
BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE PETITION OF
BROOKINGS MUNICIPAL UTILITIES
D/B/A SWIFTEL COMMUNICATIONS
FOR SUSPENSION OR MODIFICATION
OF DIALING PARITY, NUMBER
PORTABILITY AND RECIPROCAL
COMPENSATION OBLIGATIONS

Docket No. TC07-007

Direct Testimony of Peter C. Rasmuson

**On Behalf of Brookings Municipal Utilities D/B/A Swiftel
Communications**

May 23, 2007

1 **Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS**
2 **ADDRESS.**

3 **A.** My name is Peter C. Rasmuson. My business address is 1515 North Sanborn
4 Blvd., Mitchell, SD 57301. My occupation/title is President,
5 Telecommunications Consulting and Engineering for Martin Group, Inc.

6 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
7 **WORK EXPERIENCE.**

8 **A.** I received a Bachelor of Science degree in Civil Engineering from Iowa State
9 University. I currently manage the engineering, consulting and regulatory
10 business for Martin Group, Inc., a telecommunications software, consulting, and
11 engineering firm. In this position during the past five years, I have supervised
12 and reviewed the development of many different types of cost studies, feasibility
13 studies, business plans and transport and termination studies including:

- 14 • Intrastate and interstate access cost studies for companies including
- 15 Swiftel and several other ILECs in South Dakota, Iowa, Ohio, Washington
- 16 and Indiana;
- 17 • Business plans for regional fiber networks in New York, Nebraska,
- 18 California and Alabama;
- 19 • NECA average schedule to cost conversion feasibility studies;
- 20 • NECA average schedule filings;
- 21 • Collection and analysis of traffic data
- 22 • LECA intrastate access rate development and pool administration;
- 23 • Transport and termination rate development for Swiftel in this docket.

24 Martin Group has extensive knowledge of Swiftel's operations and finances

1 due to the wide variety of consulting projects and cost studies we have
2 completed for them during the past twenty years.

3 Prior to joining Martin Group I was employed for seven years as President and
4 General Manager for Sioux Valley Telephone Company and Hills Telephone
5 Company, two independent local exchange carriers with operations in South
6 Dakota, Minnesota and Iowa. As President and General Manager of Sioux Valley
7 Telephone Company, I had the overall responsibility to develop its intrastate
8 access rate in accordance with SDPUC rules and to file NECA average schedule
9 forms and reports. As part of my duties for Sioux Valley and Hills Telephone
10 Companies, I also served on the Board of Directors for Express Communications,
11 a South Dakota-based long distance carrier; the Local Exchange Carrier
12 Association (LECA), a South Dakota access charge pooling association;
13 FiberNet, an Iowa-based regional transport network; and Fiber Comm, an Iowa-
14 based competitive local exchange carrier.

15 **Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?**

16 **A.** This testimony was prepared on behalf of Brookings Municipal Utilities d/b/a
17 Swiftel Communications (Swiftel). Swiftel is the incumbent local exchange
18 carrier (ILEC) that is franchised to serve the telephone customers within the
19 municipal boundaries of the City of Brookings, SD.

20 **Q. IN WHAT CAPACITY ARE YOU TESTIFYING?**

21 **A.** I am here to explain the development of Swiftel's exhibits supporting its request
22 for suspension or modification of dialing parity, number portability and reciprocal
23 compensation, and to render my opinion that the suspension request is necessary
24 (i) to avoid a significant adverse economic impact on users of telecommunications

1 services generally; (ii) to avoid imposing a requirement that is unduly
2 economically burdensome; or (iii) to avoid imposing a requirement that is
3 technically infeasible; and that the request is consistent with the public interest,
4 convenience, and necessity.

5 **Q. WHAT IS THE PURPOSE OF EXHIBIT 1A?**

6 **A.** Exhibit 1A summarizes the NRC (nonrecurring charges) and MRC (monthly
7 recurring charges) for implementing intramodal local number portability (LNP)
8 with the traffic exchange occurring within Swiftel's existing exchange
9 boundary.

10 **Q. PLEASE DESCRIBE THE DEVELOPMENT OF EXHIBIT 1A?**

11 **A.** The Exhibit is an update of the cost information provided to the PUC in TC-04-
12 047 "In The Matter Of the Petition Of Brookings Municipal Utilities d/b/a
13 Swiftel Communications For Suspension Or Modification of 47 U.S.C. §251
14 (B)(2) Of the Communications Act Of 1934 As Amended". Martin Group
15 reviewed each section of the original exhibit and updated the applicable cost
16 information and number of access lines.

17 **Q. WHAT MODIFICATIONS WERE MADE TO THE SWITCH-RELATED**
18 **COSTS IN EXHIBIT 1A?**

19 **A.** The nonrecurring software upgrade costs of [BEGIN CONFIDENTIAL
20 INFORMATION] \$ [END CONFIDENTIAL INFORMATION] were
21 removed from the original exhibit, since these features were included in the
22 recent generic upgrade of Swiftel's switch. Based on Martin Group's
23 experience, the remaining switch-related costs included on the original exhibit
24 were reviewed and include the applicable labor hours, travel and related

1 expenses associated with the implementation of LNP.

2 **Q. WHAT MODIFICATIONS WERE MADE TO THE NPAC-RELATED**
3 **COSTS IN EXHIBIT 1A?**

4 **A.** The only modification made to this section was the MRC for LNP queries. The
5 monthly cost was updated to include Swiftel's traffic data used in its 2005 test
6 year cost study submitted to the South Dakota PUC in June 2006. Martin Group
7 reviewed vendor pricing and determined that the other NPAC-related costs did
8 not require modification from the original exhibit in TC04-047.

9 **Q. WHAT MODIFICATIONS WERE MADE TO THE**
10 **TECHNICAL/ADMINISTRATIVE COSTS IN EXHIBIT 1A?**

11 **A.** The technical / administrative costs were reviewed by Swiftel staff and the only
12 modification was a minor reduction in the monthly market/informational flyer
13 costs. The NRC in this section were based upon Swiftel's estimates for
14 Swiftel's labor and direct material costs for each item. The MRC were based
15 upon Swiftel's estimates for ongoing, incremental labor and direct material
16 costs.

17 **Q. HOW DID MARTIN GROUP DEVELOP THE NUMBER OF ACCESS**
18 **LINES USED IN EXHIBIT 1A?**

19 **A.** In accordance with FCC § 52.33 (for lifeline access line removal) and NECA
20 guidelines in place during 2003 (for annual access line losses), Martin Group
21 calculated Swiftel's forward-looking, five-year, total access line count starting
22 with Swiftel's total access lines as of the 12/31/06 ICLS filing, less lifeline
23 access lines. The lifeline access lines are identified as a separate line item on
24 the NECA ICLS data collection form. The line count is reduced by 3% annually

1 for the five years ending 12/31/07 through 12/31/11. The calculation yielded
2 the five year average access line count of 11,010 used in all Exhibits.

3 **Q. CAN YOU PROVIDE A SUMMARY OF THE RESULTS IN EXHIBIT**
4 **1A?**

5 **A.** Yes, the impact of intramodal LNP shown in Exhibit 1A is \$0.52 per line per
6 month, assuming a five year amortization of NRC.

7 **Q. WHAT IS THE PURPOSE OF EXHIBIT 1B?**

8 **A.** Exhibit 1B summarizes the NRC and MRC for implementing intramodal LNP
9 with the traffic exchange occurring at Sprint's location in Sioux Falls, SD
10 outside Swiftel's existing exchange boundary.

11 **Q. HOW WAS EXHIBIT 1B DEVELOPED?**

12 **A.** The only difference between Exhibit 1A and 1B is the addition of transport
13 costs. Exhibit 1B adds the cost to transport local calls to a Sprint Point of
14 Presence (POP) outside Swiftel's local calling area. The assumed POP location
15 is in Sioux Falls, SD. The transport cost development for Exhibit 1B is fully
16 explained in Exhibits 2A and 2B which I describe below.

17 **Q. WHY DID YOU ASSUME A SIOUX FALLS, SD POP LOCATION?**

18 **A.** Sprint's interconnection request identified this location for Sprint's facilities in
19 TC06-176.

20 **Q. HOW DID MARTIN GROUP DEVELOP THE SWITCH-RELATED**
21 **COSTS IN EXHIBIT 2B?**

22 **A.** Martin Group used the NECA Tariff No. 5 special access pricing.

23 **Q. WHY DID MARTIN GROUP USE THE NECA TARIFF NO. 5 TO**
24 **DEVELOP THE TRANSPORT COSTS IN EXHIBIT 2B?**

1 A. Swiftel is a member of the NECA pool for interstate special access and these
2 rates were used in a similar interconnection decision in Iowa (IUB Order
3 032406_arb052).

4 Q. IN DETAIL, HOW IS THE NECA TARIFF NO. 5 USED TO
5 CALCULATE THE RATE FOR A SINGLE DS1 TRANSPORT
6 FACILITY FROM BROOKINGS, SD TO SIOUX FALLS, SD IN
7 EXHIBIT 2B?

8 A. The NECA tariff specifies the NRC and MRC for special access DS1s. For all
9 exhibits, Martin Group used the NECA tariff dated July 1, 2006, which was the
10 most current version at the time this exhibit was developed. For the NRC of
11 special access DS1s, the NECA tariff prices the circuits based on two rate
12 elements:

- 13 1. Installation of Channel Termination – recovers the labor and material costs
14 to install and provision the equipment in the Sioux Falls central office. As
15 shown on page 17-26 of the tariff, the cost for this element is \$349.00 per
16 termination.
- 17 2. Access Order Charge – recovers the labor costs of processing the order for
18 the DS1. As shown on page 17-30 of the tariff, the cost of this element is
19 \$93.00 per order.

20 For the MRC of special access DS1s, the NECA tariff prices the circuits based
21 on rate bands and three rate elements:

- 22 1. Channel Terminations – recovers the cost from the transport electronics in
23 the Sioux Falls central office to the Sprint POP location in Sioux Falls. This is
24 often referred to as the local loop cost. As shown on page 17-26 of the tariff,

1 the cost for this element is \$165.17 per termination in rate band two (the rate
2 band applicable to Swiftel).

3 2. Channel Mileage Termination – recovers the cost of transport electronics
4 on each end of the circuit. As shown on page 17-27 of the tariff, the cost for
5 this element is \$88.16 per termination in rate band two (the rate band
6 applicable to Swiftel). There are two terminations required – one in
7 Brookings and one in Sioux Falls.

8 3. Channel Mileage Facility – recovers the cost of the cable connecting the
9 transport electronics on each end of the circuit. The mileage is calculated
10 based on airline miles between the end points of the circuit not actual cable
11 route miles. As shown on page 17-26 of the tariff, the cost for this element
12 is \$17.88 per airline mile in rate band two (the rate band applicable to
13 Swiftel). As calculated from the V&H coordinates in NECA Tariff #4, the
14 airline miles between the two central offices is approximately 53 miles.
15 Since Swiftel is providing all of the route miles between Brookings and
16 Sioux Falls, the cost is $\$17.88 \times 53 \text{ miles} = \947.64 per DS1.

17 In summary, the NRC for one DS1 is \$442.00 and the MRC for one DS1 is
18 \$1,289.13.

19 **Q. WHAT IS THE PURPOSE OF EXHIBIT 2A?**

20 **A.** Exhibit 2A summarizes the NRC and MRC for five transport DS1s. These
21 amounts are then carried forward to the Transport-Related Costs on Exhibit 1B.

22 **Q. WHY DOES EXHIBIT 2A USE THE COST FOR 5 DS1S?**

23 **A.** Martin Group used local traffic studies, completed in conjunction with Swiftel's
24 2005 test year cost study submitted to the South Dakota PUC in June 2006, to

1 calculate the required number of DS1s using industry standard formulas. Martin
2 Group assumed a 30% local MOU loss from the baseline study. This level of
3 MOU loss is consistent with the range of MOU losses in competitive overbuilds
4 of which Martin Group has direct knowledge.

5 **Q. WHAT IS THIS IMPACT ON THE NUMBER OF REQUIRED DS1S IF**
6 **THE LOCAL MOU LOSS IS 15%?**

7 **A.** Based on Swiftel's traffic studies referenced in the prior answer and industry
8 standard formulas, a 15% loss of local MOU would require 3 DS1s.

9 **Q. WHAT IS THIS IMPACT ON THE NUMBER OF REQUIRED DS1S IF**
10 **THE LOCAL MOU LOSS IS 50%?**

11 **A.** Based on Swiftel's traffic studies referenced in the prior answer and industry
12 standard formulas, a 50% loss of local MOU would require 8 DS1s.

13 **Q. CAN YOU PROVIDE A SUMMARY OF THE RESULTS IN EXHIBIT**
14 **1B?**

15 **A.** Yes, the per-line impact of intramodal LNP including transport to Sioux Falls,
16 SD shown in Exhibit 1B is \$1.11, assuming a five year amortization of NRC.

17 **Q. WHAT WOULD THE IMPACT BE IF A CARRIER SELECTED A**
18 **DIFFERENT LOCATION FOR INTERCONNECTION OF LNP**
19 **TRAFFIC?**

20 **A.** Since South Dakota is a single LATA state, Sprint contends that it could select
21 interconnection at virtually any point in the state. Our analysis using Sioux
22 Falls is a low cost location in the state because the transport cost is
23 predominantly dependent on the airline miles from Brookings to Sioux Falls. If
24 a carrier were to select Aberdeen or Rapid City, the transport costs would

1 increase to approximately \$1.95 per line and \$3.33 per line, respectively.

2 **Q. WHAT IS THE PURPOSE OF EXHIBIT 2B?**

3 **A.** Exhibit 2B summarizes the NRC and MRC for transport of one DS1. These
4 amounts are used in Exhibits 3 and 7 in combination with respective DS1
5 quantities in these exhibits to calculate the transport costs.

6 **Q. WHAT IS THE PURPOSE OF EXHIBIT 3?**

7 **A.** Exhibit 3 estimates the cost of allowing Swiftel customers to dial Sprint wireless
8 customers with numbers in the Minneapolis MTA as a local call and with the
9 *same dialing pattern* used to call other numbers in Swiftel's current local calling
10 area (Wireless Dialing Parity). If Wireless Dialing Parity in this manner is
11 ordered for Sprint other carriers may initiate a similar request. Exhibit 3 also
12 estimates the cost of Wireless Dialing Parity for all wireless carriers' customers
13 with numbers in the Minneapolis MTA.

14 **Q. HOW DID MARTIN GROUP DEVELOP THE COSTS IN THE SPRINT**
15 **SECTION OF EXHIBIT 3?**

16 **A.** Based on a representative sample of Swiftel's centralized equal access (CEA)
17 records as recorded by SDN Communications, the amount of Wireless Dialing
18 Parity traffic from Swiftel to Sprint would require [BEGIN CONFIDENTIAL
19 INFORMATION] [END CONFIDENTIAL INFORMATION] for transport
20 as calculated using industry standard traffic algorithms. In the current
21 configuration, wireless calls are routed over one of [BEGIN CONFIDENTIAL
22 INFORMATION] [END CONFIDENTIAL INFORMATION] common
23 DS1s to SDN. These common DS1s provide inherent redundancy for all
24 carriers. If separate trunks for Sprint would be installed, [BEGIN

1 CONFIDENTIAL INFORMATION] , [END CONFIDENTIAL
2 INFORMATION] The NRC and MRC for Exhibit 3's line item entitled
3 Transportation Costs would be [BEGIN CONFIDENTIAL INFORMATION]
4 [END CONFIDENTIAL INFORMATION]times the single DS1 rates
5 calculated in Exhibit 2B. The Translations NRC and MRC were estimated
6 based on Martin Group's experience. We estimated [BEGIN CONFIDENTIAL
7 INFORMATION] [END CONFIDENTIAL INFORMATION] hours for the
8 Translations NRC and [BEGIN CONFIDENTIAL INFORMATION]
9 [END CONFIDENTIAL INFORMATION] hours for the Translations MRC at
10 [BEGIN CONFIDENTIAL INFORMATION] \$ [END CONFIDENTIAL
11 INFORMATION] per hour. The LERG Access and Updates NRC and MRC
12 were based on an estimated range of costs received from Telecordia.

13 **Q. HOW DID MARTIN GROUP DEVELOP THE COSTS IN THE "ALL**
14 **WIRELESS PROVIDERS" SECTION OF EXHIBIT 3?**

15 **A.** Based on a representative sample of Swiftel's CEA records as recorded by SDN
16 Communications, there are approximately fifteen Wireless Providers terminating
17 traffic to Swiftel over the PSTN. We assumed at least two DS1s to each
18 wireless provider and assumed that their connection point would also be in
19 Sioux Falls. The NRC and MRC for Transportation would be 30 times the
20 single DS1 rates calculated in Exhibit 2B. The NRC and MRC for Translations
21 and LERG Access and Updates are the same as the Sprint Section of Exhibit 3
22 since the incremental effort to complete translations and LERG updates is not
23 significant.

24 **Q. HOW DID MARTIN GROUP DEVELOP THE NUMBER OF ACCESS**

1 **LINES USED IN EXHIBIT 3?**

2 **A.** Using the same method as outlined for Exhibit 1A described starting at page 4,
3 line 19 of this testimony.

4 **Q. CAN YOU PROVIDE A SUMMARY OF THE RESULTS IN EXHIBIT 3?**

5 **A.** Yes, the per-line impact of Wireless Dialing Parity including transport to Sioux
6 Falls, SD shown in Exhibit 3 is \$0.80 for Sprint wireless traffic. If all wireless
7 carriers received the same treatment, the per-line impact increases to \$4.10.

8 **Q. WHAT IS THE PURPOSE OF EXHIBIT 4?**

9 **A.** Exhibit 4 estimates the value of lost access due to Wireless Dialing Parity for
10 calls terminated beyond Swiftel's service territory. Currently, calls to wireless
11 subscribers terminated outside of Swiftel's service territory generate access
12 revenue because the Swiftel customer dials such call as a toll call using 1+NPA-
13 NXX-XXXX. If Swiftel is required to change its practice, Exhibit 4 also
14 estimates the value of lost access due to Wireless Dialing Parity for all wireless
15 carriers' customers.

16 **Q. HOW DID MARTIN GROUP DEVELOP THE COSTS IN THE SPRINT**
17 **SECTION OF EXHIBIT 4?**

18 **A.** Based on Swiftel's CEA records as recorded by SDN Communications, the
19 number of minutes of use (MOU) from Swiftel customers to Sprint wireless
20 numbers in the Minneapolis MTA totals [BEGIN CONFIDENTIAL
21 INFORMATION] [END CONFIDENTIAL INFORMATION] MOU per
22 month. Martin Group used the called number's NPA-NXX to jurisdictionalize
23 the MOU as interstate or intrastate. The intrastate minutes were multiplied by
24 the current intrastate access rate of \$0.125 / minute. The interstate MOU were

1 removed from Swiftel's average schedule settlement formulas utilized to
2 calculate the monthly settlement amount due to Swiftel. The resulting MRC of
3 lost access is [BEGIN CONFIDENTIAL INFORMATION] \$. [END
4 CONFIDENTIAL INFORMATION]

5 **Q. HOW DID MARTIN GROUP DEVELOP THE COSTS IN THE "ALL**
6 **WIRELESS PROVIDERS" SECTION OF EXHIBIT 4?**

7 **A.** Martin Group used Swiftel's CEA records as recorded by SDN Communications
8 and the same method to jurisdictionalize MOU as above and calculated the
9 MRC of lost access for calls from Swiftel customers to all wireless carriers in
10 the Minneapolis MTA. The total number of MOU for all wireless carriers is
11 [BEGIN CONFIDENTIAL INFORMATION] . [END CONFIDENTIAL
12 INFORMATION] The resulting MRC of lost access is [BEGIN
13 CONFIDENTIAL INFORMATION] \$. [END CONFIDENTIAL
14 INFORMATION]

15 **Q. HOW DID MARTIN GROUP DEVELOP THE NUMBER OF ACCESS**
16 **LINES USED IN EXHIBIT 4?**

17 **A.** Using the same method as outlined for Exhibit 1A described starting at page 4,
18 line 12 of this testimony.

19 **Q. CAN YOU PROVIDE A SUMMARY OF THE RESULTS IN EXHIBIT 4?**

20 **A.** Yes, the per-line impact of lost access revenues due to Wireless Dialing Parity
21 shown in Exhibit 4 is \$0.06 per month for Sprint wireless traffic. If all wireless
22 carriers received the same treatment, the per-line impact increases to \$0.59 per
23 month.

24 **Q. WHAT IS THE PURPOSE OF EXHIBIT 5?**

1 A. Exhibit 5 estimates the additional cost of reciprocal compensation that would be
2 paid to Sprint and other wireless carriers due to *Wireless Dialing Parity* beyond
3 Swiftel's service territory. As discussed in the Exhibit 4 testimony, these calls
4 currently generate access revenue to Swiftel. In the event *Wireless Dialing*
5 *Parity* is ordered for Sprint, Swiftel will (1) lose access revenue and (2) have
6 increased reciprocal compensation costs to terminate those calls. If *Wireless*
7 *Dialing Parity* is ordered for all wireless carriers, Exhibit 5 estimates the
8 additional cost of reciprocal compensation that would be paid to all wireless
9 carriers due to *Wireless Dialing Parity*.

10 Q. **HOW DID MARTIN GROUP DEVELOP THE INCREASED EXPENSES**
11 **IN THE SPRINT SECTION OF EXHIBIT 5?**

12 A. Martin Group used the same MOU as in the Sprint section of Exhibit 4 and
13 multiplied by the reciprocal compensation rate of \$0.01310 per minute proposed
14 in TC06-176. The resulting MRC of increased reciprocal compensation is
15 [BEGIN CONFIDENTIAL INFORMATION] \$. [END CONFIDENTIAL
16 INFORMATION]

17 Q. **HOW DID MARTIN GROUP DEVELOP THE INCREASED EXPENSES**
18 **IN THE ALL WIRELESS PROVIDERS SECTION OF EXHIBIT 5?**

19 A. Martin Group used the same MOU as in the All Wireless Providers section of
20 Exhibit 4 and multiplied by the reciprocal compensation rate of \$0.01310 per
21 minute proposed in TC06-176. The resulting MRC of increased reciprocal
22 compensation is [BEGIN CONFIDENTIAL INFORMATION] \$. [END
23 CONFIDENTIAL INFORMATION]

24 Q. **HOW DID MARTIN GROUP DEVELOP THE NUMBER OF ACCESS**

1 **LINES USED IN EXHIBIT 5?**

2 A. Using the same method as outlined for Exhibit 1A described starting at page 4,
3 line 19 of this testimony.

4 **Q. CAN YOU PROVIDE A SUMMARY OF THE RESULTS IN EXHIBIT 5?**

5 A. Yes, the per-line impact of increased reciprocal compensation expenses due to
6 Wireless Dialing Parity shown in Exhibit 5 is \$0.01 per month for Sprint
7 wireless traffic. If all wireless carriers received the same treatment, the per-line
8 impact increases to \$0.09 per month.

9 **Q. WHAT IS THE PURPOSE OF EXHIBIT 6?**

10 A. Exhibit 6 estimates the cost to implement access to the E800 database in
11 Swiftel's local switch if Swiftel is required to route toll traffic directly to an IXC
12 and not via SDN. Sprint's proposal is to use universal trunks – trunks to carry
13 all local and access traffic including calls to 8XX. This would require Swiftel to
14 implement the ability to query the E800 database from its local switch in
15 Brookings. Currently, Swiftel uses the SDN Communications tandem switch to
16 perform this E800 database query to determine the correct NPA-NXX-XXXX to
17 route the dialed 8XX number.

18 **Q. HOW DID MARTIN GROUP DEVELOP THE ESTIMATED COSTS TO**
19 **IMPLEMENT E800 IN EXHIBIT 6?**

20 A. To implement E800 functionality in Swiftel's local switch, additional
21 translations and testing would be required. For the NRC Switch-Related Costs
22 (Translations and Technical Implementation and Testing), Martin Group utilized
23 estimates based upon its experience. We estimated [BEGIN CONFIDENTIAL
24 INFORMATION] [END CONFIDENTIAL INFORMATION] hours at

1 [BEGIN CONFIDENTIAL INFORMATION] \$ [END CONFIDENTIAL
2 INFORMATION] per hour to complete the translations and testing. For the
3 NRC NPAC-Related Costs – Establishment of Service, Martin Group estimated
4 these costs based on confidential vendor price quotes. The MRC for E800
5 Queries was estimated based on confidential vendor price quotes for a per-
6 message rate multiplied by [BEGIN CONFIDENTIAL INFORMATION]
7 [END CONFIDENTIAL INFORMATION] 8XX messages as identified in a
8 representative sample of Swiftel's CEA records as recorded by SDN
9 Communications.

10 **Q. HOW DID MARTIN GROUP DEVELOP THE NUMBER OF ACCESS**
11 **LINES USED IN EXHIBIT 6?**

12 **A.** Using the same method as outlined for Exhibit 1A described starting at page 4,
13 line 19 of this testimony.

14 **Q. CAN YOU PROVIDE A SUMMARY OF THE RESULTS IN EXHIBIT 6?**

15 **A.** Yes, the per-line impact of E800 implementation shown in Exhibit 6 is \$0.05 per
16 month.

17 **Q. WHAT IS THE PURPOSE OF EXHIBIT 7?**

18 **A.** Exhibit 7 estimates the increased cost to transport Swiftel's wireline access
19 traffic between Brookings and an IXC in Sioux Falls. Currently, Swiftel routes
20 all access traffic to the SDN Communications tandem switch in Sioux Falls on a
21 common trunk group. Sprint has proposed the use of universal trunks (trunks to
22 carry all types of traffic including local and access) which would bypass SDN's
23 access network.

24 **Q. HOW DID MARTIN GROUP DEVELOP THE INCREASED WIRELINE**

1 **TRANSPORT EXPENSES IN THE SPRINT SECTION OF EXHIBIT 7?**

2 **A.** An annualized sample of Swiftel's 2005 MOU billed to Sprint Long Distance
3 totaled over [BEGIN CONFIDENTIAL INFORMATION] [END
4 CONFIDENTIAL INFORMATION] MOU. This number of MOU would
5 require eight DS1s for transport as calculated using industry standard traffic
6 algorithms. The NRC Transport Cost is eight times the single DS1, Channel
7 Termination Installation charge of \$349 shown on Exhibit 2B plus the single
8 DS1, Access Order Charge of \$93 shown on Exhibit 2B. The MRC Transport
9 Costs in Exhibit 7 is eight times the single DS1 rates calculated in Exhibit 2B.

10 **Q. HOW DID MARTIN GROUP DEVELOP THE INCREASED WIRELINE**
11 **TRANSPORT EXPENSES IN THE "ALL INTEREXCHANGE**
12 **CARRIERS" SECTION OF EXHIBIT 7?**

13 **A.** Based on the number of interexchange carriers delivering access minutes to
14 Swiftel we assumed each carrier would require at least two DS1s for redundant
15 routing between Brookings and Sioux Falls. For those carriers with significant
16 traffic (i.e. Sprint, AT&T and MCI) we calculated the number of DS1s required
17 to accommodate their traffic using industry standard traffic algorithms. As a
18 result of this assumption, the total number of DS1s required for wireline access
19 traffic would increase from the current [BEGIN CONFIDENTIAL
20 INFORMATION] [END CONFIDENTIAL INFORMATION] to 44. The
21 NRC Transport Cost is 44 times the single DS1, Channel Termination
22 Installation charge of \$349 shown on Exhibit 2B plus the single DS1, Access
23 Order Charge of \$93 shown on Exhibit 2B. The MRC for Transport Costs in
24 Exhibit 7 is 44 times the single DS1 rates calculated in Exhibit 2B.

1 **Q. HOW DID MARTIN GROUP DEVELOP THE NUMBER OF ACCESS**
2 **LINES USED IN EXHIBIT 7?**

3 **A.** Using the same method as outlined for Exhibit 1A described starting at page 4,
4 line 19 of this testimony.

5 **Q. CAN YOU PROVIDE A SUMMARY OF THE RESULTS IN EXHIBIT 7?**

6 **A.** Yes, the per-line impact of bypassing the existing SDN network due to the use
7 of universal trunks is \$0.94 for Sprint access traffic per month. If all
8 interexchange carriers bypassed the SDN network the per-line impact increases
9 to \$5.18 per month.

10 **Q. HOW CAN SWIFTEL RECOVER ITS INCREASED EXPENSES**
11 **AND/OR LOST REVENUES?**

12 **A.** The LNP costs shown in Exhibits 1A and 1B range from \$0.52 per month per
13 line to \$1.11 per month per line. The NECA tariff allows these rates to be
14 charged to the end user for a five year period if the member LEC so chooses. It
15 is possible that Swiftel would not tariff the LNP rate due to competition in
16 Brookings. As for the other expenses and/or lost revenues, the competitive
17 environment will most likely restrict Swiftel's ability to recover the substantial
18 increased costs or lost revenues. To the extent Swiftel is able to recover some
19 portion of these costs and lost revenues, the recovery would only serve to
20 increase local rates for end users in Brookings. As shown in Exhibit 4, Swiftel's
21 revenues would decrease in the range of [BEGIN CONFIDENTIAL
22 INFORMATION] \$ to \$ [END CONFIDENTIAL INFORMATION]
23 annually. As shown in Exhibits 5, 6 and 7, Swiftel's expenses would increase,
24 without a corresponding revenue increase, in the range of [BEGIN

1 CONFIDENTIAL INFORMATION] \$ to \$ [END CONFIDENTIAL
2 INFORMATION] annually plus [BEGIN CONFIDENTIAL INFORMATION]
3 \$ to \$ [END CONFIDENTIAL INFORMATION] in the first year for
4 NRC.

5 **Q. HOW DOES GRANTING SWIFTEL'S SUSPENSION PETITION**
6 **ELIMINATE THE NEED TO IMPLEMENT 10-DIGIT DIALING IN**
7 **BROOKINGS?**

8 **A.** Without the suspension, all local calls would require ten-digit dialing because
9 the switch would need to distinguish which NPA (i.e., 507, 605, 612, 320, 218,
10 and 702) the call should be routed to within the Minneapolis MTA. Ten-digit
11 dialing would require switch translation changes that could require the
12 implementation of additional switch memory, at additional cost to Swiftel and
13 its end users. In addition, the current dialing pattern, where calls that terminate
14 beyond Swiftel's local calling area are dialed on a 1 plus ten-digit basis and
15 routed to an IXC, ensures that Swiftel does not pay for the transport of traffic
16 beyond its service territory.

17 **Q. ARE THERE OTHER CONSIDERATIONS IN SUPPORT OF**
18 **GRANTING SWIFTEL'S TOLL DIALING PARITY REQUEST?**

19 **A.** Yes. If a universal trunk is implemented over which toll traffic can be routed,
20 Swiftel would be replacing a reliable billing mechanism with an unknown and
21 untested one. Currently, Swiftel in conjunction with SDN Communications
22 records the actual minutes of use and bills based on these records. It is unclear
23 whether the records Sprint proposes to provide to identify access traffic would
24 be as accurate for billing purposes. Current call detail information provided to

1 Swiftel by Sprint and other telecommunications carriers does not provide
2 information on a consistent basis that would allow Swiftel to properly determine
3 the jurisdiction of the call. Even if this information would be provided,
4 Swiftel's current billing system is not capable of using the information to
5 produce a bill. Swiftel uses Martin Group's VMS CABS software to generate
6 access bills. This software does not recognize the information in the JIP field.
7 Rather, it generates CABS bills based upon the NPA-NXX of the called number.
8 Accordingly, an upgrade would be required. While the cost for this upgrade has
9 not been precisely determined, the cost would be very significant. A range of
10 costs between \$800,000 and \$1,100,000 would be anticipated. This would
11 equate to \$1.21 to \$1.67 per access line per month based on a 5-year
12 amortization period.

13 **Q. ARE THERE ADDITIONAL CONSIDERATIONS?**

14 **A.** Yes. Swiftel utilizes SDN Communications' centralized equal access tandem
15 switch for all originating and terminating access traffic. For access billing
16 purposes, Swiftel concurs in the NECA Tariff No. 5 for interstate access service
17 and LECA Tariff No. 1 for intrastate access service. Specifically, NECA Tariff
18 No. 5 Section 6.8.1(B), issued 2/23/2000 and effective 3/9/2000, states:

19 (B) FGD is provided at Telephone Company designated end office
20 switches whether routed directly or via Telephone Company
21 designated electronic access tandem switches. The Telephone
22 Company will designate the first point(s) of switching for FGD
23 services where the Telephone Company elects to provide equal
24 access through a centralized equal access arrangement. Those
25 Telephone Company offices providing equal access through
26 centralized arrangements are identified in NATIONAL
27 EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C.
28 NO. 4.
29

1 LECA Tariff No. 1 Section 6.8.3, issued 12/15/90 and effective 1/1/91, also
2 states in this regard:

3 For Feature Group D, the Telephone Company shall design and
4 determine the routing of Switched Access Service, including the
5 selection of the first point of switching and the selection of facilities
6 from the interface to any switching point and to the end offices where
7 busy hour minutes of capacity are ordered. The Telephone Company
8 shall also decide if capacity is to be provided by originating only,
9 terminating only, or two-way trunk groups. Finally, the Telephone
10 Company will decide whether trunk side access will be provided
11 through the use of two-wire or four-wire trunk terminating equipment.

12 Selection of facilities and equipment and traffic routing of the service
13 are based on standard engineering methods, available facilities and
14 equipment, and the Telephone Company traffic routing plans. The
15 Telephone Company will designate the first point(s) of switching and
16 routing to be used where equal access is provided through a centralized
17 equal access arrangement.

18 Both NECA and LECA define the first point of switching as:

19 The term "First Point of Switching" denotes the first Telephone Company or
20 centralized equal access provider location at which switching occurs on the
21 terminating path of a call proceeding from the customer designated premises to
22 the terminating end office and, at the same time, the last Telephone company or
23 centralized equal access provider location at which switching occurs on the
24 originating path of a call proceeding from the originating end office to the
25 customer designated premises.

26 It is my understanding that these tariff provisions were implemented after both
27 the FCC and the South Dakota PUC issued authorizations for centralized equal
28 access provisions, based in part upon the public interest. The SDN switch is an
29 efficient access point to over 130,000 rural consumers.

30 **Q. IS SWIFTEL'S SUSPENSION REQUEST FOR TOLL DIALING**
31 **CONSISTENT WITH THE NECA AND LECA TARIFFS?**

32 Yes.

33 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

34 **A.** Yes it does.