, Sprint believes this price floor should as a practical matter be equal to or in the close neighborhood of Total Service Long-Run Increment Cost (or TSLRIC). To the extent this is the case, ILECs should not be able to use either ISDN-PRI tariffs or CSAs for predatory retail pricing.

As far as price squeezing, Tenn. Code Ann. §65-5-208(c) provides that the "authority shall, as appropriate, also adopt other rules or issue orders

to prohibit cross-subsidization, preferences to competitive services or affiliated entities, predatory pricing, price squeezing, price discrimination, tying arrangements or other anti-competitive practices."

It is also important to remember that the purpose behind the Telecommunications Act of 1996 requiring ILECs to unbundle their network elements to competitors is so the competitors can essentially replicate the ILECs' economies of scale. That is, a UNE-based competitor pays a price for that UNE that reflects the incumbent's costs which, by definition, reflect the economies of scale of serving the entire market. The Act required the unbundling of UNEs so that economies of scale would not be a barrier to entry, and would not create a situation where firms could not compete because to do so would require prices that reflected the scale of serving the entire market.

This effective ceiling on ILEC wholesale UNE pricing, in addition to Tenn. Code Ann. §65-5-208(c) and its provisions setting a retail price floor for competitive services plus generally prohibiting anti-competitive practices such as price squeezing, all act to independently prevent the abuses complained of by the CAPD and AT&T regardless of the presence or absence of the TRA continuing to regulate the retail price ceiling of ILEC ISDN-PRI services.

As a note, the above discussion regarding the on-demand availability of UNEs at ILEC economies of scale also contribute to my previous discussions regarding price elasticity of supply and contestable markets.

Q. Do you agree with Mr. Buckner's (page 7) contention that "effective price competition is not likely to occur as the CLEC's costs of PRI ISDN are largely driven by BellSouth's wholesale prices"?

A. United is on record in this proceeding as stating that competition as a fact exists in its incumbent territory, and I would question the premise that CLECs' costs must largely be driven by ILEC wholesale prices. As Mr. Argenbright (pages 7-8) states, a competitor such as AT&T provides its own switch to provision ISDN-PRI service and only uses BellSouth's local loop and transport facilities in a percentage of instances. In those instances where BellSouth's facilities are used, AT&T pays an amount to BellSouth to lease the facilities that reflects BellSouth's economies of scale. Where AT&T does not utilize BellSouth's facilities, it may be assumed that AT&T can self-provision the facilities at even less cost or purchase what it needs from another supplier. Thus, I do not believe the situation is as bleak as Mr. Buckner describes.

Q. The Direct Testimonies of Dr. Brown (pages 1-7) and Mr. Argenbright (pages 5-7) discuss the role of ISDN-PRI in the provision of VoIP services. What is your reaction to these comments?

A. The issue presented by the CAPD and AT&T in their Direct Testimonies should not and need not be considered as part of this case. Tenn. Code Ann. §65-5-208(b) sets out a specific criteria for the TRA to consider when a petition for exemption is received.

IV. Summary

Q. Please summarize your testimony.

A. Market share analysis should not be required when considering a request for exemption of services under Tenn. Code Ann. §65-5-208(b) for the following reasons:

- Market share analyses are extremely difficult to do correctly, and when done incorrectly they provide flawed results;
- Any market share analysis depends on how broadly or narrowly the market is defined, and the choice of defining the market broadly or narrowly is subjective in nature;
- Any market share number designed to represent a competitive threshold is also subjective in nature, since the quantity of competition often has nothing to do with a firm exercising market power or controlling prices;
- Market share is often not a useful or accurate measure of the level of competition found in a market;
- Market share is not the only, or even primary, determinant of market power.

Furthermore, while the dominant firm model is potentially an acceptable tool for use in this proceeding, Dr. Brown's application of that model is incorrect. Therefore his conclusions suggesting that the petition is not sufficiently demonstrated are without foundation.

Q. Does this complete your testimony?

A. Yes it does.