BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

In the Matter of the Petition of Sprint Communications Company L.P. for Arbitration Pursuant to the Telecommunication Act of 1996 to Resolve Issues Relating to an Interconnection Agreement with Brookings Municipal Utilities d/b/a Swiftel Communications	)	Docket No. TC06-176

Direct Testimony of RANDY G. FARRAR
On behalf of Sprint Communications Company L.P.
February 2, 2007

Public Version

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DIRECT TESTIMONY

Randy G. Farrar

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Randy G. Farrar. My title is Senior Manager – Interconnection Support for Sprint Nextel. My business address is 6450 Sprint Parkway, Overland Park, Kansas, 66251.

Q. What is your educational background?

A. I received a Bachelor of Arts degree from The Ohio State University, Columbus, Ohio, with a major in history. Simultaneously, I completed a program for a major in economics. Subsequently, I received a Master of Business Administration degree, with an emphasis on market research, also from The Ohio State University.

Q. Please summarize your work experience.

A. I have worked for Sprint Nextel or one of its predecessor companies since 1983 in the following capacities:

- 2005 to present Senior Manager – Interconnection Support. I provide interconnection support, where I provide financial, economic, and

policy analysis concerning interconnection and reciprocal compensation issues.

- 1997 to 2005, Senior Manager – Network Costs. I was an instructor for numerous training sessions designed to support corporate policy on pricing and costing theory, and to educate and support the use of various costing models. I was responsible for the development and support of switching, transport, and financial cost models concerning reciprocal compensation, unbundled network elements, and wholesale discounts.
- 1992 to 1997, Manager - Network Costing and Pricing. I performed financial analyses for various business cases, analyzing the profitability of entering new markets and expanding existing markets, including Custom Calling, Centrex, CLASS and Advanced Intelligent Network features, CPE products, Public Telephone and COCOT, and intraLATA toll. Within this time frame, I was a member of the USTA's Economic Analysis Training Work Group (1994 to 1995).
- 1987 to 1992, Manager - Local Exchange Costing. Within this time frame I was a member of the United States Telephone Association's (USTA) New Services and Technologies Issues Subcommittee (1989 to 1992).
- 1986 to 1987, Manager - Local Exchange Pricing. I investigated alternate forms of pricing and rate design, including usage sensitive rates, extended area service alternatives, intraLATA toll pricing, and lifeline rates.

- 1983 to 1986, Manager - Rate of Return., which included presentation of written and/or oral testimony before state public utilities commissions in Iowa, Nebraska, South Carolina, and Oregon.

I was employed by the Public Utilities Commission of Ohio from 1978 to 1983. My positions were Financial Analyst (1978 - 1980) and Senior Financial Analyst (1980-1983). My duties included the preparation of Staff Reports of Investigation concerning rate of return and cost of capital. I also designed rate structures, evaluated construction works in progress, measured productivity, evaluated treatment of canceled plant, and performed financial analyses, for electric, gas, telephone, and water utilities. I presented written and oral testimony on behalf of the Commission Staff in over twenty rate cases.

Q. What are your responsibilities in your current position?

A. I provide financial, economic and policy analysis concerning interconnection and reciprocal compensation issues. Such analysis is provided in the context of supporting negotiations between Sprint Nextel entities to obtain interconnection agreements with other telecommunications carriers and, where necessary, provide expert witness testimony. In the performance of my responsibilities I must maintain a working understanding of the interconnection and reciprocal compensation provisions of the Communications Act of 1934 as amended by the Telecommunications Act

of 1996 ("the Act" or "the 1996 Act") and the resulting rules and regulations of the Federal Communications Commission ("FCC").

Q. Have you provided testimony before other regulatory agencies?

A. Yes. In addition to my previously referenced testifying experience, since 1995 I have presented written or oral testimony before the Illinois Commerce Commission, the Pennsylvania Public Utility Commission, the New Jersey Board of Public Utilities, the Florida Public Service Commission, the North Carolina Utilities Commission, the Public Utilities Commission of Nevada, the Public Utility Commission of Texas, the Georgia Public Service Commission, the Arizona Corporation Commission, the New York Public Service Commission, the Corporation Commission of Oklahoma, the Missouri Public Service Commission, the Virginia State Corporation Commission, the Iowa Utilities Board, the Kentucky Public Service Commission, the Public Utilities Commission of Ohio, and the Federal Communications Commission on the avoided costs of resold services, the cost of unbundled network elements, reciprocal compensation, access reform, universal service, and local competition issues.

II. PURPOSE AND SCOPE OF TESTIMONY

Q. What is the purpose of your Testimony?

A. I am testifying on behalf of Sprint Communications Company L.P. ("Sprint"). I will provide input to the Public Utilities Commission of the State of South Dakota ("Commission") concerning Sprint's positions regarding various unresolved issues associated with the establishment of Interconnection and Reciprocal Compensation Agreements between Sprint and Brookings Municipal Utilities d/b/a Swiftel Communications ("Swiftel").

Q. What is the scope of your testimony?

A. I am providing testimony on behalf of Sprint regarding the following issues.

A. Sprint Issue No. 2: Does the Telecommunications Act authorize the Commission to arbitrate terms and conditions for interconnection obtained under Section 251(a) of the Telecommunications Act? If yes, what terms and conditions should the Commission impose on the Parties in this proceeding? (Sprint witness James R. Burt will address the specific arbitration issue.)

B. Swiftel Issue No. 14: Section 6.3, Swiftel proposes language to make clear that it is the originating Party's responsibility to enter into a transiting arrangement if the Party chooses to use an Intermediary Entity. Swiftel opposes Sprint's proposed language which refers to "the" Intermediary Entity because no Entity is identified as "the" Entity.

C. Sprint Issue No. 5: What is the appropriate reciprocal compensation rate for the termination of Telecommunications Traffic? (Swiftel Issues Nos. 5, 9, 15, and 25)

Sprint Issues Nos. 9 and 10, and Swiftel Issue No. 20 have been resolved. Sprint witness James R. Burt will provide testimony on Sprint Issues Nos. 1, 3, 4, 6, 7, and 8.

III. UNRESOLVED ISSUES

A. Sprint Issue No. 2

Does the Telecommunications Act authorize the Commission to arbitrate terms and conditions for interconnection obtained under Section 251(a) of the Telecommunications Act? If yes, what terms and conditions should the Commission impose on the Parties in this proceeding?

Q. Does the Telecommunications Act authorize the Commission to arbitrate terms and conditions for interconnection obtained under Section 251(a) of the Telecommunications Act?

A. Yes. Sprint witness James R. Burt will address that issue. I will address Sprint's position on direct and indirect interconnection.

1) Indirect Interconnection

Q. Does Sprint have the right to interconnect indirectly?

A. Yes. Sprint has proposed terms and conditions that will permit the parties to the interconnection agreement to interconnect their switches indirectly. Indirect interconnection is a duty of telecommunications carriers under Section 251(a)(1) of the Act; specifically,

> Each telecommunications carrier has the duty to interconnect directly or **indirectly** with the facilities and equipment of other telecommunications carriers. [Emphasis added.]

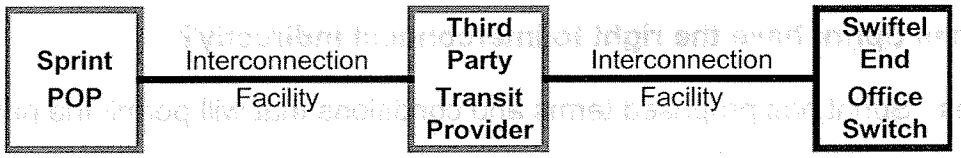
Moreover, indirect interconnection is widely used in the industry today for the simple reason that it would be totally impractical and economically inefficient for every carrier to establish direct interconnection with every other carrier in the nation.

Q. What is indirect interconnection?

A. According to the FCC, "Carriers are said to be indirectly interconnected to the extent they use transit services to exchange traffic."[1] Thus, Indirect Interconnection is the use of a third-party transit provider to link the two carriers, as shown in the following diagram.

[1] *In the Matter of the Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration*, et. al., FCC, CC Docket No. 00-218, et. al., Released July 17, 2002, paragraph 218. [*FCC VA Arbitration Order*.]

Diagram 1
Indirect Interconnection



In the diagram above, since Sprint and Swiftel are indirectly interconnected, there are no POIs as demarcations between Sprint's and Swiftel's networks.

Q. What is Sprint's position on indirect interconnection?

A. Section 251(a) states clearly that every Telecommunications Carrier has a duty to interconnect directly or indirectly with other Telecommunications Carriers. Therefore, Swiftel and Sprint can choose whether to interconnect directly or indirectly to each other. For example, Sprint could choose to interconnect indirectly with Swiftel and Swiftel could choose to interconnect with Sprint directly. While this may not be the most efficient way for the parties to exchange traffic, the point is Swiftel cannot dictate how Sprint interconnects with Swiftel or vice versa

Q. Why does Sprint wish to include language regarding indirect interconnection in the agreement?

A. Since Section 251(a) is an ongoing right and obligation, Sprint wishes to ensure that the interconnection agreement does not somehow limit the parties' rights to one form of interconnection (e.g. direct interconnection). To

do this, there must be specific language that addresses the rights of the parties to indirectly interconnect including the rights and obligations regarding traffic exchanged between the parties.

Q. Why should the Commission adopt Sprint's proposal?

A. Sprint's proposal to include language that permits the parties to interconnect indirectly and establishes the ground rules for traffic delivery and compensation is reasonable and consistent with the Act and the FCC's rules. I discuss the specifics of Sprint's proposal in Section III.A.2, below.

2) Calling Party's Network Pays

Q. Is the originating carrier financial responsible to deliver its traffic to the terminating carrier's network?

A. Yes. Interconnection benefits the end user customers of both Sprint and Swiftel by allowing those end user customers to originate calls and to have those calls ultimately terminated to other customers. This is obviously the desire of the end user customer who originates the call. There is a long-standing FCC policy in the telecommunications industry that the "Calling Party's Network Pays," i.e. the originating caller is the cost-causer.

Consistent with this policy, the FCC has determined that the originating carrier is responsible for the cost of delivering its end-user's traffic to the

terminating carrier. The fact that an originating carrier may use a third-party transit provider to terminate a call does not alter the fact that the originating caller is the cost-causer and that the originating carrier is financially responsible for delivery of that call to the terminating carrier, including transit charges.

Q. Is Swiftel responsible for the costs of delivering its originating traffic to Sprint if the parties are indirectly interconnected?

A. Yes. It is the responsibility of the originating carrier to deliver its originating traffic to the terminating carrier's network. The FCC's position that the "Calling Party's Network Pays" has been well established. Specifically, 47 C.F.R. § 51.703(b) states,

> A LEC may not assess charges on any other telecommunications carrier for telecommunications traffic that originates on its network.

In addition, 47 C.F.R. § 51.709(b) states,

> The rate of a carrier providing transmission facilities dedicated to the transmission of traffic between two carriers' networks shall recover only the costs of the proportion of that trunk capacity used by the interconnecting carrier to send traffic that will terminate on the providing carrier's network. Such proportions may be measured during peak periods.

The FCC's General Counsel has stated, referring to two appellate court decisions,

> Section 51.703(b) of the Commission's rules states that a LEC may not assess charges on any other telecommunications carrier, including a CMRS provider, for telecommunications traffic that originates on the LEC's network. *See* 47 C.F.R. § 51.703(b). The Commission has

construed this provision to mean that an incumbent LEC must bear the cost of delivering traffic (including the facilities over which the traffic is carried) that it originates to the point of interconnection ("POI") selected by a competing carrier. **At least two appellate courts have held that this rule applies in cases where an incumbent LEC delivers calls to a POI that is located outside of its customer's local calling area.**[2] [Emphasis added.]

Q. Has the FCC decided that the originating carrier is financially responsible for delivering its traffic?

A. Yes. In its Verizon Arbitration Order, The FCC stated that the ILEC was financially responsible for delivering its traffic to the competitive LEC's POI that may be located anywhere within the LATA where the ILEC is located. Specifically, the FCC stated,

> **Under the Commission's rules, competitive LECs may request interconnection at any technically feasible point. This includes the right to request a single point of interconnection in a LATA.** The Commission's rules implementing the reciprocal compensation provisions in section 252(d)(2)(A) prevent any LEC from assessing charges on another telecommunications carrier for telecommunications traffic subject to reciprocal compensation that originates on the LEC's network. Furthermore, under these rules, **to the extent an incumbent LEC delivers to the point of interconnection its own originating traffic that is subject to reciprocal compensation, the incumbent LEC is required to bear the financial responsibility for that traffic.**[3] [Emphasis added.]

Q. Have other state commissions decided that the originating carrier is responsible for delivering its traffic outside of its serving territory?

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[2] *Central Texas Telephone Cooperative Inc., et. al. v. Federal Communications Commission*, Brief of Respondents, Case No. 03-1405, p. 35 (D.C. Cir. 2004) (citing, *Southwestern Bell Tel. Co. v. Public Utilities Commission of Texas*, 348 F.3d 482, 486-87 (5th Cir. 2003); *MCImetro Access Transmission Services, Inc. v. BellSouth Telecommunications, Inc.*, 352 F.3d 872, 878-79 (4th Cir. 2003)).

[3] *FCC VA Arbitration Order,* paragraph 52.

A. Yes. At least seven state commissions have recently concluded that the originating carrier is responsible for delivering its traffic outside of its service territory.

For example, the Florida Public Service Commission stated,

> The record evidence is persuasive that the originating carrier utilizing BellSouth's transit service is responsible to compensate BellSouth for that service. Any decision to the contrary would appear to conflict with 47 CFR 51.703(b) which prohibits a LEC from assessing charges on any other carrier for traffic originating on its network. Furthermore, the Small LECs have provided no valid reason to deviate from the "originating carrier pays" policy. The Small LECs' claims that CLECs and CMRS providers, as the terminating carriers of transit traffic, are direct beneficiaries of transit connections and thus, should be responsible for compensating BellSouth for the transit function, **are unsupported and have no basis in law, policy, or principles of equity**. ...
>
> ... the "calling party's network pays" (CPNP) concept is well-established policy based on principles of cost causation. FCC Rule 51.703(b) states that "A LEC may not access charges on any other telecommunications carrier for telecommunications traffic that originates on the LEC's network." (47 CFR 51.703(b)) Read in conjunction with Rule 51.701(b)(2), Rule 51.703(b) requires LECs to deliver traffic, without charge, to a CMRS provider's switch anywhere within the Major Trading Area (MTA) in which the call originated. **Thus, the Small LECs' claim that there should be no compensation impact on them when they originate traffic is nonsensical.** If customers of the Small LEC place a call that transits BellSouth's network, it is because the Small LEC and the terminating carrier have not established a direct interconnection. **The Small LEC's customer is the cost causer; the Small LEC should pay transit costs as a cost of doing business.**[4] [Emphasis added.]

[4] *Joint petition by TDS Telecom d/b/a/ TDS Telecom/Quincy Telephone, et. al. objecting to and requesting suspension and cancellation of proposed transit traffic service tariff filed by BellSouth Telecommunications, Inc.*, Order on BellSouth Telecommunications, Inc.'s Transit Traffic Service Tariff, Florida Public Service Commission, Order No. PSC-06-0776-FOF-TP, Docket Nos. 05-0119-TP and 05-0125-TP, issued September 18, 2006, p. 22. [*Florida Decision.*]

The Iowa Utilities Board stated,

> The Board agrees with the decisions of the various state commissions cited above and finds that it is most appropriate for each party to pay the cost of delivering traffic to the other party.[5]

The Illinois Commerce Commission stated,

> When indirectly interconnecting through a third party ILEC switch each party should be financially responsible (that is financially responsible for its own installed facilities or for compensating another party for facilities it uses) for interconnection facilities on its side of the third party ILEC switch. Costs associated with tandem switching should be paid by the carrier sending the traffic. This, in effect, creates two POIs – one on either side of the third party ILEC tandem – demarcating the carriers' financial responsibility for interconnection facilities. When the RLEC is delivering traffic to Sprint then the POI will be on the Sprint side of the third party ILEC tandem. When Sprint is delivering traffic to the RLEC then the POI will be on the RLEC side of the third party ILEC tandem. This is the most efficient and equitable means of allocating costs.[6]

The Tennessee Regulatory Authority stated,

> If a call originates in a switch on one party's network, then that party is responsible for the transiting costs.[7]

The Pennsylvania Public Utility Commission stated,

> Based on FCC rule § 51.703(b) that prohibits an originating carrier from charging a terminating carrier for the costs of traffic originating on its network, we decide that the weight of authority would place the cost responsibility for third-party transit on the originating carrier.[8]

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[5] *Arbitration of Sprint Communications Company L.P., Petitioning Party, vs. Ace Communications Group, et. al., Responding Parties*, Arbitration Order, Iowa Utilities Board, Docket Nos. ARB-05-2, et. al., issued March 24, 2006.

[6] *Sprint Communications L.P. d/b/a/ Sprint Communications Company L.P. Petition for Consolidated Arbitration with Certain Illinois Incumbent Local Exchange Carriers pursuant to Section 252 of the Telecommunications Act of 1996*, Arbitration Decision, Illinois Commerce Commission, Docket No. 05-0402, Dated November 8, 2005, page 28.

[7] *Petition for Arbitration of Cellco Partnership d/b/a/Verizon Wireless, et. al.*, Order of Arbitration Award, Tennessee Regulatory Authority, Docket No. 03-00585, January 12, 2006, page 30.

[8] *Petition of Cellco Partnership d/b/a Verizon Wireless For Arbitration Pursuant to Section 252 of the Telecommunications Act of 1996 to Establish an Interconnection Agreement With ALLTEL*

The Georgia Public Service Commission stated,

> In *Atlas*, the Tenth Circuit concluded that commercial mobile radio service providers should not have to bear the costs of transporting calls that originated on the networks of rural telephone companies across an incumbent LEC's network. 400 F.3d at 1266 fn. 11. The Tenth Circuit also found that the Section 251(a) obligation of all carriers to interconnect directly or indirectly is not superseded by the more specific obligations under Section 251(c)(2).
>
> The Commission finds the reasoning of *Atlas* compelling. **It is consistent with and confirms the principle that the originating party must bear the costs of transiting the call.**[9] [Emphasis added.]

Finally, the Indiana Utility Regulatory Commission stated,

> We find that each party should have the ability under the arrangement to interconnect indirectly and send traffic through a tandem transit provider. **We also find that each party shall be responsible for any charges incurred in delivering traffic originated by its customers to the other party.** We find this conclusion is consistent with the public interest because it requires competitively neutral terms for interconnection by placing symmetrical traffic delivery obligations on both parties.
>
> Our conclusion is also consistent with the competitively neutral regime created by the FCC (which has been followed by at least four other state commissions) under which interconnecting carriers are required to pay the costs associated with transporting calls to the ILEC and the ILEC has the obligation to pay costs associated with transporting calls to the interconnecting carrier.[10] [Emphasis added.]

Pennsylvania, Inc., Opinion and Order, Pennsylvania Public Utility Commission, Docket No. A-310489F7004, January 13, 2005, page 27. [*Pennsylvania Decision.*]

[9] *BellSouth Communications, Inc.'s Petition for a Declaratory Ruling Regarding Transit Traffic*, Order on Clarification and Reconsideration, Georgia Public Service Commission, Docket No. 16772-U, released May 2, 2005, page 4. (Citing Atlas Telephone Company, et. al. v. Oklahoma Corporation Commission, et. al., 400 F.3d 1256, (10th Cir. 2005)).

[10] *In the Matter of Sprint Communications Company L.P.'s Petition for Arbitration … with Ligonier Telephone Company, Inc.*, Final Order, Indiana Utility Regulatory Commission, Cause No. 43052-INT-01, approved September 6, 2006, p. 48. (Citing, (1) … *Sprint Communications Company L.P. Petition of Consolidated Arbitration with Certain Illinois Incumbent Local Exchange Carriers…*, Arbitration Decision, Illinois Commerce Commission, Docket No. 05-0402 (November 8, 2005); (2) *Petition of … Verizon Wireless for Arbitration … With Alltel Pennsylvania, Inc.*, Pennsylvania Public Utility Commission, Opinion and Order, Docket A-310489F7004 (January 13, 2005); (3) *Petition for Arbitration of … Verizon Wireless*, Tennessee Regulatory Authority Case No. 03-00585, at 30 (January 12, 2006); and (4) *Arbitration of Sprint Communications Company L.P. v.*

3) Direct Interconnection

Q. Does Sprint intend to interconnect directly with Swiftel?

A. Yes, Sprint intends to interconnect directly to Swiftel.

Although Sprint intends to interconnect directly, Sprint reserves all rights to interconnect with Swiftel directly or indirectly at any time during the term of the interconnection agreement as Sprint chooses. Sprint's rights should be reflected in the agreement by including language for both direct and indirect interconnection as discussed in detail above.

Q. What is Sprint's obligation with respect to establishing a Point of Interconnection ("POI") with Swiftel?

A. The FCC has explicitly stated that the obligation of any interconnecting telecommunications carrier is to establish one POI per LATA. Specifically, the FCC stated,

> Under section 251(c)(2)(B), an incumbent LEC must allow a requesting telecommunications carrier to interconnect at any technically feasible point. The Commission has interpreted this provision to mean that competitive LECs have the option to interconnect at a single point of interconnection (POI) per LATA.[11]

Ace Communications Group, et. al., Iowa Utilities Board, Docket nos. ARB-05-2, et. al., at 12 (March 24, 2006).

[11] *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Further Notice of Proposed Rulemaking, par. 87, released March 3, 2005.

Q. Does Sprint have a Point of Interconnection located within the LATA where Swiftel is located?

A. Yes. Sprint has one Point of Presence ("POP") located within Swiftel's LATA, located at 1000 North Cliff Avenue, Sioux Falls, SD, 57103. Consistent with the FCC decision, Sprint will establish a direct interconnect facility between the Sprint POP and Swiftel's Brookings, SD end office.

Q. What is Sprint's position on direct interconnection?

A. The direct interconnection facility between Sprint's network and Swiftel's network benefits the customers of both Sprint and Swiftel. The "Calling Party's Network Pays" principle discussed in Section III.A.2, above, applies to both direct and indirect interconnection. It is Sprint's financial responsibility to deliver its originating traffic to Swiftel, and it is Swiftel's financial responsibility to deliver its originating traffic to Sprint. Thus, the cost of the direct interconnection facility between Sprint's network and Swiftel's network should be shared based on the proportionate use of that facility.

Q. What has Sprint proposed?

A. Sprint has proposed that each party establish a financial POI on the other party's network. Each party will be financially responsible for the facilities used to deliver its originating traffic to the POI on the other party's network.

Alternately, Sprint will agree to a single POI located on Swiftel's network if the costs of the shared interconnection facility linking the POI to Sprint's network is shared by the parties based on each party's proportionate use of the facility for its originating traffic.

4) Forward-Looking Cost Based Rates

Q. How should the rate for direct interconnection facilities be determined?

A. The rates charged by Swiftel for the portion of direct interconnection facilities it provides should be based on forward-looking economic costs, consistent with FCC rules.

Q. What do the FCC rules say about the pricing of interconnection facilities?

A. In order to promote competition, the FCC established a framework which would prevent ILECs from raising costs and rates for interconnection in order to deter competitive entry. The FCC's Local Competition Order explicitly requires that interconnection be priced "in a manner that reflects the way they are incurred. Specifically, the FCC's Local Competition Order states,

> We conclude, as a general rule, that incumbent LECs' **rates for interconnection** and unbundled elements must recover costs in a manner that reflects the way they are incurred. This will conform to the 1996 Act's requirement that rates be cost-based, ensure requesting

carriers have the right incentives to construct and use public network facilities efficiently, and **prevent incumbent LECs from inefficiently raising costs in order to deter entry**. We note that this conclusion should facilitate competition on a reasonable and efficient basis by all firms in the industry by establishing prices for interconnection and unbundled network elements based on costs similar to those incurred by the incumbents, ...[12]

47 C.F.R § 51.501 explicitly sets the same forward-looking cost standard (i.e. TELRIC) for both interconnection and unbundled network elements. Specifically, 47 C.F.R § 51.501 states,

> (a) The rules in this subpart apply to the pricing of network elements, **interconnection**, and methods of obtaining access to unbundled elements, including physical collocation and virtual collocation.
>
> (b) As used in this subpart, the term "element" includes network elements, **interconnection**, and methods of obtaining access to unbundled elements, including physical collocation and virtual collocation. [Emphasis added.]

Therefore, the pricing standard described in 47 C.F.R § 51.505, generally referred to as TELRIC, must apply to interconnection facilities.

Q. Have any state commissions explicitly decided that interconnection facilities should be priced at TELRIC?

A. Yes. The Public Service Commission of Maryland stated,

> As noted above, the issue here is interconnection, and **interconnection must be priced at TELRIC**, like unbundled network elements, pursuant to the Act and the *Local Competition Order*. Therefore, the TELRIC rate previously established by this Commission for unbundled dedicated transport is also the correct rate to be charged for this interconnection. [Bold emphasis added.]

[12] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, FCC 96-325, CC Docket No. 96-98, paragraph 743.

5) Shared Cost of Direct Interconnection Facilities

Q. Should the cost of a two-way direct interconnection facilities be shared between the two carriers?

A. Yes. Identical to the indirect interconnection discussion in Section III.A.2, above, direct interconnection benefits the end user customers of both Sprint and Swiftel by allowing those end user customers to originate calls and to have those calls ultimately terminated to other customers. The "Calling Party's Network Pays" principle requires the originating carrier to be financially responsible for delivering that call to the terminating carrier.

Thus the cost of a two-way direct interconnection facility from the Sprint POP in Sioux Falls, SD to the Swiftel end office in Brookings, should be shared by Sprint and Swiftel based upon their proportionate share of the usage of that facility.

Q. What would the monthly cost be for this facility?

A. This facility will require a DS1 facility from both Qwest (approximately 48 miles) and Swiftel (approximately 5 miles). At interstate access rates, Sprint estimates this facility would cost approximately $882 per month. If traffic was balanced, Swiftel's share of this cost would be only $441 per month.

Sprint would expect forward-looking rates to be significantly less. For example, Swiftel has proposed the use of the HAI Model to establish reciprocal compensation rates (see discussion in Section III.C.2 below). While Sprint opposes the use of the HAI model for such purposes, the HAI Model does calculate a cost of dedicated DS1 facilities. Using the HAI default inputs, the average rate for a DS1 would be only $549.98, which is 37% less than the access-based rate. Using Sprint's proposed inputs to the HAI Model, the average rate for a DS1 would be only $341.64, which is 61% less than the access-based rate. Again, Swiftel's cost would only be about one-half of that rate.

Q. How should the cost of two-way direct interconnection facilities be shared between the two carriers?

A. The FCC rules explicitly contemplate that this cost should be shared between the two carriers based on their respective proportionate use of that facility. 47 C.F.R. § 51.709(b) states:

> The rate of a carrier providing transmission facilities dedicated to the transmission of traffic between two carriers' networks shall recover only the costs of the proportion of that trunk capacity used by an interconnecting carrier to send traffic that will terminate on the providing carrier's network. Such proportions may be measured during peak periods.

Accordingly, the cost of the dedicated facility between the two networks is apportioned between the Sprint and Swiftel based on their relative use of the facility.

Q. Are one-way trunks an option?

A. Yes. However, it is generally more efficient for two carriers to share the cost of a single two-way facility than for two carriers to individually provision two one-way facilities.

If either Sprint or Swiftel chooses to utilize a one-way facility to deliver its originating traffic to the other, then the proportional use rules require the originating carrier to pay one-hundred percent (100%) of that facility cost. If Sprint and Swiftel agree to utilize a two-way direct interconnection facility, then the proportional use rule requires Sprint and Swiftel to split the cost of the two-way facility based on their percentage of originated traffic.

This also demonstrates the unreasonableness of requiring one carrier to be solely financially responsible for a single two-way facility. Rather than accept that financial burden, that carrier could simply provision a one-way trunk for its originating traffic, requiring the other carrier to provision its own one-way trunk.

Q. Have the FCC and other state commissions decided that the both carriers should share the cost of direct interconnection facilities?

A. Yes. The issue is essentially the same as that discussed in Section III.A.2, above; i.e. it is the responsibility of the originating carrier to deliver its traffic to the terminating carrier. Several of the state commissions discussed in

Section III.A.2, above, explicitly addressed direct interconnection and agreed that both parties are financially responsible for direct interconnection facilities.

For example, the Florida Public Service Commission stated,

> Even if a Small LEC directly interconnects with a CLEC thereby not using BellSouth's transit function, rules of intercarrier compensation require that the Small LEC be responsible for transporting its originating traffic;[13]

The Pennsylvania Public Utility Commission stated,

> In its Final Best Offer, Verizon Wireless took the position that ALLTEL's obligation to share the cost of two-way direct facilities does not end at its local exchange area or its network boundaries. Verizon Wireless maintained that the ILEC's obligation ends at the point of interconnection, which can be located anywhere in the MTA.
>
> The ALJ recommended in favor of Verizon Wireless on this issue. In support of his recommendation, the ALJ cited *TRS Wireless* and the FCC rules stating the compensation requirements of 47 C.F.R. § 51.703.
>
> ... we shall adopt the ALJ recommendation. However, we shall further direct that the interconnection agreement incorporate Verizon Wireless commitment to establish one point of interconnection within each LATA where it terminates traffic with ALLTEL.[14]

Finally, the Indiana Utility Regulatory Commission stated,

> We find that Sprint's proposal is consistent with the FCC's rules and is equitable for both parties. The evidence reflects that if the parties use direct interconnection that carries two-way trunks, the facility will be sized to accommodate both the RTC's traffic and Sprint's traffic. Where this occurs, we agree that allocating the cost of the two-way facility based on the relative percentage of originated traffic will ensure

[13] *Florida Decision*, page 22.
[14] *Pennsylvania Decision*, pages 53 – 57.

each party will assume the cost associated with carrying its traffic. This is consistent with *both* the FCC rule prohibiting a LEC from assessing charges on another telecommunications carrier for telecommunications traffic originating on the LEC's network *and* the FCC rule requiring that rates of a carrier providing transmission facilities dedicated to the transmission of traffic between two carriers' networks recover only the cost of that trunk capacity used by an interconnecting carrier to send traffic that will terminate on the providing carrier's network.

... Additionally, we note that Sprint's proposal accommodates any RTC concern about the distance between the RTC switches and the Sprint switch, by agreeing to establish a network interconnection point in the LATA in which the RTC originating switch resides.

In addition to the seven state commissions discussed in Section III.A.2, above, several other state commissions have also decided that the cost of direct interconnection facilities should be shared.

For example, the Oklahoma Corporation Commission agreed to the following,

When both Parties agree to utilize two way facilities, charges will be shared by the Parties on a proportional percentage basis as specified in the Shared Facility Factor in Appendix A. ... If the parties can measure actual minutes of use, they shall bill accordingly.[15]

The Public Service Commission of Maryland stated,

The FCC's rules make each party responsible for delivering traffic to the other party. Therefore, Verizon is financially responsible for transporting its traffic to AT&T's switch location and AT&T is financially responsible for transporting its traffic to Verizon's switch location. Two points of interconnection are appropriate. Each party is responsible for the cost of delivering its traffic through its network and into the

[15] *Application of Southwestern Bell Wireless L.L.C. for Arbitration Under the Telecommunications Act of 1996*, Final Order, Oklahoma Corporation Commission, Cause No. PUD200200149, October 22, 2002, Attachment C, Joint Submission of Conformed Agreement, Section 3.1.4.

interconnection facility that connects the two networks. The cost of the interconnection facility itself is shared consistent with the rules set forth by the FCC in ¶1062 of the 1996 First Report and Order. In sum, those rules require that the carriers share the cost of the interconnection facility based upon each carrier's percentage of the traffic passing over the facility.[16]

B. Swiftel Issue No. 14.

Section 6.3, Swiftel proposes language to make clear that it is the originating Party's responsibility to enter into a transiting arrangement if the Party chooses to use an Intermediary Entity. Swiftel opposes Sprint's proposed language which refers to "the" Intermediary Entity because no Entity is identified as "the" Entity.

Q. Regarding the originating party that is responsible for the transiting agreement in section 6.3, who is the entity referred to as "the" Intermediary Entity?

A. The originating carrier has the choice of selecting any third-party carrier who will act as a transit provider between Sprint and Swiftel. Thus "the Intermediary Entity" can be any third-party provider other than Sprint or Swiftel.

Swiftel proposes to changed the final phrase from "... the Intermediary Entity." to "... any Intermediary Entity they may use." Sprint does not

[16] *In the Matter of the Petition of AT&T Communications of Maryland, Inc. for Arbitration Pursuant to 47 U.S.C. § 252(b) Concerning Interconnection Rates, Terms And Conditions*, Order No. 79250, Public Service Commission of Maryland, Case No. 8882, page 9. [*Maryland Decision.*]

necessarily object to this language, as long as it is clear that the Intermediary Entity is a third party transit provider other than Sprint or Swiftel.

The Commission should adopt Sprint's proposed language.

C. Sprint Issue No. 5 (Swiftel Issues Nos. 5, 9, 15, and 25)

What is the appropriate reciprocal compensation rate for the termination of Telecommunications Traffic?

1) Bill-and-Keep

Q. What is Sprint's position on Issue No. 5?

A. The Commission should establish Bill-and-Keep as the appropriate compensation mechanism between Sprint and Swiftel. Sprint believes that it is most efficient for each carrier to be ultimately responsible for its originating traffic, and to terminate other carrier's traffic without charge.

Bill-and-Keep is the most efficient method of reciprocal compensation between two carriers. Bill-and-Keep eliminates the administrative burden for the two carriers to establish a billing process, i.e. it eliminates the need to produce and exchange monthly invoices and payments.

Only if it has been demonstrated that traffic is both significantly out-of-balance and of sufficient volume, should the Commission adopt a specific compensation rate.

Q. What is Swiftel's position on Issue 5?

A. According to its Response, Swiftel proposes a specific compensation rate prior to any evidence that traffic is significantly out-of-balance or of significant volume.[17]

Q. May the Commission adopt a Bill-and-Keep arrangement for reciprocal compensation?

A. Yes. 47 C.F.R. § 51.713(b) states,

> A state commission may impose bill-and-keep arrangements if the state commission determines that the amount of telecommunications traffic from one network to another is roughly balanced with the amount of telecommunications traffic flowing in the opposite direction, and is expected to remain so, and no showing has been made pursuant to § 51.711(b).

Q. May the Commission presume traffic is balanced?

A. Yes. 47 C.F.R. § 51.713(c) states,

> (c) Nothing in this section precludes a state commission from presuming that the amount of telecommunications traffic from one network to another is roughly balanced with the amount of telecommunications traffic flowing in the opposite direction and is expected to do so, unless a party rebuts such a presumption.

[17] *Response of Brookings Municipal Utilities d/b/a Swiftel Communications and Motion to Dismiss and Opposition to Motion to Consolidate*, page 16, paragraph 41. [*Swiftel Response*.]

Q. Is there reason to presume traffic will be roughly balanced?

A. Yes. The Sprint business model (discussed in the Direct Testimony of Sprint witness James R. Burt) will initially target residential customers in a ubiquitous manner. Because there will be no targeting of high use residential or business customers, there is no reason to expect Sprint's end-user customers to have different traffic patterns than Swiftel's end-user customers. The majority of Swiftel's customers are residential.[18] Since both Sprint and Swiftel will be serving the same set of residential customers, there is no reason to expect traffic to be significantly out-of-balance between the two carriers. Eventually, the Sprint business model will also include business customers, making Sprint's residential / business mix even more in line with Swiftel's residential / business mix, making it even less likely that traffic will be significantly out-of-balance.

Q. What traffic ratio defines "balanced" traffic?

A. There is no firm rule on what constitutes "balanced traffic." Setting the "threshold" too low, will cause the two carriers to bear the administrative burden to establish a billing process unnecessarily, particularly when the volume of traffic exchanged is low. In other words, both parties would need to create a process to measure the actual traffic on a monthly basis, create

[18] *Brookings Municipal Utilities d/b/a/Swiftel Communications Responses to Sprint's Discovery Requests*, Request No. 9, Swiftel refused to provide the exact number of residential and business access lines. [*Swiftel Responses to Sprint's Discovery*.]

a billing system; process, issue, create, and send bills; create a remittance system; and process, verify, issue, and send remittances.

Q. Does Sprint recommend a Bill-and-Keep "threshold?"

A. No. Sprint recommends a Bill-and-Keep arrangement. However, should the Commission wish to establish a Bill-and-Keep "threshold," Sprint recommends a threshold of at least 60% / 40%, which is very common in the telecommunications industry. In other words, if the balance of traffic between the two carriers is within 60% / 40%, a Bill-and-Keep reciprocal compensation arrangement shall be in place.

Q. Should the Commission establish a Bill-and-Keep "threshold" between Sprint and Swiftel?

A. No. The amount of reciprocal compensation traffic expected between Sprint and Swiftel will most likely be so low as to never justify anything other than a Bill-and-Keep arrangement between the two carriers.

For example, assume that after one year in business,

- Sprint serves 1,000 end user customers in Swiftel's service area,
- each customer has a total of 2,000 MOU per month,
- the balance of traffic is 55% / 45% (Sprint originating / terminating), and
- the symmetrical reciprocal compensation rate is $0.005.

Under this hypothetical, Sprint would owe to Swiftel an average of just $2,750 per month, while Swiftel would owe to Sprint $2,250, for a net of only $500 per month. (See calculation on Attachment RGF-1) In some months, the balance of traffic may favor Sprint, with Swiftel owing a net amount to Sprint.

It is extremely unlikely that during the life of this Interconnection Agreement, that traffic would be both out-of-balance and of sufficient volume to justify anything other than a Bill-and-Keep arrangement. Sprint suggests that it would be inefficient to establish a billing process for such low amounts of net compensation; and that it would be reasonable to maintain a system of Bill-and-Keep without a Commission-defined automatic "threshold."

Again, in the unlikely event that sometime in the future, either party could demonstrate that traffic is not only out-of-balance but of significant volume to create a meaningful amount of reciprocal compensation, the parties could readdress this issue at that time.

2) Swiftel's Proposed Rate Derived From the HAI Model

Q. What rate is Swiftel proposing for reciprocal compensation, and how did it arrive at that rate?

A. According to Swiftel's Response, Swiftel is proposing a rate of $0.01061 per minute, which was derived from the HAI Model.[19] However, subsequently, Swiftel increased this rate to $0.01310.[20]

Q. Briefly describe the HAI Model 5.0a.

A. The HAI Model was developed primarily for USF purposes. It was not universally adopted by state commissions. In my previous experience with Sprint's Local Telephone Division which operated in eighteen states, the HAI Model was rejected for USF purposes by at least nine states (Florida, Indiana, Nebraska, New Jersey, North Carolina, Pennsylvania, South Carolina, Washington, and Wyoming), a rejection rate of at least 50%.[21]

Q. Is the HAI Model appropriate for calculating rates for reciprocal compensation?

A. No. Universal Service Fund (USF) models, like the HAI, are not appropriate for determining an RLEC's rate for terminating traffic.

USF models are concerned with the cost of basic service. Switching and transport typically account for less than 10% of the total cost of USF basic service. Accordingly, most of the complexity in USF models deals with loop

[19] *Swiftel's Response*, page 25, paragraph 76.
[20] *Brookings Municipal Utilities d/b/a Swiftel Communications, Hatfield Model, Total Long Run Incremental Cost (TELRIC), Reciprocal Compensation Rate Summary, January 2007.* (Confidential Document)
[21] This is not intended to be an exhaustive list of all fifty states. Sprint's Local Telephone Division operated in only eighteen states.

costs. For example, the HAI Model 5.0a contains approximately 1,705 user-variable inputs. Only 41 (2.4%) deal with end office switching / wire center investment, and only 34 (2.0%) deal with interoffice investment. As a result, for usage-sensitive services such as reciprocal compensation, USF models do not provide sufficient precision for switching and transport costs.

Finally, the USF proceedings were about creating a cost benchmark. ILECs costs were then compared to this benchmark to determine the degree of USF support for each ILEC. But the absolute value of the cost benchmark was not as relevant as the relative cost of an individual ILEC to that benchmark. In other words, the fact that an individual ILEC's costs were 50% over the benchmark was more relevant than the actual value of the benchmark.

Q. Has the FCC arrived at a similar conclusion?

A. Yes. In the Universal Service proceeding, FCC's Fifth Report and Order, CC Docket No. 96-45, dated October 22, 1998, Paragraph 75 states,

> In our evaluation of the switching modules in this proceeding, we note that for universal service purposes where cost differences caused by differing loop lengths are the most significant cost factor, switching costs are less significant than they would be in, for example, a cost model to determine unbundled network element switching and transport costs.

Thus, Swiftel has improperly utilized a USF model to determine the cost of reciprocal compensation.

Q. Have other state commissions commented on the arbitrary nature of the HAI inputs?

A. Yes. In a similar reciprocal compensation proceeding, the Oklahoma Corporation Commission expressly ruled that the HAI 5.0a Model should not be used by rural LECs to compute rates for reciprocal compensation. Specifically, the Commission stated,

> The Arbitrator further finds that the Hatfield model , which has been utilized by the RTCs herein, has already been found suspect by the Arbitrator in at least one previous hearing due to the ability of persons using it to be able to manipulate the inputs to reach about almost any imaginable result. In this case, the result utilizing the Hatfield model is approximately ten cents per minute, but the RTCs are gracious and offer a 50 percent discount.[22]

Q. Can you give an example of the arbitrary nature of the HAI inputs?

A. Yes. I have personally seen HAI Model runs proposed by rural LECs in other jurisdictions which produce reciprocal compensation rates for individual LECs as high as $0.45 per minute. While these studies have been rejected by state commissions, it is clear the HAI model can be manipulated to produce fantastic results.

Q. Has Swiftel adjusted the HAI Model inputs in a selective and arbitrary manner?

A. Yes. Swiftel changed very few of the HAI Model input default values. Of the 1,705 inputs, Swiftel changed only 37 inputs, 17 of those being

[22] *Application of Southwestern Bell Wireless L.L.C. for Arbitration under the Telecommunications Act of 1996*, Final Order, Cause Nos. PUD 2002-149 through 153, Oklahoma Corporation Commission, Final Order No. 468960, October 22, 2002.

depreciation lives. Of 195 HAI inputs in the Switching and Interoffice Transmission category, Swiftel changed only 15 inputs, or 7.7%. Of the 135 HAI inputs in the Expense category, Swiftel changed only 22 inputs, or 16.3%.

Using HAI Model-provided default values produces a reciprocal compensation rate for Swiftel of $0.00658. However, these 37 Swiftel input changes increase Swiftel's proposed rate for reciprocal compensation to $0.01310, an increase of 99% over the default values.

Q. What is your personal experience with the transport cost generated by the HAI Model?

A. My personal experience with the HAI model is that is significantly overstates the cost of transport.

Q. How did Swiftel develop its proposed rate for reciprocal compensation of $0.01310?

A. According to information provided by Swiftel in response to Sprint's Discovery Request No. 32,[23] Swiftel uses four outputs from the HAI Model. To develop the switching rate, Swiftel adds the "EO switching" output and the "ISUP" output to derive a total switching cost per minute. This cost is then applied to all terminating minutes.

[23] *Swiftel Discovery Responses*, Request No. 32.

To develop the transport rate, Swiftel adds the "Direct Transport" output and the "Direct Transmission Terminal" output to derive a total transport cost per minute. Swiftel applies this transport cost only to those minutes being transported from the Brookings host office to one on three remotes served by that host office.

However, Sprint believes HAI Model outputs used by Swiftel are inflated because of the incorrect inputs used by Swiftel.

3) Swiftel Proposed Inputs to the HAI Model

Q. Please discuss the Swiftel input changes to the HAI Model.

A. Attachment RGF-2 analyzes and summarizes the changes made by Swiftel to the HAI Model default inputs.

Columns B and C of Attachment RGF-2 show the 37 HAI input variables changed by Swiftel. Column B is the "HAI Input No." used by Swiftel in its Response to Sprint Discovery Request No. 32.

Column D shows the original HAI default value for an HAI input, Column E shows the Swiftel input value, and Column F shows the percent change to that input value.

Columns G – I show the results of a sensitivity analysis of the individual Swiftel-proposed input changes. Column G represents the rate for reciprocal compensation that would result due solely to this individual Swiftel-proposed input, all other default inputs unchanged. Column H shows the difference between the Swiftel rate in Column G and the HAI model default rateshown in Cell D83. Column I shows the percent change in the reciprocal compensation rate due to that one input change. For example, in Row 11, the Swiftel-proposed input for the "Switch Installation Multiplier" produces a reciprocal compensation rate of $0.00692 (Column G). This is an increase of $0.00033 (Column H), or an increase of 5.1% (Column I) over the HAI default rate of $0.00658 (Cell D83).

Column J shows the Sprint-proposed inputs for each of these variables.

Rows 72 – 83 show the HAI results and the final reciprocal compensation rate produced by the HAI default inputs (Column D), the Swiftel-proposed inputs (Column E), and the Sprint-proposed inputs (Column J).

Q. Please discuss the specific input changes Swiftel made to the to the HAI Model default inputs.

A. As can be seen in Attachment RGF-2, the vast majority of the Swiftel input changes increase Swiftel's rate. The vast majority of the increase can be attributed to the seven areas.

Switch Installation Multiplier – This input reflects Swiftel's investment in switch installation as a multiplier factor. Swiftel increased this variable from 1.10 to **[Begin Swiftel Confidential]** (i.e. the multiplier factor from % to %). **[End Swiftel Confidential]** By itself, this input change increases Swiftel's rate by 5.1% (as compared to the HAI default inputs).

1) Power Investment – Swiftel increased this investment amount for a 5,000 – 25,000 line central office (applicable to Swiftel) from $20,000 to **[Begin Swiftel Confidential]** $, an increase of %. **[End Swiftel Confidential]** By itself, this input change increases Swiftel's rate by 7.7%.
2) Switch Room Size – Swiftel increase this amount for a 5,000 – 25,000 line central office from 2,000 square feet to **[Begin Swiftel Confidential]** square feet, an increase of %. **[End Swiftel Confidential]** By itself, this input change increases Swiftel's rate by 3.8%.
3) Fraction of Interoffice Structure Assigned to Telephone – This input reflects the percentage of investment in poles and trenching that is assigned to Swiftel, the remainder being assigned to other utilities or carriers on a forward-looking basis. Swiftel increase this input for buried cable from 33% to **[Begin Swiftel Confidential]** %, **[End Swiftel Confidential]** and for underground cable from 33% to **[Begin Swiftel Confidential]** %. **[End Swiftel Confidential]** By itself, this input change increases Swiftel's rate by 6.8%.

4) Cost of Capital – Debt Percent – Swiftel decreased this percentage from 45% to **[Begin Swiftel Confidential]** %. **[End Swiftel Confidential]** By itself, this input change increases Swiftel's rate by 8.3%.

5) Depreciation – Swiftel decreased the lives of 16 classes of plant. Most significantly, Swiftel decreased the life of digital electronic switching from 16.17 to **[Begin Swiftel Confidential]** years. **[End Swiftel Confidential]** By itself, this input change increases Swiftel's rate by 10.3%.

6) Forward-Looking Network Operations Factor – This input is intended to reflect forward-looking productivity and expense-saving opportunities that are not reflected in embedded expenses and technologies. Swiftel increased this factor from 50% to **[Begin Swiftel Confidential]** %, **[End Swiftel Confidential]** essentially removing any forward-looking cost efficiencies and productivity improvements. By itself, this input change increases Swiftel's rate by 10.9%.

Just these seven input changes by Swiftel increase Swiftel's rate from $0.00658 to $0.01023, an increase of 55% over the HAI default inputs. This demonstrates how sensitive the HAI Model results for switching and transport are to a very few number of inputs, and how easily the HAI Model output can be manipulated.

Q. Has Swiftel documented or provided any support for these input changes?

A. No, not at this time. While Sprint recommends that the HAI Model be rejected, should this Commissionchoose to adopt it in this proceeding, the Commission must give special consideration as to whether the Swiftel-proposed input changes are well documented and supported, and whether these inputs reflect a forward-looking environment. If these inputs are not well documented, they should be rejected by the Commission.

4) Sprint's Proposed Inputs to the HAI Model

Q. What recommended changes does Sprint suggest to the Swiftel-proposed inputs?

A. Sprint suggests the following input changes in each of the eight input areas discussed.

1) Switch Installation Multiplier – Increasing this input is not justified, particularly considering that this cost study is intended to reflect a forward-looking environment. Sprint recommends this input revert back to the default value.

2) Power Investment – Increasing this investment amount by **[Begin Swiftel Confidential]** % **[End Swiftel Confidential]** is not justified in a forward-looking environment. Sprint recommends this input revert back to the default value.

3) Switch Room Size – Increasing this investment amount by **[Begin Swiftel Confidential]** % **[End Swiftel Confidential]** is not justified in a forward-looking environment. Sprint recommends this input revert back to the default value.

4) Fraction of Interoffice Structure Assigned to Telephone – Increasing this input from 33% to **[Begin Swiftel Confidential]** % **[End Swiftel Confidential]** may be justifiable given Swiftel's rural nature. However, increasing this input to **[Begin Swiftel Confidential]** % **[End Swiftel Confidential]** for underground cable is not justified in a forward-looking environment. Sprint recommends that the input for underground equal that for aerial, i.e. increased from 33% to **[Begin Swiftel Confidential]** %. **[End Swiftel Confidential]**

5) Cost of Capital – Debt Percent – This input change is presumably consistent with Swiftel's existing capital structure. If this is correct, Sprint does not object to this change.

6) Depreciation – Sprint recommends the use of FCC-prescribed depreciation lives. For example, the FCC-prescribed life for electronic digital switching ranges from 12% to 18%. Sprint recognizes that depreciation rates are declining in a forward-looking environment. Thus, Sprint recommends the low end of the FCC-prescribed depreciation ranges, which produce more conservative (higher) costs.

7) Forward-Looking Network Operations Factor – Changing this factor from 50% to **[Begin Swiftel Confidential]** % **[End Swiftel Confidential]**

is not reasonable in a forward-looking environment. While the 50% default value may be excessive eleven years after the passage of the 1996 Telecommunications Act, **[Begin Swiftel Confidential]** % **[End Swiftel Confidential]** is inappropriate as it assumes Swiftel is operating at peak efficiency and there will be no forward-looking productivity gains. This is particularly unlikely for rural ILECs which have not experienced the levels of competition as have urban ILECs. Sprint recommends a compromise of these two extremes, i.e. 75%.

Sprint accepts the other input changes proposed by Swiftel, assuming they represent actual, Swiftel-specific, forward-looking information.

Q. Do you have any proposed changes to inputs not modified by Swiftel?

A. Yes, Sprint recommends two other changes to the HAI model run provided by Swiftel.

Sprint's first proposed change concerns switching investment. As mentioned above, the HAI Model's emphasis is on loop costs. As a result, the HAI Model's calculations for switching are grossly simplistic. All of the complexity in switching costs is reduced to two simple investment variables, which the user is free to adjust to produce just about any result imaginable. These investment variables are "End Office Switching Investment Constant

Term" (Variable 4.1.9) and "End Office Switching Investment Slope Term" (Variable 4.1.10).

Swiftel chose not to adjust these two switch investment variables. For the "End Office Switching Investment Constant Term" (Variable 4.1.9), the HAI Model default value is $416.11 for small ILECs such as Swiftel. However, this value dates back to 1995. It is well established that the cost of switching equipment has been decreasing over time. For example, according to the consulting firm AUS, which publishes the annual changes in the cost of all telecommunications equipment, including switch electronics, the cost of switching investment has decreased by 31% since 1995.[24] Accordingly, Sprint recommends that this input be reduced by 31%, from $416.11 to $287.12.

Sprint's second proposed change concerns host-remote relationships. HAI Model contains the variables "Host-Remote CLLI Assignments" (Variable 4.10.1) and "Host-Remote Assignment Enable" (Variable 4.10.2). According to the HAI Model Inputs Portfolio, Variable 4.10.1 is defined as,

> An input form consisting of parameters that allow the user to specify the set of host and remote wire centers, and establish the relationships between remotes and their serving host, using the CLLI codes of the respective switches. In the default mode, HM 5.0a does not make such designations or identify such relationships.

Variable 4.10.1 is defined as,

[24] AUS Telephone Plant Index Bulletin No. 33, Schedule No.T-3.

An option that, if enabled, instructs the model to perform switching calculations based on the host-remote relationships defined by Parameter 4.10.1. In enabled, 1) the investment in host/remote combinations are distributed equally among all lines served by the combination, 2) the cost of umbilical trunks between remotes and hosts is modeled explicitly, and 3) the host and remotes will be connected on a local SONET ring.

Sprint recommends that Variable 4.10.2 be enabled and that the host-remote relationships be defined in Variable 4.10.1 consistent with Swiftel's response to Sprint Discovery Request No. 5. Specifically, Swiftel has one host office in Brookings, and three remote offices designated North, South, and East. Sprint believes this will more accurately model Swiftel's network and provide a more accurate result.

Q. How does enabling the host-remote assignment in the HAI model affect the final results?

A. This one change to the model has a huge impact on the final result. When comparing the HAI default results with the Sprint-inputs result, the "Direct Transport" cost component decreases from $0.00238 to $0.00070, a reduction of 70.6%. This is apparently because the HAI model, with the host-remote assignment disabled, builds direct transport facilities from each of Swiftel's four exchanges to the RBOC tandem. (All of that cost is apparently assigned to the RLEC, with no costs assigned to the RBOC owning the tandem. Thus, there is no "meet-point" sharing of these facility costs.)

With the host-remote assignment activated, the HAI model will properly build only one direct transport facility from Swiftel's Brookings host to the RBOC tandem. The fact that all of these costs are apparently assigned to Swiftel, and none to the RBOC, still inflates Swiftel's transport costs.

Q. What is Sprint's recommended rate if the Commission adopts the HAI Model in this proceeding?

A. The Swiftel HAI Model run produces a rate of $0.01310. Beginning with that model run, making the Sprint-recommended input changes, including designating host-remote relationships, produces a rate of $0.00469.

IV. SUMMARY AND CONCLUSION

Q. Please summarize your Direct Testimony.

A. Sprint Issue No. 2 –

- Sprint has the right to interconnect with Swiftel either directly or indirectly, as it chooses. Sprint plans to interconnect directly at Swiftel's Brookings end office.
- Should Sprint choose to connect indirectly, the FCC's Calling Party's Network Pays policy requires that each party is financially responsible for delivering its originating traffic to the terminating carrier's network. In an indirect interconnection scenario. The originating party is financially responsible for all transiting costs.

- Since Sprint intends to interconnect directly with Swiftel's network, it will establish one POI on Swiftel's network, at its Brookings end office. Both carriers are financially responsible for delivering its originating traffic to the other carrier's network.
- Direct interconnection facilities should be priced at forward-looking rates.
- If the two carriers utilize a two-way facility for direct interconnection, the cost of that facility should be shared based on the proportionate use of that facility.

Swiftel Issue No. 14 – The Commission should adopt Sprint's language which allows the originating carrier to select any third-party transit provider other than Sprint and Swiftel.

Sprint Issue No. 5 – The Commission should adopt a Bill-and-Keep reciprocal compensation arrangement between Sprint and Swiftel. The balance of traffic should be presumed to be roughly balanced, and the expected volume of traffic is so low as to not justify the creation of a measurement and billing process between the two carriers.

Alternately, the Commission could adopt a Bill-and-Keep arrangement until such time that one party demonstrates that traffic is significantly out-of-balance and that traffic volume is so significant that it justifies the creation of

a measurement and billing system. The Commission could establish a rate to be effective at that time.

The HAI Model proposed by Swiftel is not appropriate for reciprocal compensation. Swiftel's proposed inputs are undocumented, unreasonable and not forward-looking. Should the Commission choose to establish a reciprocal compensation rate using the HAI Model, they should use Sprint's proposed inputs which produce a rate of $0.00469 per minute.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.