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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
    IN RE: Petition by MCI
    Telecommunications Corporation
                                       :DOCKET NO. 961230-TP
    for arbitration with United
    Telephone Company of Florida and
    Central Telephone Company of
    Florida concerning interconnection :
    rates, terms, and conditions,
    pursuant to the Federal
 6
    Telecommunications Act of 1996
 7
                   FIRST DAY - AFTERNOON SESSION
 8
                             VOLUME 4
 9
                       Pages 437 through 536
10
    PROCEEDINGS:
                             HEARING
11
    BEFORE:
                             CHAIRMAN SUSAN F. CLARK
12
                             COMMISSIONER J. TERRY DEASON
                             COMMISSIONER JULIA L. JOHNSON
13
                             COMMISSIONER DIANE K. KIESLING
                             COMMISSIONER JOE GARCIA
14
    DATE:
                             Wednesday, December 18, 1996
15
16
    TIME:
                             Commenced at 1:15 p.m.
17
    LOCATION:
                             Betty Easley Conference Center
18
                             ROOM 148
                             4075 Esplanade Way
19
                             Tallahassee, Florida
20
    REPORTED BY:
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                             TALLAHASSEE, FLORIDA 32315
    APPEARANCES:
                                          BUREAU OF REPORTING.
24
                   (As heretofore noted.)
                                           RECEIVED 12/20/96
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# WITNESSES - VOLUME 4 PAGE NO. RANDY G. FARRAR Direct Examination by Mr. Fons Direct Prefiled testimony Supplemental direct prefiled testimony Cross Examination by Mr. Melson

		440
1	EXHIBITS - VOLUME 4	
2	DWILDIID 1	
3	NUMBER	ID EVD
4	20 RGF-1 and 2 4	43
5	21 RGF-3 4	43
6	22 Confidential information relating to Exhibit 21 4	48
7		
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C & N REPORTERS TALLAHASSEE, FLORIDA (904) 385-5501

# 1 PROCEEDINGS 2 (Hearing reconvened at 3:00 p.m.) (Transcript follows in sequence from Volume 3) 3 CHAIRMAN CLARK: Go back on the record. 4 is -- we are now on Mr. Farrar. 5 MR. FONS: Thank you, Madam Chairman. We passed 6 out some documents that we will address when we get to 8 RGF-3 and I'll indicate to you what, where they will go in 9 RGF-3. And also we passed out some confidential information that is also part of RGF-3. They are in an 10 envelope, and we'll tell you where they are located in the 11 12 testimony. Whereupon, 13 14 RANDY G. FARRAR was called as a witness on behalf of Sprint and, having 15 been duly sworn, testified as follows: 16 17 DIRECT EXAMINATION 18 BY MR. FONS: 19 0 Would you please state your full name for the record? 2.0 21 Α My name is Randy G. Farrar, F-a-r-ra-r. And by whom are you employed and in what 22 Q capacity, Mr. Farrar? 23 24 A Sprint, and I'm manager of network costing and

25

pricing.

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0
              And Mr. Farrar, on November 5, 1996 did you have
    cause to be filed in this proceeding direct testimony
    consisting of 44 -- I'm sorry, wrong number -- 67 pages of
 3
    questions and answers?
         Α
              Yes.
 5
              And are there any changes or corrections to this
    direct testimony?
              Yes, there are I believe four changes. The first
    one is on page 7, lines 10 and 11, the words "per unit"
    should be replaced with "per cent." On page 28, line 21,
10
    95 should be replaced with 82.
11
              CHAIRMAN CLARK: I'm sorry, what was that page
12
13
    again?
              MR. FONS: Page 28.
14
              CHAIRMAN CLARK: Line what?
15
              MR. FONS:
                         21.
16
17
              CHAIRMAN CLARK: Okay. What was the change?
              MR. FONS: 82 for 95.
18
19
              CHAIRMAN CLARK: Thank you.
20
         Α
              And the last two changes are on page 44, line 7,
    the word "eleven" should be "ten," and also on line 22,
21
    again the word "eleven" should be "ten."
    BY MR. FONS:
23
             Any other changes or corrections to your direct
24
         Q
25
    testimony?
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No, sir.
 1
        Α
              If I were to ask you the same questions today
 2
    that were posed to you in your prefiled direct testimony
 3
    with the changes that you've just indicated, would your
4
   answers be the same today?
5
         Α
              Yes.
 6
              MR. FONS: Madam Chairman, I would ask that
 7
   Mr. Farrar's direct testimony be inserted in the record as
8
    though read.
              CHAIRMAN CLARK: It will be inserted in the
10
   record as though read.
11
    BY MR. FONS:
12
              And Mr. Farrar, attached to your direct
13
    testimony, did you have two exhibits, RGF-1 and RGF-2?
14
         Α
              Yes.
15
              MR. FONS: Madam Chairman, could we have RGF-1
16
17
    identified as the next exhibit, please.
              CHAIRMAN CLARK: The next exhibit I have is 20,
18
    so RGF-1 will be Exhibit 20.
19
              MR. FONS: And could we have RGF-2 as Exhibit 21?
20
              CHAIRMAN CLARK: I'm is sorry, Mr. Fons, is RGF-1
21
    and 2 with his direct testimony?
22
              MR. FONS: Yes.
23
              CHAIRMAN CLARK: All right. We'll make it a
24
```

25

composite exhibit then.

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1
              MR. FONS: That will be fine, that will be
    Composite Exhibit 20?
              CHAIRMAN CLARK: Will be RGF-1 and 2.
 3
              MR. FONS: Thank you.
 4
   BY MR. FONS:
 5
 6
              And Mr. Farrar, was Composite Exhibit 20 prepared
7
   by you or at your direction and supervision?
         Α
              Yes.
8
              Are there any corrections or changes to Composite
    Exhibit 20?
10
         Α
              No.
11
              And Mr. Farrar, on November 15, 1996, did you
12
    cause to have filed in this proceeding supplemental direct
13
    testimony consisting of three pages of questions and
14
15
   answers?
         A
              Yes.
16
              And are there any corrections or changes to your
17
    supplemental direct testimony?
18
         Α
              No.
19
              If I were to ask you the same questions today as
20
   were posed to you in your supplemental direct testimony,
21
    would your answers be the same today?
22
         Α
              Yes.
23
              MR. FONS: And Madam Chairman, I would ask that
24
   Mr. Farrar's supplemental direct testimony be inserted in
25
```

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the record as though read.
              CHAIRMAN CLARK: It will be inserted in the
   record as though read.
3
   BY MR. FONS:
              And Mr. Farrar, did you have attached to your
        Q
5
    supplemental direct testimony a composite exhibit, Number
   RGF-3?
         Α
              Yes.
8
             And was that --
 9
              MR. FONS: Madam Chairman, may I have that marked
10
    as Exhibit 21?
11
              CHAIRMAN CLARK: It will be marked as Exhibit 21.
12
   BY MR. FONS:
13
              And Mr. Farrar, was Exhibit 21 prepared by you or
14
    at your direction and supervision?
15
         Α
              Yes.
16
              And are there any corrections and changes to your
17
    Exhibit 21?
18
              Yes, there are. We have made changes to four of
19
    the cost studies. Most of these changes were pointed out
20
    in response to the interrogatories.
21
             And Mr. Farrar, is the first change to Exhibit 21
         0
22
    at pages 95 of 122 pages?
23
24
         Α
             Yes.
              And is that titled "Directory Assistance Database
25
```

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Listing and Update?"
         Α
              Yes.
              And do the changes -- are there three pages of
 3
         0
    changes?
 5
         Α
              Yes.
              And do those pages, are they intended to replace
 6
    the current pages 95 through 97?
         Α
              Yes.
8
              And the next change, is that at page 99 of 122
 9
         0
10
    pages?
11
         Α
              Yes.
              And is that titled "Directory Assistance Data
         Q
12
    Base Query Service?"
13
         Α
              Yes.
14
              And are these changes intended to replace pages
         Q
15
    99 through 101 -- I'm sorry, through 102?
16
         Α
              Yes.
17
              And is the next change at page 104 of 122 pages?
18
19
         Α
              Yes.
              And is that titled "Toll and Local Assistance
20
    Service (Live)?"
21
              Yes.
22
         Α
              And do these pages replace pages 104 through 108?
23
24
         Α
              Yes.
25
         Q
              And is the final change at Page 110 of 122 pages?
```

A Yes.

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- Q And is that titled "Directory Assistance Operator Service (Live)?"
- ${\tt A} {\tt Yes.}$ 
  - Q And does that replace pages 110 --
- A Yes.
  - Q -- through 114?
- A Yes.
  - Q Are there any other changes to your Exhibit 21?
- A I would just like to point out that there was -
  again, in response to one of the interrogatories, the cost

  that is shown on page 86 is incorrect, and that was

  corrected in one of the interrogatories.
  - Q Do you remember which interrogatory it was or what numbers?
- 16 A I don't recall off the top of my head, no.
- MR. FONS: We will determine that and supply it.
- CHAIRMAN CLARK: We'll go ahead with the summary
  and cross examination, and then if you will clarify either
  the interrogatory or the numbers changed.
- MR. FONS: We will do that, Madam Chairman.
- There is one other bit of information with regard to this
- 23 exhibit.
- 24 BY MR. FONS:
- Q Were there certain pages of this exhibit that

```
contained confidential information? And would those be
   pages 63 through 71?
        Α
             Yes.
3
 4
        Q
             And page 84?
 5
        Α
             Yes.
            And I believe those have been passed out to the
 6
   Commissioners and to counsel.
             MR. FONS: And do we want to identify that as
8
   Exhibit 22.
             CHAIRMAN CLARK: Is that this?
10
             MR. FONS: Yes, ma'am.
11
             CHAIRMAN CLARK: All right. Let's go ahead and
12
   identify it as Exhibit 22. It is a confidential exhibit.
13
   Give us the title again.
14
             MR. FONS: Yes, ma'am. I'm sorry, I didn't --
15
             CHAIRMAN CLARK: My fault too. What is in here,
16
   again, the confidential exhibit? I need a title for
17
   Exhibit 22.
1.8
             MR. FONS: Confidential information relating to
19
20
   Exhibit 21.
             CHAIRMAN CLARK: Okay.
21
22
23
24
25
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		DIRECT TESTIMONY
3		OF
4		RANDY G. FARRAR
5		
6	Q.	Please state your name, occupation, and business address.
7		
8	A.	My name is Randy G. Farrar. I am presently employed as
9		Manager - Network Costing and Pricing for Sprint/United
10		Management Company. My business address is 2330 Shawnee
11		Mission Parkway, Westwood, Kansas, 66205.
12		
13	Q.	What is your educational background?
14		
15	A.	I received a Bachelor of Arts degree from The Ohio State
16		University, Columbus, Ohio, in June 1976 with a major in
17		history. Simultaneously, I completed a major program in
1.8		economics. Subsequently, I received a Master of Business
19		Administration degree, with an emphasis on market
20		research, in March 1978, also from The Ohio State
21		University.
22		
23	Q.	What is your work experience?
24		
25	Α.	From 1978 to 1983 I was employed by the Public Utilities

In 1980, I was promoted from Commission of Ohio. Financial Analyst to Senior Financial Analyst. My duties of Staff included the preparation Reports of Investigation concerning rate of return and cost of I also designed rate structures, evaluated capital. construction works in progress, measured productivity, evaluated treatment of canceled plant, and performed financial analysis, for electric, gas, telephone, and water utilities. I presented written and oral testimony on behalf of the Commission Staff in over twenty rate cases.

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I have been employed by Sprint Corporation or one of its predecessor companies since 1983. From 1983 to 1986 I was Manager - Rate of Return. I presented written and oral testimony before state public utilities commissions in Iowa, Nebraska, South Carolina, and Oregon.

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From 1986 to 1987 I was Manager - Local Exchange Pricing. I investigated alternate forms of pricing and rate design, including usage sensitive rates, extended area service alternatives, intraLATA toll pricing, and lifeline rates.

24

25

From 1987 to 1992 I was Manager - Local Exchange Costing.

In 1992 I was promoted to Manager - Network Costing and I perform financial analyses for various Pricing. business cases, which analyze the profitability of entering new markets and expanding existing markets, including Custom Calling, Centrex, CLASS and Advanced Intelligent Network features, CPE products, Public Telephone and COCOT, and intraLATA toll. instructor for numerous training sessions for subsidiary companies, designed to support corporate policy on pricing and costing theory, and to educate and support the use of various costing models. I was a member of the United States Telephone Association's New Services and Technologies Issues Subcommittee from 1989 to 1992, and the Economic Analysis Training Work Group from 1994 to In 1996, I have presented written and/or oral 1995. testimony before the Illinois Commerce Commission and the New Jersey Board of Public Utilities on the avoided costs of resold services; and before the Pennsylvania Public Utilities Commission on the cost of local loop.

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Q. What is the purpose of your testimony?

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23 **A.** My testimony will cover two areas: Sprint's perspective 24 on cost-based pricing for unbundled network elements; and 25 Sprint's position on the appropriate methodology for determining wholesale rates for retail services.

Sprint's perspective on the pricing and costing of unbundled network elements and wholesale discounts is neither solely one of a local telephone company, nor solely one of a new competitor. Rather, Sprint's perspective represents an accommodation of interests similar to those that the Commission must balance in this docket. Sprint is a multi-billion dollar company providing traditional local exchange service, long distance service, and PCS/wireless communication. In addition, Sprint Communications Company L.P. will compete as a competitive local exchange carrier (CLEC).

My testimony is divided into two sections: Section I addresses cost-based pricing for unbundled network elements, and Section II addresses wholesale discounts for retail services.

20 I. COST-BASED PRICING FOR UNBUNDLED NETWORK ELEMENTS.

22 A. TELRIC-based Pricing Methodology

Q. What does the Telecommunications Act of 1996 (the Act)
require for pricing network elements?

1	Α.	Section 252 (d)(1) of the Act, interconnection and
2		Network Element Charges, states that,
3		
4		Determinations by a State commission of the just
5		and reasonable rate for the interconnection of
6		facilities and equipment for purposes of subsection
7		(c)(2), and the just and reasonable rate for
8		network elements for purposes of section (c)(3) of
9		such section -
10		(A) shall be -
11		(i) based on the cost (determined without
12		reference to a rate-of-return or other
13		rate-based proceeding) of providing the
14		interconnection or network element
15		(whichever is applicable), and
16		(ii) nondiscriminatory, and
17		(B) may include a reasonable profit.
18		
19	Q.	What does the FCC Order say about the pricing of network
20		elements?
21		
22	A.	The FCC requires, at paragraph 672 of its First Report
23		and Order ("FCC Order"), issued August 8, 1996, in CC
24		Docket No. 96-98, that prices for interconnection and
25		unbundled elements should be set at forward-looking

economic costs. In the FCC's view, this will mean that
prices are based on the Total Service Long Run
Incremental Cost (TSLRIC) of the network element, which
the FCC titled Total Element Long Run Incremental Cost
(TELRIC). Importantly, TELRIC will include a reasonable
allocation of forward-looking joint and common costs.

Q. The Eighth Circuit Court of Appeals stayed the FCC Order.

In light of this development, what is Sprint's position concerning the cost, price, and unbundling requirements

for network elements?

A. Sprint's policy in this area is unchanged. Sprint believes the cost methodology in the FCC Order, TELRIC for unbundled network elements, is correct.

It is imperative that the same cost standard be applied to all Florida ILECs. Sprint believes the Commission should adopt a TELRIC-based costing and pricing standard for all Florida ILECs. A different pricing standard for different ILECs will produce non-competitive costs and prices among ILECs, disadvantaging some while benefiting others.

25 Q. Please describe Sprint's pricing policy for network

1		elements.
2		
3	A.	Sprint believes that prices for network elements must be
4		based on economic costs. More specifically, Sprint
5		recommends:
6		
7		▶ Prices for unbundled elements should be developed
8		using a TELRIC-based pricing methodology.
9		▶ The level of contribution to shared and common costs
LO		should be recovered from each network element on a per
L1		<b>Cent</b> unit basis.
L2		▶ The reasonable profit level to be included in TELRIC
١3		should be the most recent authorized interstate rate
L4		of return.
L5		▶ Prices for network elements should be geographically
L6		deaveraged; for example, according to high cost,
L7		medium cost, and low cost areas, where such cost
L8		differences have been quantified.
L9		▶ The same costing and pricing standards must be
20		applicable on a industry-wide and statewide basis.
21		
22	1.	TSLRIC (Total service Long Run Incremental Cost)
23		
24	Q.	Please explain what is meant by TSLRIC.

TSLRIC represents the incremental cost of an entire Α. 1 product. In other words, TSLRIC represents all the costs 2 directly caused by a service. TSLRIC is also sometimes 3 called total incremental cost, long run 4 incremental cost, long run incremental cost - total 5 service, or average incremental cost (when divided by 6 output). TSLRIC includes all of the service-specific 7 fixed costs and volume sensitive costs. It represents 8 the total direct burden that the service places upon the 9 resources of the company. In more precise terms, TSLRIC 10 is the difference between (1) the total cost of a company 11 that provides the study service and a number of other 12 services, and (2) the total cost of that same company if 13 it provided all of its other services in the same 14 15 quantities, but not the study service.

16

17

# 2. TELRIC (Total Element Long Run Incremental Cost)

18

19 Q. Is TSLRIC costing different from TELRIC costing?

20

21 **A.** Essentially, TSLRIC and TELRIC costing methodologies are the same. Their differences are related to the items 23 being costed, not the method of developing the costs.

24 The FCC Order, paragraph 678, states,

While we are adopting a version of the methodology commonly referred to as TSLRIC as the basis for pricing interconnection and unbundled elements, we are coining the term "total element long run incremental cost" (TELRIC) to describe our vision of this methodology. The incumbent LEC offerings to be priced using this methodology generally will be "network elements," rather than "telecommunications services," as defined by the 1996 Act.

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TSLRIC studies determine the forward-looking, long run incremental cost of services while TELRIC studies determine the forward-looking, long run incremental cost of network elements. Neither TSLRIC nor TELRIC include common costs. Many shared costs at the service level are direct at the element level. The FCC chose the term total "element" long-run incremental cost to reflect that the "services" in question are, in reality, "elements" of The FCC also noted that network. unlike the telecommunication services, network elements correspond to distinct network facilities.

24

25

Q. Please describe Sprint's position on an appropriately

developed TELRIC cost of service study.

A. Sprint believes that the major characteristics of an appropriately developed TELRIC cost of service study are as follows:

1. The ILEC's prices for interconnection and unbundled network elements will recover the forward-looking costs directly attributable to the specified element, as well as a reasonable allocation of forward-looking common costs. (FCC Order, para. 682.)

2. Per-unit costs will be derived from total costs using reasonably accurate "fill factors" (estimates of the proportion of a facility that will be "filled" with network usage); that is, the per unit costs associated with a particular element must be derived by dividing the total cost associated with the element by a reasonable projection of the actual total usage of the element. (FCC Order, para. 682.)

3. Directly attributable forward-looking costs will include the incremental costs of shared facilities and operations. Those costs will be attributed to specific elements to the greatest extent possible.

Certain shared costs that have conventionally been 1 treated as common costs (or overheads) will be 2 attributed to the individual elements to the 3 greatest extent possible. (FCC Order, para. 682.) 4 forward-looking pricing methodology 5 4. The interconnection and unbundled network elements 6 7 should be based on costs that assume that wire centers will be placed at the ILEC's current wire 8 9 center locations, but that the reconstructed local network will employ the most efficient technology 10 for reasonably foreseeable capacity requirements. 11 12 (FCC Order, para. 685.) Only forward-looking, incremental 13 5. costs are included in a TELRIC study. (FCC Order, para. 14 690.) 15 6. Retailing costs, such as marketing or customer 16 17 billing costs associated with retail services, are not attributable to the production of network 18

billing costs associated with retail services, are not attributable to the production of network elements that are offered to interconnecting carriers and are not included in the forward-looking direct cost of an element. (FCC Order, para. 691.)

19

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7. The TELRIC methodology provides for a reasonable profit and thus no additional profit is required under the statutory language. (FCC Order, para.

T		699.)
2		8. The currently authorized rate of return is a
3		reasonable starting point for TELRIC calculations.
4		(FCC Order, para. 702.)
5		
6	3.	Shared and Common Costs
7		
8	Q.	What are shared costs?
9		
LO	A.	Shared costs are costs that:
11		
12		▶ support a group of services,
13		▶ are incremental to that group of services, and
14		▶ are unaffected by any individual service.
15		
16		Another way of saying this is that shared costs are
17		essential to the provision of more than one service and
18		do not vary with the output of any of the individual
19		services.
20		
21	Q.	What does the FCC Order say about the treatment of shared
22		costs?
23		
24	A.	The FCC Order, at paragraph 682, indicates that shared
25		costs be attributed to specific elements to the greatest

1		extent possible.
2		
3	Q.	What are common costs?
4		
5	A.	Common costs are a specific type of shared costs. They
6		are costs shared by all services offered by the company.
7		These are costs that do not change or go away unless the
8		company goes out of business. The classic example is the
9		president's desk. As with TSLRIC, TELRIC does not
10		include common costs.
11		
12	Q.	What is the magnitude of common costs to be included
13		under the TELRIC-based pricing methodology?
14		
15	A.	The FCC Order, at paragraph 695, states that the level of
16		common costs for network elements should be less than
17		that for services, because network elements correspond to
18		discrete network facilities that have distinct operating
19		characteristics. Many shared costs of facilities and
20		operations are attributed to specific elements to the
21		greatest extent possible. (FCC Order, para. 682.)
22		
23	Q.	What is Sprint's recommendation on the size and
24		allocation of shared and common costs?

- 1 A. Sprint recommends that shared and common costs be
  2 recovered on a percentage basis, above the TELRIC of each
  3 individual element, to reflect the forward-looking shared
  4 and common costs of a reasonably efficient firm.
- 5 Sprint's methodology and recommended allocation amounts 6 are explained in Section B. 12, below.

## 4. Return On Investment

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10 Q. Please describe cost of capital.

11

Cost of capital is what a company has to pay creditors 12 A. The and shareholders for the money the company uses. 13 payment to creditors is generally called interest. The 14 payment to shareholders is generally called profit. 15 Regulation and economic texts have long recognized that 16 there is a normal level of profit, or return 17 investment, that shareholders need to receive if they are 18 to continue to invest in the company. This normal level 19 of profit is often referred to as the cost of equity. 20

21

22 Q. Is cost of capital part of TELRIC?

23

A. Yes. The incremental cost of network elements includes the cost of making additional investments. The money to

1.		make these investments comes from creditors and
2		shareholders. As I explained above, the cost of
3		obtaining money from creditors and shareholders is called
4		the cost of capital.
5		
6	Q.	Does TELRIC include profit?
7		
8	A.	Yes. TELRIC provides for a reasonable profit consistent
9		with Section 252(d)(1)(B) of the Act which states that
10		rates for network elements "may include a reasonable
11		profit." Because TELRIC includes the cost of capital,
12		TELRIC includes a normal level of profit.
13		
14	Q.	What level of return on investment does Sprint recommend
15		using?
16		
17	A.	Sprint recommends the use of the current authorized
18		interstate rate of return on investment of 11.25%.
19		
20	5.	Other TELRIC Considerations
21		
22	Q.	Please describe what is meant by "reasonably accurate
23		fill factors."
24		

A. Fill factors are the percentage of available network

capacity utilized. Utilization is due to three factors.

- 1. When engineering and building telecommunications facilities, LECs attempt to anticipate future needs. For example, it is more cost-effective to dig a trench once and install facilities necessary to meet additional forecasted demand, than to dig up the trench and install new facilities every time a new loop is required.
- 10 2. It is the nature of the telecommunications industry
  11 that capacity is acquired in large blocks. Unused
  12 capacity will exist while demand grows into the
  13 available capacity.
  - 3. An engineering interval, a period of time necessary to plan and construct facilities, is required when replacing or expanding capacity.

Efficient deployment balances the cost-benefit relationship of unused capacity and the cost of installation. Not enough capacity results in inefficient rework (e.g. digging new trenches every month); and too much capacity is an inefficient use of resources (e.g. burying plant that will never be used).

Q. What is the significance of applying a standard that

requires the use of "current wire center locations and the most efficient technology available?"

A. Forward-looking cost measurements require capturing the costs of network facilities that will be incurred in the future. The use of current wire center locations and the most efficient technology available in determining forward-looking economic costs is the approach that reasonably balances the interests of ILECs, CLECs, and consumers. ILECs need prices that will recover their legitimate forward-looking economic costs. CLECs need to be provided the opportunity compete on an equitable basis with the ILEC. Consumers will benefit the most when there is facilities-based competition.

The FCC rejected alternative approaches which represented extreme viewpoints that would either frustrate facilities-based competition, or hinder competitive entry. At one extreme, the FCC rejected the use of a hypothetical, least cost network in calculating forward-looking element costs, because this would discourage facilities-based competition (i.e., the incentive to build would be reduced if facilities were already available at least-cost prices). At the other extreme, the FCC rejected cost recovery based entirely on the past

1		network design and technology (i.e., embedded cost),
2		because this would result in inefficient pricing to the
3		detriment of competitive entry.
4		
5		Instead, the FCC adopted a standard that uses the
6		existing wire center locations and the most efficient
7		technology deployed as most closely representing the
8		incremental costs ILECs will actually incur in making
9		elements available to new entrants.
10		
11	Q.	Please expand on the use of economic depreciation rates.
12		
13	A.	The use of economic depreciation rates in TELRIC ensures
14		that costs represent the actual useful economic lives of
15		ILEC facilities, instead of regulatory lives. The actual
16		useful economic lives may be different from that
17		reflected in the existing prescribed depreciation rates.
18		
19	6.	Geographic Deaveraging
20		
21	Q.	What does Sprint propose with regard to geographic
22		deaveraging?
23		
24	A.	Sprint believes that geographically deaveraged prices for
25		network elements are appropriate. However, the

deaveraging methodology for loops is different than that for switching and transport. Switching and transport costs are a function of traffic density and can be deaveraged to high cost, medium cost, and low cost exchanges based on traffic density characteristics. Loop costs, however, are a function of loop length and the density of end-user locations. These loop cost characteristics should be reflected in deaveraged prices that may vary from the geographic areas used for switching and transport deaveraging. For example, an exchange with low switching costs may have both high and low cost loops.

Q. Why are deaveraged rates important?

A. Deaveraged rates are appropriate to more closely reflect the actual costs of providing network elements in different areas. Loop costs in particular can vary widely across a large geographical area. For example, an ILEC's service area that is composed of both densely populated and sparsely populated areas will have different costs depending on distances, densities and other factors affecting costs.

While average pricing has served to permit lower prices

in sparsely populated areas, average pricing distorts

CLECs' entry decisions regarding whether to build or

lease unbundled network elements. Deaveraging provides

accurate market signals, which will encourage efficient

utilization of resources while discouraging uneconomic

decisions by CLECs.

7

8

### B. Unbundled Network Elements Costs and Prices

9

10 Q. How should unbundled rates be developed?

11

In keeping with the general guidelines offered by the A. 12 FCC's Order, Sprint's rates for unbundled elements will 13 14 recover those costs in a manner that reflects the way they are incurred. (FCC Order, para. 743.) 15 The charges 16 for dedicated facilities will be flat-rated, including, 17 limited to, charges for unbundled loops, dedicated transport, interconnection, and collocation. 18 (FCC Order, para. 744.) Recurring costs will 19 recovered through recurring charges, rather than through 20 21 a nonrecurring charge. (FCC Order, para. 745.)

22

Q. How many unbundled elements does Sprint propose to offer?

24

25 A. Sprint proposes to offer the following ten unbundled

Τ		network elements.
2		
3		1. Local Loops
4		2. Cross-connect Facilities
5		3. Network Interface Devices
6		4. Local Switching
7		5. Tandem Switching
8		6. Transport
9		7. Digital Cross-connect
10		8. Signaling Links and STP Ports
11		9. Call Related Data Bases
12		10. Operator Services and Directory Assistance
13		
14	1. I	ocal Loop
15		
16	Q.	What is the appropriate rate structure for unbundled
17		local loops?
18		
19	A.	In essence, the FCC Order, at paragraph 790, requires the
20		use of a TELRIC methodology to establish geographically
21		deaveraged, flat-rate charges for access to unbundled
22		loops. Sprint agrees, and is currently in the process of
23		developing deaveraged unbundled loop costs using the
24		TELRIC methodology and the Benchmark Cost Model forward-
25		looking network.

unbundled loop? 2 3 Two relatively easy modifications to BCM 2 can be made to Α. 4 produce the TELRIC of unbundled loop. First, it is 5 necessary to isolate loop investment. Since BCM 2 6 considers all investments associated with basic service, 7 it includes investment not only in loop, but in Network 8 Interface Devices (NID), switching, and central office 9 equipment associated with line termination. 10 these investments are treated separately in BCM 2, so the 11 loop investment can easily be isolated. 12 13 Second, a forward-looking annual charge factor was used 14 to develop TELRIC. The derivation of this annual charge 15 factor is described in Section B. 11, below. 16 17 Is the loop investment developed by BCM 2 appropriate for Q. 18 a TELRIC study? 19 20

How can BCM 2 be used to calculated the TELRIC of the

ο.

1

- 21 **A.** Absolutely. The result of BCM 2 is a loop network 22 representing a forward-looking network using state-of-23 the-art technology, employing existing wire centers.
- 25 Q. How are these loop investments converted to a loop cost

A. Loop investments are multiplied by a forward-looking annual charge factor, then divided by twelve to arrive at the monthly recurring cost.

6

7 Q. Do these costs include a reasonable allocation of shared and common costs?

9

10 A. No. The shared and common cost study methodology is
11 discussed at Section B. 12, below.

12

13 Q. How many TELRIC cost zones are calculated?

14

Costs are computed for each Census Block Group (CBG); 15 Α. 16 thus each CBG has its own unique TELRIC. The individual 17 CBG TELRIC results must be aggregated into a manageable 18 number of cost zones. The greater the number of cost 19 zones, the closer the actual CBG cost will be to the cost The lesser the number of zones, the easier and 20 21 less costly the plan is to administer. The goal is to determine the number and placement of these zones in 22 23 order to accurately deaverage costs without creating 24 costly administrative burden.

The following method is proposed to develop the cost First, a distribution of all CBG loop costs is Second, the minimum number of \$5 cost zones developed. were created, such that at least 80% of the loops were included in that number of zones. Third, since the loop cost distribution is not a normal distribution, the \$5 cost zones are not contiguous. Thus, for administrative purposes, the \$5 cost zones were expanded to make them contiguous. Finally, the cost of each zone is equal to 10 the weighted average of the cost of all loops within that zone.

12

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9

#### Cross-Connect Facilities

14

13

15 Q. What are cross-connect facilities?

16

17 A. are the facilities required to connect unbundled loop to the CLEC facilities within the ILEC 18 19 central office.

20

#### Network Interface Device (NID)

22

21

What is a NID, and why is it a distinct network element? 23 Q.

24

25 Α. The NID represents the interface between LEC-owned loop facilities and customer-owned inside wire and CPE. It provides the following functions:

- ▶ Cross-connect point
- Over-voltage protection
- Electrical ground
- 7 ▶ Testing point

It is unbundled as a distinct network element because the NID will likely possess more intelligence as more sophisticated services are offered over the loop to the end-user customer. Thus the CLEC may wish to provide its own NID, or purchase an unbundled NID from the ILEC.

There are several loop/NID combinations available to the CLEC. Here are several possible combinations. First, the CLEC can simply purchase both the existing unbundled loop and NID from the ILEC. Second, the CLEC can provide its own loop and NID, interconnecting its NID to the ILEC NID in order to access the customer's inside wire. Third, the CLEC may purchase an unbundled loop from the ILEC, and interconnect (directly or through the existing NID) that loop to another NID, which it may own or lease from the ILEC. One limitation is that the ILEC loop cannot be left disconnected from a NID.

1	Q.	Please describe your TELRIC methodology for the unbundled
2		NID.
3		
4	A.	A separate TELRIC cost/price has been developed for 1-
5		line NID, 2-line NID, smart jack, and HDSL NID.
6		
7		The TELRIC methodology consists of four steps. First,
8		the EF&I (Engineered, Furnished, and Installed) material
9		cost of the NID, ground wire, and ground rod, is
LO		determined. This includes the actual equipment vendor
L1		price, installation and engineering costs, and any
L2		applicable sales taxes.
L3		
L <b>4</b>		Second, a forward-looking annual charge factor is
15		applied. The development of this factor is discussed
L6		below in Section B. 11, below.
L7		
18		Third, this annual cost is divided by twelve to produce
19		a monthly cost.
30		
21		Fourth, the shared and common cost factor is added to the
22		above TELRIC result to produce the rate of the unbundled
23		element. The development of the shared and common costs
24		is discussed below in Section B. 12, below.

1 4	. Lo	cal S	wit	ching
-----	------	-------	-----	-------

3 Q. How does Sprint propose to price unbundled switching?

5 A. Local switching will be priced as three separate
6 components; a flat-rated port, usage sensitive switching,
7 and flat-rated features.

The port charge will be assessed on a monthly basis on each access line the CLEC interconnects with the Sprint switch. The usage sensitive switching charge will be assessed on two separate per MOU charges, one for lineside switching, another for trunk-side switching. The flat-rated feature will be assessed on each access line.

16 Q. Please describe Sprint's local switching TELRIC methodology.

19 A. The TELRIC methodology for local switching consists of an
20 Excel worksheet model, SWIM (Switching Model). SWIM
21 takes output of the Bellcore SCIS (Switching Cost
22 Information System) model, and combines it with actual
23 usage information to derive TELRIC results, deaveraged
24 for two distinct cost zones. These two cost zones are:

- Host Offices, and remote switches within the same
   exchange.
- Remote offices outside of the host office's
   exchange.

The TELRIC methodology for switching consists of seven basic steps.

8

9 Q. Please describe the first step.

10

A. The first step is to determine the total forward-looking 11 switching investment using the SCIS model. Nortel DMS-12 100/200 switches in Florida were modeled, assuming a 13 minimum Supernode-60 processor capability. Supernode-60 14 is the minimum processor size currently supported by 15 Although earlier vintage processors may be Nortel. 16 currently in use, they represent obsolete technology and 17 do not represent forward-looking technology as required 18 by TELRIC standards. The DMS-100/200 switch represents 19 the predominate technology deployed by Sprint in Florida, 20 accounting for 35% of all access lines. 21

22

This investment is segregated into seven investment categories. These are,

- Getting Started Cost the minimum investment 1. 1 required to provide switching, regardless of usage. 2 It is composed primarily of the central processor 3 and memory.
  - Line Termination Cost the investment required to 2. terminate the local loop in the central office. It is composed primarily of a line card, the main distribution frame, and protector.
- 3. Line CCS - the investment associated with usage sensitive line-side switching. It is composed 10 primarily of the line concentrating module, DS-30A 11 links, line group controller, DS-30 links, and the 12 network module. (CCS is an acronym for 100 call seconds.)
  - 4. Trunk CCS - the investment with usage sensitive trunk-side switching. It is composed primarily of digital trunk controllers, DS1 links, network module.
  - 5. Tandem Trunk CCS - the investment associated with usage sensitive tandem trunk switching.
- 21 6. Umbilical CCS - the usage-sensitive investment in 22 Host-Remote links.
- 23 7. SS7 - investment associated with the SSP (Service 24 Signaling Point) located in the central office.

6

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19

1	The SCIS model considers only the hardware investment in
2	the central office. One-time software investment
3	required to provide basic switching must also be
4	included. This proprietary information was provided to
5	Sprint by Nortel.
6	
7	The second step is to accumulate the demand data needed
8	to complete the study. Current traffic studies are used
9	to gather MOU and call set-ups by call types.
10	
11	The third step is to determine the number of processor
12	milliseconds required to process each type of call.
13	
14	The fourth step is to derive monthly expense per
15	investment category by multiplying the investment by the
16	appropriate forward-looking annual charge factor. The
17	development of the annual charge factor is discussed
18	below in Section B. 11, below.
19	
20	The fifth step is to calculate the cost per call set-up
21	per call type. This is done by determining the total
22	processor cost per call type, and dividing by the
23	appropriate MOU.
24	
25	The sixth step is to calculate the cost per MOU per call

1		type. This is done by determining the total CCS
2		investment by call type, and dividing by the appropriate
3		MOU.
4		
5		The seventh and final step is to apply the shared and
6		common cost factor to the above TELRIC results to produce
7		the rate of the unbundled element. The development of
8		the shared and common costs is discussed in Section B.
9		12, below.
LO		
L1	Q.	Have you completed your TELRIC studies for the features
L <b>2</b>		portion of switching?
L3		
L4	A.	No. These studies will be provided upon completion.
15		
16	5.	Tandem Switching
L7		
18	Q.	Please describe the TELRIC methodology for tandem
19		switching.
20		
21	A.	That methodology is the same as included in the local
22		switching discussion in Section B. 4, above.
23		
24	Q.	Have you completed your TELRIC studies for tandem
25		switching?

4		
5	Q.	Has Sprint calculated its TELRIC studies for transport?
6		
7	A.	No. However, we have completed the redesign of our
8		transport costing model, and have completed preliminary
9		studies. These studies will be provided when completed.
10		
11	7.	Digital Cross-Connect
12		
13	Q.	Has Sprint completed its TELRIC studies for digital
14		cross-connect?
15		
16	A.	No. These studies will be provided when completed.
17		
18	8.	Signaling Links and STP Ports
19		
20	a.	Signaling Links
21		
22	Q.	Please describe the unbundled STP Signaling Links
23		service.
24		
25	A.	The signaling links are 56 kbps circuits which
		32

A. No. These studies will be provided upon completion.

6. Transport

7		interconnect the STP with the end office switching
1		
2		network.
3		
4	Q.	Has Sprint completed its TELRIC studies for unbundled
5		signaling links?
6		
7	A.	No. Until these studies are completed, Sprint proposes
8		to use exiting interstate rates. These rates were
9		recently developed, and approximate TELRIC costs.
LO		
1 <b>1</b>	b.	STP Ports
12		
13	Q.	Please describe the unbundled STP Port service.
L <b>4</b>		
15	A.	The STP Port is the interface equipment contained in the
16		STP to which the signaling links interconnect.
		bir co willow die bignaring line intersections
L <b>7</b>		
18	Q.	Please describe your TELRIC methodology for the unbundled
19		STP port.
20		
21	A.	The TELRIC methodology is relatively straight-forward.
22		
23		The TELRIC methodology consists of four steps. First,
24		the EF&I (Engineered, Furnished, and Installed) material
25		cost of the Link Port Card, MP1624 Processor Card,

1		Cluster Card Kit, and Frame is determined. This includes
2		the actual equipment vendor price, installation and
3		engineering costs, and any applicable sales taxes.
4		
5		Second, these investment are adjusted for fill factors
6		and capacity.
7		
8		Third, a forward-looking annual charge factor is applied.
9		The development of this charge factor is discussed below
LO		in Section B. 11, below.
1		
.2		Fourth, this annual cost is divided by twelve to produce
L3		a monthly TELRIC result.
L <b>4</b>		
<b>L</b> 5		Fifth, the shared and common cost factor is added to the
L6		above TELRIC result to produce the rate of the unbundled
L <b>7</b>		element. The development of the shared and common costs
L8		is discussed below in Section B. 12, below.
L9		
20	c.	STP Switching
21		
22	Q.	Please describe unbundled STP switching.
23		
24	A.	The STP switching service is for the routing of the
25		Initial Set-Up and Processing (ISUP) message through the
		34

1		STP. The rate for switching is applied on the basis of
2		equivalent 56 kbps trunks per month. The T-1 rate is
3		equal to 24 times the STP switching rate per 56 kbps
4		trunk per month.
5		
6	Q.	Please describe your TELRIC methodology for unbundled STP
7		switching.
8		
9	A.	Sprint has developed its own levelizing program to
10		develop TELRIC results when investment must be recovered
11		over an extended period of time.
12		
13	Q.	Please describe this levelizing program.
14		
15	A.	Levelizing simply projects total expenses and demand over
16		the expected economic life of the investment, and
17		discounts these projections to the present using the
18		current cost of capital. There are five main components.
19		
20		1. Maintenance - Maintenance is stated as a percent of
21		gross investment.
22		2. Depreciation - Actual tax depreciation schedules
23		are used, which reflect a five-year class of plant.
24		3. Economic Live - The tax depreciation rate will not
25		necessarily match the actual useful life of any

- particular investment. Therefore, the study uses
  a seven-year economic life.
- 3 4. Rate of Return The currently authorized federal rate of return on investment of 11.25% is used.
- 5. Ad Valorem Taxes The rate in Florida is 1.88%.

Shared and common costs must be added to the TELRIC result to determine the price.

9

10

#### 9. Call-Related Data Bases

11

12 a. Line Information Data Base (LIDB) Administration Service

13

14 Q. Please describe LIDB Administration service.

15

Administration service provides administrative 16 Α. support to the Line Information Data Base. This service 17 18 provides the administrative interface for automated loads and updates of carrier line information, including 19 20 Alternate Billing Service restrictions (ABS) and Personal 21 Identification numbers in the LIDB data base. In 22 addition, this service monitors queries to the LIDB and 23 responds to alerts initiated by queries exceeding 24 predetermined thresholds.

1	Q.	Please describe the TELRIC costing methodology.
2		
3	A.	A simple methodology consists of four steps. First,
4		direct costs were identified. This includes
5		administrative salaries, software right-to-use fees,
6		depreciation, and computer equipment and software.
7		
8		Second, shared and common costs will be determined in
9		accordance with the methodology as shown in Section B.
10		12, below.
11		
12		Third, average demand over the next five years was
13		estimated.
14		
15		Fourth, and finally, total expenses are divided by total
16		demand, and divided by twelve to develop a cost per
17		access line per month.
18		
19	b.	Directory Assistance Data Base Listing and Update
20		
21	Q.	Please describe the Directory Assistance Data Base
22		Listing and Update service.
23		
24	A.	Directory Assistance Data Base Listing and Update service
25		is the provision of Subscriber Listing Information. This

1		enables carriers to provision their own directory
2		assistance data bases, which support their provision of
3		directory assistance service to end users.
4		
5	Q.	Please describe the TELRIC methodology.
6		
7	A.	It is similar to the methodology described for LIDB
8		service, above.
9		
10	c.	Directory Assistance Data Base Query Service
11		
12	Q.	Please describe the Directory Assistance Data Base Query
13		service.
14		
15	A.	Directory Assistance Data Base Query Service makes the
16		ILEC's directory listing information data base available
17		for processing. The functions include the directory
18		listing information, the data base equipment, and the
19		local area networking equipment required to provide
20		access to the data base.
21		
22	Q.	Please describe the TELRIC methodology.
23		
24	A.	It is similar to the methodology described for LIDB
25		service, above.

2		
3	a.	Toll Assistance Service (Live)
4		
5	Q.	Please describe the Toll Assistance Service (Live).
6		
7	A.	The Toll Assistance Service (Live) provides live
8		assistance to a customer to complete a telephone call.
9		The function includes a live operator and the associated
10		facilities and equipment necessary to bill and/or
11		complete the call.
12		
13	Q.	Please describe the TELRIC methodology.
14		
15	A.	It is similar to the methodology described for LIDB
16		service, above.
17		
18	b.	Directory Assistance Service (Live)
19		
20	Q.	Please describe the Directory Assistance Service (Live).
21		
22	A.	The Directory Assistance Service (Live) provides live
23		assistance to a customer to obtain directory listing
24		information and/or complete a telephone call. The
25		service includes a live operator, a data base of
		39

1 10. Operator Services and Directory Assistance

1		directory listing information, and the associated
2		facilities and equipment necessary to access the data
3		base and/or complete the call. This service does not
4		include customized branding. The calls must be delivered
5		to an existing operator center.
6		
7	Q.	Please describe the TELRIC methodology.
8		
9	A.	It is similar to the described for LIDB service, above.
10		
11	11.	Annual Charge Factors
12		
13	Q.	Please describe Sprint's methodology for calculating the
14		annual charge factor used in the above unbundled network
15		element TELRIC studies.
16		
17	A.	Sprint has developed its own Annual Charge Factor Program
18		(ACFP) to develop these TELRIC factors.
19		
20	Q.	What are the main components of the ACFP?
21		
22	A.	There are five main components.
23		
24		1. Maintenance - Maintenance is stated as a percent of
25		gross investment, based upon actual 1995

- information. This 1995 data is the most up-to-date information available, and represents the current maintenance costs associated with current technology.
  - 2. Depreciation. Actual tax depreciation schedules are used, which reflect the MACRS (Modified Accelerated Cost Recovery System) class of plant of each investment category.
- 3. Economic Life - The tax depreciation rate will not 9 necessarily match the actual useful life of any 10 particular investment. Therefore, Sprint's ACFP 11 uses as a study period the predicted economic life 12 of each investment. This forecast are taken from 13 "Depreciation 14 the 1995 study, Lives Telecommunication Equipment," 15 written by Technologies Futures, Inc., on behalf of 16 17 Telecommunications Technology Forecasting Group.
  - 4. Rate of Return The currently authorized federal rate of return on investment of 11.25% is used.
- 20 5. Ad Valorem Taxes State specific property tax 21 rates are used. The rate in Florida is 1.88%.

23 12. Shared and Common Costs

5

7

8

18

19

22

24

25 Q. Sprint agrees with the FCC formula where the price of an

unbundled element is equal to its TELRIC plus a 1 reasonable allocation of shared and common costs. 2 does Sprint calculate the appropriate shared and common 3 cost factor? 4

5

6

7

8

9

Sprint has created an Excel workbook program, Unbundled Α. Cost Allocation, to determine the shared and common costs using 1995 general ledger information, the most recent financial information available.

10

The process for determining shared and common costs to 11 12 the unbundled network elements consists of four steps. The first step is to identify each General Ledger account 13 at the four-digit level as either direct, shared, or 14 15 Direct expenses are those which are included in 16 the development of the TELRIC annual charge factor, and 17 are excluded from this analysis. Examples of direct 18 expenses include,

19

- Central office switching (621X)
- 21 ▶ Operator systems (6220)
- 22 ▶ Central office transmission (623X)
- ▶ Cable & wire facilities (64XX) 23
- 24 ▶ Depreciation associated with direct investment (656X)
- 25 ▶ Portions of following accounts:

```
- Marketing (661X)
 1
              - Services (662X)
 2
 3
           Shared expenses include,
 4
 5
           ▶ Network support (611X)
 6
           ▶ General support (612X)
 7
           ▶ Other terminal equipment (6362)
 8
           ▶ Provisioning (6512)
 9
           ▶ Network operations (653X)
10
           ▶ Depreciation associated with shared investment (656X)
11
12
           ▶ Portions of the following accounts:
              - Marketing (661X)
13
              - Services (662X)
14
15
           Common expenses include,
16
17
           ► Executive and Planning (671X)
18
           ▶ General and Administrative (672X)
19
20
21
           The following accounts were excluded from the analysis
22
           because they do not pertain to unbundled network
23
           elements.
24
25
           ▶ Station apparatus (6311)
```

1	▶ Large PBX (6341)
2	▶ Public Telephone Terminal Equipment (6351)
3	▶ Access expense (6540)
4	▶ Foreign Directory (portion of 6622)
5	
6	The second step is to develop an investment base for each
7	of the eleven unbundled network elements. The General
8	Ledger investment accounts which are considered direct
9	investment include,
.0	
.1	► Central Office (22XX)
12	► Cable & Wire Facilities (24XX)
.3	
_4	The investment accounts which are considered shared
.5	include,
.6	
.7	▶ General support assets (21XX)
_8	▶ Other terminal equipment (2362)
.9	► Amortizable assets (26XX)
20	
21	The third step is to allocate each shared and common
22	expense account to one of the eleven unbundled network
23	elements based upon one of the following allocation
24	methods.

1		<ol> <li>Direct - Allocated directly to a specific element.</li> </ol>
2		2. Indirect - Allocated based on a cost causative
3		linkage to another account.
4		3. Generally Allocated - Allocated based on a summary
5		of the direct and indirect allocation accounts.
6		
7	Q.	How are these results applied to TELRIC results to arrive
8		at prices for unbundled elements?
9		
10	A.	Investment factors are developed for both shared and
11		common costs. First, the TELRIC result is multiplied by
12		the shared factor. Second, this result is multiplied by
13		the common factor.
14		
15	II.	WHOLESALE DISCOUNTS
16		
17	Q.	What methodology does Sprint propose for determining the
18		level of discounts for its retail services which are
19		resold?
20		
21	A.	Section 252(d)(3) of the Federal Telecommunications Act
22		of 1996 states, "For the purposes of section 251(c)94),
23		a State commission shall determine wholesale rates on the
24		basis of retail rates charged to subscribers for the
25		telecommunications service requested, excluding the
		45

portion thereof attributable to any marketing, billing, collection, and other expenses that will be avoided by the local exchange carrier. This is further clarified and interpreted in the FCC Order which specifies particular accounts to be presumed avoided, unless the ILEC proves that specific expenses will be incurred in the provisioning of wholesale services, or that the particular expenses within these accounts are not included in the retail price of the service being resold.

Q. What effect does the stay of the FCC's resale rules (Subpart 6) in CC Docket 96-98 have on Sprint's position?

A. Sprint believes the policy portions of the FCC Order are correct. Sprint agrees with the majority of the FCC Order concerning the appropriate level of the wholesale discount. However, there are two significant areas in the calculation of the wholesale discount in which Sprint believes the FCC made an error. The first is the treatment of common costs as avoided. The second is the inclusion of number services and call completion services expenses. These will be addressed in detail below.

## 1 A. Methodology

2

Q. Please overview Sprint's avoided cost study methodology.

4

First, Sprint's study identifies and reviews expenses, at A. 5 seven-digit subaccount level, to determine whether they are avoided or non-avoided in a wholesale environment for 7 Second. an activity-based services. methodology is used to identify the appropriate levels of 9 avoided expenses associated with each account. 10 revenues for the various services and the net avoided 11 12 expenses are categorized into retail service groups. Third, the net avoided cost for the retail service group 13 is divided by the total revenues for the service group to 14 develop the percent discount applicable to the rates of 15 the individual services included in each retail service 16 Exhibit RGF-1, the user guide, provides a more 17 18 detailed explanation οf the avoided cost methodology. 19

20

21 Q. Please explain how avoided expenses are assigned to the services.

23

24 A. The avoided expenses are assigned to services based on 25 the actual activity which creates or drives specific types of expenses. For example, if a specific study indicates that a particular expense activity is unrelated to residential services, activity-based costing will assign this avoided expense only to other services. To the extent that an expense can be associated with a service, an increase (or decrease) in the activity drives an increase (or decrease) in the expense associated with that service.

9

10 Q. Please explain how net avoided expenses were developed.

11

12 A. In developing the net avoided expenses Sprint calculated
13 both the incremental expenses and avoided expenses
14 associated with providing services on a wholesale basis.
15 The net result is a reasonable estimate of avoided
16 expense.

17

18 Q. How were the incremental wholesale expenses developed?

19

20 A. Sprint evaluated each category of customer operations
21 expenses presumed by the FCC to be avoided to determine
22 what, if any, expenses in these accounts would be
23 incurred in the provision of services on a wholesale
24 basis. This evaluation included quantification of any
25 incremental expenses incurred directly related to the

wholesale offering of Sprint's retail products.

2

Were these incremental wholesale expenses included in the avoided cost study?

5

The FCC Order recognizes the need to include these 6 A. expenses in paragraph 928 of its Order, which states, "We 7 also agree ... that some new expenses may be incurred in 8 addressing the needs of resellers as customers." Ιt 9 would be improper not to include these incremental 10 wholesale expenses in the wholesale prices. 11 discounting retail prices does not make the LEC a 12 wholesaler; the LEC must take additional steps and will 13 additional expenses in connection with 14 wholesaling activities. Exhibit RGF-2, page 3 of 20, 15 includes a summary of the incremental wholesale expenses 16 by service groups. 17

18

19 Q. How many discount levels for retail services were 20 developed?

21

22 A. Five, based on classification of all retail services into 23 five retail service groups.

24

25 Q. How were the services categorized and what are the five

the customer operations expense categories (6611, 6612, 6613, 6621, 6622, and 6623) presumed to be avoided by the FCC Order to determine which types of expenses would be impacted by the sale of services on a wholesale versus retail basis. From this analysis, Sprint has determined there are certain functions within these expense categories that will continue to apply to a wholesale marketplace. Therefore, these expenses are not avoided.

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Q. What expenses are not avoided in a wholesale environment?

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operating company expenses Sprint's evaluation of Α. indicates that portions of product management (6611), sales (6612), product advertising (6613), call completion (6621), number services (6622), and customer services (6623) expenses will not be avoided in a wholesale Sprint's methodology evaluated detailed environment. seven-digit subaccounts in each of these categories to determine which specific expenses would be avoided or not avoided. Exhibit RGF1 includes a list, beginning on page 16 of 20, of Sprint's expense accounts and indicates Sprint's treatment in the study as avoided, not avoided, or included a mix of avoided and not avoided expenses.

24

# 1 <u>Product Management (6611)</u>

2

Q. Which subaccounts within product management are not avoided in a wholesale environment?

5

Product management expenses include costs associated with 6 A. administrative activities related to marketing 7 The majority of the expenses in products and services. 8 this category are avoided since they are directly related 9 However, there are two subaccounts to retail sales. 10 11 which are non-avoided. The first is account 6611.06X, Forecasting - ICSC. This account includes the pay, 12 13 office, travel, and other expenses of employees who coordinate planning sessions between Sprint and the IXCs. 14 Since exchange access services are not subject to resale 15 16 (see FCC Order, paragraph 874), these expenses are not avoided. 17

18

The second account is 6611.07X, Forecasting - Other.

This account consists of four functions:

- 22 1. Forecasts of customer demand for all services
  23 affecting central office equipment, outside plant,
  24 and interexchange facilities.
- 25
   Administrative forecasts, such as toll message and

1		revenue forecasts, and forecasts of movement and
2		gain used in the preparation of Sprint's
3		construction program
4		3. Local economic forecasts
5		4. Special purpose forecasts, such as those used for
6		determining interexchange service requirements.
7		
8		Forecasting is a non-avoided expense. Forecasting is an
9		essential function and will include the forecast for both
LO		retail sales and wholesale units in order to ensure
L1		Sprint's network is properly sized for wholesale and
L2		retail services sold.
13		
14	Q.	Are there any other non-avoided expenses in the product
15		management accounts?
16		
17	A.	Yes. For each of the above product management expense
18		categories, Sprint/United of Florida also receives
19		customer operations expense allocations and charges from
20		the parent company for various services. These are
21		referred to as General Services and Licenses (GS&L)
22		expenses. Many GS&L expenses are avoided. For example,
23		"conduit" GS&L expenses, account 6611.987, are corporate
24		activities performed specifically for Sprint/United

Florida, and are considered avoided.

However, GS&L expenses such as product research and development are not avoided in a wholesale environment.

Therefore, the study results include an avoided expense assignment of GS&L charges equal to the proportion of avoided expense to total expenses within the entire

product management expense category.

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The FCC Order in Paragraph 928 indicates that 90% of the expenses in the Product Management account (6611) are presumed to be avoided when calculating a default range for wholesale discounts. Sprint's detailed expense analysis indicates that 63.48% of these expenses are avoided.

14

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### Sales (6612)

16

17 Q. Which subaccounts within sales are not avoided in a wholesale environment?

19

Α. associated with traditional 20 Accounts retail sales 21 activity are 100% avoided in a wholesale environment. 22 However, there are two subaccounts which are not avoided. 23 The first is account 6612.02X - Sales - Interexchange 24 Carrier Service Center. This account includes the 25 administrative staff and direct expenses incurred to promote access orders from interexchange carriers, and to implement the associated marketing strategies. Since exchange access services are not subject to resale (see FCC Order, paragraph 874), these expenses are not avoided. This account also includes expenses attributable to intraLATA private line service. These expenses are avoided.

The second account is 6612.4XX - Engineering and Project Management. This is not a traditional sales activity account, and did not exist prior to 1991. This account includes the expenses incurred by personnel that support project management and administration of sales projects, including provisioning and installation. The positions charged to this account include technical support, sales engineers, project managers, and customer service. These functions will be required for the provisioning and installation of resale services such as Centrex, Key, and PBX trunks.

GS&L expenses are treated in the same manner as discussed above under product management. An exception is GS&L sales account 6612.986. A special study of this account indicates that 94.83% of these expenses are associated with sales to interexchange carriers. Since exchange

access services are not subject to resale (see FCC Order, paragraph 874), these expenses are not avoided.

The FCC Order in Paragraph 928 indicates that 90% of the expenses in the Sales account (6612) are presumed to be avoided when calculating a default range for wholesale discounts. Sprint's detailed expense analysis indicates that 72.19% of these expenses are avoided. Most of the non-avoided expenses are corporate level sales to interexchange carriers which appear in this account, as discussed below.

# Product Advertising (6613)

Q. Which subaccounts within product advertising are not avoided in a wholesale environment?

A. Product advertising is directly linked to the retail sales of products and services. In a purely wholesale environment, these expenses are avoided. The FCC Order, in Paragraph 928, indicates that 90% of the expenses in this account are presumed to be avoided when calculating a default range for wholesale discounts. Sprint's detailed expense analysis indicates that 100% of these expenses, including GS&L, are avoided.

Sprint recognizes that products will advertised to the wholesale market. This study does not include the additional advertising expense needed to support the wholesale function. Note that the FCC assumes that 10% of these expenses are non-avoided. Thus this analysis includes 10% of existing advertising incremental wholesale expense, expenses as an discussed below. 

### Call Completion (6621)

Q. Which subaccounts within call completion are not avoidable in a wholesale environment?

A. Operator Call Completion expenses are non-avoided. In the instance where a reseller provides its own operator services, Sprint would not charge the reseller for operator functions. Therefore, there is no resold service in which to apply a wholesale discount. If a reseller chooses to resell Sprint's operator services, there are no avoided call completion expenses.

For example, suppose the ILEC currently has 100 operators serving 100% of the market. Two new competitors enter the market. Competitor A captures 30% of the market and

provides its own operator services. Competitor B captures 20% of the market but chooses to resell the ILECs operator services. The ILEC will no longer incur the expenses associated with the 30 operators who were serving the 30% of the market now served by Competitor A. However, in the case of Competitor be who is reselling the ILEC's operator services, the expenses associated with the 20 operators serving that 20% of the market remain, i.e. are not avoided.

Competitor A is not due a discount because it is not reselling the ILEC's service. Competitor B is not due a discount because the ILEC is not avoiding any expenses associated with the 20% of the market served by Competitor B. In other words, while it is true that expenses are not incurred when Competitor A provides its own operator services, neither Competitor A nor B is due a discount on these expenses.

### Number Services (6622)

Q. Which subaccounts within number services are not avoided in a wholesale environment?

25 A. There are two types of number service expenses. First

are expenses associated with provisioning of Directory Assistance. Second are Alphabetical Directory Expenses, which are the expenses of providing white page listings and directory production and distribution associated with the white page section.

For directory assistance, these expenses are non-avoided. If Sprint provides the directory assistance service on a wholesale basis to the reseller, there are no avoided directory assistance expenses. If the reseller provides directory assistance for their customers, the reseller will not be buying a wholesale directory assistance service from Sprint. Therefore, there is no resold service with an avoided cost-based discount rate.

For the Alphabetical Directory expenses, these are non-avoided. The reseller buying Simple or Complex Access Services will receive directory listings and publications as part of the bundled access line service. These expenses are not avoided in the provisioning of wholesale services.

### Customer Services (6623)

Q. Which subaccounts within customer services are not

avoided in a wholesale environment?

2

1

include business office Customer services expenses 3 Α. functions that are directly related to retail sales. 4 These expenses will be avoided for services resold by a 5 service reseller. However. there are five local 6 subaccounts which are not avoided. The first is account 6623.05X - Collecting and Reporting Paystations. 8 paystations are not a retail service, they will not be 9 offered at wholesale. Therefore, this is not an avoided 10 11 expense.

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The second account is 6623.1XX - Interexchange Customer Service Center. This account includes the expenses of Interexchange Customer Service Center employees engaged servicing establishing and customer accounts in pertaining to switched and special access and interexchange private line. Only the portion of these expenses attributable to private line is avoided. exchange access services are not subject to resale (see FCC Order, paragraph 874), the portion of these expenses attributable to switched and special access are not avoided.

24

25

The third account is 6623.62X - Toll Processing and

Control. This account includes the cost of 1 accounting staff necessary to operate the Toll Processing 2 and Control module. The toll processing function will be 3 required in both a retail and wholesale environment. 5 The fourth account is 6623.63X - Carrier Access Billing. 6 7 This account includes the costs associated with billing interexchange carriers for the use of Sprint's network. 8 It also includes the costs associated with the accounting 9 staff necessary to support the Carrier Access Billing 10 System, including the costs of reconciling general ledger 11 accounts and investigating and correcting billing errors. 12 Since exchange access services are not subject to resale 13 (see FCC Order, paragraph 874), these expenses are not 14 avoided. 15 16 The fifth account is 6623.7XX - Paystation Commissions. 17 18 This account includes the amount paid to owners or 19 tenants of premises upon which public telephone stations 20 are located. Since paystations are not a retail service, they will not be offered at wholesale. Therefore, this 21 22 is not an avoided expense. 23 24 The FCC Order in Paragraph 928 indicates that 90% of the 25 expenses in the Customer Services (6623) account are

1		presumed to be avoided when calculating a default range
2		for wholesale discounts. Sprint's detailed expense
3		analysis indicates that 85.49% of these expenses are
4		avoided.
5		
6	Q.	How has Sprint calculated the avoided expenses associated
7		with the indirect expenses General Support Expenses (6121
8		- 6124), Corporate Operations (6711 - 6728) and
9		Telecommunications Uncollectibles (5301) (Indirect
10		Expense)?
11		
12	A.	While the FCC Order considers these expenses "to be
13		avoided in proportion to the avoided direct expenses,"
14		Sprint disagrees.
15		
16		What the FCC Order refers to as indirect costs, are the
17		general support and common costs of the firm. Common
18		costs are those costs used to support all of the
19		individual products and services offered by the company.
20		Common costs are, by definition, costs which cannot be
21		attributed to individual services. They are not avoided
22		due to the resale of retail services.
23		
24		Uncollectible revenue expenses also fall into the FCC
25		definition of indirect costs. Uncollectibles are avoided

only if the ILEC will no longer incur lost revenues in a wholesale environment. The evidence indicates this will not be the case. First, the experience of Sprint's long distance division indicates that problems with revenue collection still exist when dealing with resellers. with reseller write-offs, experience Their unsubstantiated billing adjustments, and fraudulent code similar to the rate of uncollectibles are experienced by Sprint's local telecommunications division. Although the type of uncollectible revenues are different for a retailer and wholesaler, the problem itself does not disappear.

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Second, a real-life example was referred to by the California PUC in Docket R.95-04-043/I.95-05-044. The final order states, "... Sonic Communications, Inc. ... our recognition of the millions of dollars that company owed Pacific and GTE when it went bankrupt are all too clear in our minds. We therefore cannot accept the assumption of zero uncollectibles at the wholesale level ...."

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## Incremental Wholesale Expenses

24

25 Q. Has Sprint calculated incremental expenses incurred in

the offering of wholesale services?

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Sprint agrees with the FCC Order, paragraph 928, 3 Α. which states, "We also agree ... that some new expenses 4 may be incurred in addressing the needs of resellers as 5 Much of the incremental wholesale market customers. 6 function will be performed at a national or parent level 7 These parent level incremental wholesale 8 for Sprint. expenses were apportioned to the various state and 9 operating company jurisdictions based upon access lines. 10 Operating company level incremental wholesale expenses 11 12 were also determined. Wholesale market expenses include advertising, expenses to develop systems for electronic 13 information, reseller customer database bonding of 14 15 services functions, regulatory/legal support, end-user education, 16 customer employee training, and 17 modifications for billing and service maintenance.

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The total incremental wholesale expenses were allocated to the five retail service groups based upon the avoided expenses in each of the service groups relative to the total avoided expenses.

23

Q. What are the results of the avoided cost study for Sprint?

1	A.	The results of the avoided cost study for Sprint 's
2		Florida operations are as follows:
3		
4		1. Simple Access - 16.10%
5		2. Complex Access - 10.49%
6		3. Features - 30.35%
7		4. Operator/DA - 10.00%
8		5. Other Services - 10.58%
9		
10		More detail on the service group revenues and avoided
11		expenses is included in Exhibit RGF-2.
12		
13	Q.	How would these discounts be applied in the development
14		of wholesale rates?
15		
16	A.	While Sprint has segregated its services into five
17		service groups, there are many individual services within
18		each service group. The appropriate avoided expense
19		percent will be applied to each of Sprint's retail rates
20		to determine a service-specific wholesale rate quoted in
21		dollars.
22		
23		For example, using Centel's rate group 6, the retail rate
24		for basic residential R1 service is \$9.65. Applying the
25		Simple Access service group discount of 16.10% yields a

wholesale discount of \$1.55, which will not change as the retail rate changes. The wholesale rate is \$8.10. The following table shows the retail rates, percent discounts, dollar discounts, and wholesale rates for several other services in Centel's rate group 6.

The dollar amount of avoided expenses is independent of the retail price. As retail prices are increased or decreased, there is no reason that the dollar amount of avoided expenses should change. Therefore, the dollar wholesale <u>discount</u> will remain constant over time, independent of any retail price changes. However, as the retail rate changes, the wholesale <u>rate</u> will change.

15	Tariff	Retail	Percent	Dollar	Wholesale
16	<u>Service</u>	<u>Rate</u>	Discount	Discount	<u>Rates</u>
17	B1	\$21.75	16.10	\$3.50	\$18.25
18	B1 Rotary	32.65	10.49	3.42	29.23
19	PBX Trunk	43.50	10.49	4.56	38.94
20	Call Waiting -				
21	Residence	3.50	30.35	1.06	2.44

23 Q. Please summarize your discussion of wholesale discounts.

A. The Act specifies that an avoided cost discount is to be

applied to retail rates to determine the wholesale rates for services to be resold. The FCC Order has defined certain expense categories to be presumed avoided, but allows states to consider a company's rebuttal of these presumptions. Sprint considers an activity-based cost methodology appropriate for the determination of avoided expenses in the five retail service groups. Sprint has also quantified additional expenses it will incur to resell its retail services. Consideration of these additional wholesale expenses is appropriate determining the wholesale discount.

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I recommend that the Commission adopt the results of Sprint's avoided cost study, as summarized above, to establish the appropriate wholesale rates for retail services that will be resold. A copy of the avoided cost study is provided in Exhibit RGF-2.

18

19 Q. Does this conclude your testimony?

20

21 A. Yes, it does.

22

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25 jjw\utd\farrar.230

UNITED TELEPHONE COMPANY
OF FLORIDA
CENTRAL TELEPHONE COMPANY
OF FLORIDA
DOCKET NO. 961230-TP
FILED: November 15, 1996

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		SUPPLEMENTAL DIRECT TESTIMONY
3		OF
4		RANDY G. FARRAR
5		
6	Q.	Please state your name, occupation, and business address.
7		
8	A.	My name is Randy G. Farrar. I am presently employed as
9		Manager - Network Costing and Pricing for Sprint/United
10		Management Company. My business address is 2330 Shawnee
11		Mission Parkway, Westwood, Kansas, 66205.
12		
13	Q.	Did you file Direct Testimony in this proceeding on
14		November 5, 1996?
15		
16	A.	Yes, I did.
17		
18	Q.	What is the purpose of your supplemental direct
19		testimony?
20		
21	A.	The purpose is to provide the results of the TELRIC cost
22		studies; the methodologies were described in my direct
23		testimony.
24		
25	Q.	Are there any changes in the TELRIC methodology described

1		in your direct testimony?
2		
3	A.	Yes, there are two changes. The first deals with
4		Sections I.B.11, Annual Charge Factors, and I.B.12,
5		Shared and Common Costs of my Direct Testimony.
6		
7		Paragraph 682 of the FCC order states that the costs of
8		shared facilities and operations should be attributed to
9		the TELRIC of specific elements to the greatest extent
10		possible. Therefore, in Section I.B.12, which describes
11		the derivation of the common cost factor, only common
12		costs (accounts 671% and 672%) are now included in the
13		calculation of that factor.
14		
15		The majority of the expenses identified as shared in the
16		direct testimony are now treated as "other direct
17		operating expenses" attributable to network elements.
18		These "other direct operating expenses" are now included
19		as a component of the Annual Charge Factor used in the
20		TELRIC studies.
21		
22	Q.	What is the second change?
23		
24	A.	Sprint has identified and provided cost support and
25		prices for an additional (eleventh) network element, 911

1		Tandem Trunks and Ports.
2		
3		
4	Q.	Would you please address the actual TELRIC cost studies?
5		
6	A.	Composite Exhibit No. RGF-3, titled "Unbundled Network
7		Elements Cost Studies," consists of fourteen parts (A
8		through N) which sets forth the development of the costs
9		of the unbundled network elements and call termination.
10		This exhibit also provides the cost data for the Common
11		Cost Study (Part O) and the Annual Charge Factors (Part
12		P).
13		
14	Q.	Has Sprint completed TELRIC studies for all unbundled
15		network elements?
16		
17	A.	No. There are several unbundled network elements for
18		which Sprint has not completed TELRIC studies. These
19		elements are identified in Exhibit No. MRH-6, sponsored
20		by Mr. Hunsucker in his Supplemental Direct Testimony.
21		
22	Q.	Does this conclude your supplemental direct testimony.
23		
24	A.	Yes, it does.
25	jjw\ut	d\farrar-s.230

BY MR. FONS:

1.5

Q Would you please summarize your testimony,
Mr. Farrar?

A Yes, first I would like to point out that Sprint is a combined company. It operates as both an ILEC and a CLEC in the State of Florida, and I would also like to point out that all the costs that have been performed here were taken with that in mind, and everything here, all the methodologies, are acceptable to Sprint both as an ILEC and as a CLEC.

My testimony is divided into two parts. The first part deals with the TELRIC costs of unbundled elements. The second part has to do with the wholesale discount. Just to summarize the TELRIC portion, I would like to point out that the TELRIC methodology and the TSLRIC methodology which we are more used to are actually the exact same methodology. The TELRIC is simply the TSLRIC methodology being applied to a network element rather than a service. The biggest distinction there is that certain costs, certain costs which are shared at the service level are, in fact, direct at the element level. An obvious example would be land and buildings. I would never include land and buildings in a TSLRIC study of a service such as call waiting. However, when we are dealing with the TELRIC of local switching, or the TSLRIC of the

element of local switching, land and building is an essential part of that. You can't set a switch out in the field; it has to have land and buildings associated with it to provide the unbundled service.

All of our studies use current or forward-looking technologies, and we take a conservative approach in the sense that we have actually forecasted increased demands in doing all these cost studies. Given that CLECs intend to enter the market and will be facilities-based to a certain extent, to the extent that they are facilities-based, our demand on those facilities managed would decrease in the future; and if you were to try to recognize that, the cost could only go up.

I want to point out that our annual charge factors we use in these studies exclude all retailing costs, in particular product management, sales, product advertising and customer service. 72% of those expenses are excluded from our annual charge factors. And in the calculation of our common cost factor, 17.6% of actual common costs that are on the books right now are excluded from the study.

In calculation of our TELRIC for unbundled loop, we have not used BCM2 in itself but we have used the loop investment portion of BCM2, and that is analogous to the way we use the SCIS model from BellCore. The BellCore

model is used, it's an engineering model and determines the engineering investment necessary to provide switching. The BCM2, the loop investment portion, is an engineering model, and it tells us the amount of investment necessary to provide loop as an unbundled element.

And I would like to point out one thing.

Contrary to what Mr. Wood said in his testimony, our cost bands have absolutely nothing to do with existing tariff structures. They are one hundred percent a result of the cost studies.

Going on to the second part of my testimony, the wholesale discount, there are two areas which we really differ from MCI on. The first is the treatment of operator expenses. MCI considers those an avoidable expense, Sprint does not. And clearly, if you are reselling operator services, those expenses are not avoidable. Those expenses go -- it is true, those expenses go away if MCI does not provide its own operator services; but if you are reselling a service, then by definition those costs do not go away.

The MCI approach of having a single discount which reflects operator service expenses as an avoided expense produces the situation of a discount on something like call waiting. That discount is increased because of operator services, and operator services has nothing to do

with the provision of call waiting.

The second area we disagree in is in the overhead; that is, it's Sprint's position that overheads are not avoidable. By definition, overhead, these are common expenses which are not associated with any individual products. So whether or not you resell or retail a particular product, those by definition will not have any effect upon corporate overheads.

- Q Does that conclude your summary?
- A Yes, it does.

MR. FONS: The witness is available for cross examination. Before the cross examination begins, though, I can point out where in the answers to interrogatories the changes to page 86 of what is now Exhibit 21 occur, and it's answer to staff's first set of interrogatories number 41K, page 3 of 3.

CHAIRMAN CLARK: 41K?

MR. FONS: Yes.

19 CHAIRMAN CLARK: 41K, thank you.

Mr. Melson.

21 CROSS EXAMINATION

22 BY MR. MELSON:

Q Good afternoon, Mr. Farrar, I'm Rick Melson representing MCI. Good to see you again.

A Hello.

Q Let me start backwards, let me start just for a minute with your avoided cost study, and the results of that study are shown on your Exhibit RGF-2 which has been identified as part of Composite Exhibit 20; is that correct?

A Yes.

Q And if we look at page 3 of that exhibit, page 3 of 20 -- it's actually numbered 3 of 20 at the top of the page -- and it's not got page number 1 at the bottom of the page. That is simply a summary of the avoided cost discount that you've calculated by group of service; is that correct?

A Yes.

Q And then if we look at the next page, page 4 of 20, is that simply a spread sheet which shows how the particular dollars in each USOA account listed down the left-hand side of the page are spread across the various categories of service for which you are calculating a discount?

A Yes.

Q Now on that spread sheet, you show avoided costs in only four USOA accounts; is that correct?

A You are on page 4 again?

Q Yes.

A Yes, that's correct.

And are those accounts that the FCC classified as 1 0 containing directly avoided costs? Α Yes. 3 And would you agree with that characterization 4 that those are accounts that include costs that would be 5 directly avoided? 6 7 Α Yes. Now do the other accounts on this page where you 8 have a zero figure, are those all of what you would put 10 into the category of indirect or overhead expenses? The vast majority of them, yes. I quess the only 11 one I would not consider an indirect would be depreciation. 12 All right. What about call completion services, 13 0 what would you consider that to be? I would also consider those both. Call 15 Α completion and number services are both direct type 16 expenses directly associated with operator services. 17 18 So excluding the call completion and number services and the depreciation amortization, the rest of the 19 accounts on that page that shows zero are what the FCC 20 would have referred to as indirectly avoided accounts; is 21 that correct? 22

sheet, for example, that even though some product

And is an assumption implicit in your spread

Α

23

24

25

Yes.

management expenses are avoided and even though that avoidance may result in the reduction of head count, that there is no corresponding avoidance of any human resources expenses or other general and administrative expenses?

A Yes.

Q Now in New Jersey when you presented a similar avoided cost study, I believe you did treat these accounts as having indirectly avoided expenses; is that correct?

A Yes, I did, and that was because we were under an FCC order at that time, which has since been stayed.

- Q So your New Jersey testimony was based on following the FCC order that was in effect at the time?
  - A That's correct.
- Q And your position then is that absent that FCC order there should be no treatment of any of these costs as indirectly avoided?

A Yes, and that was our position prior to the FCC order. I had testimony filed in Illinois approximately a year ago that said that they were not avoidable. Sprint's original comments to the FCC said that they were not avoidable. When the FCC order came out, we complied with the order in that area.

Q If you were going to apply the methodology that you used in New Jersey to this Florida spread sheet, how would you calculate the percentage of these other accounts

that would be indirectly avoided?

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A In New Jersey the ratio was the -- the ratio of avoided expenses to total direct expenses resulted in a percentage, and that percentage was applied to all the overhead and indirect expenses.

- Q Okay. So the numerator of that was avoided expenses and the denominator was total direct expenses?
  - A That's correct.
- Q And in that denominator, did that include both direct and -- Strike that.
- Tell me again what the denominator was.
- 12 A Total direct expenses.
  - Q All right. So the denominator did not include any of the indirect categories?
    - A That's correct.
  - Q If you did a similar calculation for Florida, do you know what percentage it would produce as an avoided percentage in these indirect categories?
  - A Using that New Jersey methodology, I do not -I'm sure it would be higher, but I do not know what the
    answer is.
  - Q It would be higher than zero? You said it would be higher. Higher than what?
  - A Oh, I was saying that the bottom line answer -- Right now it's 15.47%. The bottom line would be higher, I

don't know by how much.

Q All right. If I wanted to do that calculation, can you tell me what numbers on this spread sheet I would add and divide?

A Basically, if I recall the way the model would work, the numerator would be all the total avoided expenses, which is in the column there, total, off to the right. Your denominator would be your -- and again, the numbers would not be here, but they are all the total expenses off the general ledger less all the indirect expenses.

Q And you would expect that number you said to be higher than 15.47%?

A Certainly.

Q All right. The numbers shown, again, on this same page, avoided cost for product management, product advertising, customer services, those are estimates of costs that would be avoided in the resale environment; is that correct?

A I would not call them estimates. What we did is we looked at seven-digit account detail and were able to identify which portions of these ARMIS accounts are, in fact, associated with retail activities; and it was only that retail activity portion which is an avoidable expense.

Q And how was that analysis of the seven-digit

ARMIS accounts performed?

A We had a team which consisted of about -- the core group had about eight people, and we spent many, many days looking through every individual general ledger account, talking to the various subject-matter experts; and we were able to determine which of those seven-digit detailed accounts were associated with retail activities. I should say retail activities associated with products which will be resold.

Q All right. Does Sprint propose -- do you propose to monitor the actual avoided costs in any way?

A No.

Q So essentially your proposal is to establish a discount amount now based on that analysis that was performed by your team, and that would then be a number that would be locked in from here to eternity?

A Well, I don't know about the here to eternity part, but until such time as new studies are warranted, yes.

Q In determining the avoided cost percentages, you also added back what you call incremental wholesaling expenses; is that correct?

A Yes.

Q And if I understand correctly, that add back really consisted of two pieces, one piece was a corporate

level number, and another piece was a Florida specific number?

A That's correct.

Q Can you show me in your document where those calculations appear? How about page 19 of 20?

A Yes, it's on page 19 of 20. This is a summary. The top of the page is a summary of the corporate level incremental expenses. In this particular spread sheet you see a line here towards the middle of the page called OTC specific, and that is the Florida company specific number which was calculated outside this model. Additional detail on the corporate level discount and detail on the Florida specific discount were included as part of the interrogatories.

- Q And were they included on a publicly available basis, or are those confidential numbers?
  - A I believe they were confidential.
- Q Did you participate in the development of the Florida specific number of the dollar two per access line?
- A Only very indirectly. The core group did develop a methodology for each company to follow when developing their company specific incremental expenses, but that was done by the operating company, and I was not directly involved with the creation of the document.
  - Q And have you done any review of that document to

determine if, in fact, the operating company followed the methodology that your core group recommended?

A Admittedly, very superficially, but I did look at it. It has the same type of expenses included in it, and the bottom line answer was within the range that the other companies were coming in with, so it seemed reasonable, but I did not give a thorough audit.

Q And is it correct to say on page 19 of 20 that you've got some system development costs that are incurred at a corporate level in years 1 through 4?

A That's correct.

Q And are those -- what is system development cost as you use it there?

A These are the actual systems which will be used to bill the CLECs, and this is the additional program that is needed to provide that service.

Q And does the method that you use to levelize that cost and the other corporate level costs over five years imply that those system development expenditures have a useful life of five years?

A No.

Q Would your methodology have been the same regardless of what the useful life of those system development expenses was?

A Yes. I mean I assume it wasn't specifically for

system development, but I chose to look at a five-year window to try to identify all the expenses that would occur in the next five years, and that just seemed to be a reasonable window of time to be looking at.

- Q Let's move from your avoided cost study now to the cost studies that you performed for the unbundled network elements, and those are in your Exhibit RGF-3 which has been identified as Exhibit 21; is that correct?
  - A Yes.

- Q And in general, in preparing these cost studies, you attempted to apply the FCC's TELRIC methodology; is that right?
  - A Yes.
- Q And is one criteria for a TELRIC cost study that it ought to produce forward-looking costs?
  - A Yes.
- Q Is it true that the first major step in each of these studies was to calculate the investment in plant necessary to provide the unbundled network element?
  - A Yes.
- Q And then was the second major step to calculate what you've called a combined annual charge factor that you would then multiply by the investment to obtain an annual cost?
  - A Yeah, that's the generic methodology.

- Q And the annual cost that comes from multiplying the investment times its combined annual charge factor is what you define as TELRIC costs; is that correct?
  - A Yes.

- Q And is it correct that that combined annual charge factor in turn consists of two pieces; is that correct?
- A Well, there are many, many components actually within that annual charge factor, not just two, there are many components.
- Q Okay. Let me ask the question this way. Is one piece of that a fairly traditional annual charge factor that takes into account such things as depreciation, return on investment, taxes, maintenance?
  - A Yes, that's correct.
- Q And is another distinct component of that something you've called other direct operating expense factor?
- 19 A Yes, that's correct.
  - Q Okay. Do you -- just so we can discuss those separately, I know what to call the other direct operating expense factor. What do you call that first piece of your annual charge factor, or what can we use as a shorthand today?
- 25 A I don't have a name for it. Call it direct

versus other direct. That's as good as any.

- Q Okay. All right. Let's talk about that first piece of it, that direct. Was the list I gave you, maintenance, taxes, depreciation and cost of capital essentially everything that is included in that first factor?
- A Maintenance, return, taxes, depreciation, yeah, those are the main components.
  - Q Okay. Are there other components beyond that?
    (WITNESS REVIEWED DOCUMENTS)
- A No.

- Q And so I can follow along, what document are you looking at there to help you answer that question?
- A I was just looking where I listed the main components in my direct testimony.
  - Q All right.
- A There I identified five components, but there are maintenance, depreciation, and I included economic life as an additional element, but it's really part of depreciation, and then rate of return and taxes.
- Q Now the second part of that annual charge factor that you call in your exhibits the other direct operating expense factor, does that represent costs that are shared at the service level but that can be directly attributed or assigned to elements if you study them at the element

level?

- A That's correct.
- Q And is what makes your study a TELRIC cost study rather than a traditional TSLRIC cost study the inclusion of this second other operating expense factor?
- A Well, yes and no. Again, TSLRIC and TELRIC are the same methodology. It's just that when you apply TSLRIC to an element using the same methodology you get additional costs which are directly attributable to the elements, and those are these other direct.
- Q If you had done a TSLRIC cost of a service a year ago, you would not have included this other direct operating expense factor, would you?
- A If I were to do a TSLRIC of a service a year ago, no, I would not have. Had I done a TSLRIC of an element, then I would have.
- Q Okay. Now just so I understand the way these pieces fit together to produce a cost for a particular item, let me take an example of unbundled loops, and I'm just going to try to use some round numbers. If the investment necessary to provide unbundled loops was a million dollars and this annual charge factor was 30%, then the annual cost of providing unbundled loops would be three hundred thousand dollars or the million times the 30%; is that right?

A Yes.

1.9

2.0

Q And if the universe of loops was a thousand loops, you would simply divide the three hundred thousand annual cost by the thousand loops to get an annual per loop cost of three hundred dollars?

A Yes.

Q And then if you were going to price those or cost those on a monthly basis you would divide again by 12 and get to 25 dollars a month; is that right?

A That's correct.

Q Okay. Now for unbundled loops, can you tell me what the combined annual charge factor was that was used in your cost study?

A I'm not sure that I can answer that because, again, how the BCM actually uses the annual charge factor and if there are more than -- I think there are a couple of different -- There may be a couple of different annual charge factors. Like I said, I would prefer to defer that to Mr. Dunbar.

Q Okay. You provided annual charge factors to Mr. Dunbar for use in his BCM study; is that correct?

A Yes.

Q And you provided them I believe for loop investment and you provided them for circuit equipment; is that correct?

As I recall -- Yes, and I believe that BCM uses Α 1 those different charge factors for different investment 2 categories, but again, I'm not intimately involved with 3 BCM. 4 Okay. Let me not ask how BCM used them. Can you 5 Q tell me what factor you supplied to Mr. Dunbar for the 6 cable and wire investment? And I believe if you look on 7 page 120 or 122 of your study is about the place you ought 8 9 to find it. For the combined outside plant, the number that 10 appears on this exhibit is 29.88%. 11 And you're referring there to the number in the 12 lower right-hand corner of page 122 of your exhibit? 13 14 Α Yes. 15 All right. Can you break that 29.88% out between the other direct expense factor and the sort of traditional 16 annual charge factor? 17 The traditional, if you will, will be 18 Α Yeah. 25.82 and then other direct will be 4.06. 19 20 (Transcript continues in sequence in Volume 5) 21 22 23 24