



Susan S. Masterton Attorney Law/External Affairs
Post Office Box 2214
1313 Blair Stone Road
Tallahassee, FL 32316-2214
Mailston FLTH-00107

Mailstop FLTLH00107 Voice 850 599 1560 Fax 850 878 0777

susan.masterton@mail.sprint.com

October 23, 2001

Ms. Blanca S. Bayó, Director Division of the Commission Clerk & Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850 COMMISSION

Re: Docket No. 010795-TP Direct Testimony of James R. Burt, Mark G. Felton and Michael R. Hunsucker

Dear Ms. Bayó:

Enclosed for filing is the original and fifteen (15) copies of the Direct Testimony of:

- 1. James R. Burt 13428-01
- 2. Mark G. Felton 13429-01
- 3. Michael R. Hunsucker. [3430-D]

Copies of this have been served pursuant to the attached Certificate of Service.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning the same to this writer.

Thank you for your assistance in this matter.

Sincerely,

Susan S. Masterton

Enclosure

APP CAF CMP

CTR ECR LEG

PAI

RGO

COM 5 + org

RECEIVED & FILED

FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER - DATE

13428 OCT 23 a

FPSC-COMMISSION CLERK

#### **CERTIFICATE OF SERVICE DOCKET NO. 010795-TP**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by Hand Delivery\*, and Overnight Mail\*\*, this 23rd day of October, 2001 to the following:

Verizon Florida, Inc.\*\* Kimberly Caswell 201 N. Franklin Street, FLTC0007 One Tampa City Center Tampa, Florida 33602 Fax: 813-204-8870

Ms. Mary Anne Helton, Esq.\* Division of Legal Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Kelly L. Faglioni, Esq. \*\* Meredith B. Miles, Esq. Hunton & Williams Riverfront Plaza, East Tower 951 East Byrd Street Richmond, Virginia 23219-4074

Fax: 804-788-8218

sun S. notist

Susan S. Masterton

Filed: October 23, 2001

1	BEFORE THE FLORIDA PUBLIC SERVICE COMMMISSION
2	<b>DOCKET NO. 010795-TP</b>
3	DIRECT TESTIMONY
4	OF
5	JAMES R. BURT
6	
7	
	Q. Please state your name, title and business address.
8	A. My name is James R. Burt. I am presently employed as Director - Regulatory
9	Policy for Sprint Communications Company LP. My business address is 6360
10	Sprint Parkway, Overland Park, Kansas 66251.
11	
12	Q. Please describe you educational background and experience.
13	
14	A. I received a Bachelor of Science degree in Electronics Engineering from the
15	University of South Dakota in 1980 and a Masters in Business Administration from
16	Rockhurst College in 1989.
17	I became Director - Regulatory Policy in February of 2001. I am responsible for
18	developing state and federal regulatory policy and legislative policy-for Sprint
19	Corporation, including the coordination of regulatory and legislative policies across
20	the various Sprint business units and the advocacy of such policies before regulatory
21	and legislative bodies.

	Sprint Communications Company Limited Partnership Docket No. 010795-TP
1	Filed: October 23, 2001 From 1997 to February of 2001 I was Director-Local Market Planning. I was
Ŧ	From 1997 to February of 2001 I was Director-Local Market Flamming. I was
2	responsible for policy and regulatory position development and advocacy from a
3	CLEC perspective. In addition I supported Interconnection Agreement negotiations
4	and had responsibility for various other regulatory issues pertaining to Sprint's CLEC
5	efforts.
6	From 1996 to 1997 I was Local Market Director responsible for Sprint's
7	Interconnection Agreement negotiations with BellSouth.
8	I was Director - Carrier Markets for Sprint's Local Telecom Division from 1994
9	to 1996. My responsibilities included interexchange carrier account management and
10	management of one of Sprint's Interexchange Carrier service centers.
11	From 1991 to 1994 I was General Manager of United Telephone Long Distance, a
12	long distance subsidiary of Sprint/United Telephone Company. I had P&L,
13	marketing and operations responsibility.
14	From 1989 to 1991 I held the position of Network Sales Manager responsible for
15	sales of business data and network solutions within Sprint's Local Telecom Division.
16	From 1988 to 1989 I functioned as the Product Manager for data and network
17	services also for Sprint's Local Telecom Division.
18	Prior to Sprint I worked for Ericsson Inc. for eight years with positions in both
19	engineering and marketing.

Q. Have you ever testified before any state regulatory commission?

1	A. Yes. I have testified in Georgia, Louisiana, Pennsylvania, Maryland and Illinois and
2	have supported the development of testimony in many other states.
3	
4	Q. What is the purpose of your testimony?
5	
6	A. The purpose of my testimony is to respond to Issue 6 as identified in the
7	Commission's Procedural Order for the Arbitration. Issue 6 addresses MAN
8	Commingling and UNE Multiplexing.
9	
10	ARBITRATION ISSUE 6 – FOR THE PURPOSES OF THE NEW
11	SPRINT/VERIZON INTERCONNECTION AGREEMENT, SHOULD SPRINT BE
12	PERMITTED TO:
13	(A) REQUIRE VERIZON TO PROVIDE UNE MULTIPLEXING?
14	(B) ROUTE ACCESS TRAFFIC OVER UNES LEASED FROM VERIZON AT
15	COST-BASED RATES?
16	
17	Q. Please describe the issues in question.
18	
19	A. As any telecommunications provider Sprint strives to implement the most efficient
20	network possible. One such activity underway at Sprint is the deployment of a
21	metropolitan area network ("MAN") in several Verizon cities. More specifically,
22	Sprint is attempting to deploy its MAN network in Verizon central offices in various
23	metropolitan areas. With the MAN network, Sprint is replacing transport facilities

- Filed: October 23, 2001
- 1 being purchased today from Verizon with its own transport. This transport is between
- 2 multiple Verizon central offices where Sprint is collocated and Sprint's POP. Sprint
- 3 is seeking to gain the best engineering efficiencies possible and has asked Verizon to
- 4 allow the following.
- Convert special access circuits between a customer premise and an end office
- 6 to an unbundled loop and connect these loops to an ILEC multiplexer. Sprint
- 7 intends to make this conversion where it is collocated and not using Verizon's
- 8 transport.

15

16

17

19

20

21

22

- Connect switched access services to the same multiplexer.
- Deliver this combined traffic to Sprint's collocation cage via the highest speed
- multiplexers available in Verizon's network, including OCn. In other words,
- Sprint would like to move its point of interface with Verizon from the current
- POP to Verizon's end office in those end offices where Sprint is collocated
- and is providing its own transport between the end office and Sprint's POP.

#### Q. How would Sprint propose paying Verizon for what it is asking?

A. Sprint would pay Verizon the appropriate UNE or access rates depending on the

•

element or service being utilized. For example, Sprint would pay Verizon the state

approved rate for a UNE loop capable of supporting DS1 service. Sprint would pay

Verizon the appropriate switched access rates for the switched access connected to

the multiplexer. Sprint proposes paying for the multiplexer based on the ratio of

23 unbundled network element and switched access ports utilized. I would like to

	Sprint Communications Company Limited Partnership  Docket No. 010795-TP
1	Filed: October 23, 2001 emphasize that Sprint is not suggesting that the switched access portion of the
2	multiplexer be subject to unbundled rates.
3	
4	Q. What is the impact to Sprint if Verizon is not required to provide Sprint the
5	engineering efficiencies it seeks?
6	
7	A. If Verizon does not provide this capability, Sprint will be forced to segregate traffic,
8	duplicate facilities unnecessarily, utilize more space, incur increased costs and lose
9	very important engineering efficiencies that are necessary to provide the services
10	Sprint seeks to offer. Exhibits JRB-1, JRB-2 and JRB-3 to this testimony
11	illustrate the efficiencies Sprint is attempting to implement in contrast to what
12	Verizon is attempting to force Sprint to implement.
13	
14	Q. What has been Verizon's response to this request?
15	
16	A. Verizon states that it is not obligated to do what Sprint is asking because (1) Sprint is
17	not entitled to a "multiplexing UNE", and (2) Sprint should not be permitted to
18	provide access services over UNEs. See, Verizon Response to Petition for Arbitration
19	pages 25 –28.

Q. Please explain Multiplexing.

1 A. The purpose of multiplexing is to eliminate the need for duplicate facilities by 2 combining multiple, comparatively slower information streams onto a single, 3 significantly faster, path. These individual information streams are then separated 4 (demultiplexed) at their destination points. In Sprint's case, the collocation points in 5 Verizon's network are important multiplexing points. Multiplexers commonly used 6 in telecommunications networks are connected with fiber optic cable and operate at 7 speeds including, but not limited to OC3, OC12 and OC48. For example a 8 multiplexer operating at an OC3 level is capable of carrying three DS3 signals. Each 9 DS3 signal is equivalent to 28 DS1 signals and each DS1 signal is equivalent to 24 10 DS0 or voice grade channels. Therefore, each OC3 multiplexer is capable of carrying 11 the equivalent of 2016 voice grade channels.

12

13

#### Q. Is Sprint inappropriately trying to avoid access charges?

14

17

18

19

20

21

22

23

A. No. There are three situations applicable to Sprint's request that I would like tosummarize.

The first is the creation of the metropolitan area network or MAN. With MAN, Sprint is simply replacing the transport it purchases today from Verizon with its own transport. Sprint's ability to do this is not an issue in this proceeding because there is no justifiable reason why a carrier can't choose its point of interface with an ILEC to be at a central office collocation cage. I mention this first situation to ensure there is a thorough understanding of what Sprint is trying to accomplish. Optimizing the location of the interface point with an ILEC has been a common practice of facilities

1 based carriers for many years. In an attempt to minimize the cost of ILEC access 2 services, carriers have been building out their networks for the purpose of getting 3 closer to end-user customers. MAN is Sprint's latest initiative to accomplish this 4 goal. 5 The second situation relates to the switched access. Sprint purchases originating and 6 terminating switched access today from Verizon and will continue to do so. The only 7 difference is that Sprint's point of interface with Verizon is going to be at the central 8 office rather than at the Sprint POP. The Sprint provided transport described in the 9 previous paragraph gives Sprint the ability to move its point of interface. Sprint is not 10 suggesting that it compensate Verizon for switched access at a UNE rate. 11 The last situation is the conversion of special access that Sprint is purchasing from the 12 customer premise to Verizon's central office. Sprint intends to convert that special 13 access to unbundled loops consistent with FCC rules. This issue is discussed in 14 greater detail later in my testimony. 15 16 O. Please respond to Verizon's first reason for denial, Sprint is not entitled to a 17 "multiplexing UNE." 18 19 A. The fact that Verizon provides UNE multiplexing albeit on a stand-alone basis 20 renders a major portion of their argument moot. In other words they provide UNE 21 multiplexing, but will only do so on their terms. This combined with the fact that the 22 FCC has stated in paragraph 175 of its Third Report and Order in Docket No. 96-98 23 that it considers the multiplexing equipment used to derive the loop transmission

Docket No. 010795-TP

Filed: October 23, 2001

- capacity a part of the loop, fully supports Sprint's position. Sprint is only asking that
- Verizon be required to provide the multiplexing functionality as a part of the loop
- 3 consistent with the FCC's intent. Not doing so is inconsistent with current FCC
- 4 direction and unnecessarily introduces additional expense and points of failure into
- 5 the network.

6

1

- 7 Q. Please clarify what you mean by unnecessarily introduces additional expense
- 8 and points of failure into the network.

9

10

11

12

13

14

15

16

17

18

19

20

A. Verizon is only willing to provide the multiplexer on a "stand-alone" basis. In other words, they will not combine it with other unbundled network elements. In order for Sprint to take advantage of the multiplexer, Sprint would have to terminate the loop in Sprint's collocation cage, and then cross connect the loop to an intraoffice cross connect running between Sprint's cage and Verizon's UNE multiplexer. This introduces additional expense in terms of the loop termination hardware, the cross connect Sprint performs in its cage, the intraoffice cross connect between Sprint's cage and Verizon's UNE multiplexer, additional collocation space and all associated labor. The additional cross connect points introduce possible points of failure. There is no technical reason for Verizon's configuration. In fact, Verizon's configuration is counter to good engineering practices.

21

O. Do you have any concerns with the multiplexing speeds Verizon is offering?

23

Filed: October 23, 2001

A. Yes. Verizon is only offering two multiplexing alternatives. One capable of converting 24 DS0 signals into a DS1 signal, a 0/1 multiplexer. The other is capable of converting 28 DS1 signals into a DS3 signal, a 1/3 multiplexer. Higher speed multipexing capabilities are necessary to gain the needed efficiencies. As stated previously, multiplexers in common use today by Verizon and telecommunications carriers operate at much higher speeds than those being offered In order to realize the efficiencies Verizon itself realizes when by Verizon. transporting Sprint traffic, Sprint feels it should be entitled to utilize any speed multiplexer that Verizon currently uses in its network.

#### Q. Please respond to Verizon's second reason for denial.

A. Verizon attempts to mix issues for the purpose of supporting its position. They claim that Sprint's request to connect a UNE to a tariffed service violates the FCC's comingling restrictions. In its Supplemental Order Clarification in Docket No. 96-98 at paragraph 22, the FCC prohibited commingling only as it relates to the three circumstances when a CLEC can use loop and transport combinations. In the same order at paragraph 28, the FCC further clarified this single commingling distinction stating, "We emphasize that the co-mingling determinations that we make in this order do not prejudge any final resolution on whether unbundled network elements may be combined with tariffed services." This is a clear indication that the FCC is not prohibiting the co-mingling of unbundled network elements and tariffed services except for the use of EELs.

Q. Is Sprint asking Verizon to convert special access to UNEs consistent withcurrent FCC rules?

A. Yes. In discussing High-Capacity Loops the FCC determined that there was no basis for placing a restriction on what services a carrier may offer using the loop network element. In the Third Report and Order at paragraph 177, the FCC found that the fact that a competitor intends to lower its costs was considered consistent with the intent of the 1996 Act. Further support is provided in the discussion in paragraph 487 of the Third Report and Order on the use of unbundled network elements to provide exchange access services. The FCC concluded that a carrier is allowed to convert special access to UNEs where the requesting carrier is collocated and provides its own transport or obtains transport from an alternative provider. Both of these assertions by the FCC clearly support Sprint's right to substitute unbundled network elements for special access under the circumstances in which Sprint is making the request, i.e., Sprint is collocating and is providing its own transport.

Q. Is this issue addressed in the Supplemental Order Clarification?

A. Yes. Footnote 31 of the FCC's Supplemental Order Clarification in CC Docket No.

96-98 clearly states that the temporary "significant local service" constraint does not

apply to stand-alone loops and references paragraph 177 of the Third Report and

Order which clearly removes any restrictions on what services a carrier wants to offer using an unbundled loop.

3

- 4 Q. Isn't what Sprint is requesting different than what the FCC contemplated in the
- 5 Third Report and Order and the Supplemental Order?

6

- 7 A. No. Sprint believes that the FCC intended to allow CLECs to utilize UNE loops for
- 8 any purpose so long as they are collocated and are not using the ILEC's transport.
- 9 The fact that Sprint is requesting that Verizon utilize its multiplexing capabilities
- does not alter the underlying fact that Sprint is collocated and providing its own
- 11 transport.

12

13 O. Please describe Exhibit JRB Direct-1.

- 15 A. The diagram in Exhibit \_\_ JRB-1 illustrates how Verizon utilizes multiplexing
- capabilities to efficiently transport access and UNE traffic between its end office and
- Sprint's POP. The left portion of the diagram identifies the various types of end users
- and their respective traffic types. They include Verizon end users that may be placing
- 19 long distance calls over Sprint's network or receiving long distance calls from
- Sprint's network. In both these situations switched access is used to connect the end
- user to Sprint's network. Next, end users may be accessing Sprint's network via
- special access facilities. And finally, end users utilizing unbundled loops connected
- to a Sprint collocation cage are connected to Sprint's network via an unbundled

- transport facility. Each of these facilities connecting Sprint's network to the end user

  passes through a Verizon multiplexer before it is placed on the fiber optic facility

  between Verizon's central office and Sprint's POP.
- Q. Is Sprint requesting Verizon to do something they currently don't do forthemselves.
- A. No, As the exhibits illustrate, Verizon is utilizing and benefiting from an efficient network design, but is not willing to give Sprint the benefit of those same efficiencies.

  Verizon, like any other carrier in direct control of their network design will utilize the most efficient transmission speeds available in the backbone portion of their network.

  Verizon commingles various traffic types onto the same facility primarily because it
- 15 Q. Please describe Exhibit\_\_\_ JRB-2.

is most cost-effective.

7

13

14

16

A. Exhibit \_\_\_ JRB-2 is a diagram of what Sprint is asking Verizon to do. Each of the inputs described in Exhibit\_\_ JRB-1 with the exception of the UNE Transport from Sprint's collocation cage is still routed to the Verizon multiplexer. The difference is that the output of the multiplexer is routed to the Sprint collocation cage where it is connected to Sprint's MAN network rather than routed over Verizon's fiber optic facilities to the Sprint POP. Sprint's MAN network is used to transport this traffic to the Sprint POP. In effect, Sprint has moved its Point of Interface (POI) from its POP

Docket No. 010795-TP

Filed: October 23, 2001

- 1 location to the collocation cage. Exhibit \_\_JRB-2 also shows the where Sprint wishes
- 2 to replace special access with unbundled loops consistent with current FCC rules.

3

4 Q. Please describe Exhibit JRB-3.

5

6 A. Exhibit JRB-3 is a diagram that illustrates how Verizon would like to force Sprint 7 to configure its network. Assuming Verizon will provide the multiplexing Sprint 8 requests, Verizon is requiring Sprint to utilize a less efficient network design by 9 forcing Sprint to segregate the various traffic types that they themselves combine. In 10 addition to not allowing the conversion of special access to unbundled network 11 elements as discussed previously. Verizon is also not allowing Sprint to utilize a 12 single multiplexer for both access and unbundled network element traffic. Verizon insists that Sprint utilize different multiplexers (assuming they will make them 13 14 available) resulting in multiple circuits between the Verizon multiplexing equipment 15 and the Sprint collocation cage. In contrast to the fact that a loop includes the 16 attached electronics used to derive the loop transmission capacity, e.g., the 17 multiplexing equipment, as described in the testimony above, it is Verizon's position 18 that they will not leave these two components of the loop connected. Instead, they 19 require that the loop is brought into the collocation cage, cross-connected to another intraoffice cross connect cable that then connects the collocation cage to the 20 21 multiplexer. The position Verizon takes on these issues serves only to complicate 22 Sprint's network design, increase the points of failure and increase cost.

1 Q. In more general terms, what are Verizon's obligations according to FCC

2 requirements?

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

A. FCC Rule 51.307 (c) provides that ILECs such as Verizon must provide a requesting telecommunications carrier with access to UNEs in a manner that allows the requesting carrier to provide any telecommunications service that can be offered by means of that network element. Rule 51.309 (a) prohibits ILECs from imposing limitations, restrictions or requirements on requests for, or the use of, unbundled network elements that would impair the ability of a requesting telecommunications carrier to offer a telecommunications service in the manner the requesting telecommunications carrier intends. Moreover, Rule 51,309 (b) clearly states that a telecommunications carrier can use a UNE to provide exchange access to itself in order to provide interexchange services to subscribers. Rule 51.309 (a) provides that Verizon as an ILEC cannot impose restrictions on the use of UNEs that would impair the ability of a requesting carrier to offer a telecommunications service in the manner that it intends. Rule 51.307 (c) provides that when a CLEC purchases a UNE, it has access to all of the UNE's features, functions and capabilities. Thus, the FCC clearly has indicated that transmission facilities are part of UNEs.

19

20

#### Q. Is Sprint impaired by Verizon?

21

A. Yes. Sprint is impaired by Verizon's refusal to provide MAN commingling and multiplexing. Without MAN commingling and UNE multiplexing Sprint is forced to

#### Sprint Communications Company Limited Partnership

Docket No. 010795-TP

Filed: October 23, 2001

segregate traffic, duplicate facilities and utilize more collocation space. The increased costs and the creation of additional delay associated with finding collocation arrangements runs contrary to the recognition of economic engineering efficiencies. Sprint is forced to have one set of trunks that are access, and multiplexing equipment associated with that, and then is forced to have separate overlay network, that is just UNE transport. Sprint is attempting to use a single piece of equipment or transmission facility rather than multiple pieces and place unbundled network element services and access services on the single piece of equipment or transmission facility.

There has been no demonstration by Verizon that Sprint's proposal is technically infeasible. Verizon's refusal to allow Sprint to place services using access and UNE facilities on the same multiplexing equipment is an unreasonable UNE restriction that unnecessarily impairs Sprint's ability to offer a telecommunications service in the manner that Sprint intends.

#### O. Is Sprint asking for a network configuration that is restricted by the FCC?

A. No. Carriers like Sprint seek to design and implement as efficient a network as possible in order to reduce costs. A Metropolitan Area Network ("MAN") seeks to utilize fiber rings around various metropolitan areas/networks and to combine various types of traffic on that network.

Sprint does <u>not</u> seek to commingle special access services associated with Enhanced Extended Loops ("EELs") because Sprint does not seek to also combine a

	Docket No. 010795-TP
1	Filed: October 23, 2001 loop connection for transport of traffic. Sprint is not asking Verizon to convert
2	existing special access circuits to UNE loop/transport combinations.
3	
4	Q. What does Sprint want the Florida Public Service Commission to do?
5	
6	A. The Commission should require Verizon to include the following language in the
7	contract based on the above description of what Sprint is requesting Verizon to do.
8 9 10 11 12 13 14 15	2.9 At Sprint's request, Verizon will provide multiplexing capabilities at all currently available speeds, including OCn, on a per port basis as a UNE at TELRIC pricing. Verizon agrees, upon Sprint's request, to combine UNE traffic and tariff service traffic whether ordered as an UNE or from a tariff service offering, to the same multiplexing equipment and provide connectivity between the multiplexing equipment and Sprint's collocation location.
16	Q. Does this conclude your testimony?

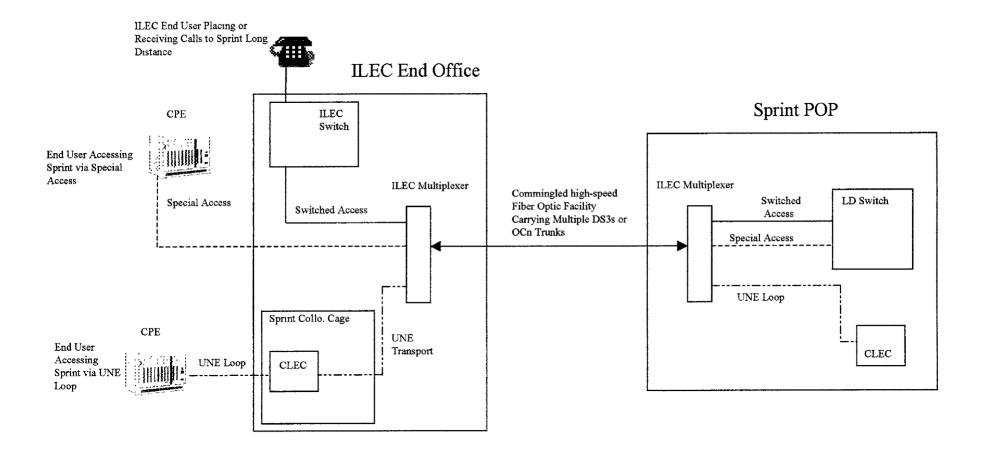
18

A. Yes.

Sprint Communications Company Limited Partnership

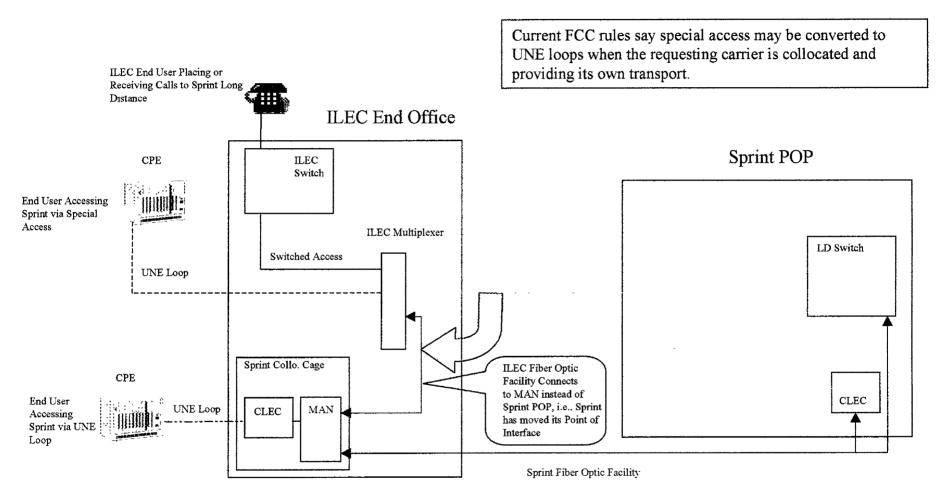
## Docket No. 010795-TP J. R. Burt Exhibit \_\_ ( JRB-1) Current Network Configuration

# Current Network Configuration as <a href="Provisioned">Provisioned</a> by Verizon



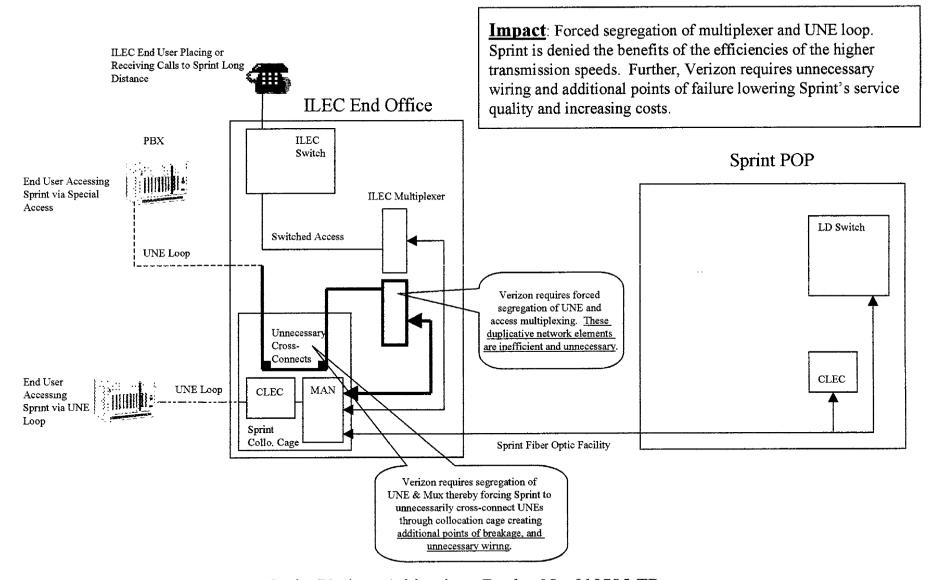
### Sprint Requested Network Configuration

Docket No. 010795-TP
J. R. Burt Exhibit No. \_\_ (JRB-2)
Sprint Requested Network Configuration



## Verizon Forced Segregation Network Configuration

Docket No. 010795-TP
J. R. Burt Exhibit \_\_ ( JRB-3)
Verizon Forced Segregation
Network Configuration



Sprint/Verizon Arbitration - Docket No. 010795-TP