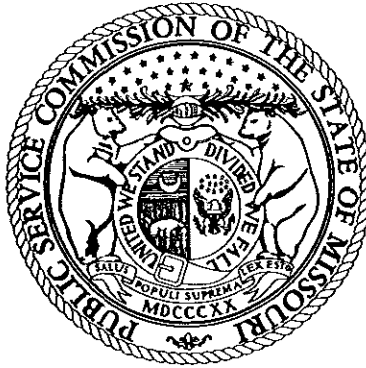


**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

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PGB



Petition of BroadSpan Communications, Inc.)
for Arbitration of Unresolved)
Interconnection Issues Regarding ADSL)
with Southwestern Bell Telephone Company.)

Case No. TO-99-370

ARBITRATION ORDER

Issue Date: June 15, 1999

Effective Date: June 22, 1999

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OF THE STATE OF MISSOURI

Petition of BroadSpan Communications, Inc.)
for Arbitration of Unresolved)
Interconnection Issues Regarding ADSL) Case No. TO-99-370
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APPEARANCES

Katherine Swaller, Counsel, One Bell Center, Suite 3536, St. Louis, Missouri 63101, for Southwestern Bell Telephone Company.

Carl J. Lumley, Attorney at Law, Curtis, Oetting, Heinz, Garrett & Soule, P.C. 130 South Bemiston, Suite 200, Clayton, Missouri 63105,

and

Colleen M. Dale, Attorney at Law, 11756 Borman Drive, Suite 101, St. Louis, Missouri 63146, for BroadSpan Communications, Inc.

REGULATORY LAW JUDGE: Morris L. Woodruff

ARBITRATION ORDER

Procedural History

On March 1, 1999, BroadSpan Communications, Inc., d/b/a Primary Network Communications (BroadSpan) filed a petition seeking arbitration of unresolved interconnection issues regarding Asymmetrical Digital Subscriber Line (ADSL) with Southwestern Bell Telephone Company (SWBT). BroadSpan's Petition is based on the requirements of Section 252(b) of

the Telecommunications Act of 1996, which requires state commissions, such as the Missouri Public Service Commission, to arbitrate interconnection disputes between an incumbent local exchange carrier (ILEC) and a telecommunications carrier as defined in the Telecommunications Act. SWBT is an ILEC as defined in the Telecommunications Act and BroadSpan meets the Act's definition of telecommunications carrier.

On August 12, 1998, the Commission approved an Interconnection Agreement between BroadSpan and SWBT. On September 22, BroadSpan made a request to SWBT for access to ADSL technologies as unbundled network elements (UNEs). SWBT provided a quote for those services on January 19, 1999. BroadSpan and SWBT were able to reach agreement on all issues surrounding its request other than rates. BroadSpan filed a petition for arbitration of unresolved interconnection issues regarding ADSL on March 1. SWBT filed its answer to BroadSpan's petition on March 22. Both parties filed direct testimony on April 15 and rebuttal testimony followed on April 22. A hearing was conducted on May 6. BroadSpan and SWBT each filed post-hearing briefs on June 1.

Findings of Fact

The Missouri Public Service Commission has considered all of the competent and substantial evidence upon the whole record in order to make the following findings of fact. The Commission has also considered the positions and arguments of all the parties in making these findings.

Failure to specifically address a particular item offered into evidence or a position or argument made by a party does not indicate that the Commission has not considered it. Rather the omitted material was not dispositive of the issues before the Commission.

Loop Qualification

ADSL technology allows a customer to use existing copper phone lines to transmit and receive data at an increased speed. However, certain devices that may be necessary to provide voice service over that phone line will interfere with the ADSL signal. If the customer's phone line does contain such interferors, they must be disconnected from the line before ADSL service can be provided. In addition, the length of the loop, apart from the presence of any interferors, may limit or prevent the provision of ADSL service.

SWBT has agreed to provide ADSL capable loops to BroadSpan as an unbundled network element. However, before BroadSpan could utilize a particular loop to provide ADSL service to a customer, it must learn whether or not any interferors are present on that line. SWBT is offering BroadSpan a two-step process for determining what, if any interferors are present on a loop. The first step is a pre-qualification tool. This would allow BroadSpan to access an electronic database where all loops have been divided into Distribution Areas. This database does not contain information about the exact make-up of individual loops. Instead it broadly categorizes loops by length and composition. If BroadSpan inquires about the loop serving a given address, the pre-

qualification database will indicate whether the loop is of a length that is likely to permit the provision of ADSL service and whether or not the loop is copper. SWBT provides the pre-qualification service at no extra cost beyond the charge for Operational Support System (OSS) connectivity, which is not at issue in this case.

If, after accessing the pre-qualification database, BroadSpan wishes to proceed further, it must request that SWBT qualify the loop. SWBT's testimony indicated that the loop qualification process is at present a totally manual process. In other words a SWBT engineer must physically pull out a paper map and examine the representation of the loop to determine whether or not any interferors are on the line. SWBT represented that at this time its cost for providing a manual loop qualification service is \$84.15 and it proposes to charge BroadSpan that amount. SWBT's testimony did indicate that it plans to have a partially mechanized loop qualification process in place by August 1, 1999. Once this new process is in place, SWBT proposes to charge BroadSpan between \$15.00 and \$20.00 per loop for loop qualification.

BroadSpan argued that the cost of providing loop qualification should be included in OSS charges and should not be subject to an additional charge. Even if SWBT is to receive additional compensation for loop qualification, BroadSpan argued that its prices, based on manual and partial mechanical processes, do not meet the Total Element Long Run Incremental Cost (TELRIC) standard imposed by federal regulation (47 CFR 51.505(b)(1)) and previously adopted by this Commission. TELRIC

principles require that prices of unbundled network elements be based on forward-looking economic cost, which must be measured based on the use of the most efficient telecommunications technology currently available. BroadSpan was not able to propose an exact cost for loop qualification under TELRIC principles but suggested that the Commission adopt the rate proposed by the staff of the Texas Public Utility Commission, \$2.56 per loop.

Section 252(d) of the Telecommunications Act provides that the price to be established for the provision of unbundled network elements is to be based on the cost of providing that element. Furthermore, 47 CFR 51.505(b)(1) indicates that the TELRIC cost of an element should be measured "based on the use of the most efficient telecommunications technology currently available. . . ." BroadSpan argues that the use of an electronic database to perform loop qualifications is bound to be more efficient than manually looking at paper maps and that therefore the cost of providing that service should be based on the use of such an electronic database, resulting in a lower cost.

The problem with BroadSpan's argument is that no such electronic database currently exists for SWBT's system. Indeed there was no testimony to establish that such a database exists for any other ILEC. SWBT's witness testified that because of the vast number of loops existing in its system and because most of those loops will never be considered for ADSL service, it may never be economical to transfer all of the information necessary to do a loop qualification into an

electronic database. Under the circumstances it would be unfair to require SWBT to offer a loop qualification service based upon speculation about the cost of providing that service through a non-existent and perhaps inefficient electronic system.

SWBT proposes to charge \$84.15 per loop for its current all-manual loop qualification process until August 1, 1999, when it expects to have a partially mechanized process in place. After August 1, SWBT proposes to charge \$15.00 per line as an interim rate with a cap of \$20.00 per line after a TELRIC study is performed. The evidence indicated that BroadSpan most likely would never have to pay the proposed \$84.15 charge because it is unlikely that BroadSpan will be able to begin providing services before August 1. In any event, the proposed \$84.15 per loop charge is clearly excessive in that it is based on a completely manual process that is obviously obsolete since it will be replaced by an improved process on August 1. However, the partially mechanized process that SWBT plans to inaugurate on August 1 does appear to be the most efficient telecommunications technology available at this time. While it was glad to speculate about the services that a more efficient SWBT might provide, BroadSpan did not present any convincing evidence that a more efficient technology is available.

SWBT presented evidence that its proposed charge of \$15.00 per loop is fair and reasonable and necessary to recover its costs. Contrary to BroadSpan's assertion, a nonrecurring charge in that amount should not

prove to be a substantial barrier to competition. Therefore, the nonrecurring loop qualification rate will be set at \$15.00 per loop.

Loop Conditioning

The ADSL service that BroadSpan seeks to provide is offered over the same 2-wire 8dB copper loops that SWBT is currently using for voice transmission. Some of those loops contain devices that are useful and sometimes necessary for voice transmission. Those same devices will, however, impede or prevent the transmission of data through the ADSL signal. In order for the 8dB loop to be used for ADSL service, the loop must be disconnected from those devices. SWBT proposes to require BroadSpan to pay for the cost of disconnecting those devices in an up-front manner when BroadSpan requests that the loop be conditioned for provision of ADSL service.

The FCC's interpretation of federal law requires SWBT to perform the conditioning work requested by BroadSpan. However, it also requires that BroadSpan compensate SWBT for the cost of such conditioning. (FCC Docket No. 96098 at paragraph 382) The fact that BroadSpan must compensate SWBT for the cost of conditioning the loops it requests is not disputed. However, the parties disagree sharply concerning how SWBT is to be compensated for its work.

Rather than paying up-front non-recurring charges for the work required to condition the loops, BroadSpan proposes that the Commission establish a monthly recurring charge of \$0.62 applicable to all ADSL loops up to 17,500 feet. For loops in excess of 17,500 feet BroadSpan

asks the Commission to require SWBT to develop and submit for approval in subsequent proceedings, discrete pricing components for an "individual case basis" charge for conditioning of such loops.

BroadSpan argues that the use of a relatively small monthly recurring charge is reasonable because the conditioning of a loop to allow the provision of ADSL is a permanent improvement to SWBT's system. BroadSpan suggests that the cost of creating that improvement should be capitalized and recovered over time as would the cost of any other capital improvement.

BroadSpan's argument must fail because it was unable to establish that the work required to condition a loop for provision of ADSL service is in fact a capital improvement. The devices that must be disconnected from the loop if ADSL service is to be offered over that loop are still valuable elements of SWBT's voice network. Indeed, under some circumstances, if BroadSpan's customer no longer wants ADSL service and SWBT finds that it once again needs to use the loop for voice service, it may have to reconnect the interfering devices.

A larger problem with BroadSpan's argument is that it is based on speculation about how many loops will be leased for ADSL services. Without some firm knowledge about how many loops will be leased and how long they will be leased, it is impossible to devise a recurring charge that will fully compensate SWBT for the up-front costs it must incur to condition the loop for BroadSpan's use.

BroadSpan is concerned that the imposition of large up-front charges will discourage the entry of competition in the provision of ADSL services. BroadSpan points out that if SWBT's non-recurring, up-front charges are allowed, the first company that provides ADSL service on a line that requires conditioning will be required to either absorb the conditioning costs or pass them on to the customer, either directly or through higher rates. If the costs of conditioning are passed directly to the customer, the increased costs would discourage the use of ADSL service. If the conditioning costs are recovered through higher rates, the first company that pays for conditioning is at risk that a competitor, that does not have to pay for conditioning the loop, will be able to undercut rates and steal the customer. If it no longer has the customer, the competitive company would no longer have the means to recover the conditioning cost.

Interestingly, the risks that BroadSpan would face in recovering conditioning costs through higher rates, which BroadSpan decries as anti-competitive when applied to BroadSpan, are exactly the same risks that BroadSpan urges the Commission to impose on SWBT when it suggests that SWBT recover its expenses of conditioning through a recurring charge. No doubt those risks are real. However, the actual risk is diminished by the fact that the risk runs both ways. If SWBT or some other phone company pays to condition a loop for its customer, BroadSpan can steal that company's customer as easily as its own customer can be stolen. That is the nature of competition. If BroadSpan believes that, despite the

risks, it is commercially feasible to provide ADSL service to customers on loops that require conditioning, it may develop rates that make such service possible. However, it is not fair to require SWBT to absorb the risk of providing that service on behalf of BroadSpan.

The danger that competitors will be discouraged from entering the ADSL field by the risks of paying for conditioning the required loops is reduced by the fact that most loops that BroadSpan or other competitors will obtain from SWBT will not require any conditioning. If BroadSpan wants to avoid paying the cost of conditioning loops, it can easily do so by declining to serve customers that can only be served over lines that require conditioning. Certainly the facilitation of service to a large number of customers is a worthy goal. However, SWBT should not be required to assume the risk of doing so while BroadSpan is allowed to collect the profits from its customers.

BroadSpan's proposal to compensate SWBT for the cost of conditioning its loops through a recurring charge will not be accepted. The next question then becomes, how much should SWBT be allowed to charge BroadSpan for those services?

SWBT's proposed charges are based on its own interviews with its employees to determine the amount of time required to complete the tasks necessary to disconnect ADSL lines from interfering devices. BroadSpan's testimony was able to call into question the accuracy of those estimates. However, BroadSpan did not offer any competing estimates of the time and resulting cost required to disconnect the interferors. Instead BroadSpan

suggested that SWBT's cost estimates should be arbitrarily reduced by 50 percent because SWBT's time estimates were reduced by that amount in a previous, unrelated, arbitration (TO-97-40 and TO-98-115).

The Commission will decline to arbitrarily adopt the 50 percent reduction urged by BroadSpan. Nevertheless, some adjustment to SWBT's cost estimates is appropriate. Barry Moore testified on behalf of SWBT that the cost studies that formed the basis for SWBT's proposed charges to BroadSpan are also the basis for SWBT's plan to charge its retail customers an up-front, non-recurring charge of \$900 if they wish to receive ADSL service from SWBT on a loop that requires any amount of conditioning. The \$900 charge was based on a weighted average derived from the same figures that SWBT proposed to charge BroadSpan for removing individual interferors. The figures were left broken down because that would allow BroadSpan greater flexibility in deciding which lines to pay to have conditioned. SWBT has therefore established a retail cost for conditioning a loop for provision of ADSL service. A retail discount rate of 19.2 percent was established in the AT&T/MCI/SWBT arbitration (PSC Case Nos. TO-97-40 and TO-97-67). The Commission will reduce the conditioning charges proposed by SWBT to be charged to BroadSpan by 19.2 percent.

SWBT proposed to charge BroadSpan the following non-recurring charges for disconnecting interfering devices:

Removal of Repeater Option	\$358.30
Removal of Bridged Tap Option	\$599.25
Removal of Load Coil Option	\$987.35

When the 19.2 percent retail discount is applied to those figures the result is the following:

Removal of Repeater Option	\$358.30 - \$ 68.79 = \$289.51
Removal of Bridged Tap Option	\$599.25 - \$115.06 = \$484.19
Removal of Load Coil Option	\$987.35 - \$189.57 = \$797.78

SWBT will be allowed to charge BroadSpan these amounts for the removal of interferors on loops between 12,000 and 17,500 feet in length.

For loops beyond 17,500 feet in length, SWBT proposed to determine the cost of conditioning on an individual case basis. BroadSpan agreed that the cost of conditioning such lines could be determined on an individual case basis but asked that SWBT be directed to develop discrete pricing components for development of individual case basis charges. BroadSpan indicates that such discrete pricing components are necessary so that it can obtain predictable and prompt price quotes for such conditioning. The Commission agrees that SWBT should develop discrete pricing component charges consistent, in principle, with the charges authorized in this order. The Commission will not require SWBT to submit its pricing components to the Commission for review.

Shielded Loop Cross-Connect

The local loop that BroadSpan leases from SWBT for provision of ADSL service must be linked to the DSL Access Multiplexer tie cable at the Main Distribution Frame. SWBT and BroadSpan have agreed that when a non-shielded cross-connect is made, BroadSpan will be charged a non-recurring charge of \$19.96 for an initial connection and \$12.69 for additional connections. However, interference may require the use of shielded cable

in some situations to assure quality service. SWBT proposes to charge \$115.30 for an initial shielded cross-connect and has not proposed a rate for an additional shielded cross-connect.

The evidence presented did not establish any appreciable difference in the amount of labor required to make a shielded or non-shielded cross-connect. The difference in the cost of materials used to make the different connections is addressed in the recurring charges that BroadSpan will pay for the cross-connect. There is no reason for SWBT to charge a higher rate for a shielded cross-connect. SWBT will be directed to provide shielded cross-connect for the same non-recurring charge it applies to non-shielded cross-connect.

Conclusions of Law

The Missouri Public Service Commission has arrived at the following Conclusions of Law:

1. Section 252(b)(1) of the Telecommunications Act of 1934 as amended by the Telecommunications Act of 1996, provides that "during the period from the 135th to the 160th day (inclusive) after the date on which an incumbent local exchange carrier receives a request for negotiation under this section, the carrier or any other party to the negotiation may petition a State commission to arbitrate any open issues."

2. BroadSpan is a carrier for purposes of Section 252 of the Telecommunications Act of 1934 as amended by the Telecommunications Act of 1996.

3. SWBT is an incumbent local exchange carrier for purposes of Section 252 of the Telecommunications Act of 1934 as amended by the Telecommunications Act of 1996.

4. BroadSpan's arbitration petition was timely filed, more than 134 and less than 161 days after BroadSpan requested access to ADSL technologies as Unbundled Network Elements on September 22, 1998.

5. Section 252(b)(4)(C) of the Telecommunications Act of 1934 as amended by the Telecommunications Act of 1996 provides that:

[t]he State Commission shall resolve each issue set forth in the petition and the response, if any, by imposing appropriate conditions as required to implement subsection (c) upon the parties to the agreement and shall conclude the resolution of any unresolved issues not later than 9 months after the date on which the local exchange carrier received the request under this section.

SWBT received BroadSpan's request on September 22, 1998 and therefore the Commission must act to resolve this arbitration no later than June 22, 1999.

6. Section 252(c) of the Telecommunications Act of 1934 as amended by the Telecommunications Act of 1996 provides that "[I]n resolving by arbitration under subsection (b) any open issues and imposing conditions upon the parties to the agreement, a State commission shall - . . . (2) establish any rates for interconnection services, or network elements according to subsection (d). . . ."

7. Section 252(d) of the Telecommunications Act of 1934 as amended by the Telecommunications Act of 1996 provides that:

Determinations by a State Commission of the just and reasonable rate for . . . network elements for purposes of subsection (c) (3) of such section -

(A) shall be -

(i) based on the cost (determined without reference to a rate-of-return or other rate based proceeding) of providing the . . . network element . . . , and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.

IT IS THEREFORE ORDERED:

1. That Southwestern Bell Telephone Company shall charge BroadSpan Communications, Inc. a non-recurring charge of \$15.00 per loop for loop qualification services.

2. That Southwestern Bell Telephone Company shall charge BroadSpan Communications, Inc. a non-recurring charge for loop conditioning on loops between 12,000 and 17,500 feet in length in the following amounts:

Removal of Repeater Option	\$289.51
Removal of Bridged Tap Option	\$484.19
Removal of Load Coil Option	\$797.78

3. That for loops beyond 17,500 feet in length, Southwestern Bell Telephone Company shall develop discrete pricing component charges consistent in principle with the charges authorized in this order.

4. That Southwestern Bell Telephone Company shall charge BroadSpan Communications, Inc. a non-recurring charge of \$19.96 for an initial shielded cross-connect and \$12.69 for additional shielded cross-connect.

5. That this order shall become effective on June 22, 1999.

BY THE COMMISSION

A handwritten signature in black ink, reading "Dale Hardy Roberts". The signature is written in a cursive, slightly slanted style.

Dale Hardy Roberts
Secretary/Chief Regulatory Law Judge

(S E A L)

Crumpton, Murray, Schemenauer,
and Drainer, CC., concur and
certify compliance with the
provisions of Section 536.080,
RSMo 1994
Lumpe, Ch., dissents

Dated at Jefferson City, Missouri,
on this 15th day of June, 1999.

RECEIVED

JUN 15 1999

COMMISSION COUNSEL
PUBLIC SERVICE COMMISSION