

Exhibit No.: _____

Issues:

Cost of Switched Access/

Review of the Staff's Cost Studies/

Witness/Type of Exhibit: William Dunkel/Rebuttal

Sponsoring Party:

Public Counsel

Case No.:

TR-2001-65

FILED²

AUG 01 2002

Missouri Public
Service Commission

REBUTTAL TESTIMONY

OF

WILLIAM W. DUNKEL

Submitted on Behalf of the Office of the Public Counsel

Investigation of Exchange Access Service

Case No. TR-2001-65

NOTE: ****DENOTES HIGHLY CONFIDENTIAL INFORMATION****

August 1, 2002

NP

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

In the matter of an Investigation of the)
actual costs incurred in providing)
exchange access service and the access)
rates to be charged by competitive local)
exchange telecommunications companies)
in the State of Missouri.)

Case No. TR-2001-65

AFFIDAVIT OF WILLIAM DUNKEL

STATE OF ILLINOIS)
COUNTY OF SANGAMON)

ss

William Dunkel, of lawful age, on my oath states: that I have participated in the preparation of the foregoing testimony in question and answer form, to be presented in this case; that the answers in the foregoing testimony were given by me; that I have knowledge of the matters set forth in such answers; and that such matters are true to the best of my knowledge and belief.

William Dunkel
William Dunkel

Subscribed and sworn to before me this 26 day of July, 2002.

Merideth Rossi
Notary Public

My commission expires 12-12-2005.

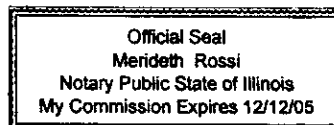


TABLE OF CONTENTS

I.	INTRODUCTION AND STATEMENT OF QUALIFICATIONS	1
II.	PRINCIPLES	2
III.	RATE ELEMENT ANALYSIS	8
IV.	CONCLUSION	19

REBUTTAL TESTIMONY

OF

WILLIAM W. DUNKEL

INVESTIGATION OF EXCHANGE ACCESS SERVICE

CASE NO. TR-2001-65

I. INTRODUCTION AND STATEMENT OF QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is William Dunkel. My business address is 8625 Farmington Cemetery Road, Pleasant Plains, Illinois 62677.

Q. WHAT IS YOUR PRESENT OCCUPATION?

A. I am a consultant providing services in telephone rate proceedings. I am the principal of William Dunkel and Associates, which was established in 1980. Since that time, I have regularly provided consulting services in telephone regulatory proceedings throughout the country. I have participated in over 140 state regulatory telephone proceedings before over one-half of the state commissions in the United States. I have participated in telephone regulatory proceedings for over 20 years.

Q. HAVE YOU PREPARED AN APPENDIX THAT DESCRIBES YOUR QUALIFICATIONS?

A. Yes. My qualifications are shown on Appendix A.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Missouri Office of the Public Counsel.

1 **Q. HAVE YOU PREVIOUSLY PARTICIPATED IN PROCEEDINGS IN MISSOURI?**

2 A. Yes. I testified on behalf of the Staff of the Missouri Public Service Commission in Docket Nos.
3 TR-79-213, which was a Southwestern Bell Telephone Company (SWBT) general rate case; TR-
4 80-256, which was a SWBT general rate case; and TR-82-199, which was a SWBT general rate
5 case. I have also testified on behalf of the Office of the Public Counsel (OPC) in Docket Nos.
6 TC/93-224/TO-93-192, which was a Southwestern Bell Telephone Company general rate case, TR-
7 93-181, which was a United Telephone Company of Missouri case, TR-86-84, which was a SWBT
8 general rate case; TC-89-14; TO-86-8, which was an Extended Area Service (EAS) case involving
9 all companies in Missouri; and TO-87-131, which was an EMS investigation involving all
10 companies in Missouri.

11 **Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?**

12 A. The primary purpose of this testimony is to respond to the Direct Testimony and cost studies of
13 Staff consultant, Dr. Ben Johnson, which were submitted July 1, 2002. (Dr. Johnson's Direct or Dr.
14 Johnson's Testimony).

15 **II. PRINCIPLES**
16

17 **Q. IN HIS TESTIMONY DR. JOHNSON SETS FORTH VARIOUS PRINCIPLES TO**
18 **BE USE TO DETERMINE IF RATES ARE COST BASED. DO YOU AGREE**
19 **WITH THESE PRINCIPLES?**

20 A. Yes. Dr. Johnson's testimony sets forth the appropriate principles to be used to determine whether
21 a price is cost based:

1 To the extent current rates for intrastate switched access service are between
2 TSLRIC and stand-alone cost, economic theory demonstrates that this service is
3 neither subsidizing any other service nor is it being subsidized by any other
4 service. It is for that reason that it is often suggested that TSLRIC studies provided
5 a pricing "floor" or (less frequently) that stand-alone cost studies provide a pricing
6 "ceiling".¹

7 The accepted principle is that a price that is below its stand-alone cost but above its TSLRIC is a
8 "subsidy free" price and is cost based. This principle is illustrated on Schedule WDA-1. Parties
9 can disagree about where in that range they would like the price to be, but a price anywhere in that
10 range is cost based and subsidy-free.

11 **Q. WHEN IS A RATE PRODUCING A SUBSIDY?**

12 A. Dr Johnson properly pointed out that a service is not producing a subsidy unless it is priced above
13 its stand-alone costs:

14 Similarly, while some parties to this proceeding may argue that switched access
15 rates are too high, they cannot properly argue that switched access service is
16 "subsidizing" basic local service, or any other service, unless the current rate
17 exceeds stand-alone cost. (emphasis in original)².

18 and

19 Conversely, a service priced below its stand-alone cost is not subsidizing any another
20 service.³

¹ Page 18, line 4 of Dr. Johnson's Direct Testimony.

² Page 17, line 21 of Dr. Johnson's Direct Testimony.

³ Page 16, line 19 of Dr. Johnson's Direct Testimony.

1 **Q. WHEN IS A SERVICE RECEIVING A SUBSIDY?**

2 A. Dr. Johnson properly states that a service is receiving a subsidy only if it is priced below its
3 TSLRIC. He states that parties "cannot properly argue that a service is 'subsidized' unless that total
4 incremental revenues it generates are less than the corresponding TSLRIC"⁴

5 **The Staff study shows the current access rates are cost based.**

6 **Q. WHAT DOES DR. JOHNSON STATE HIS STUDY SHOWS PERTAINING TO THE**
7 **OVERALL ACCESS CHARGES OF THE LECS?**

8 A. Dr. Johnson states:

9 In total, the existing rates generally do not exceed stand alone costs, and thus one
10 cannot say that IXC's are having to subsidize other customers on an overall basis.⁵

11 Schedule WDA-2 shows the rates, TSLRIC and stand-alone costs exactly as shown in Dr.
12 Johnson's exhibits. For every ILEC, the access charges overall are below the stand-alone cost and
13 above the TSLRIC. Therefore, for every ILEC, the current overall access charges are subsidy-free
14 and are cost based.

15 Dr. Johnson's figures show overall rates that are outside the proper range for one CLEC,

16 **** _____ **.**

17 In short, Dr. Johnson's own numbers show that the overall current intrastate access charges
18 of each of the ILECs are cost based and are neither receiving nor producing a subsidy.

⁴ Page 17, line 18 of Dr. Johnson's Direct Testimony.

⁵ Page 126, line 8 of Dr. Johnson's Direct Testimony.

1 This conclusion is not changed by any of the other items I discuss in this testimony. The
2 overall access service rate are subsidy-free for all ILECs in Missouri. The current ILEC access
3 rates are not producing or receiving a subsidy.

4 **Q. ALTHOUGH THE OVERALL ACCESS RATES FOR ALL ILECS ARE WITHIN**
5 **THE SUBSIDY-FREE RANGE, SOME OF THEM ARE WELL ABOVE THE**
6 **TSLRIC COSTS. DOES COST BASED PRICING SUGGEST THAT THE RATES**
7 **BE SET AT OR NEAR TSLRIC?**

8 A. Absolutely not. Some prices must be set above TSLRIC in order to recover shared costs. TSLRIC
9 costs do not include the full costs that must be incurred in order to provide a service. More
10 specifically, the TSLRIC excludes the costs of facilities that are shared by more than service. As
11 Dr. Johnson correctly stated:

12 Finally, the TSLRIC results are very low, because this study only considers the
13 amount by which the carrier's costs would decline if switched access service were
14 not provided. Thus, it excludes loop costs, the minimum, fixed cost of switching
15 and other costs which are needed in order to provide intrastate switched access
16 service, but which would be incurred even if this service not provided by the
17 carrier.⁶

18 Dr. Johnson also points out that under TSLRIC

19 ... none of the burden of shared facilities is attributed to this service.
20 Undoubtedly, that is one of the reasons why the TSLRIC methodology is so
21 popular with parties who advocate reducing switched access rates.⁷

⁶ Page 117, line 11 of Dr. Johnson's Direct Testimony.

⁷ Page 118, line 12 of Dr. Johnson's Direct Testimony.

1 TSLRIC is the floor of the proper price range. It is not the goal of proper cost based pricing.

2 Pricing above TSLRIC, (but below stand-alone) is how the shared costs are recovered.

3 **Q. WHAT IF ALL SERVICES WERE PRICED EQUAL TO TSLRIC?**

4 A. If all prices were set equal to TSLRIC, then the companies shared/joint/common costs would not be
5 recovered. The majority of the telephone companies equipment is used to provide more than one
6 service. Therefore setting prices equal to TSLRIC (which would exclude the shared/joint costs)
7 would result in the telephone companies failing to recover a large part of their costs.

8 **Q. IF SWITCHED ACCESS RATES WERE REDUCED IN ORDER TO MOVE THEM**
9 **CLOSER TO THEIR TSLRIC, WHAT WOULD THAT MEAN?**

10 A. That would mean that the switched access rates would be supporting less of the shared/joint costs of
11 the telephone companies. Either the Commission would have to reduce the telephone companies
12 overall revenues or the Commission would have to raise the rates for some other service or
13 services. That would increase the portion of the shared costs those other services were supporting.⁸
14 Reducing the shared costs recovered from access service does not eliminate those shared costs,
15 they would have to be recovered somewhere else.

16 **Residential basic exchange service is priced at over 6 times TSLRIC.**

17 **Q. TO ILLUSTRATE WHY SWITCHED ACCESS RATES SHOULD NOT BE PRICED**
18 **EQUAL TO THEIR TSLRIC, PLEASE EXPLAIN WHAT THE RESIDENTIAL**

⁸ If a surcharge was applied to end-user's bills that would have an effect similar to increasing the basic exchange rates of end-users.

**BASIC EXCHANGE RATE WOULD BE IF IT WAS PRICED EQUAL TO ITS
TSLRIC.**

A. SWBT's residential basic rate would be \$1.98 if it were set equal to its TSLRIC as shown on Schedule WDA-3. The current residential SWBT basic local rate ranges from \$12.69 to \$17.57, depending upon the customer's rate group.⁹ The current SWBT residential basic rates are six to nine times the residential basic TSLRIC. If the TSLRIC was used as the primary basis for setting rates, then the residential basic exchange rates would be drastically reduced.

It is true that access service is priced at several times its TSLRIC, but so is residential basic exchange service and most other telephone services. In short, current residential basic services are already making a huge contribution to the shared costs, and there is nothing in the cost study presented by Staff that would justify forcing basic exchange service to support an even greater portion of the shared costs.

In fact, because of universal service requirements, basic exchange service cannot be required to support an unreasonable portion of the shared/joint costs. Section 254(k) of the Federal Telecommunications Act requires that:

A telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition. The Commission, with respect to interstate services, and the States, with respect to intrastate services, shall establish any necessary cost allocation rules, accounting safeguards, and guidelines to ensure that services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services.

⁹ Residential local exchange rate of \$7.42 to \$12.30, plus residential SLC of \$5.27.

III. RATE ELEMENT ANALYSIS

Q. ALTHOUGH DR. JOHNSON'S TESTIMONY AND SCHEDULES INDICATE THAT THE OVERALL ACCESS CHARGES OF EACH ILEC ARE WITHIN THE COST BASED RANGE, DR. JOHNSON DIVIDED THE ACCESS CHARGES INTO DIFFERENT RATE ELEMENTS. HE REACHED CONCLUSIONS PERTAINING TO THESE RATE ELEMENTS. ARE HIS CONCLUSIONS PERTAINING TO INDIVIDUAL RATE ELEMENTS VALID?

A. No. In addition to looking at the overall access charges, Dr. Johnson also attempted to show revenues and costs for four separate rate elements: "common line"; "end office switching"; "tandem switching"; and "transport". However, Dr. Johnson's attempt to segregate the revenues and costs by rate element was not successful. As is discussed below, in many instances he placed the costs in one rate element but the associated revenues in another rate element. Many of the rates he used are not the actual tariffed rates that apply. Dr. Johnson's attempts to identify rates and costs by rate element were not successful.

Q. ON PAGE 127 OF HIS TESTIMONY, DR. JOHNSON REFERS TO THE " END OFFICE SWITCHING" RATES AND STATES THAT THE FACT THAT MANY OF THESE " END OFFICE SWITCHING" RATES " EVEN EXCEED STAND ALONE COSTS STRONGLY SUGGESTS THIS IS AN AREA WHERE

1 **SUBSTANTIAL RATE REDUCTIONS WOULD BE APPROPRIATE."**¹⁰ DID DR.
2 **JOHNSON PROPERLY IDENTIFY THE " END OFFICE SWITCHING" COSTS**
3 **AND RATES?**

4 A. No, for several reasons that will be discussed below.

5 The "line termination" costs are in the "common line" rate element, but the revenues are in
6 the "end office switching" rate element.

7 **Q. WHAT IS THE FIRST PROBLEM WITH DR. JOHNSON'S " END OFFICE**
8 **SWITCHING" ANALYSIS?**

9 A. Dr. Johnson's study properly puts the "line termination" costs in the "common line" rate element.
10 However, Dr. Johnson improperly put the "line termination" revenues in the "end office switching"
11 rate element. Therefore, the "end office switching" rate element contains line termination rates, but
12 does not contain the associated costs.

13 **Q. IN WHAT RATE ELEMENT DID DR. JOHNSON PLACE THE LINE**
14 **TERMINATION (PORT) COST?**

15 A. Dr. Johnson placed the line termination (port) costs in the "common line" rate element. Schedule 1,
16 page 2 of Dr. Johnson's Direct shows that the "common line" rate element includes the "loop + port
17 costs". Dr. Johnson's testimony shows that by "port" costs he is referring to "line termination".¹¹

¹⁰ Page 127, line 19 of Dr. Johnson's Direct Testimony. Dr. Johnson makes a similar statement on page 126, line 10.

¹¹ See page 53, line 18 of Dr. Johnson's Direct Testimony.

1 **Q. IN WHAT RATE ELEMENT DID DR. JOHNSON INCLUDE THE LINE**
2 **TERMINATION RATES?**

3 A. Dr. Johnson included line termination revenues in the "end office switching" rate element.

4 Of the 5 largest ILECs in Missouri only two have a Line Termination rate
5 component. Most of the other 34 ILECs include a separation Line Termination
6 rate component in their tariff. For ease of comparison, I have incorporated the
7 Line Termination rates into the End Office Switching rates listed in Schedule 1.¹²

8 Quite simply, Dr. Johnson put the line termination rates in the "end office switching" rate element
9 but put the line terminations costs in the "common line" rate element. I know of no valid reason for
10 putting line termination revenues in one rate element, while putting the associated costs in a
11 different rate element. The result is to create a mismatch between revenues and costs in the "end
12 office switching" and in the "common line" rate elements. Both the rates and cost of line
13 termination properly belong in the "common line" rate element.

14 **Q. CAN YOU DEMONSTRATE HOW MUCH DR. JOHNSON OVERSTATED THE " END**
15 **OFFICE SWITCHING" REVENUE BY INCLUDING THE LINE TERMINATION**
16 **REVENUE IN THAT CATEGORY (WITHOUT INCLUDING THE ASSOCIATED**
17 **COSTS) ?**

18 A. Yes. The first Company listed on Dr. Johnson's "Small ILECs" list is the Alma Telephone
19 Company. Dr. Johnson's Schedule 2, page 4 shows that the Alma Telephone Company end office
20 switching rate is ** _____ ** per minute. However, the actual Alma "end office switching" rate is
21 ** _____ ** per minute. Dr. Johnson got the ** _____ ** per minute "end office switching" rate

¹² Page 123, line 15 of Dr. Johnson's Direct Testimony.

1 by adding the line termination rate of ** _____ ** to the true "end office switching" rate. Over
2 half of Dr. Johnson's "end office switching" rate is in fact not an "end office switching" rate at all,
3 but is the line termination rate. This is especially improper because Dr. Johnson did not include any
4 of the line termination costs along with the line termination rate.

5 **Q. IS THIS PROBLEM LIMITED TO ALMA TELEPHONE COMPANY?**

6 A. No. 28 out of the 39 ILECs, have a line termination charge as is shown on Schedule WDA-4. For
7 all 28 of these companies, Dr. Johnson included the line termination rate in the "end office
8 switching" rate element, but placed the associated line termination costs in the "common line" rate
9 element. Most of the ILECs have a line termination charge of ** _____ **. Therefore, the huge
10 impact as discussed above for Alma is typical of the impact on most of the other ILECs, as well, as
11 is shown on Schedule WDA-4. In short, for most of the ILECs, the "end office switching" rates
12 that are used in Dr. Johnson's study are more than double the true "end office switching" rates. The
13 line termination rates were included in the "end office switching" rate element. This creates a huge
14 distortion, because the line termination costs were not included in the "end office switching" rate
15 element.

16 **Q. WHAT IS SCHEDULE WDA-4?**

17 A. The first column of Schedule WDA-4 shows the actual "end office switching" rate, the second
18 column shows the line termination rate, and the third column shows the total of these two, which is
19 the rate that was used as the "end office switching" rate in Dr. Johnson's study. For over half of the
20 ILECs, the "end office switching" rate that Dr. Johnson used is more than twice the actual "end
21 office switching" rate, as can be seen on Schedule WDA-4. As this document shows, this higher

1 rate resulted from Dr. Johnson adding in the line termination rate. However this created a
2 mismatch, because Dr. Johnson did not add the associated line termination costs into this rate
3 element.

4 **Q. DOES THIS PROBLEM AFFECT THE ANALYSIS OF THE OVERALL ACCESS**
5 **CHARGES FOR AN ILEC?**

6 A. No. This problem distorts the results for the "end office switching" rate element and the "common
7 line" rate element, but it does not affect the overall switched access results.

8 **For SWBT Dr. Johnson did not place the traffic sensitive line switching costs in the "end**
9 **office switching" rate element.**

10 **Q. FOR SWBT, WHICH IS THE LARGEST ILEC, WAS DR. JOHNSON'S**
11 **CALCULATION OF THE "END OFFICE SWITCHING" COST CORRECT?**

12 A. No. For SWBT "end office switching", I found that Dr. Johnson's study:

13 1. Placed the traffic sensitive line switching costs in the "common line" rate element instead of the
14 "end office switching" rate element; and

15 2. Dr. Johnson's study excluded the "getting started" costs for almost all of the switches.

16 I will discuss both of these issues in more detail below.

1 **Q. WHAT REVENUES AND COSTS ARE SUPPOSED TO BE IN THE " END**
2 **OFFICE SWITCHING" RATE ELEMENT?**

3 A. The "end office switching" rate element is supposed to include the traffic sensitive costs of the end
4 office switches.

5 According to page 53 of Dr. Johnson's testimony, the TSLRIC traffic sensitive costs
6 included in the "end office switching" rate element properly include at least the following: Line
7 CCS; and Trunk CCS¹³. These are traffic sensitive costs, as Dr. Johnson explains on page 53 of his
8 testimony, "The CCS categories all vary with traffic volumes..."¹⁴.

9 **Q. WHAT LINE TRAFFIC SENSITIVE COSTS (LINE CCS) DID JOHNSON**
10 **PLACE IN SWBT'S " END OFFICE SWITCHING" RATE ELEMENT COSTS?**

11 A. **** ____ ****. Schedule WDA-5 is a page from Dr. Johnson's workpapers. This document shows that
12 the line traffic sensitive costs Dr. Johnson included was **** ____ ****.

13 **Q. IN WHAT RATE ELEMENT DID DR. JOHNSON PLACE THE TRAFFIC**
14 **SENSITIVE " LINE CCS" COSTS?**

15 A. Dr. Johnson placed the traffic sensitive "line CCS" costs in the "common line" rate element. He
16 placed **** ____ **** "line CCS" costs in the "end office switching" rate element.¹⁵

¹³ "Trunk CCS" (for host or stand-alone switches) or the "umbilical CCS" (for remote switches), see page 53 of Dr. Johnson's direct testimony.

¹⁴ Line 26, page 53 of Dr. Johnson's Direct Testimony.

¹⁵ For example, see Dr. Johnson's workpapers pertaining to Sprint-MO entitled "Sprint Switched Access Summary", Switching tab in Dr. Johnson's supporting workpapers.

1 **Q. IS IT PROPER TO PLACE THE TRAFFIC SENSITIVE COSTS IN THE**
2 **" COMMON LINE" RATE ELEMENT?**

3 A. No. The "common line" rate element is supposed to contain the non-traffic sensitive costs. These
4 are the loop and port costs. The port (line termination) is the non-traffic sensitive portion of the
5 switch that is associated with lines.

6 Dr. Johnson obtained some "per line" switching cost figures from SWBT's cost study.
7 Those "per line" switching cost figures included both the cost of the non-traffic sensitive port and
8 the cost of the traffic sensitive "line CCS". Dr. Johnson performed calculations using these
9 numbers, but the results of those calculations were still numbers that contained both the non-traffic
10 sensitive (port) and the traffic sensitive switching costs. Instead of breaking this number down to
11 separate the non-traffic sensitive costs from the traffic sensitive costs, Dr. Johnson placed the entire
12 cost, including the traffic sensitive line switching costs, in the "common line" rate element. Placing
13 these traffic sensitive costs in the "common line" rate element was improper. These traffic
14 sensitive costs properly belong in the "end office switching" rate element. Dr. Johnson did not
15 move any traffic sensitive revenue along with the costs.

16 **Q. WHAT PROBLEM DOES DR. JOHNSON'S TREATMENT OF THE END OFFICE**
17 **TRAFFIC SENSITIVE SWITCHING COSTS CREATE?**

18 A. By placing the end office line traffic sensitive costs in the "common line" rate element, while
19 leaving the end office rates in the "end office switching" rate element, Dr. Johnson has created a
20 mismatch between revenues and costs.

1 This problem creates distortions in both the "end office switching" rate element and the "common
2 line" rate element, but does not impact the analysis of the overall switched access service for a
3 SWBT.

4 **Dr. Johnson excluded the "getting started" costs for almost all of the SWBT switches.**

5 **Q. WHAT IS THE NEXT PROBLEM WITH DR. JOHNSON'S CALCULATION OF**
6 **THE COST IN THE SWBT " END OFFICE SWITCHING" RATE ELEMENT?**

7 A. As discussed in Dr. Johnson's testimony, one of the costs that is properly included in the stand-
8 alone "end office switching" costs is the "getting started" or "start-up" costs of the switch.¹⁶

9 All switches have a "getting started" costs. For example, as discussed in Dr. Johnson's
10 testimony, the FCC found that the "getting started" investment was \$161,800 for remotes, and was
11 \$486,700 for host and stand-alone switches.¹⁷ However, for ** __** of the ** __** SWBT
12 switches in his study, Dr. Johnson used a "getting started" investment of ** __**¹⁸.

13 **Q. WHAT IS SCHEDULE WDA-6?**

14 A. Schedule WDA-6 contains pages from Dr. Johnson's workpapers which show he included the
15 "getting started" investment for only ** __** out of the ** __** SWBT switches. This Schedule
16 shows that he included "getting started" investment of ** __** each for only ** __** out of the
17 ** __** switches. For all the rest of the switches these columns show a ** __** "getting started"
18 investment in his study.

¹⁶ Pages 50, 51, and 53 of Dr. Johnson's Direct Testimony.

¹⁷ Page 50, lines 6-8 of Dr. Johnson's Direct Testimony.

¹⁸ Dr. Johnson's cost study "endofficeswitchingSWBTswitchingstudyWHCrevised.xls, tab "Cost worksheet".

1 I have tracked through Dr. Johnson's study and these "getting started" costs for these
2 ** ____ ** switches are the only "getting started" costs he included in his "end office switching"
3 rate element.

4 **Q. IS OMITTING THE "GETTING STARTED" COSTS FOR ALMOST ALL OF**
5 **THE SWBT SWITCHES A MAJOR OMISSION?**

6 A. Yes. By using a ** ____ ** "getting started" investment for ** ____ ** switches, Dr. Johnson
7 included a total of ** ____ ** "getting started" investment. As previously discussed, the
8 smallest getting started investment used by the FCC is \$161,800, which is the getting started for
9 remote. Using that number, the getting started investment for ** ____ ** switches would be over
10 ** ____ **, and that number is understated because all of the switches could not possibly be
11 remotes. The getting started costs for a host or stand-alone switch are higher¹⁹.

12 Omitting the "getting started" investments for most of SWBT switches understates the stand-alone
13 costs in both the "end office switching" rate element and the overall access stand-alone costs.

14 **Q. CAN YOU SUMMARIZE HOW THE "END OFFICE SWITCHING" RATE**
15 **ELEMENT COSTS WERE OMITTED FROM DR. JOHNSON'S STUDY**
16 **PERTAINING TO SWBT?**

17 A. Yes. Costs which should be in the "end office switching" stand alone cost include at least:

¹⁹ I am not necessarily advocating that the FCC numbers have to be used, but the FCC numbers do demonstrate the "getting started" investment is not ** ____ **.

1 Included in Dr. Johnson's SWBT
2 "End Office Switching" Study
3 Should be included: for ** ** out of ** ** switches.
4

5 Line CCS excluded (\$0)
6 Trunk CCS²⁰ included
7 Getting Started excluded (\$0)
8

9 For the other ** _** out of the ** __** switches, Dr. Johnson did include the "getting started"
10 costs, but continued to exclude the Line CCS costs in the "end office switching" cost study.

11 For many ILECs, the carrier "common line" rates included in Dr. Johnson's study are not
12 the rates that apply to most of the traffic.

13 Q. IS THERE ANOTHER PROBLEM WITH DR. JOHNSON'S STUDY?

14 A. Yes. For approximately one-half of the companies, the carrier common line (CCLC) rates that he
15 used are not the tariffed rates that apply to the majority of the intrastate switched access traffic.

16 Many companies in Missouri have different CCLC rates for intrastate intraLATA service
17 than they do for intrastate interLATA service. This is shown on Schedules WDA-7 and WDA-8.
18 For example, the first telephone company on Dr. Johnson's list, Alltel has an intrastate interLATA
19 CCLC rate of ** _____ ²¹, but its intrastate intraLATA CCLC rate is ** _____ **. Alltel's
20 intraLATA CCLC rate is approximately ** _____ ** its interLATA CCLC rate, as is shown on
21 Schedule WDA-8.

²⁰ "Trunk CCS" (for host or stand-alone switches) or the "umbilical CCS" (for remote switches), see page 53 of Dr. Johnson's direct testimony.

²¹ Originating plus terminating divided by 2.

1 Most of the intrastate access traffic is billed at the intraLATA rate. For example, ** ____ **²²
2 of Alltel's intrastate switched access traffic is intraLATA and therefore is billed at the lower
3 intrastate intraLATA CCLC rate. However, in Dr. Johnson's study the CCLC rate that he used for
4 all traffic was the higher interLATA rate. If you look at Schedule 2, page 2 of Dr. Johnson's
5 testimony for Alltel, you will see the CCLC rate he used was the ** ____ ** figure. Schedule
6 WDA-8 shows that this figure is the intrastate interLATA CCLC rate.

7 The intrastate switched access costs included in Dr. Johnson's study include the costs of
8 both the interLATA and intraLATA access traffic, but he did not use the actual rates that apply to
9 that traffic. Instead, he treated all of that traffic as if it was billed at the interLATA CCLC rate,
10 which is not the case. Most of the intrastate access is billed at the intraLATA rate, not at the
11 interLATA rate. For example, for Alltel only ** ____ ** of the intrastate switched access traffic is
12 interLATA traffic.²³ For these companies, the CCLC rate that Dr. Johnson used in his study is not
13 the CCLC rate that applies to most intrastate access traffic.

14 **Q. YOU DISCUSSED THIS PROBLEM FOR ALLTEL. DO MANY TELEPHONE**
15 **COMPANIES IN MISSOURI HAVE A LOWER CCLC RATE FOR INTRALATA**
16 **THAN THEY DO FOR INTERLATA ACCESS SERVICE?**

17 **A. Yes. ** ____ ** of the 39 ILECs in the study have a lower CCLC rate for intraLATA intrastate access**
18 **than they do for interLATA intrastate access. For all of these companies Dr. Johnson uses the**

²² Alltel's Part 36 jurisdictional allocation study, which is Schedule A attached to the Direct Testimony of Alltel witness Brandon. In separations account 6622-Directory Alpha is allocated based upon the SLU, that is a measurement of the actual relative traffic.

²³ Brandon Direct Testimony Schedule A.

1 interLATA rate instead of an average that includes the intraLATA rate. Therefore, for a large
2 number of the companies in the study, the CCLC rates shown on Dr. Johnson's Schedule 2
3 overstate the CCLC rate that actually applies to most of those companies intrastate access traffic.

4 This problem not only overstates the rate for the CCLC rate element, but it also overstates
5 the overall rates for switched access for those companies.

6 **Q. OTHER WITNESSES HAVE PRESENTED VARIOUS CRITICISMS OF DR.**
7 **JOHNSON'S STUDY. ARE YOU ADDRESSING THOSE ISSUES IN THIS**
8 **TESTIMONY?**

9 A. No. There certainly may be problems other than I have discussed in this testimony. The fact that I
10 have not repeated or addressed problems that others have presented does not imply that I
11 necessarily disagree with those issues.

12 **IV. CONCLUSION**
13

14 **Q. WHAT CONCLUSION DO YOU REACH FROM THIS ANALYSIS?**

15 A. For all ILECs, Dr. Johnson found that the overall intrastate access rates are not producing or
16 receiving a subsidy. This finding is correct. Dr. Johnson's study, even without any corrections,
17 demonstrates that the overall switched access rates of all of the ILECs in Missouri are not
18 producing or receiving any subsidies. The current rates are cost based for all ILECs. That
19 conclusion is not changed by any of the issues I addressed in this testimony.

1 In reality, the actual intrastate access rates for many companies are lower than are shown in
2 Dr. Johnson's study, because Dr. Johnson overstated the CCLC rate that actually applies, and
3 because of other problems discussed in this testimony. In addition, in many instances the costs are
4 higher than in Dr. Johnson's analysis, for the reasons discussed in this testimony.

5 Dr. Johnson's attempt to identify the revenues and costs by specific rate elements failed.
6 As discussed in this testimony, Dr. Johnson has numerous mismatches of revenues and costs. For
7 many companies he put the "line termination" revenues in one rate element and the associated "line
8 termination" costs in another rate element. He has traffic sensitive switching costs in the non-
9 traffic sensitive "common line" rate element. He has "end office switching" costs that do not
10 include the line switching costs of the end office switches. He has switches with ** ____ ** "getting
11 started" costs. These problems create rate element results that are meaningless, or even
12 worse...misleading. I recommend Dr. Johnson's attempts to identify the revenues or costs by rate
13 element be disregarded.

14 Rates are not properly set equal to TSLRIC. Pricing above TSLRIC is how the costs of the
15 shared facilities are recovered. The costs of the shared facilities are a large part of the costs that
16 exist in telecommunications. If all services were priced at TSLRIC, then the shared costs of the
17 telephone companies would not be covered in rates.

18 To illustrate the absurdity of setting rates equal to TSLRIC, if residential basic exchange
19 rates were set equal to TSLRIC the rate would be \$1.98 per line per month for SWBT.

1 It is true switched access rates are set significantly above TSLRIC costs, but the same is
2 true for residential basic exchange service and most other telecommunication services. Setting
3 rates above TSLRIC costs is how the significant shared and common costs of the company are
4 recovered.

5 There is no cost based reason for altering the current switched access rates of the ILECs in
6 Missouri.

7 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

8 **A. Yes it does.**

William Dunkel, Consultant
8625 Farmington Cemetery Road
Pleasant Plains, Illinois 62677

Qualifications

The Consultant is a consulting engineer specializing in telecommunication regulatory proceedings. He has participated in over 140 state regulatory proceedings as listed on the attached Relevant Work Experience.

The Consultant has provided cost analysis, rate design, jurisdictional separations, depreciation, expert testimony and other related services to state agencies throughout the country in numerous telecommunication state proceedings. The Consultant has also provided depreciation testimony to state agencies throughout the country in several electric utility proceedings.

The Consultant made a presentation pertaining to Video Dial Tone at the NASUCA 1993 Mid-Year Meeting held in St. Louis.

In addition, the Consultant also made a presentation to the NARUC Subcommittee on Economics and Finance at the NARUC Summer Meetings held in July, 1992. That presentation was entitled "The Reason the Industry Wants to Eliminate Cost Based Regulation--Telecommunications is a Declining Cost Industry."

The Consultant provides services almost exclusively to public agencies, including the Public Utilities Commission, the Public Counsel, or the State Department of Administration in various states.

William Dunkel currently provides, or in the past has provided, services in telecommunications proceedings to the following clients:

The Public Utility Commission or the Staffs in the States of:

Arkansas	Mississippi
Arizona	Missouri
Delaware	New Mexico
Georgia	Utah
Guam	Virginia
Illinois	Washington
Maryland	U.S. Virgin Islands

JUL 29 2002

The Office of the Public Advocate, or its equivalent, in the States of:

Colorado	Maryland
District of Columbia	Missouri
Georgia	New Jersey
Hawaii	New Mexico
Illinois	Ohio
Indiana	Pennsylvania
Iowa	Utah
Maine	Washington

The Department of Administration in the States of:

Illinois	South Dakota
Minnesota	Wisconsin

In April, 1974, the Consultant was employed by the Illinois Commerce Commission in the Electric Section as a Utility Engineer. In November of 1975, he transferred to the Telephone Section of the Illinois Commerce Commission and from that time until July, 1980, he participated in essentially all telephone rate cases and other telephone rate matters that were set for hearing in the State of Illinois. During that period, he testified as an expert witness in numerous rate design cases and tariff filings in the areas of rate design, cost studies and separations. During the period 1975-1980, he was the Separations and Settlements expert for the Staff of the Illinois Commerce Commission.

From July, 1977 until July, 1980, he was a Staff member of the FCC-State Joint Board on Separations, concerning the "Impact of Customer Provision of Terminal Equipment on Jurisdictional Separations" in FCC Docket No. 20981 on behalf of the Illinois Commerce Commission. The FCC-State Joint Board is the national board which specifies the rules for separations in the telephone industry.

The Consultant has taken the AT&T separations school which is normally provided to the AT&T personnel.

The Consultant has taken the General Telephone separations school which is normally provided for training of the General Telephone Company personnel in separations.

Since July, 1980 he has been regularly employed as an independent consultant in telephone rate proceedings across the nation.

He has testified before the Illinois House of Representatives Subcommittee on Communications, as well as participating in numerous other schools and conferences pertaining to the utility industry.

Prior to employment at the Illinois Commerce Commission, the Consultant was a design engineer for Sangamo Electric Company designing electric watt-hour meters used in the electric utility industry. The Consultant was granted patent No. 3822400 for a solid state meter pulse initiator.

The Consultant graduated from the University of Illinois in February, 1970 with a Bachelor's of Science Degree in Engineering Physics with emphasis on economics and other business-related subjects. The Consultant has taken several post-graduate courses since graduation.

RELEVANT WORK EXPERIENCE OF WILLIAM DUNKEL

ARIZONA

- | | |
|----------------------------|-----------------------------|
| - U.S. West Communications | Cost of Service Study |
| Wholesale cost/UNE case | Docket No. T-00000A-00-0194 |
| General rate case | Docket No. E-1051-93-183 |
| Depreciation case | Docket No. T-01051B-97-0689 |
| General rate case | Docket No. T-01051B-99-0105 |

ARKANSAS

- Southwestern Bell Telephone Company Docket No. 83-045-U

CALIFORNIA

(on behalf of the California Cable Television Association)

- General Telephone of California I.87-11-033
- Pacific Bell
Fiber Beyond the Feeder Pre-Approval Requirement

COLORADO

- | | | |
|---|---------------------------------|----------------------------|
| - | Mountain Bell Telephone Company | |
| | General Rate Case | Docket No. 96A-218T et al. |
| | Call Trace Case | Docket No. 92S-040T |
| | Caller ID Case | Docket No. 91A-462T |
| | General Rate Case | Docket No. 90S-544T |
| | Local Calling Area Case | Docket No. 1766 |
| | General Rate Case | Docket No. 1720 |
| | General Rate Case | Docket No. 1700 |
| | General Rate Case | Docket No. 1655 |
| | General Rate Case | Docket No. 1575 |
| | Measured Services Case | Docket No. 1620 |
| - | Independent Telephone Companies | |
| | Cost Allocation Methods Case | Docket No. 89R-608T |

DELAWARE

- | | | |
|---|---------------------------------|-----------------------|
| - | Diamond State Telephone Company | |
| | General Rate Case | PSC Docket No. 82-32 |
| | General Rate Case | PSC Docket No. 84-33 |
| | Report on Small Centrex | PSC Docket No. 85-32T |
| | General Rate Case | PSC Docket No. 86-20 |

Centrex Cost Proceeding

PSC Docket No. 86-34

DISTRICT OF COLUMBIA

- C&P Telephone Company of D.C.
Depreciation issues

Formal Case No. 926

FCC

- Review of jurisdictional separations
- Developing a Unified Inter-carrier
Compensation Regime

FCC Docket No. 96-45

CC Docket No. 01-92

FLORIDA

- BellSouth, GTE, and Sprint
Fair and reasonable rates

Undocketed Special Project

GEORGIA

- Southern Bell Telephone & Telegraph Co.
General Rate Proceeding
General Rate Proceeding
General Rate Proceeding
General Rate Proceeding

Docket No. 3231-U

Docket No. 3465-U

Docket No. 3286-U

Docket No. 3393-U

HAWAII

- GTE Hawaiian Telephone Company
Depreciation/separations issues
Resale case

Docket No. 94-0298

Docket No. 7702

ILLINOIS

- Geneseo Telephone Company
EAS case
- Central Telephone Company
(Staunton merger)
- General Telephone & Electronics Co.
Usage sensitive service case
General rate case (on behalf of CUB)

Docket No. 99-0412

Docket No. 78-0595

Docket Nos. 98-0200/98-0537

Docket No. 93-0301

ILLINOIS (CONT.)

- (Usage sensitive rates)
- (Data Service)
- (Certificate)
- (Certificate)

Docket No. 79-0141

Docket No. 79-0310

Docket No. 79-0499

Docket No. 79-0500

-	General Telephone Co.	Docket No. 80-0389
-	Ameritech (Illinois Bell Telephone Company)	
	Alternative Regulation Review	Docket No. 98-0252
	Area code split case	Docket No. 94-0315
	General Rate Case	Docket No. 83-0005
	(Centrex filing)	Docket No. 84-0111
	General Rate Proceeding	Docket No. 81-0478
	(Call Lamp Indicator)	Docket No. 77-0755
	(Com Key 1434)	Docket No. 77-0756
	(Card dialers)	Docket No. 77-0757
	(Concentration Identifier)	Docket No. 78-0005
	(Voice of the People)	Docket No. 78-0028
	(General rate increase)	Docket No. 78-0034
	(Dimension)	Docket No. 78-0086
	(Customer controlled Centrex)	Docket No. 78-0243
	(TAS)	Docket No. 78-0031
	(Ill. Consolidated Lease)	Docket No. 78-0473
	(EAS Inquiry)	Docket No. 78-0531
	(Dispute with GTE)	Docket No. 78-0576
	(WUI vs. Continental Tel.)	Docket No. 79-0041
	(Carle Clinic)	Docket No. 79-0132
	(Private line rates)	Docket No. 79-0143
	(Toll data)	Docket No. 79-0234
	(Dataphone)	Docket No. 79-0237
	(Com Key 718)	Docket No. 79-0365
	(Complaint - switchboard)	Docket No. 79-0380
	(Porta printer)	Docket No. 79-0381
	(General rate case)	Docket No. 79-0438
	(Certificate)	Docket No. 79-0501
	(General rate case)	Docket No. 80-0010
	(Other minor proceedings)	Docket No. various
-	Home Telephone Company	Docket No. 80-0220
-	Northwestern Telephone Company	
	Local and EAS rates	Docket No. 79-0142
	EAS	Docket No. 79-0519
<u>INDIANA</u>		
-	Public Service of Indiana (PSI)	
	Depreciation issues	Cause No. 39584
-	Indianapolis Power and Light Company	
	Depreciation issues	Cause No. 39938

IOWA

- | | |
|---------------------------------|----------------------|
| - U S West Communications, Inc. | |
| Local Exchange Competition | Docket No. RMU-95-5 |
| Local Network Interconnection | Docket No. RPU-95-10 |
| General Rate Case | Docket No. RPU-95-11 |

KANSAS

- | | |
|--|----------------------------|
| - Southwestern Bell Telephone Company | |
| Commission Investigation of the KUSF | Docket No. 98-SWBT-677-GIT |
| - Rural Telephone Service Company | |
| Audit and General rate proceeding | Docket No. 00-RRLT-083-AUD |
| Request for supplemental KUSF | Docket No. 00-RRLT-518-KSF |
| - Southern Kansas Telephone Company | |
| Audit and General rate proceeding | Docket No. 01-SNKT-544-AUD |
| - Pioneer Telephone Company | |
| Audit and General rate proceeding | Docket No. 01-PNRT-929-AUD |
| - Craw-Kan Telephone Cooperative, Inc. | |
| Audit and General rate proceeding | Docket No. 01-CRKT-713-AUD |
| - Sunflower Telephone Company, Inc. | |
| Audit and General rate proceeding | Docket No. 01-SFLT-879-AUD |
| - Bluestem Telephone Company, Inc. | |
| Audit and General rate proceeding | Docket No. 01-BSST-878-AUD |
| - Home Telephone Company, Inc. | |
| Audit and General rate proceeding | Docket No. 02-HOMT-209-AUD |
| - Wilson Telephone Company, Inc. | |
| Audit and General rate proceeding | Docket No. 02-WLST-210-AUD |
| - Blue Valley Telephone Company, Inc. | |
| Audit and General rate proceeding | Docket No. 02-BLVT-377-AUD |

MAINE

- | | |
|---------------------------------|-------------------|
| - New England Telephone Company | |
| General rate proceeding | Docket No. 92-130 |

MARYLAND

- | | |
|--|-----------------|
| - Chesapeake and Potomac Telephone Company | |
| General rate proceeding | Docket No. 7851 |
| Cost Allocation Manual Case | Case No. 8333 |
| Cost Allocation Issues Case | Case No. 8462 |
| - Verizon Maryland | |
| PICC rate case | Case No. 8862 |
| USF case | Case No. 8745 |

MINNESOTA

- Access charge (all companies) Docket No. P-321/CI-83-203
- U. S. West Communications, Inc. (Northwestern Bell Telephone Co.)
 - Centrex/Centron proceeding Docket No. P-421/91-EM-1002
 - General rate proceeding Docket No. P-321/M-80-306
 - Centrex Dockets MPUC No. P-421/M-83-466
 - MPUC No. P-421/M-84-24
 - MPUC No. P-421/M-84-25
 - MPUC No. P-421/M-84-26
 - MPUC No. P-421/GR-80-911
 - MPUC No. P-421/GR-82-203
 - MPUC No. P-421/GR-83-600
 - MPUC No. P-421/CI-84-454
 - MPUC No. P-421/CI-85-352
 - MPUC No. P-421/M-86-53
 - MPUC No. P-999/CI-85-582
 - Docket No. P-421/M-86-508
- AT&T
 - Intrastate Interexchange Docket No. P-442/M-87-54

MISSISSIPPI

- South Central Bell
 - General rate filing Docket No. U-4415

MISSOURI

- Southwestern Bell
 - General rate proceeding TR-79-213
 - General rate proceeding TR-80-256
 - General rate proceeding TR-82-199
 - General rate proceeding TR-86-84
 - General rate proceeding TC-89-14, et al.
 - Alternative Regulation TC-93-224/TO-93-192
- United Telephone Company
 - Depreciation proceeding TR-93-181
- All companies
 - Extended Area Service TO-86-8
 - EMS investigation TO-87-131

NEW JERSEY

- New Jersey Bell Telephone Company
 - General rate proceeding Docket No. 802-135
 - General rate proceeding BPU No. 815-458
 - Phase I - General rate case OAL No. 3073-81
 - General rate case BPU No. 8211-1030
 - Division of regulated OAL No. PUC10506-82
 - from competitive services BPU No. 848-856
 - Customer Request Interrupt OAL No. PUC06250-84
 - OAL No. TO87050398
 - OAL No. PUC 08557-87
 - Docket No. TT 90060604

NEW MEXICO

- U.S. West Communications, Inc.
 - E-911 proceeding Docket No. 92-79-TC
 - General rate proceeding Docket No. 92-227-TC
 - General rate/depreciation proceeding Case No. 3008
 - Subsidy Case Case No. 3325
 - USF Case Case No. 3223
- VALOR Communications
 - Subsidy Case Case No. 3300

OHIO

- Ohio Bell Telephone Company
 - General rate proceeding Docket No. 79-1184-TP-AIR
 - General rate increase Docket No. 81-1433-TP-AIR
 - General rate increase Docket No. 83-300-TP-AIR
 - Access charges Docket No. 83-464-TP-AIR
- General Telephone of Ohio
 - General rate proceeding Docket No. 81-383-TP-AIR
- United Telephone Company
 - General rate proceeding Docket No. 81-627-TP-AIR

OKLAHOMA

- Public Service of Oklahoma
 - Depreciation case Cause No. 96-0000214

PENNSYLVANIA

- GTE North, Inc.
 - Interconnection proceeding Docket No. A-310125F002
- Bell Telephone Company of Pennsylvania

Alternative Regulation proceeding	Docket No. P-00930715
Automatic Savings	Docket No. R-953409
Rate Rebalance	Docket No. R-00963550
- Enterprise Telephone Company	
General rate proceeding	Docket No. R-922317
- All companies	
InterLATA Toll Service Invest.	Docket No. I-910010
- GTE North and United Telephone Company	
Local Calling Area Case	Docket No. C-902815

SOUTH DAKOTA

- Northwestern Bell Telephone Company	
General rate proceeding	Docket No. F-3375

TENNESSEE

(on behalf of Time Warner Communications)

- BellSouth Telephone Company	
Avoidable costs case	Docket No. 96-00067

UTAH

- U.S. West Communications (Mountain Bell Telephone Company)	
General rate case	Docket No. 84-049-01
General rate case	Docket No. 88-049-07
800 Services case	Docket No. 90-049-05
General rate case/ incentive regulation	Docket No. 90-049-06/90- 049-03
General rate case	Docket No. 92-049-07
General rate case	Docket No. 95-049-05
General rate case	Docket No. 97-049-08

VIRGIN ISLANDS, U.S.

- Virgin Islands Telephone Company	
General rate case	Docket No. 264
General rate case	Docket No. 277
General rate case	Docket No. 314
General rate case	Docket No. 316

VIRGINIA

- General Telephone Company of the South	
Jurisdictional allocations	Case No. PUC870029
Separations	Case No. PUC950019

WASHINGTON

- US West Communications, Inc.
 - Interconnection case
 - General rate case
- All Companies-

Docket No. UT-960369
Docket No. UT-950200
Analyzed the local calling
areas in the State

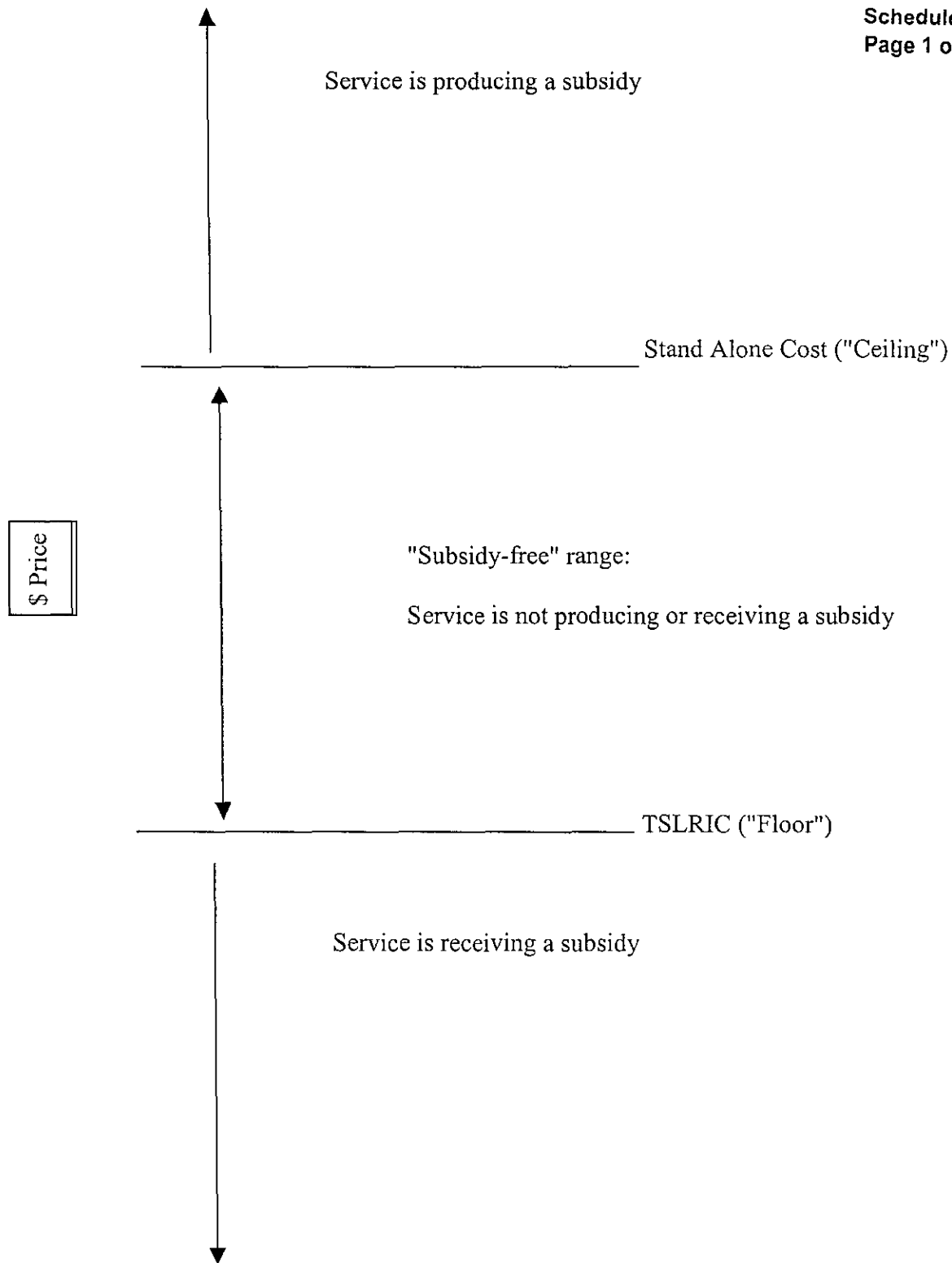
WISCONSIN

- Wisconsin Bell Telephone Company
 - Private line rate proceeding
 - General rate proceeding

Docket No. 6720-TR-21
Docket No. 6720-TR-34

A price that is below stand-alone, but above TSLRIC is “subsidy free” and cost based. It is neither receiving nor producing a subsidy.

Schedule WDA-1
Page 1 of 1



SCHEDULES WDA-2 THROUGH WDA-8 HAVE BEEN OMITTED.
THEY CONTAIN INFORMATION CLAIMED TO BE HIGHLY CONFIDENTIAL