BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 990649B-TP

In the Matter of

INVESTIGATION INTO PRICING
OF UNBUNDLED NETWORK
ELEMENTS (SPRINT/VERIZON TRACK)
_____/

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VOLUME 2

Pages 184 through 372

PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN LILA A. JABER COMMISSIONER J. TERRY DEASON COMMISSIONER BRAULIO L. BAEZ COMMISSIONER MICHAEL A. PALECKI COMMISSIONER RUDOLPH "RUDY" BRADLEY
DATE:	Monday, April 29, 2002
TIME:	Commenced at 9:35 a.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	LINDA BOLES, RPR Official FPSC Reporter (850) 413-6734
APPEARANCES:	(As heretofore noted.)

I N D E X
WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
6	DJD-1 through DJD-6	229	229
7	GSF-1 through GSF-11	266	266
8	GSFSR-1 through GSFSR-11	267	267
9	GSFSR-12	267	267
10	Sprint's Stip 1	328	328
11	Sprint's Stip 2	328	328
12	TOC-1D	328	328
13	JRD-1D	328	328
14	KWD-1D	328	328
15	MRH-1D	328	328
16	BKS-1D	328	328
17	(Confidential)Sprint Stip 1	328	328
18	Verizon Stip 1	328	328
19	Verizon Stip 2	328	328
20	Verizon Stip 3	328	328
21	(Confidential)Verizon Stip 1	328	328
22	JVW-1D	328	328
23	DBT/TRD-1	328	328
24	AS-1D	328	328
25	DGT-1D	328	328
26	LR-1D	328	328
27	ALEC Stip 1	328	328
28	AHA-1D	328	328
29	AHA-2D	328	328
30	NRF-1D	328	328
31	SLM-1D	328	328
32	SLM-2D	328	328
33	KMC Stip 1	328	328
34	FWW-1D	328	328
35	Z-Tel Stip 1	328	328
36	GSF-1D	328	328
37	DJD-1D	328	328
38	Staff's Response and Objection to Verizon's POD1 and Z-Tel's Response to Verizon's POD1	328	328
39	AES-1 and AES-2	340	340

P R O C E E D I N G

(Transcript continues in sequence from Volume 1.)

MR. FONS: Next we have the direct testimony of Jimmy R. Davis consisting of 27 pages of direct testimony, and we'd ask that that direct testimony be inserted into the record as though read.

CHAIRMAN JABER: Prefiled direct testimony of Jimmy R. Davis shall be inserted into the record as though read.

MR. FONS: There were no exhibits to Mr. Davis' direct testimony.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY

OF

Jimmy R. Davis

Q. Please state your name, place of employment, and business address.

A. My name is Jimmy R. Davis. I am employed by Sprint/United Management Company as a Senior Manager – Network Costing at 6360 Sprint Parkway, Overland Park, Kansas 66251. I am testifying on behalf of Sprint Communications L.P. ("Sprint").

Q. What is your educational background?

A. I received a Bachelor of Science Degree in Civil Engineering from North Carolina State University in Raleigh, North Carolina. In 1990, I received a Master of Business Administration Degree from East Carolina University, in Greenville, North Carolina. I have also received telephony related continuing education through Company Sponsored Technical Training in Planning, Network, and Field Operations.

Q. What is your work experience?

A. After a two-year tour in Building Engineering, I transferred to the Network Planning Department of Sprint – Carolina Telephone in Tarboro, North Carolina where I had responsibility for that Company's Capital Recovery Program. There my job functions involved statistically based mortality studies of telephone physical property, depreciation expense budgeting, property valuations, and cost studies including capital planning. From 1989 to 1993, I served a Sprint-Carolina Telephone's Technical Training Manager where I had responsibility for providing network related technical skills training to that Company's craft and lower level management employees. After a two-year assignment in the Corporate Training Organization, I was assigned, in 1995, to a Customer Services Manager Position in Jacksonville, North Carolina. There I was responsible for the turn up and maintenance of Network and Outside Plant for approximately 115,000 access lines. I was also responsible for installation and maintenance of residential and small business services including high-speed data (special) services. In 1998, I transferred to Kansas City where I continued to work in the Customer Services Organization spending the majority of that time as a Standards a Process Manager responsible for the Sprint Local Telephone Division's National Standard Methods and Procedures for Outside Plant Construction and Maintenance Operations. I then transferred to my current position in June of 2001.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to support the Sprint – Florida, INC (Sprint) "Non-Recurring Charge (NRC) Study" and to explain the assumptions made and principles utilized in development of the NRCs associated with ordering and installing Unbundled Network Elements ("UNEs").

Non-recurring charges are one-time charges assessed for activities performed by Sprint on behalf of Alternative Local Exchange Carriers (ALECs) which involve the processing of orders and the installation of UNEs. Due to the quantity of NRCs involved with this proceeding, I will only address the categories and/or particular items that warrant discussion due to complexity of the subject and/or costing methodology. Additional details regarding each UNE NRC costing methodology can be found within the body of the cost study, which includes further descriptions, methodology and workpapers. My testimony also addresses in whole, issues #8, #10 and #11, and in part, issues #9(a) and #12 as identified in Appendix A of this Commission's "Second Revised Order on Procedures" issued March 16, 2000. Sprint witness Mr. Kent Dickerson will also address issues #9(a) and #12.

Q. Which portions of Sprint's cost study filings are you supporting?

A. In addition to my testimony, Exhibit KWD-3 to the testimony of Sprint witness Kent Dickerson identifies the portions of Sprint's cost study filings that I support.

Issue 8: What are the appropriate assumptions and inputs for the following items to be used in the forward-looking non-recurring UNE cost studies?

(a) network design;

(b) OSS design;

(c) labor rates;

(d) required activities;

(e) mix of manual versus electronic activities;

(f) other.

Q. What guiding principles did Sprint utilize in developing non-recurring charges for UNEs?

A. Sprint utilized principles set out by the FCC and this Commission. First, the Company assumed a "forward-looking" network as defined by the FCC. That is, the network utilized in the development of

NRCs meets the FCC criteria of being "the most efficient, least-cost and reasonable technology currently available for purchase".

In compliance with these principles, Sprint assumed the use of Next Generation Digital Loop Carriers ("NGDLCs") in the development of NRCs for unbundled loops and assumed the availability of a "fully automated" Operations Support System (OSS) for an ALEC to submit Local Service Requests ("LSRs") to the Company. Automated facility assignment, order routing, switch activation and dispatch have also been assumed as part of the Company's forward-looking network.

Second, again assuming a forward-looking network, Sprint developed charges that relate as closely as possible to actual costs incurred, rather than developing a single "average" charge. Consequently, ALECs will pay non-recurring charges that relate directly to work actually performed on their behalf which, in turn, will ensure that Sprint neither over, nor under-recovers, non-recurring costs.

Q. Would you please describe in more detail how non-recurring charges were developed for unbundled network elements?

A. Yes. The purpose of the NRC study is to determine the cost of initiating, changing and providing unbundled element services for ALEC customers. These charges are based on the amount of time required to complete an activity and the cost of performing that activity. The charges represent the most current wage rates and time components related to UNE services.

The study consists of four main steps:

1. Identifying the work activities or tasks necessary to complete service order, installation, and other related provisioning functions for each unbundled element.
2. Identifying the work times related to performing each function.
3. Identifying the labor rates for each work group that completes the activity and multiplying that amount by the time required to complete the activity.
4. Grouping the costs by appropriate activities to develop a cost by unbundled network element.

Q. Have you included a contribution for common cost in the NRCs?

A. Yes. A contribution for common costs was included as a component in the total NRC cost. Mr. Kent Dickerson will explain the

development of the factor used to determine the level of common costs included in the NRC rates.

Q. What categories of NRCs are reflected in the study?

A. There are three general categories of functions reflected in the study of non-recurring charges:

1. *Service Order Charges*
2. *Installation Charges*
3. *Other Installation Charges*

Each of the four main study steps I described previously are performed with respect to each of these categories of non-recurring charges.

Q. Please describe the first category of non-recurring charges - Service Order Charges.

A. A *Service Order Charge* covers the cost of work performed by Sprint in connection with receiving, recording and processing ALEC requests for service. Sprint has developed three categories *of Service Order Charges.*

1) A ***Service Order Charge*** is applied to all orders for new service received from ALECs.

2) A ***Listing Only Charge*** is applied to orders received through the Local Service Request (LSR) process to provide directory listings only. (Note: Sprint also provides a "batch" process that is generally used by ALECs for providing directory listings.)

3) A ***Change Order Charge*** is applied when an ALEC requests a change in a port feature.

Q. Has Sprint developed Service Order Charges based on the availability of a fully automated OSS for ordering service?

A. Yes. Sprint has developed two general categories of Service Order Charges: ***Electronic Service Order Charges*** and ***Manual Service Order Charges.***

Electronic Service Order Charges are applied to orders when an ALEC has elected to use Sprint's automated ordering platforms. In this case, it is assumed that a service order will directly flow into the Company's OSS on a fully automated basis. The majority of the costs, therefore, will result from the processing of orders that, due to errors in the data provided on the ALEC's LSR, require some form of

manual intervention to complete. Typically, this might include requesting service at an address that does not exist or is not complete (such as a missing apartment number). In addition, the LSR might not contain sufficient information to identify the existing service that is being transferred from Sprint to the ALEC. In all cases, Sprint will attempt to manually correct the information and may also contact the ALEC for clarification or correction.

Manual Service Order Charges are applied when an order is not transmitted to Sprint through the automated OSS, such as when an order is placed over the telephone or by facsimile.

Q. Is Sprint's development of Electronic and Manual Service Order Charges consistent with the utilization of a least cost, forward-looking technology?

A. Yes, it is. In order to be considered forward looking, a technology must be currently available, most efficient and least cost. Sprint believes that the proposed Electronic/Manual service order structure best meets these criteria in a broad range of situations.

Q. In what ways does Sprint's service order structure meet the criteria of being least cost and most efficient?

A. An automated service ordering interface requires investment on the part of both the ALEC that is sending the orders and the ILEC that receives them. A decision as to whether an automated ordering system is "most efficient" must consider the financial impact on both parties. Sprint has an automated platform in place to serve ALECs that find it more economical to use this method. The Company also provides a manual process that ALECs may elect to use if implementing an automated interface is not economical for them due to low order volume or other reasons. ALECs presently use both methods to transmit orders to Sprint in Florida. Since it is likely that ALECs will use the ordering option, which is in their best economic interest, both manual and automated ordering are forward-looking approaches.

Q. Is there a difference in the cost to Sprint for processing Electronic and Manual service orders?

A. Yes. As one might expect, the NRC for processing a manual service order is higher. This methodology facilitates charges that relate as closely as possible to actual non-recurring costs incurred, rather than developing a single "average" charge.

Issue 9: **(a) What are the appropriate recurring rates (averaged or deaveraged as the case may be) and non-recurring charges for each of the following UNEs?**

(1) 2-wire voice grade loop;

(2) 4-wire analog loop;

(3) 2-wire ISDN/IDSL loop;

(4) 2-wire xDSL-capable loop;

(5) 4-wire xDSL-capable loop;

(6) 4-wire 56 kbps loop;

(7) 4-wire 64 kbps loop;

(8) DS-1 loop;

(9) high capacity loops (DS3 and above);

(10) dark fiber loop;

(11) subloop elements (to the extent required by the Commission in Issue 4);

(12) network interface devices;

(13) circuit switching (where required);

(14) packet switching (where required);

(15) shared interoffice transmission;

(16) dedicated interoffice transmission;

(17) dark fiber interoffice facilities;

(18) signaling networks and call-related databases;

(19) OS/DA (where required)

Q. Does Sprint's non-recurring cost study address each of the unbundled network elements listed in Issue 9(a)?

A. Yes, where applicable. The various UNE NRCs are listed on the first few pages of the Non-Recurring Cost Study.

Q. Please describe the second category of non-recurring charges - Installation Charges.

A. The Installation Charge section of the NRC cost study is sub-categorized into 13 different UNE types including loops (all types), pre-order loop qualification, loop conditioning, dark fiber, UNE-P, EELs, switching, features, customized routing, operator services and transport. Each sub-section contains a description of the costing methodology or elements utilized to derive the applicable NRC rates.

Q. Please describe the "loop" sub-category of non-recurring charges - Installation Charges.

A. For analog, digital, XDSL-capable loops and subloops, the NRC recovers the cost of work performed for connection or reconnection of 2-Wire and/or 4-Wire loops. Two possible installation charges may be applied for each installation:

New Install: This charge recovers the cost of installing an unbundled loop on behalf of an ALEC for an end user who is not an existing customer of Sprint. The charge will also apply to a loop where there is no existing "Cut Through" or "Dedicated Central Office Plant" in place.

Re-install or Migrate: This charge recovers the cost of installing an unbundled loop when an existing Sprint end user is migrating to an ALEC, or when there is an existing "Cut Through" or "Dedicated Central Office Plant" in place.

These charges are designed to ensure that the Loop Installation Charge reflect the costs that would be incurred for each installation in a forward-looking network environment. The description and methodology sections within the cost study for each of these elements provides more detail.

Issue 10: What is the appropriate rate, if any, for customized routing?

Q. Please describe the specific Non-recurring charges that apply to customized routing.

A. Three separate non-recurring charges have been identified for customized routing. Only those charges applicable to a specific customized routing request would apply.

They are:

- Switch Analysis Charge
- Host Switch Translations
- Remote Switch Translations

Time estimates and Florida-specific loaded labor rates were used to develop the charges shown in the cost study.

Issue 11: What is the appropriate rate if any, for line conditioning, and in what situations should the rate apply?

Q. Can TELRIC principles be applied to loop conditioning non-recurring cost methodologies?

A. Yes. The Commission has found that pricing on the basis of forward-looking costs is a key element in fostering competition in the local services market. Sections 51.319(a)(3)(B) and (C) of the Rules state that line conditioning costs must be recovered "in accordance with the Commission's forward-looking pricing principles...," and that ILECs shall recover nonrecurring loop conditioning costs "in

compliance with rules governing nonrecurring costs in Section 51.507(e)," that is, based on the ILECs' forward-looking economic costs.

These TELRIC pricing principles should be followed with respect to costs associated with load coil removal on loops that are shorter than 18,000 feet. While Bridged Tap and Repeater removals must be accomplished on a per loop basis, Load Coil removals for loops shorter than 18,000 feet, can be accomplished most efficiently by performing the work on a bulk-basis. An efficient service provider should develop charges for loop conditioning that are based on TELRIC principles, recognizing logical economies of scale and least-cost methodologies, including an assumption that the ILEC will remove Load Coils in groups of at least 25 at a time for loops shorter than 18,000 feet.

Q. What does line conditioning entail?

A. Line Conditioning (Loop Conditioning) is the process that may be used in conjunction with Loop Qualification for provisioning an XDSL-capable loop. After receiving the loop make-up data, it is the customer's option to request Loop Conditioning. This includes the necessary work in the outside plant needed to provide a facility that will allow the transmission of high-speed digital service, such as DSL.

This work may include the removal of Load Coils, Repeaters and/or Bridged Taps.

Q. What is the purpose of "loading" cable pairs?

A. Load Coils are placed at regular intervals on copper cable pairs that are 18,000 feet or longer. Their purpose is to improve the transmission quality for voice grade services on these longer pairs by reducing the signal loss caused by the capacitance of the telephone cable. Copper pairs that are less than 18,000 feet long do not require loading to provide voice grade services.

Q. Will digital services, such as xDSL, work on a pair that has Load Coils?

A. No. Load Coils will block the transmission of digital services including xDSL-based services for both copper-fed and NGDLC-provisioned xDSL-capable loops. This is the reason that forward-looking networks are designed with loops that are short enough to avoid the need for Load Coils.

Q. When you discuss "removing" a Load Coil or "unloading" a pair, what work is actually involved?

A. Generally, the load coil is not actually removed; it is just disconnected from the cable pair. This involves snipping off the 4 wires that connect the coil to the cable pair and then reconnecting the two ends of the cable pair. In larger cables, this may involve removing a connector that splices twenty-five pairs at a time, pulling out the load coil wires and replacing the connector.

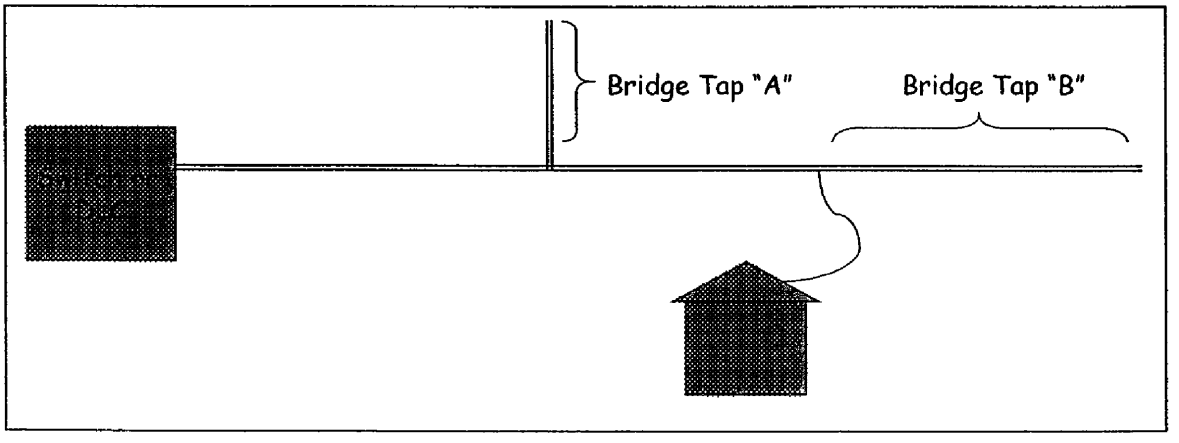
The actual work time involved in making the connections is no more than a minute or two, but set-up time can be significant, particularly when working in manholes. This is why Sprint will unload multiple pairs at one time when working on loops under 18,000 feet in length, instead of unloading only the pair required for the current order.

Q. Please explain the purpose of Repeaters in the voice network.

A. A repeater is generally used to amplify a signal over a copper loop. Without such amplification, the signal will decay over distance. The types of repeaters that are found in cable plant are not used for voice grade circuits. They are specialized modifications to the voice network that are installed to support digital services such as T1 and ISDN. The existence of a repeater will interfere with xDSL signals.

Q. Please define Bridged Tap and describe the impact on xDSL services.

A. Bridged Tap is any piece of the cable pair that is not in the direct path between the customer and the switching device. In the following illustration, sections "A" and "B" are considered to be bridged tap. Bridged Tap is an issue because it degrades the quality of any type of signal. This issue is magnified when xDSL is placed on a loop. For voice transmission on a non-loaded Revised Resistance Design (RDD) cable pair, Bridged Tap cannot exceed 6,000 feet. Sprint utilizes industry standard Carrier Serving Area (CSA) guidelines which limits total bridged tap to 2,500 feet, with no single bridged tap exceeding 2,000 feet for DSL capable loops.



Bridged Tap

In this example, let's say that sections of the cable pair "A" and "B" are both 2,000' long. So, the total bridged tap is 4,000'. This is acceptable for voice but not for xDSL. In order to be used for xDSL, we would need to eliminate 1,500' of the bridged tap. In this example, this could be done by cutting the pair off at the customer's location, eliminating Bridged Tap "B". Only enough bridged tap to get the total under 2,500 feet has to be removed. So it would not be necessary to remove both "A" and "B".

Q. Is it possible to consistently remove bridge taps in multiple quantities?

A. No. Bridge taps occur at random in Sprint's network rather than in 25 pair complements like load coils. Many locations may only have one bridge tap in a particular splice.

Q. What work is actually involved in "removing" Bridged Tap?

A. As in load coils, no plant is actually removed. The two wires of the cable pair are simply cut off and capped. Sprint's position is that excessive bridged tap can be removed the majority of the time in above ground enclosures like the customer's serving terminal (where the customer's drop wire connects to the distribution cable).

Q. Please explain how the Sprint proposed Loop Conditioning costs were developed.

A. The description and methodology section of the Loop Conditioning cost study contains a full explanation of the actual computations summarized here. Sprint's loop conditioning cost methodology is based upon unit costs contained in current contracts Sprint has with outside plant contractors in Florida to perform the work functions necessary to condition cable pairs. For load coil removal on loops over 18,000 feet, all bridged tap and repeater removals, the costs are determined on a per location basis, dependent upon the type of outside plant facilities (Underground-Ug, Aerial-Ae or Buried-Bu). This methodology enables Sprint to recover costs that vary with the different types of plant conditions encountered when performing loop-conditioning activities. For instance, it is more time-consuming to perform loop-conditioning activities in manholes than it is to perform the same procedures on aerial or buried outside plant (OSP) facilities. Unlike the aerial and buried OSP environments, a single technician cannot perform (loop conditioning) work activities in the manholes because a minimum of two technicians is required for safety reasons. The time required for pumping out water and purging potentially dangerous gases is also not required when working in aerial and buried OSP facilities. Since manholes are usually located

and accessed in city streets, there are additional costs associated with setting up traffic control as opposed to aerial and buried environments where utility trucks can usually pull off the roadway.

Sprint also assumes that the majority of cable pair access locations involve quick and easy access to the cable pairs via "ready access" splice enclosures when working in both aerial and buried plant facilities. The utilization of such enclosures is common industry practice - even in buried plant environments as the cable pair access locations are usually brought above ground into a pedestal.

Sprint's costing methodology accounts for the significant labor cost differences associated with accessing cable pairs to perform loop conditioning activities when working in these different OSP environments.

To avoid the potential problem with double counting engineering and travel time when multiple conditioning activities occur on one cable pair, Sprint calculated a separate one time per loop charge for "Engineering" and "Travel". Perhaps more important, Sprint offers an alternate, TELRIC-based view of load coil removal for loops under 18,000 feet in length. Because cable pairs are generally loaded in groups of 25, and loading is not required at all on loops under 18,000 feet, separate costs were determined based on a more efficient load coil removal process. Sprint considers it reasonable to spread the

fixed costs of accessing the cable pairs across all pairs that would be unloaded in a 25 pair binder group. The incremental labor costs associated with unloading 24 more cable pairs was added to a single engineering and travel charge and then divided by 25 to determine the cost per pair for the entire binder group. The costing methodology utilized by Sprint represents the "least-cost, most efficient" standard established by the FCC.

Q. Are there non-recurring charges associated with Switch Ports?

A. No. Sprint assumes 100% "flow-through" for port installation. That is, installation is processed automatically through the Sprint OSS with no manual intervention. Therefore, no non-recurring charge is applied.

Q. What Non-Recurring Charges does Sprint apply for Custom Calling Features, CLASS and Centrex Features?

A. Sprint provides a standard package of Custom Calling Features and CLASS features with each port purchased. Again, Sprint assumes 100% flow-through for these standard packages, with installation processed automatically through OSS and no manual intervention required. Therefore, no non-recurring charge is applied. Certain of the standard Custom Calling Features and CLASS features may be

mutually exclusive, such as two different types of call forwarding. In these cases, the ALEC will need to specify which option is desired when the port is initially ordered. If subsequent changes to the features are requested, a Service Order - Change charge would be applied. However, no additional installation charge would be applied for the change.

In contrast to the above, Centrex features require manual switch programming. Installation charges are, therefore, applied for the standard Centrex package, as well as for several less frequently requested, labor intensive, individual Centrex Features.

Issue 12: **Without deciding the situations in which such combinations are required, what are the appropriate recurring and non-recurring rates for the following UNE combinations:**

(a) "UNE Platform" consisting of: loop (all), local (including packet, where required) switching (with signaling), and dedicated and shared transport (through and including local termination);

(b) "extended links," consisting of:

(1) loop, DS0/1 multiplexing, DS1 interoffice transport;

(2) DS1 loop, DS1 interoffice transport;

(3) DS1 loop, DS1/3 multiplexing, DS3 interoffice transport.

Q. Describe how the non-recurring rates were developed for "UNE platform".

A. Sprint's NRCs for the UNE platform combinations are listed on page 13 of the Non-Recurring Cost Study. For a new 2-wire analog UNE-P, the charge is equal to the cost of the local loop installation. This is because Sprint assumes 100% flow-through automated systems whereby there is no installation charge for the port.

Q. Describe how the non-recurring rates were developed for "extended links".

A. For "Enhanced Extended Links" also known as "EELs", three costing scenarios are addressed:

EEL 1 – includes the DS0 loop, DS0/1 multiplexing and DS1 transport. For the first line, the NRC consists of the labor required for a field visit to connect the service at a cross-connect, terminal, and NID/Protector (equal to the loop installation charge) which is added to the labor associated with performing the DS0/1 multiplexing and DS1 transport provisioning functions. For the 2nd through 24th lines that are to share this initial DS1 transport facility, a reduced NRC per line occurs since an additional DS1 transport facility installation charge is not required.

EEL 2 – includes a DS1 loop, DS1/0 multiplexing and DS1 transport. The NRC is the simple addition of the NRCs for these individual UNEs. This includes the labor required for a field visit to connect the service at a cross-connect, terminal, and NID/Protector which is added to the labor associated with the DS1 transport provisioning function.

EEL 3 – includes a DS1 loop, DS1/3 multiplexing and DS3 transport. The NRC for the initial line includes the labor required for a field visit to connect the service at a cross-connect, terminal, and NID/Protector (equal to the DS1 loop installation charge) which is added to the labor associated with the DS1/3 multiplexing and DS3 transport provisioning functions. For the 2nd through 28th DS1s that are to share this initial DS3 transport facility, a reduced NRC per DS1

line occurs since an additional DS3 transport facility installation charge is not required.

Q. Please discuss the last category of non-recurring charges - Other Installation Charges.

A. Trouble Isolation and Testing Charge is billed when an ALEC reports trouble on a facility and it is discovered that the cause is outside of Sprint's network, as in the case of inside wire or trouble in the ALEC's network. The trouble isolation charge includes two components. The first recovers the cost of conducting tests at the central office and the second recovers the cost of dispatching an outside technician to determine the cause.

Other UNE charges found within this category includes those associated with *Originating Point Code Service, Global Address Translations, Nid Installation, Cooperative Testing, Trip Charges, Dark Fiber End-to-End Testing and Loop Tag and Label.* The costing methodology utilized for each of these NRCs can be found in the description and methodology sections within the "Other Charges" category of the NRC cost study .

Q. Are the work times utilized in Sprint's NRC studies comparable to the commission ordered NRC work times for BellSouth in Docket No. 990649-TP?

A. In most cases the work times that the Florida PUC ordered for BellSouth are higher than the work times reflected in Sprint's filed NRC studies. Sprint's studies were developed based on assumptions of automated forward looking, least cost, most efficient operating systems and procedures that may not exist but are consistent with TELRIC study procedures. Sprint believes that the appropriate work steps and times are included in our studies.

Q. Does this conclude your testimony?

A. Yes, it does.

MR. FONS: Next we have the direct testimony of Terry Talken which has now been adopted by Michael Fuller. Out of an abundance of caution, Mr. Fuller has filed testimony adopting Mr. Talken's testimony, so we have actually four pages of Mr. Michael Fuller's direct testimony, and we'd ask that that be inserted into the record as though read.

CHAIRMAN JABER: Okay. The prefiled direct testimony of Michael Fuller consisting of four pages shall be inserted into the record as though read.

MR. FONS: And we would also ask then that the direct testimony of Mr. Talken, which was adopted by Mr. Fuller, consisting of eight pages be inserted in the record as though read.

CHAIRMAN JABER: And the prefiled direct testimony of Terry Talken as adopted by Mr. Fuller shall be inserted into the record as though read.

MR. FONS: And there were no exhibits to either the Fuller on the Talken testimony.

CHAIRMAN JABER: Thank you.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY

OF

MICHAEL A. FULLER

ADOPTING THE TESTIMONY

OF

TERRY D. TALKEN

Q. Please state your name, business address, employer and current position.

A. My name is Michael A. Fuller. My business address is 6450 Sprint Parkway, Overland Park, Kansas, 66251. I am presently employed as Manager – Network Costing, Sprint/United Management Company.

Q. Please describe your educational background and relevant work experience.

A. I received a Bachelor of Arts degree from Western Kentucky University, Bowling Green, Kentucky, with a major in Business. Subsequently, I received a Masters of Business Administration degree, with an emphasis in finance and economics, from the University of Kansas, Lawrence, Kansas.

From 1978 to 1988, I was employed by Standard Havens Construction Company as a construction product manager. My duties included

developing cost estimates and pricing models used to develop products and services sold in the air pollution control markets.

I have been employed by Sprint Corporation or one of its predecessor companies since 1988. From 1988 to 1991 I was Manager – Policy and Economic Targeting. I developed economic policy, indicating which products were the most beneficial to Sprint utilizing life cycle analysis to cover all Sprint costs.

From 1991 to 1994, I was Group Manager – Access Pricing. I was responsible for pricing dedicated access products. From 1994 to 1996, I was Group Manager – Strategic Pricing. I was responsible for pricing business voice products in all state and federal jurisdictions. I developed and implemented strategic plans for pricing long distance voice products. From 1996 until 2000, I was Group Manager – Strategic Planning. I performed competitor and economic impact analysis to assist management in both short-term tactical decisions and long-term strategic group planning.

In 2000 I was promoted to Group Manger – Broadband Product Management. I was responsible for product management of a consumer broadband product line. I performed financial analyses for business cases that determined the profitability of developing an xDSL access product for delivering broadband content to residential consumers. I was a guest speaker at the Residential Broadband conference in Miami in January 2001, sponsored by the Institute for International Research (IRR). My topic was

Achieving DSL Mass Market Penetration: Examining How To Market And Deliver Broadband Multimedia Solutions To The Residential Sector. In May of 2001, I accepted my current position as Manager – Network Costing.

Q. Have you read and reviewed the direct testimony of Terry D. Talken dated November 7, 2001?

A. Yes, I have reviewed Mr. Talken's direct testimony.

Q. Have you read and reviewed the narratives, cost studies and work exhibits supported by Terry D. Talken dated November 7, 2001?

A. Yes, I have reviewed all of Mr. Talken's narratives, costs studies and work exhibits.

Q. Do you adopt the filing of Mr. Terry D. Talken?

A. Yes, I am adopting the testimony of Mr. Talken dated November 7, 2001 in its entirety, supporting the Sprint-Florida, Inc., ("Sprint") recurring cost studies associated with the following unbundled network elements:

Signaling Networks and Call-related databases

E911 Services

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY

OF

Terry D. Talken

Q. Please state your name, business address, employer and current position.

A. My name is Terry D. Talken. I am employed by Sprint/United Management Company as Manager of Network Costing. My business address 6360 Sprint Parkway, Overland Park KS 66251.

Q. Please describe your educational background and relevant work experience.

A. I received a Bachelor of Science and Business Administration degree from the University of Missouri - Columbia in 1991 with a major in Accounting. Also in 1991, I passed the national exam and am a Certified Public Accountant (CPA) in the State of Kansas. I am currently working towards the completion of a Master of Business Administration degree with emphasis in Finance and Information Technology from the University of Missouri – Kansas City.

Prior to joining Sprint, I practiced as a CPA. From 1991 to 1992, I was employed as a staff auditor with the public accounting firm of Baird, Kurtz

and Dobson, LLP. In this capacity I was responsible for the audits and compilation of financial reports for publicly traded and privately held businesses. From 1991 to 1996, I was employed as a consultant with the public accounting firm of Frederick and Warinner, LLC (now known as Warinner, Gesinger & Associates, LLC). In this capacity I managed the audits of privately held telecommunication providers and their subsidiaries. Additionally, I was responsible for regulatory reporting, which included preparing cost studies in accordance with FCC Parts 36 and 69. With Frederick and Warinner, I also developed traffic study models that produced results used for engineering and regulatory reporting requirements.

I joined Sprint in 1997 as a senior analyst in the Local Customer Billing area. I accepted a promotion to senior analyst in Network Costing area of the Regulatory Affairs group in 1998. Through a series of promotions I obtained my current position, Manager of Network Costing, in April 2000. I am responsible for the development and analysis of cost models for the pricing of Unbundled Network Elements (UNEs), reciprocal compensation, and other product offerings in accordance with the Total Element Long Run Incremental Cost ("TELRIC") costing methodology.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to support Sprint - Florida, Inc. ("Sprint") recurring cost studies associated with the following unbundled network elements:

I. Signaling Networks and Call-related databases

II. E911 Services

Q. What specific issues are you addressing?

A. I address the following issues as established in the Second Revised Order on Procedure:

> **Issue 5: For which signaling networks and call related databases should rates be set?**
>
> **Issue 6: What are the appropriate assumptions and inputs for the following items to be used in the forward-looking recurring UNE cost studies?**
>
> **Item(q): signaling system costs**
>
> **Issue 9(a): What is the appropriate recurring rates for each of the following UNEs?**
>
> **Item(18): signaling networks and call-related databases**

For purposes of clarity, I address each of the issues under the areas identified earlier. Unless otherwise identified, all non-recurring charges for the above are addressed by Sprint's witness, Mr. Jimmy R. Davis.

Q. Which portions of Sprint's cost study filings are you supporting?

A. In addition to my testimony, I support specific portions of the Sprint cost study. Exhibit KWD-3 to the testimony of Sprint witness Mr. Kent Dickerson identifies the portions of Sprint's cost study filings that I support.

II. SIGNALING NETWORKS AND CALL-RELATED DATABASES

Q. For which signaling networks and call related databases should rates be set?

A. Sprint proposes UNE rates for the following call-related database items:

- 911/E911
- STP Ports and STP Switching (SS7 Interconnection)
- Database Query Services

Q. Please describe the general TELRIC methodology used for each of these services.

A. The following TELRIC methodology is used for all services except 911:

1. Determine direct expense associated with the service.
2. Determine the direct investment associated with the service.
3. Multiply the investment by the annual charge factor to determine the annual direct costs.
4. Add common cost.
5. Divide total economic cost by the appropriate number of units to determine the total economic cost per unit.

Q. What prices for 911/E911 does Sprint recommend?

A. In the State of Florida, Sprint's arrangement with the local Public Safety Answering Point (PSAP) recovers all recurring costs of this service outside of any transport required by the ALEC to connect its switch with Sprint's 911 tandem. Sprint's witness, Mr. Talmage Cox, addresses transport costing. Further, all non-recurring charges related to E911 will be addressed by Sprint's witness, Mr. Jimmy Davis.

Q. Please define Signaling System Seven (SS7) interconnection.

A. SS7 interconnection consists of Signal Transfer Point (STP) ports, interconnecting facilities, and STP switching usage. The costs for these unbundled network elements are included in Volume II of Exhibit KWD-2 under the Miscellaneous UNEs tab in the SS7 Cost Module section. The common channel signaling interconnection service provides a signaling path for SS7 between a customer designated point of signaling premises and a Sprint STP. This two-way signaling path provides interconnection to the out-of-band signaling network in order to transmit and receive information related to call completion.

The STP port provides the customer access to the Sprint STP, which acts as a packet switch to route out-of-band signaling. It is in some respects

similar to the concept of access to a local switch through a port. An STP port requires use of a link port card and processor costs.

The STP transport link is the facility that connects the ALEC customer's designated premises to the Sprint STP. The link may be provisioned as a DS0 (56 Kbps) or as an DS1 (1.544 Mbps), at the option of the requesting ALEC. The interconnecting links are provisioned in mated pairs connecting to diversely located STPs consistent with industry technical standards for out-of-band signaling network diversity requirements.

STP switching usage consists of the cost of routing ISDN User Part (ISUP) messages through a STP. The cost of SS7 switching is determined by the number of individual interoffice trunks using a STP port. The rate is applied on the basis of equivalent 56 Kbps trunks per month. The optional DS1 rate is simply 24 times the 56 Kbps rate. STPs are deployed in mated pairs for network reliability, and interconnecting carriers must provision links to each STP in a mated pair.

Q. How are the forward-looking economic costs of Signaling System Seven (SS7) interconnection developed (Issue 7(q))?

A. The TELRIC methodology and costing assumptions associated with STP Ports and Switching are detailed in Volume I, under the SS7 tab. Care has been taken to exclude port costs from the STP switching usage investment. Florida-specific annual charge factors, equipment fill factors,

and demand are used in the calculations. The applicable transport link and multiplexing costs are calculated in the Transport and Multiplexing Cost Modules. Costing methodology associated with Transport and Multiplexing are addressed in the testimony of Sprint's witness, Mr. Talmage Cox.

Q. Please define the database query services Sprint proposes.

A. Sprint LTD's intelligent network database services consist of the following:

Local Number Portability (LNP)

Line Information Database (LIDB)

Calling Name (CNAM)

Toll Free Code (TFC) 800/888/877

Q. How are the forward-looking economic costs of database query services developed?

A. Again, detailed descriptions and cost studies for these services can be found in Volume II of Exhibit KWD-2 under the Miscellaneous UNEs tab in the SS7 Cost Module section.

In general, LIDB, CNAM, and TFC services are provided via a diverse pair of Service Control Points (SCPs) located in Johnson City and Bristol, Tennessee. Because these three services use the same SCPs, a common per query cost is developed based on the common investment.

Next, annual expenses incurred specific to the type of service are identified and a per query expense calculated. Finally, the per-query costs of query transport and switching from the local STPs in Florida to the National STPs are added. These three cost elements are summed to arrive at a total cost per query.

The LNP database is housed in a separate pair of SCPs with Advanced Intelligent Network Capabilities required for this service. Accordingly, a unique per query cost is developed for this service. The remaining calculations are similar to the other database query services. All services utilize the same national STP platform. Care has been exercised to ensure no duplication of investment occurs within the cost studies.

Q. Does this conclude your direct testimony?

A. Yes, it does.

MR. FONS: And that concludes the, Sprint's direct and surrebuttal and rebuttal case.

I would assume that the Staff is going to at some point move some exhibits, stipulated exhibits, and we'd only call attention to the fact that there is one deposition exhibit -- deposition of Mr. David Draper who will be appearing and stipulated into the record. And what we would like is his deposition exhibit marked as a -- his deposition marked as an exhibit to include both the deposition transcript and his Late-Filed Exhibits 1 and 2.

CHAIRMAN JABER: Okay. Staff, have you agreed to include the deposition of Mr. Draper as an exhibit?

MR. FUDGE: Yes, Madam Chairman.

CHAIRMAN JABER: Okay. And that's already identified on your list?

MR. FUDGE: It's the last one on Page 2, DJD-1D.

CHAIRMAN JABER: Okay. So we'll take that up at the right time, Mr. Fons. Is there anything else though? I need to probably officially excuse your witnesses.

MR. FONS: Yes.

CHAIRMAN JABER: And what else?

MR. FONS: I believe that's it.

CHAIRMAN JABER: Okay. Staff, this seems like a good time to go through your exhibit list.

MR. FUDGE: I think we need to go ahead and move in

the testimony of KMC witnesses and Staff and Z-Tel's witnesses --

CHAIRMAN JABER: Okay.

MR. FUDGE: -- that testified on the Sprint portion.

MR. SELF: Since the order shows the Staff witness next.

MR. FUDGE: Okay. Staff requests that the direct testimony of David J. Draper be moved into the record as though read, consisting of 11 pages.

CHAIRMAN JABER: The prefiled direct testimony of David J. Draper shall be inserted into the record as though read.

MR. FUDGE: Mr. Draper had six exhibits labeled DJD-1 through DJD-6. We ask that those be identified as a composite exhibit.

CHAIRMAN JABER: It's DJD-1 through what?

MR. FUDGE: 6.

CHAIRMAN JABER: Okay. DJD-1 through DJD-6 shall be identified as Composite Exhibit 6. And Composite Exhibit 6 is admitted into the record.

(Composite Exhibit 6 marked for identification and admitted into the record.)

DIRECT TESTIMONY OF DAVID J. DRAPER

Q. Please state your name and business address.

A. My name is David J. Draper. My business address is 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0865.

Q. By whom are you employed and in what capacity?

A. I am employed by the Florida Public Service Commission, in the Finance and Tax Section of the Division of Economic Regulation, as a Regulatory Analyst III.

Q. Please outline your educational qualifications and work experience.

A. I graduated from Florida State University in 1994 with Bachelor of Science degrees in Accounting and Finance. After graduation, I was employed full-time at the Florida Department of Revenue where I reviewed and examined various tax forms for accuracy and completeness. In 1995, I accepted an auditing position with the Florida Public Service Commission in which I audited various regulated Florida utilities. In 1997, I took my present position with the Commission working in the Finance Section analyzing return on equity, cost of capital and capital structures of public utilities and companies regulated by the Commission. I am currently pursuing a Master of Business Administration degree at Florida State University.

Q. Have you previously testified before this commission?

A. Yes. I have previously provided testimony on the appropriate cost of equity for the Chesapeake Utilities Corporation rate case, Docket No. 000108-GU.

Q. What is the purpose of your testimony in this docket?

A. The purpose of my testimony is to recommend an appropriate forward-looking weighted average cost of capital for Sprint Florida and Verizon Florida for purposes of determining the appropriate cost of unbundled network elements (UNEs).

Q. What principles provided the framework for your determination of a fair rate of

return?

A. I have framed my testimony based on my understanding of The Communications Act of 1934 as amended by The Telecommunication Act of 1996, specifically Sections 251 and 252. In my opinion, the purpose of this Act was to develop competitive local markets by various means of entry, including the unbundling of network elements. Section 251 deals with interconnection between the incumbent telecommunication carrier and competing telecommunication carriers. Section 251 makes it the duty of the incumbent telecommunication carrier to offer its network elements to competing carriers and to provide all reasonable assistance in connecting and providing service to the competing carriers. Section 252 concerns the procedure by which carriers are required to negotiate; incumbent carriers are required to negotiate in good faith and any dispute may be taken to the state's public service commission for arbitration. I also framed my opinion based on Section 47 of the Code of Federal Regulations, specifically Subpart F - 51.505(b)(2). The rule in this subpart applies to the pricing of network elements, interconnection and methods of obtaining access to UNEs. Subpart F states: "The forward-looking cost of capital shall be used in calculating the total element long-run incremental cost of an element." In short, the cost rate of common equity and debt should reflect forward-looking cost rates, not a firm's embedded cost rates. Based upon my understanding of the rules and regulations stated above, I employed generally accepted financial models, objective market data and forecasted long-term and short-term debt cost rates in my analysis to determine the forward-looking cost of capital I am recommending in this proceeding.

Q. Please describe your general approach in determining Sprint Florida's and Verizon Florida's forward-looking weighted average cost of capital.

A. I began my analysis of the forward-looking weighted average cost of capital by estimating the appropriate cost of equity, cost of debt and relative capital structure weights for a well managed company in the business of providing UNEs. As a proxy for this line of business, I

analyzed the publicly traded telecommunication carriers listed in Value Line's "Investment Survey for Windows," November 2001 edition. I developed a set of financial criteria in order to determine an appropriate index of companies which I believe are comparable to the business and financial risks associated with the provision of UNEs. In Exhibit DJD-1, I have provided a schedule of my index of telecommunication companies. After determining an appropriate index of companies, I then performed a Discounted Cash Flow (DCF) analysis and a Capital Asset Price Model (CAPM) analysis on this index to estimate an appropriate return on equity (ROE). For the forward-looking cost of debt, I analyzed the December 1, 2001, Blue Chip Financial Forecasts and the December 17, 2001, Moody's Credit Perspectives to determine a forecasted forward-looking cost rate. Finally, I averaged the equity and debt ratios of the companies in my index as a proxy for a forward-looking capital structure and checked my results.

Q. Please describe how you selected the ratio of debt and equity used in your recommendation of the forward-looking weighted average cost of capital for both companies.

A. By using Value Line's "Investment Survey for Windows," November 2001 edition, I calculated the average equity ratio of the publicly traded telecommunication carriers included in my index. The average equity ratio for the index was 63.0%. To check this result, I reviewed C.A. Turner Utility Reports "Financial Statistics of Public Utilities, 2001" (C.A. Turner). C.A. Turner is a recognized financial publication used widely by financial analysts. In its report, C.A. Turner states that the average telecommunications company had an equity ratio of 57.6% in 2000. In addition, I reviewed several recent Commission Orders which approved UNEs pricing for Sprint Florida, Verizon Florida and BellSouth in this and in other dockets. Based on this analysis, I am recommending a forward-looking capital structure consisting of 60% common equity and 40% debt.

Q. Do you believe that short-term debt should be reflected in the forward-looking cost

of debt?

A. Yes, short-term debt is used to finance day-to-day operations and allows for flexibility in paying short-term expenses. Almost all the companies included in my index have some form of short-term debt in their capital structures. C.A. Turner reports that the average amount of short-term debt for the companies in my index was 9.9% at the end of December 31, 2001, ranging from a low of 3.5% to a high of 20% of total capital. Furthermore, both Sprint Florida and Verizon Florida maintain a certain amount of short-term debt in their respective capital structures. Therefore, I believe it is appropriate to include short-term debt in the determiniation of the forward-looking cost of debt.

Q. What cost rate do you recommend for the forward-looking cost of Sprint Florida's and Verizon Florida's short-term debt?

A. I recommend a cost rate for Sprint Florida's and Verizon Florida's short-term debt of 5.36%.

Q. How did you determine the forward-looking cost rate for Sprint Florida's and Verizon Florida's short-term debt?

A. I calculated the cost rate for Sprint Florida's and Verizon Florida's short-term debt by averaging the five forecasted quarterly prime rates as reported in Blue Chip Financial Forecasts. The prime rate is the interest rate charged by banks to their most creditworthy customers. The forecasted average prime rate is 5.36%. Therefore, I recommend a cost rate of 5.36% for both Sprint Florida's and Verizon Florida's short-term debt included in their respective forward-looking cost of debt.

Q. What cost rate do you recommend for Verizon Florida's forward-looking cost of long-term debt?

A. I recommend a forward-looking cost rate for Verizon Florida's long-term debt of 7.84%.

Q. How did you determine the forward-looking cost rate for Verizon Florida's long-

term debt?

A. Verizon Florida is assigned a corporate credit rating of single A (A) by Standard & Poor's, Inc. (S&P). To estimate the forward-looking cost of long-term debt, I reviewed the average spread between yields on A rated utility bonds and 10-year Treasury bonds as reported by Moody's Investors Service, Inc. (Moody's). Due to the fact that the Federal Reserve has stopped issuing the 30-year Treasury bond, I have used the 10-year Treasury bond in calculating a forecasted cost for long-term debt. For the 12 month period ended November 2001, the average spread between the yields on A rated bonds and 10-year Treasury bonds has been as high as 309 basis points and as low as 258 basis points. Based on this range, I calculated an average spread between the yields on A rated utilities and 10-year Treasury bonds of 284 basis points. Using Blue Chip Financial Forecasts for December 2001, I calculated the forecasted interest rate for 10-year Treasury bonds by averaging the forecast for the next five quarters, which results in a rate of 5.0%. By adding the average spread of 2.84% to the average forecasted interest rate of 5.0% for 10-year Treasury bonds, I calculated a forward-looking cost rate for Verizon Florida's long-term debt of 7.84%.

Q. What cost rate do you recommend for Sprint Florida's forward-looking cost of long-term debt?

A. I recommend a forward-looking cost rate for Sprint Florida's long-term debt of 8.12%.

Q. How did you determine the forward-looking cost rate for Sprint Florida's long-term debt?

A. I performed the same analysis in forecasting Sprint Florida's cost rate for long-term debt as I did for Verizon Florida. Sprint Florida is assigned a corporate credit rating of triple B (BBB) by S&P. The spread between the yield on BBB rated utility bonds and 10-year Treasury bonds over the past twelve months ranges from a high of 348 basis points to a low of 275 basis points. Based on this range, I calculated an average spread of 312 basis points. By adding the average

spread of 3.12% to the average forecasted interest rate of 5.0% for 10-year Treasury bonds, I calculated a forward-looking cost rate for Sprint Florida's long-term debt to be 8.12%.

Q. What cost rate do you recommend for Sprint Florida and Verizon Florida overall cost of debt?

A. I recommend a weighted average forward-looking cost of debt which reflects a blend of 75% long-term debt and 25% short-term debt. For Sprint Florida, I recommend a weighted average forward-looking cost of debt of 7.43%. For Verizon Florida, I recommend a weighted average forward-looking cost of debt of 7.22%.

Q. Please describe your approach in analyzing the forward-looking cost of equity for both Sprint Florida and Verizon Florida.

A. In determining Sprint Florida's and Verizon Florida's respective forward-looking cost of equity, I first analyzed the publicly traded telecommunication carriers listed in Value Line's Investment Survey for Windows, November 2001 edition. I developed a set of financial criteria to determine an appropriate index of companies which I believe are comparable to the financial and business risks faced by Sprint Florida and Verizon Florida associated with the provision of UNEs. In developing this index, I eliminated any company that received less than 75% of its annual revenues from telecommunications operations. I also eliminated any company with insufficient financial data to perform a financial analysis. Finally, I eliminated any company that was the subject of an ongoing merger or acquisition. After I had determined the appropriate index of companies, I then performed a DCF analysis and CAPM analysis to determine an appropriate cost rate for common equity.

Q. What is the theory behind the Discounted Cash Flow Model?

A. The DCF model is based on two principles. First, investors value an asset based on the future cash flows they expect to receive. Second, investors value a dollar received today more than a dollar received in the future, meaning that they consider the time value of money.

Therefore, in a DCF analysis, the cost of equity is the discount rate that equates the present value of expected cash flows associated with a share of stock to the present market price of the stock. In Exhibit DJD-2, I have provided the basic DCF equation and defined the terms. The basic model has three simplifying assumptions: 1) dividends are paid annually and grow at a constant rate; 2) the price of the stock is determined on the dividend payment date; and 3) dividends increase once a year starting one year from the dividend payment date.

Q. Which Discounted Cash Flow model have you used in your analysis?

A. I have used a two-stage annually compounded DCF model. An assumption behind the basic DCF model is that dividends grow at a constant rate. However, growth in dividends can vary from period to period. A two-stage DCF model, also known as a non-constant growth model, allows for more specificity in the determination of dividend growth: a near term period during which dividends are specifically forecasted, and a subsequent period of sustainable growth. In Exhibit DJD-3, I have presented the equation for my two-stage annually compounded DCF model and defined the terms. This model is consistent with the valuation practices of institutional investors and financial analysts. An additional advantage of the two-stage model is that it can use the specific dividend forecast from Value Line and then incorporate a long-term sustainable growth rate. The two-stage model allows for more precision than the basic model.

Q. What are the inputs for your Discounted Cash Flow Model?

A. I used current stock prices for the companies in the Value Line index, specific dividend forecasts for the initial growth period, and a sustainable or long-term growth rate. For current stock prices, I first calculated the average of each company's high and low stock prices for the month of October 2001. From these computations, I then calculated an average stock price for the index, which is the input to my model. I used Value Line's forecasted dividends for the years 2002 and 2005. I assumed a constant growth rate between these years to estimate dividends for the initial growth period. I then calculated the long-term growth rate using the earnings retention

method, also known as the b x r approach. The inputs for my earnings retention method are Value Line's expected earned return on equity (r) and the expected retention rate (b) for 2005.

Q. Have you included an allowance for issuance costs in your Discounted Cash Flow model?

A. Yes. My DCF model includes an allowance for issuance costs, calculated as 3% of the stock price. The allowance for issuance costs added approximately 15 basis points to the overall cost of equity. An allowance for issuance costs enables the telecommunication carrier to recover the costs incurred when issuing common stock. Issuance costs include registration fees, legal fees, underwriting fees, and printing and mailing expenses. Investors could not earn the necessary return on their investment without an issuance cost adjustment. The sales price of the stock will exceed the net proceeds to the company because it will incur issuance costs. A company can incur these costs whether the stock is publicly traded or privately held. Conceptually, this situation with common stock is similar to that of bonds and preferred stock. With bonds, for example, the cost charged to ratepayers reflects issuance costs and is recovered over the life of the bond. The cost to the company for a specific bond issue is the interest expense plus the amortization of issuance costs divided by the principal value less the unamortized issuance costs. The result is that the cost to the company is greater than the return to the creditor. Unlike bonds, common stock does not have a finite life. Therefore, issuance costs cannot be amortized and must be recovered by an upward adjustment to the allowed return on equity. This adjustment reflects the fact that, due to the issuance costs, the company earns a return on an equity balance that is less than the actual amount paid by investors. Historically, underwriting expenses associated with issuing common stock have averaged 3% of gross proceeds.

Q. What are the results of your Discounted Cash Flow analysis?

A. The results of my DCF analysis shows that the forward-looking cost of equity for the comparable telecommunications index is 11.45%. Exhibit DJD-4 shows the inputs and results

of my analysis.

Q. What is the theory behind a Capital Asset Pricing Model?

A. The CAPM was first introduced by William Sharpe in 1964. It extended modern portfolio theory to introduce the notions of systematic and specific risk. CAPM divides the risk of holding assets into systematic and specific risk. Systematic risk is the risk of holding the market portfolio. This risk effects all securities and cannot be eliminated through diversification. Specific risk is the risk which is unique to an individual asset. It represents the component of an asset's return volatility which is not correlated with general market moves.

The theory underlying the CAPM is quite simple. The expected return on common equity depends on the beta of that company's equity. The beta is a measurement of stock price volatility relative to a broad market index. If a stock moves up or down twice as much as the market, it has a beta of 2. If it moves one half as much as the market, its beta is 0.5. The CAPM models the systematic risk of a particular asset.

Q. Please describe your Capital Asset Pricing Model.

A. In Exhibit DJD-5, I have listed the equation and the components of the CAPM. There are three basic components to the CAPM: 1) the expected risk-free rate of return, 2) the stock's expected relevant market risk called "beta," and 3) the expected return on the stock market taken as a whole. The risk-free rate (R_F) is derived from the average projected yield of the 30-year Treasury bond. Treasury bonds are a recognized bench mark for risk-free rates since there is little risk of the U.S. Government defaulting on its bonds. The required market return (R_m) was determined by using Value Line's database of listed companies and then screening those companies to remove anomalies. In my opinion, removing anomalies such as companies that do not pay dividends or have negative dividend growth, negative projected earnings growth or growth greater than 20%, results in an accurate representation of the market return. A basic DCF analysis was performed for each company in this broad market index. The result of the DCF

analysis was then used as the required market return. In my opinion, the average beta of the telecommunications firms in my index is a reasonable proxy for companies engaged in the provision of UNEs.

Q. What are the results of your Capital Asset Pricing Model analysis?

A. After using the CAPM to calculate an ROE, I made an adjustment for flotation costs by adding 15 basis points to the CAPM results. The 15 basis points for flotation costs were determined by calculating the difference between the DCF results using 3% flotation and the DCF results using no flotation costs. After calculating an ROE using the CAPM and adjusting for flotation costs, I calculated a cost of equity for the telecommunications index of 11.13%. Exhibit DJD-5 presents the results of my CAPM analysis.

Q. Given the results of your Discounted Cash Flow and Capital Asset Pricing Model analyses, what did you determine for the cost of equity?

A. Based on the results of my DCF and CAPM analyses, I calculated a range of return on equity from 11.13% to 11.45%. Averaging these results produces a truncated midpoint of 11.3%.

Q. What do you recommend as an appropriate ROE for both Sprint Florida and Verizon Florida?

A. The index of companies used to determine an appropriate ROE has an average bond rating of single A. S&P reports Verizon Florida as having a single A bond rating, therefore I recommend using the midpoint of 11.3% as its forward looking ROE. Sprint Florida has a bond rating of triple B. For this reason, I would recommend adding a 25 basis point adjustment to the calculated ROE mid point for Sprint Florida's forward looking ROE. This adjustment is similar to what was recommended for Sprint Florida's long-term debt. Therefore, I recommend a ROE for Sprint Florida of 11.55%. Ultimately, deciding the appropriate cost rate for common equity is a subjective process, estimating ROE has always been a forward-looking concept. Once a financial analysis is completed, a financial analyst must review the final calculation and decide

if it is a reasonable return when considering all the risks and rewards involved in the investment. Based on my analysis and the facts presented in this testimony, I believe that I have calculated the most equitable cost rates and the appropriate weighted ratios to be included in the forward-looking weighted average capital structure for both Sprint Florida and Verizon Florida.

Q. What forward-looking weighted average cost of capital do you recommend for both Sprint Florida and Verizon Florida?

A. I have calculated forward-looking cost rates for debt and common equity, and I have determined the proper weight for each component to be included in the capital structure. Based on my findings, I recommend a 9.90% return for Sprint Florida's forward-looking weighted average cost capital. In addition, I recommend a 9.67% return for Verizon Florida's forward-looking weighted average cost capital. In Exhibit DJD-6, I have provided a schedule of Sprint Florida's and Verizon Florida's recommended forecasted weighted average capital structure.

Q. Does this conclude your direct testimony?

A. Yes.

MR. SELF: Madam Chairman, KMC would move the rebuttal testimony of Frank W. Wood consisting of 24 pages into the record as though read.

CHAIRMAN JABER: The prefiled rebuttal testimony of Frank Wood shall be inserted into the record as though read.

MR. SELF: And Mr. Wood did not have any exhibits associated with his testimony. Thank you.

CHAIRMAN JABER: Thank you, Mr. Self.

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TITLE.

A. My name is Frank W. Wood. My business address is 1545 Raymond Diehl Rd, Suite #350, Tallahassee, Florida. I am employed by KMC Telecom III, Inc. ("KMC") as the City Director for Tallahassee.

Q. BRIEFLY OUTLINE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE IN THE TELECOMMUNICATIONS INDUSTRY.

A. After attending college at the University of Northern Colorado, my telecommunications career began in 1986, when I was employed by Southland Systems as the local Sales Manager for long distance service. Through a number of mergers, I eventually became a National Account Manger with MCI Telecommunications. In 1992, I resigned from MCI and founded Communications Solutions, Inc., (d/b/a CSI Long Distance) in Tallahassee, which was a switchless reseller for commercial customers. Our niche was to provide customized billing solutions for law firms and trade associations. In 1996, I sold CSI to Gulf Long Distance of Foley, Alabama. Based upon my knowledge of the Tallahassee communications market and my experience as a manager and salesman, I was hired by KMC in January of 1998 to begin the planning and development of KMC's entry into Tallahassee as a competitive local exchange carrier. As KMC's City Director for Tallahassee, I am responsible for all daily business functions in Tallahassee,

including sales, marketing, operations, profit and loss responsibility, construction, customer care, and on-going business development.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No, I have not.

Q. ON WHOSE BEHALF ARE YOU APPEARING IN THESE PROCEEDINGS?

A. I am appearing on behalf of KMC as a certificated alternative local exchange carrier ("ALEC" or, as these competitive local carriers are also known, "CLEC") operating in both the Sprint and Verizon market areas.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide KMC's position on the proposals of Sprint and Verizon to substantially increase the price of several key UNEs that are required by facilities based ALECs such as KMC. KMC greatly appreciates the fact that this Commission is investigating the cost studies and proposed pricing for Sprint and Verizon UNEs. As I will discuss, however, this proceeding presents the CLEC industry with a very difficult dilemma. Facilities based competitors such as KMC need certain UNEs from ILECs such as Sprint and Verizon, and the CLECs need for those prices to be lower. But in the current market, the cost of undertaking the significant effort necessary to analyze, evaluate, and substantially challenge the ILEC cost studies is simply beyond our means. In order to provide service to our

customers, we do not have the staff or financial resources available to us to contest the ILEC cost studies.

I am participating in this case as a field level manager, offering what I believe is valuable and relevant information about how a facilities based CLEC operates in the Sprint and Verizon markets. I also discuss what a facilities based CLEC needs in order to get started, grow the business, reach profitability, and then sustain it. The CLECs very much need UNEs purchased from the ILECs, and we need UNEs priced in a manner that makes them affordable to use.

To bridge the gap, we desperately need this Commission's help. Florida is one of the largest telecommunications marketplaces in the country. This Commission has one of the largest Staffs in the country. Use your Staff. Turn them loose on the Sprint and Verizon cost studies, and let them dig into them and give them the independent review the studies require and this industry need. We urge you in our strongest voice to live up to your legislative mandate and your recently revised mission statement and promote competition by undertaking the only detailed, independent investigation these cost studies will receive. The few real CLECs that are now left need for you to bring the full power of your vast resources to bear on these cost studies and set cost based UNE rates that will foster the growth of facilities competition and not bury it.

II. BACKGROUND ON KMC

Q. CAN YOU PLEASE DISCRIBE KMC AND ITS OPERATIONS.

A. Yes. For the past several years, the Commission has heard various arguments about the status of CLECs. Unfortunately, much of the talking has been from the ILECs. While some Interexchange Carriers also operate as ALECs and have brought various competitive matters before the Commission, these companies do not have the same issues or concerns as a facilities based CLEC such as KMC, which does not have a legacy as a long distance service provider.

KMC was founded on the eve of the passage of the Telecommunications Act of 1996 as a competitive local service provider. KMC's business plan has been to build state of the art local networks in the Tier III markets, those metropolitan areas that generally have a population between 100,000 and 750,000. We have augmented this plan to also be a nationwide provider of next generation data services for Interexchange Carriers and Tier I and II Internet providers.

KMC is the kind of CLEC envisioned by the Telecommunications Act of 1996 – KMC is a facilities based carrier utilizing fiber-based integrated communications networks that offer a full range of advanced voice, data, and Internet infrastructure services across the eastern half of the United States. Dedicated to delivering high-quality and reliable services at highly competitive prices in each of its markets, KMC provides single-source

product and service availability and maintains a strong commitment to localized customer care to the communities we service.

Q. WHERE HAS KMC BUILT ITS LOCAL NETWORKS?

A. KMC today has local, facilities based networks in 37 metropolitan areas. Our focus on Tier III markets was done for a number of reasons, but ultimately we felt that smaller markets were under-served, especially in offering the small and medium sized businesses in those communities a real competitive alternative. KMC believes that an appropriate capital investment in infrastructure in these markets will meet an untapped need that will give us a firm foundation on which to execute a solid business plan.

Q. DOES KMC SERVE RESIDENTIAL MARKETS?

A. It would be great to serve residential markets – once you deploy a network, you want to put as many customers as possible on it. However, given our deployment of SONET rings, the cost to build laterals, and the cost to collocate at the ILEC central offices or at ILEC digital loop carrier equipment (collocation construction costs, cards, cross connections, back haul transport, power, etc), it is not cost effective at this time to serve residential customers through our own networks. We have considered a residential service via UNEs, but the cost is greater to purchase the service from the ILEC than what we can retail it for.

Q. HOW MANY OF THE 37 MARKETS WHERE KMC HAS BUILT

NETWORKS ARE IN FLORIDA?

A. Florida is the state with the largest KMC presence – we have built networks in seven Florida markets. These seven markets include two Sprint markets, Tallahassee and Ft. Myers, two Verizon markets, Greater Pinellas and Sarasota, and three BellSouth markets, Brevard, Daytona Beach, and Pensacola.

Q. HOW DOES KMC DEPLOY ITS NETWORKS AND BUSINESS OPERATIONS?

A. In each of its local markets, KMC invests in a network infrastructure that is designed to reach approximately 80 percent of the business access lines through either a direct connection or unbundled network elements leased from the ILEC. In each market, KMC will have its own #5ESS central office switch and collocate facilities at the ILEC's tandem and other ILEC central offices. KMC builds a fully redundant fiber backbone ring utilizing Synchronous Optical Network ("SONET") technology that allows KMC to connect to Interexchange Carriers and an assortment of commercial customers, where practical, and offer a full array of local and long distance voice and data services.

Q. HOW SUCCESSFUL HAS KMC BEEN IN ITS BUSINESS PLAN?

A. At the end of the third quarter 2001, KMC's gross networks, property, and equipment represented a $1.5 billion investment. Total lines (DS-0 equivalents -- the combination of access lines and dedicated lines) grew to

over 3.6 million at the end of the third quarter 2001, representing a 16 percent increase over KMC's total at the end of the second quarter 2001, and 95 percent higher than reported at the end of the third quarter 2000. KMC continues to service 99.9 percent of the total lines on its networks either by direct connections or UNEs. Total customers as of September 30, 2001, were 15,301, a 6 percent increase compared to last quarter, and 53 percent higher than the customer base at the end of the third quarter of 2000. In 2001, KMC continued the trend of positive quarterly Adjusted EBITDA. At the end of the third quarter of 2001, Adjusted EBITDA was $24.2 million versus $3.4 million in the second quarter of 2001.

Q. SINCE YOU ARE THE CITY DIRECTOR FOR TALLAHASSEE, CAN YOU PLEASE DESCRIBE YOUR TALLAHASSEE OPERATIONS IN MORE DETAIL?

A. In Tallahassee, KMC's central office switch is located in the Commonwealth Center, and we are collocated at the Calhoun, Blairstone, and Willis Road Sprint central offices. We have approximately 45 route miles of fiber that very generally forms a circle around Tallahassee, and we have 32 lateral builds to either IXCs or commercial and government customers. We can serve a small business with just a few phones line via a 2-wire analog loop UNE, a mid-sized customer with multiple business lines via a DS-1 UNE, a large commercial customer via a direct fiber connection to our network, or a multi-tenant building where we have our own fiber into

the building that enables us to serve tenants within the building completely on our network.

We first began to provide service in Tallahassee in November 1998. Our product mix includes POTS service, business trunks, ISDN, point to point data, voice mail, dedicated Internet service, long distance, and large bandwidth applications such as a full DS-3 of Internet service for a local software company and an OC-3c access link for Florida State University. Our total capital investment in Tallahassee is approximately $22,500,000. Our Tallahassee operation became EBITDA positive in September of 2000.

Q. DOES THIS MEAN THAT KMC'S OPERATIONS ARE FINANCIALLY SECURE FOR THE FUTURE?

A. No, and to assume that we are now "safe" would be tragic. The EBITDA which the Tallahassee office has generated is barely enough to begin payment on the debt service we incurred. The fact is that in order to succeed we need to continue our revenue growth and positive improvements to EBITDA. If CLEC's cannot reach positive cash flow and SUSTAIN it, then our industry is DEAD. And that of course means that Florida customers would not be able to receive the benefits of a competitive telecommunications marketplace.

Q. HOW DO THE PRICING OF UNEs PLAY INTO KMC'S BUSINESS PLAN AND THE FUTURE OF COMPETITION?

A. It is KMC's intent to bring service to every possible customer that we can

on our own network so as to maximize our infrastructure investment. That said, it is clear that as a new entrant in Tallahassee, Ft. Myers, Greater Pinellas, Sarasota, or in any of the markets we serve in Florida or elsewhere, the overwhelming majority of our customers must be served via UNE's. Why? Simple math. A single location customer that has 14 lines and pays approximately $420 per month for local service can't afford the lateral construction cost to extend our network, which may cost on average $30,000 plus the associated optical electronics, which may cost an additional $20,000. Likewise, it would take KMC nearly 10 years to recover that $50,000 investment at $420 a month. That's bad math and a bad business decision.

Until you begin to reach the economies of scale where you have facilities everywhere, the only realistic way that a facilities carrier can bring competitive choice to that customer is to deploy UNEs. And, of course, UNEs are one of the three legs of local competition that is the basis for the Telecommunications Act of 1996. Everyone realized that if a CLEC had to completely build a local network that would replicate all of the connections available to the ILEC, competition in local service would never happen.

Q. WHY HAS KMC INTERVENED AT THIS POINT IN THIS PROCEEDING AND PROFFERED YOUR TESTIMONY?

A. As I said in my introduction, I'm the City Director for Tallahassee, and the person who is in the trenches trying to bring competition to this market. I

have a budget with limited financial resources, a small but dedicated staff, and we have to build a network, put customers on that network, and build both our customer base and the network. The other City Directors for KMC are in a similar situation as Tallahassee.

Our company is very young – as is the industry itself. As a new entrant in the telecommunications marketplace, we have to achieve a number of different goals in order to be successful. Initially, our regulatory involvement was limited to getting certificated, filing and updating tariffs, negotiating and sometimes arbitrating interconnection agreements with the ILECs, and dealing the usual regulatory compliance and customer relations issues. These are all things that we must do to be in the business, and we accept them.

But I do not believe that anyone, not in their wildest imagination, would have envisioned that six years after the passage of the 1996 Telecom Act that the industry would still be fighting for its basic right to exist. Who would have foreseen that six years after the 1996 Act became law that we would still be embroiled in regulatory proceedings fighting with the ILECs over reciprocal compensation, basic UNE rates, operational support systems and interfaces, and other ongoing business problems. The current situation is far beyond the regulatory burdens any start up business should have to face, and certainly way more than was promised when the 1996 Act was passed.

Q. SO HOW DOES A NEW ENTRANT BALANCE THE REGULATORY AND LITIGATION ISSUES WITH ITS ONGOING OPERATIONAL NEEDS?

A. On a financial statement, "regulatory" is an expense, unlike customers which are considered "revenue." As KMC has weathered the storms of the last six years, our company has had to make tough, but realistic management decisions. Where do we spend our capital? Is it better to spend it building networks and paying for UNEs that are too high, or should we invest in lawyers and what to me seems like endless rounds of litigation?

For KMC, the decision has been simple – build networks and get revenue. Why? Because our investors deserve a return on their investment – and that is a basic fact of our national economy. But in the present situation, we are faced with a really horrible choice. We can succumb and accept the outrageous UNE price increases now before the Commission which would drastically alter our ability to use UNEs, and thus limit our ability to compete for customers, or we can try to give the Commission our CLEC business perspective. It would be nice to be able to hire the experts necessary to analyze the ILEC UNE cost studies, but the money simply is not there. It's my understanding that while some of the other ALECs have retained outside experts to evaluate the Verizon cost study, that no one is undertaking the same effort for Sprint's cost study.

Competition is great for customers, but without competitors there to offer those choices, competition is an empty promise. I can tell you what it's like to run a CLEC operation on a day-to-day basis and what the effect of the proposed UNE rates would have on my ability to offer service to customers. Unfortunately, we cannot rely upon other CLECs to spend their money since most of them are bankrupt or in the same boat as KMC. I am here to say that there is no other reasonable alternative but for this Commission to use its vast resources to comprehensively review the cost studies and set prices that will work. You control whether real competition is given the chance envisioned by the 1996 Telecom Act or whether the vast majority of customers will remain hopelessly monopolized.

III. SPRINT AND VERIZON UNE PROPOSALS

Q. HAVE YOU REVIEWED THE COST STUDIES, TESTIMONY, AND EXHIBITS SUBMITTED BY SPRINT AND VERIZON IN THIS PROCEEDING?

A. I have reviewed some of the materials submitted by Sprint and Verizon. Since I am not an economist or cost study expert, I have not examined the cost studies or all of the supporting testimony. However, I have reviewed those Sprint and Verizon exhibits that detail their proposed UNE rates, focusing my review on those UNEs KMC uses or may use. In addition, I have also reviewed the supporting testimony filed by Sprint's witness Mr.

Hunsucker and Verizon's witness Mr. Dennis Trimble.

Q. DO YOU HAVE ANY GENERAL OBSERVATIONS REGARDING THE SPRINT AND VERIZON TESTIMONY THAT YOU HAVE REVIEWED?

A. Yes, I do. In general, if you read just the ILEC testimony, you may conclude that their proposals sound perfectly reasonable. However, the ILEC perspective on how the CLECs operate and use UNEs is incorrect, and the ILEC pricing proposals, if adopted, will make the present bad situation significantly worse.

Q. CAN YOU PLEASE EXPLAIN HOW THE ILEC TESTIMONY IS WRONG?

A. Yes. In general, the ILECs fail to recognize the impact on competition of their ubiquitous local networks, which have been established over many decades at ratepayer expense and in fulfillment of their monopoly obligations to serve everyone. It would be great if the CLECs could instantly replicate the ILEC networks. But this is not the situation today. Rather, we must rely upon investor capital in a very different marketplace without the opportunity for any guaranteed return, and ultimately we must provide our investors with a return on their investment while growing the business. As Mr. Hunsucker acknowledges at pages 6 and 7 of his testimony, "Facility-based entrants are confronted by the formidable hurdle of having to devote substantial capital resources, over an extended period of time, to construct a local network prior

to winning any customers or generating any revenues." This is certainly true.

However, Mr. Hunsucker's remarks over the next two pages, where he discusses the importance of UNE prices being set correctly so that a new entrant will get the right "pricing signal" for the "make or buy" decision in acquiring network facilities, does not reflect how CLEC business decisions are made. The Verizon testimony has similar problems. Moreover, the prices proposed by both Sprint and Verizon will not help promote competitive entry or expansion of competitive options for customers.

Q. HOW DOES THE ILEC TESTIMONY FAIL TO REFECT HOW NEW ENTRANTS MAKE NETWORK DEPLOYMENT DECISIONS?

A. As I said, the ILECs have had many years, under a completely different regulatory structure, to build and deploy their networks. During my tenure with KMC in Tallahassee, I have had to make the tough business decisions regarding the deployment of our network in a manner that gets our foot in the door and gives us the opportunity to be a long-term, viable competitor. It is critical to understand that facilities based competitors today must deploy their networks in phases, and not all at once. In our first phase, we deployed our switch and built the first leg of our SONET backbone. That first leg of our backbone was deployed so that we would connect our switch to the Sprint tandem, key Sprint central offices, other local and long distance competitors' points of presence, and, certainly, major commercial buildings or large users who would benefit from direct fiber connections at the DS-1 or DS-3 levels

and higher.

As we continue to market our services and our reputation within the community becomes established, we continue to build additional segments to reach other parts of the community not served by our existing fiber backbone. In the four years we have been operating in Tallahassee, we have increased our fiber backbone by approximately 20 miles, to its current length of 45 fiber miles. Even with the current national economic downturn, we will still make route expansions when we can ensure reasonable rates of return on our investment. Our experience in the Ft. Myers, Greater Pinellas, and Sarasota markets has been similar.

Once we have fiber deployed, we have the ongoing task of getting customers to connect to our network. As I have already discussed, construction of the necessary laterals from the backbone to specific commercial buildings or single customers is a costly and time consuming undertaking. For example, one major building in downtown Tallahassee denied KMC access to its tenants for several months while negotiating a lengthy and expensive access agreement that would permit us to bring our fiber into the building – requirements rarely imposed upon an ILEC. However, you do not even get to the point of building the lateral to your network for the average customer until you have several customers for whom you can spread out the cost of that lateral. Since you do not solicit customers and keep them unserved in your back pocket until you have enough signed

contracts to then build a lateral, the only choice is to resell the ILEC's service or use UNEs.

Q. HOW REALISTIC IS IT FOR A CLEC TO RESELL AN ILEC'S SERVICES?

A. For a facilities based carrier, the resale of ILEC services is usually a very undesirable alternative since it leaves you totally dependent upon the ILEC. From a business and especially a customer relations standpoint, resale is at most a very short term solution, one that you use only until you can build your network to the customer or you can serve the customer through UNEs.

Q. SO USE OF UNEs IS A GOOD INTERIM STEP?

A. The UNE alterative is not without its difficulties, but they remain a vital component. UNEs certainly give you a much greater degree of control and ability to serve the customer since your own switch provides the dial tone and related services made available to the customer. However, putting aside for a moment the ILEC's prices for UNEs, to use UNEs requires the CLEC to also collocate facilities at one or more ILEC central offices, another cost and hassle to the new entrant. However, being collocated still does not get you to the customer. In our experience, notwithstanding being collocated, we have still been denied the opportunity to serve some customers because of the way the ILEC has deployed digital loop carriers and used fiber distribution instead of copper. In other instances, after we've received a Firm Order Confirmation from the ILEC, we are notified just before the scheduled cut that "No

Facilities" are available. The explanation is that no copper facilities exist from the customer's demarcation point to the KMC collocation point at the DS-0 UNE level. These denials and delays are terribly frustrating to us and especially to our customers who don't want to deal with all of the behind the scenes technical stuff that must be done to institute service. Still, we must have UNEs and the associated collocation in order to provide service. Even with our desire to place customers on our own facilities, we fully understand that approximately 80 percent or more of our revenue for local service will come from our services provided through UNEs.

Q. YOU HAVE SAID THAT THE SPRINT AND VERIZON PRICING PROPOSALS ALSO DO NOT HELP PROMOTE COMPETIVE ENTRY OR EXPANSION OF COMPETITIVE OPTIONS. CAN YOU PLEASE EXPLAIN?

A. The proposed Sprint and Verizon UNE prices for the key UNEs required by KMC have the potential to crush the CLEC industry. These proposed changes can virtually wipe-out all of the gains which we have made and would likely halt all competition. We urge the Commission to follow the recent actions of the New York Public Service Commission which lowered the Verizon UNE loop prices to an average of $11.49, and take a similar bold step here and set UNE prices at a level that makes it economic for us to stay in these Tier III markets where KMC is often the only facilities competitor to the ILEC.

Q. CAN YOU BE MORE SPECIFIC REGARDING THE PRICING PROBLEMS WITH THE ILEC PROPOSALS FOR UNEs?

A. Two of the more important UNEs utilized by KMC are 2 wire loops and DS-1 loops. Let's look at the simple 2 wire loop for a moment.

Sprint is proposing to collapse the existing 6 bands for UNE loops into 3 bands. Sprint's current standard rates for 2 wire analog loops by band are: Band 1, $10.78; Band 2, $15.41; Band 3, $20.54; Band 4, $27.09; Band 5, $39.66; Band 6, $74.05. The Tallahassee Calhoun central office, which generally serves the downtown area, has been in Band 1. The Tallahassee Willis Road central office, serving north of downtown and inside I-10, has been in Band 2. The Tallahassee Blairstone Road central office, serving the southeast side Tallahassee, has been in Band 3. As I said before, KMC is collocated in all three of these central offices.

The effect of moving to three bands would be to nearly double the rate we currently pay for a Band 1 central office. For example, that same 2 wire analog loop would be priced at $21.22 in Band 1, $34.52 in Band 2, and $68.81 in Band 3. All of the central offices in which KMC is collocated would now be under the Band 1 rate, which represents a substantial increase in cost of operation.

Q. HOW DO THE VERIZON UNE PRICES COMPARE?

A. Unlike Sprint, Verizon is recommending a single, non-deaveraged 2 wire UNE loop rate of $26.17. Alternatively, if the Commission were to require

Verizon to deaverage loops, Verizon would propose three pricing bands, which would be: Zone 1, $22.17; Zone 2, $30.91; Zone 3, $77.39. When compared to the KMC interconnection agreement with Verizon, the $26.17 average price looks like a decrease from the contract amount of $33.08. However, because of volume and term commitments, the proposed $26.17 rate would be an increase, with the proposed banded rates representing a larger increase.

Q. HOW DO THESE PRICES COMPARE TO THESE ILECs' RETAIL RATES?

A. The proposed Sprint and Verizon UNE rates are usually higher, and in some cases substantially higher than the retail rates charged for their end user local services. However, it is important to understand that it is not always easy to make meaningful comparisons because of the way the ILECs package and sell their services. For example, KMC lost a customer back to Sprint because Sprint offered a key system with a line charge of only $19.75. Prices at these levels look like a price squeeze when compared to the UNE prices now proposed.

In light of these pricing proposals and our marketplace experience, I find Sprint's actions in this case as an ILEC especially troubling in view of what is going on in the BellSouth phase of this docket. In the BellSouth proceeding, Sprint has advocated for, and benefited from, much lower rates than what Sprint and Verizon are advocating here. Because of the lower

BellSouth UNE rates, we have the situation where Sprint, operating as an ALEC in the BellSouth territory, is in a better position to compete with BellSouth than KMC can compete with Sprint's ILEC operations in Tallahassee or Ft. Myers.

Q. CAN YOU ALSO COMMENT ON THE PROPOSED DS-1 PRICES?

A. At the DS-1 level, the principles remain the same as the DSO level UNE – a substantial cost increase. Current DS-1 UNE prices are as follows: Band 1, $64.79; Band 2, $74.96; and Band 3, $83.83. The proposed pricing by Sprint for the same service would be $206.76. For Verizon, KMC pays rates as low as $160.00. Verizon's proposed price would be $240.52

Provisioning service over DS-1 UNEs is an efficient manner of providing service for both parties. The ILEC simply uses two pairs of copper for the loop, and installs a "smart Jack" at the customer premise. It is our opinion that a UNE DS-1 should generally cost no more than two UNE DS-0s.

Q. ARE THERE ANY OTHER CONSEQUENCES OF THE PROPOSED DS-1 UNE PRICES?

A. If the proposed rates are approved, it would drastically increase the threshold for the minimum number of lines in service that are required to justify the capital necessary to install the channel bank which facilitates the voice service over a DS-1. This is another blatant example of squeezing a competitor from the marketplace.

Q. MR. HUNSUCKER DISCUSSES AT PAGES 12-13 HOW SPRINT'S RETAIL PRICES SHOULD BE IGNORED IN SETTING UNE RATES AND MR. TRIMBLE AT PAGE 6 DISCUSSES HOW UNE RATES AND RETAIL RATES ARE INEXTRIBLY LINKED. DO YOU AGREE?

A. I believe the point of both witnesses is that since local rates are below cost, the Commission should not compare these proposed UNE rates to their retail rates. This attitude reminds me of that scene in the Wizard of Oz where the Great Wizard admonishes Dorothy to "pay no attention to that man behind the curtain!" How can you possibly avoid retail rates when setting wholesale rates?

The issues associated with the levels of local rates are obviously not before this Commission at this time. But the Commission cannot be setting rates in a vacuum. Local rates may need to go up at some time, but the Commission must today recognize that the services the CLECs are selling are competing against the retail services being sold by the ILECs. How are we supposed to sell local service when one of the key components we need costs us more than what Sprint or Verizon are selling the full package of retail services? Keep in mind that the prices I have discussed are just part of the UNE picture. Depending upon the service we are providing, we may be required to purchase additional UNEs, such as NIDs or cross connects, in our collocations costs, or pay high nonrecurring charges which only

further exacerbate the impact of the proposed UNE prices and our ability to compete with ILEC retail prices.

Q. BUT DOESN'T THE FLORIDA PSC HAVE AN OBLIGATION TO SET COST-BASED UNE PRICES?

A. I am no expert on what the 1996 Telecom Act or the FCC rules, and the Commission should certainly follow the requirements of the law. However, I am suggesting that in following the law, the Commission should do three things.

First, in analyzing the cost studies, the Commission will have to make certain assumptions or otherwise exercise its discretion in accepting or rejecting information submitted by Sprint and Verizon. In undertaking your evaluation, all such assumptions should be made in favor of results that promote competition.

Second, you cannot end up with UNE prices that are above ILEC retail rates. I recognize that the Commission may be in a difficult position because of end user rates. But to ignore end user rates in setting UNE rates will result in UNE prices that no CLEC can afford. And if we cannot afford to buy UNEs, you have effectively ended any chance of competition.

Lastly, you should carefully consider the proposed geographic deaveraging for loop prices, and if necessary, adopt more rather than fewer bands. This seems especially true for Sprint where the present 6 band approach results in rates that are at least tolerable Band 1 and Band 2 offices.

Q. DO YOU HAVE ANY OTHER COMMENTS FOR THE COMMISSION REGARDING THE SPRINT AND VERIZON PROPOSED UNE PRICES?

A. While preparing this testimony, I learned that Alltel, a CLEC with which KMC competes in Tallahassee, announced that it was curtailing its CLEC operations in Tallahassee and in several other markets. Alltell's demise cannot be blamed on poor marketing or effort, as KMC certainly felt their competitive presence in Tallahassee. Professionally, they certainly had the technical expertise and financial resources to be a viable provider. Based upon what I have heard and read, it appears that Alltel simply couldn't see the light at the end of the tunnel in regards to profit. Looking at the UNE rates proposed in this proceeding, the road to profitability becomes a brick wall.

Q. CAN YOU PLEASE SUMMARIZE YOUR TESTIMONY?

A. We'd like to be able to provide you with a detailed economic analysis of the Sprint and Verizon UNE proposals, but as a young company KMC simply doesn't have the luxury of unlimited budgets. At this important time in our history, and the history of the telecommunications industry, it is critical that UNE prices for Sprint and Verizon be set at a level that would further competition and not deny us the opportunity to provide competitive choices to customers. In the final analysis, only this Commission has the resources

that can comprehensively evaluate the ILEC UNE proposals. We urge you to conduct this needed evaluation and set new UNE rates that will help give customers a real competitive choice.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

CHAIRMAN JABER: Z-Tel?

MR. McGLOTHLIN: Z-Tel's witness has three testimonies. The first is the revised rebuttal testimony of Dr. George Ford dated January 30th. We request that it be inserted into the record at this point.

CHAIRMAN JABER: The revised rebuttal testimony of George S. Ford shall be inserted into the record as though read.

MR. McGLOTHLIN: Dr. Ford had 11 exhibits attached to the revised rebuttal designated GSF-1 through 11. I'd move those into evidence.

CHAIRMAN JABER: GSF-1 through GSF-11 shall be identified as Composite Exhibit 7. And Composite Exhibit 7 shall be admitted into the record.

(Composite Exhibit 7 marked for identification and admitted into the record.)

MR. McGLOTHLIN: Dr. Ford also submitted surrebuttal testimony on March 18th. I request that it be inserted in the record at this point.

CHAIRMAN JABER: The prefiled surrebuttal testimony of George S. Ford shall be inserted into the record as though read.

MR. McGLOTHLIN: Dr. Ford attached 11 exhibits to the surrebuttal. They are designated with SR. I ask that they be admitted into evidence at this point.

CHAIRMAN JABER: What are the initials, Mr. McGlothlin?

MR. McGLOTHLIN: GSFSR for surrebuttal.

CHAIRMAN JABER: GSFSR-1 through GSFSR-11; is that correct?

MR. McGLOTHLIN: Correct.

CHAIRMAN JABER: Shall be identified as Composite Exhibit 8. And Composite Exhibit 8 is admitted into the record.

(Composite Exhibit 8 marked for identification and admitted into the record.)

MR. McGLOTHLIN: And, finally, Dr. Ford submitted supplemental testimony on March 18th. I request that it be inserted into the record at this point.

CHAIRMAN JABER: The supplemental direct testimony of George S. Ford shall be inserted into the record as though read.

MR. McGLOTHLIN: And attached to the supplemental testimony was a single exhibit designated GSFSR-12. The SR was an unfortunate mistake, but that's the way it appears.

CHAIRMAN JABER: Okay. Exhibit 8 -- I'm sorry. Exhibit 9 is GSFSR-12. And Exhibit 9 is admitted into the record.

(Composite Exhibit 9 marked for identification and admitted into the record.)

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is George S. Ford. I am the Chief Economist for Z-Tel Communications, Incorporated (Z-Tel). My business address is 601 South Harbour Island Boulevard, Suite 220, Tampa, Florida 33602.

Q. BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND RELATED PROFESSIONAL EXPERIENCE.

A. I received a Ph.D. in Economics from Auburn University in 1994. My graduate work focused on the economics of industrial organization and regulation, with course work emphasizing applied price theory and statistics. In 1994, I became an Industry Economist for the Federal Communications Commission's Competition Division. The Competition Division of the FCC was tasked with ensuring that FCC policies were consistent with the goals of promoting competition and deregulation across the communications industries. In 1996, I left the FCC to become a Senior Economist at MCI WorldCom where I was employed for about four years. While at MCI WorldCom, I performed economic studies on a variety of topics related to federal and state regulatory proceedings. In May 2000, I became Z-Tel's Chief Economist.

In addition to my responsibilities at Z-Tel, I maintain an active research agenda on communications issues and have published research papers in a number of academic journals including the Journal of Law and Economics, the Journal of Regulatory Economics, and the Review of Industrial Organization, among others. I am also a co-author of the chapter on local and long distance

competition in the International Handbook of Telecommunications Economics. I often speak at conferences, both at home and abroad, on the economics of telecommunications markets and regulation.

Q. COULD YOU DESCRIBE Z-TEL'S SERVICE OFFERINGS?

A. Z-Tel is a Tampa-based, integrated service provider that presently provides competitive local, long distance, and enhanced services to residential consumers in thirty-five states, including New York, Pennsylvania, Massachusetts, Texas, Michigan, Georgia, Illinois, among others. Z-Tel plans to expand nationally as the unbundled network element platform ("UNE-P") becomes available at TELRIC rates. The company's goal is to offer a competitive service to the residential consumers of every state.

Z-Tel's service is not just a simple bundle of traditional telecommunications services. Z-Tel's service is unique in that it combines its local and long distance telecommunications services with Web-based software. This consideration enables each Z-Tel subscriber to organize his or her communications, including email, voicemail, fax, and even a Personal Digital Assistant ("PDA"), by accessing a personalized web-page via the Internet. In addition, the personal Z-Line number can be programmed to follow the customer anywhere he or she goes, via the "Find Me" feature. Other service features include low long distance rates from home or on-the-road and message notification by phone, email, or pager. Customers can also initiate telephone calls

(including conference calls in the near future) over the traditional phone network, using speed-dial numbers from their address book on their personalized web page.

Q. WHAT INTEREST DOES Z-TEL COMMUNICATIONS HAVE IN THIS PROCEEDING?

A. Z-Tel's service is a bundle of many different communications services including voicemail, email, fax, Internet, PDAs, and local and long distance telecommunications into an easy-to-use communications control center. An important element of that bundle is local exchange telecommunications service. To provide the local exchange portion of its service offering, Z-Tel must purchase unbundled network elements from incumbent local exchange carriers like Verizon and Sprint. At present, Z-Tel's primary means of providing local exchange service provision is UNE-P. Because Z-Tel is dependent upon the local exchange carrier's UNEs to provide service at this time, Z-Tel has a strong interest in ensuring the rates established for UNEs are TELRIC compliant and conducive to competitive entry.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

In my testimony I will address two issues. The first is the cost of capital that should be used for Verizon and Sprint when calculating the costs upon which to base UNE rates. The cost of capital, or weighted average cost of capital ("WACC"), is an important element of the cost studies in that small changes in the WACC can affect materially most UNE rates. I show, based on this Commission's own Order, that the approach of Verizon witness Dennis Vander Weide to the task of quantifying Verizon's cost of capital is lacking. I recommend that, in lieu of his approach, the Commission should instead

update the well reasoned analysis that it adopted in the BellSouth phase of this proceeding.

I then provide a framework that gives guidance on the relative costs of UNE between Verizon-Florida and BellSouth. This analysis shows that the cost of UNEs for Verizon-Florida is slightly less than for BellSouth-Florida. Thus, Verizon's UNE rates should be no more than the UNE rates set in the BellSouth proceeding. While the UNE rates for BellSouth are not yet finalized, a comparison of the rates determined in the BellSouth Cost Order indicates that, not withstanding the assertions of Verizon witnesses Bert Steele and Dennis Trimble, who contend that Verizon's proposed UNE rates meet the TELRIC standard, the values that Verizon proposes for unbundled loops and switching are suspect on their face.

The Weighted Average Cost of Capital

Q: WHY DO YOU CONTEND THAT DR. VANDER WEIDE'S ANALYSIS OF THE COST OF CAPITAL IS LACKING?

A: Dr. Vander Weide's analysis entirely ignores the Commission's recent decision in Phase A of this same proceeding regarding the cost of capital. With respect to the cost of debt, Dr. Vander Weide ignores the impact of short-term debt. The commission found in Phase A of this proceeding that short-term debt is an important element in the determination of the cost of capital. (BellSouth Cost Order, p. 155). Furthermore, in an effort to estimate the forward-looking cost of equity, Dr. Vander Weide performs a discounted cash flow analysis using a large number of firms drawn from a variety of industries that are, in most cases, wholly unrelated to telecommunications. In the Phase A Order, the Commission decisively rejected this approach and concluded that the appropriate group of comparable firms that should be used in such an analysis includes

only the Regional Bell Operating Companies and GTE . ("We agree with witness Hirshleifer's conclusion that the RBHSc and GTE are an appropriate group to consider when deciding the cost of capital for UNEs;" "we find problems with witness Billingsley's comparable group of companies as a proxy for BellSouth's UNE business." BellSouth Cost Order, p. 153, 4). By ignoring short-term debt and employing an analysis rejected by this Commission only a few months ago, Dr. Vander Weide's analysis is not particularly helpful in determining the cost of capital in this phase of the proceeding.

Q: DESCRIBE FURTHER THE RECENT COMMISSION ANALYSIS TO WHICH YOU REFER.

A: In Order No. PSC-01-1181-FOF (990649A-TP, "BellSouth Cost Order"), released in May 2001, this Commission established a forward-looking cost of capital of 10.24%. This cost of capital consisted of a cost of equity of 12.2%, a cost of debt of 7.3%, and a capital structure of 60% equity and 40% debt [0.6·12.2 + 0.4·7.3 = 10.24%]. The cost of equity was determined using the Capital Asset Pricing Model ("CAPM"), whereas the cost of debt was computed as a weighted average of short and long-term debt. The cost of long-term debt was computed by adding a premium to the then current Treasury bond rate. The cost of equity was computed using a risk-free rate of 6.67%, a market risk-premium of 8.35%, and a Beta of 0.66 [6.67 + 0.66(8.35) = 12.2].

Q: WERE THE INPUTS USED TO COMPUTE THE COST OF CAPITAL SPECIFIC TO BELLSOUTH?

A: Only one of the many inputs could be described as BellSouth-specific, but that input has similar values across all the Regional Bell Companies ("RBOCs") -- the Commission

ordered comparable firms. Thus, all of the inputs can be described as applying generally to a provider of unbundled network elements. Because none of the inputs are BellSouth specific, there is no reason to believe that the methodology adopted by this Commission to determine the cost of capital in this case should be any different than that set forth in the BellSouth Cost Order. All that needs to be done here is to update the inputs and re-compute the cost of capital. If the updated estimate of the cost of capital is similar to the 10.24% cost of capital established earlier, then it may be sensible just to apply that same cost of capital in this phase of the proceeding. Consistency has its value. If significant differences in the estimates of cost of capital are observed, either above or below the previously established rate, then the cost of capital should be altered to reflect changes in market conditions that have altered the forward-looking cost of capital.

Q: WAS THE BELLSOUTH COST ORDER CLEAR IN ITS COMPUTATION OF THE WACC?

A: Yes. In the BellSouth Cost Order, the Commission clearly set forth the formula it used to compute the cost of capital. The calculations in my testimony mirror the Commission's formula. In many cases, the inputs used in the Commission's formula were easily replicated.

Q: GENERALLY, WHAT PROCEDURE DOES YOUR ANALYSIS FOLLOW?

A: My approach is straightforward. I attempt simply to replicate the cost of capital calculations from the BellSouth Cost Order using the primary data sources. After replicating the calculations, I then update the inputs with current data. This approach to computing the cost of capital has the benefits both of consistency within this proceeding and a reliance on the Commission's own methods. For the purpose of consistency and conceptual validity, in a very few cases I altered the procedures used to estimate the

inputs. Importantly, these different procedures have no effect on the final rate established in the BellSouth Cost Order. But, these alternative procedures are more easily updated and, I believe, more consistent and theoretically appropriate.

The Cost of Debt

Q: HOW DID THE COMMISSION COMPUTE THE FORWARD-LOOKING COST OF DEBT IN THE BELLSOUTH COST ORDER?

A: The Commission computed the cost of debt using the following formula:

$$C_D = W_S \cdot R_S + (1 - W_S) \cdot [R_F + 0.5 \cdot (P_S + P_L)] \quad (1)$$

where C_D is the cost of debt, W_S is short-term debt as a percentage of total debt, R_S is the short-term cost of debt, R_F is the risk-free rate, P_S is the short-term premium and P_L the long-term premium of the Aaa Public Utility Bonds over the 30-Year Treasury Bond. The term $[0.5 \cdot (P_S + P_L)]$ is the simple average of the short and long-term premiums of Public Utility over Treasury yields. Notably, this formula was a creation of the Commission itself, and not taken directly from the testimony of the parties.

Q: PLEASE DESCRIBE THE INPUTS USED TO COMPUTE THE COST OF DEBT.

A: In the "A" proceeding, the short-term cost of debt (R_S) was set equal to the March-May 2000 average yield on AA-rated Non-Financial Commercial Paper (6.22%).[1] Short-term debt was weighted 17% of total debt. The risk-free rate (R_F) was the March-to-May 2000 average of the 30-year Treasury Bond yield (6.02%). The short-term premium of Corporate over Treasury bonds was computed as the average premium over the March-to-May 2000 period (1.97%), whereas the long-term premium was computed as

the average spread from March 1995 to February 2000 (1.01%). The final cost of debt, therefore, was computed as

$$C_D = 0.17 \cdot 6.22 + 0.83 \cdot [6.02 + 0.5 \cdot (1.97 + 1.01)] = 7.3\%,$$

which was the final value selected in the BellSouth Cost Order.

Q: WERE YOU ABLE TO REPLICATE THE CALCULATIONS FROM THE ORIGINAL DATA SOURCES?

A: Yes. With one exception, I was able to replicate both the inputs and calculations described in the BellSouth Cost Order. One input, the weight for short-term debt, cannot be replicated exactly because it was based on a prospective, unsupported response to discovery by BellSouth.

Q: HAVE YOU UPDATED THE INPUTS FOR THE COMPUTATION OF THE COST OF DEBT?

A: Yes, I have made the exact same computations using the most current data available. The data has been updated with a series ending in December 2001. For example, instead of using the three-month period March-to-May 2000 as in the BellSouth Cost Order, I use the three-month period October-to-December 2001.

Q: WHAT IS THE UPDATED SHORT-TERM DEBT RATE?

A: For the BellSouth Cost Order, the short-term debt rate (R_S) was measured as the average yield on AA-rated 3-Month Commercial Paper (Non-Financial) during the months March-to-May 2000. During that time, the yield was 6.22%. The average yield on AA-

rated 3-month Commercial Paper for the three-month period October-to-December 2001 is 2.01%. Exhibit ___ (GSF-1).

Q: WHAT IS THE UPDATED RISK-FREE RATE?

A: For the BellSouth Cost Order, the risk-free rate R_F was measured as the average yield on the 30-Year Treasury bonds during March-to-May 2000. During that time, the yield was 6.02%. The average yield on the 30-year treasury for the three-month period October-to-December 2001 is 5.31%. Exhibit ___ (GSF-2).

Q: WHAT ARE THE UPDATED YIELD PREMIUMS?

A: For the BellSouth Cost Order, the short-term premium was measured as the average yield spread between Aaa Public Utility bonds and 30-Year Treasury bonds during March-to-May 2000. The long-term premium was measured over the sixty-month period beginning in March 1995 and ending in February 2000. The respective yield premiums were 1.97 and 1.01 during these periods. The updated premiums are 2.17% (P_S) over the three-month period October-to-December 2001, and 1.45% (P_L) over the sixty-month period January 1997 through December 2001. Exhibit ___ (GSF-2). The simple average of the two is 1.81%.

Q: WHAT IS THE UPDATED INPUT FOR SHORT-TERM DEBT AS A PERCENTAGE OF TOTAL DEBT?

A: This input was the most difficult to replicate, because it was based on a prospective, unsupported response to a discovery request and, consequently, does not have a verifiable data source.

Q: WERE YOU ABLE TO EVALUATE, INDIRECTLY, THE ASSUMED PERCENT OF SHORT-TERM DEBT?

A: Yes. Historical data for the RBOCs indicates that Commercial Paper – the relevant yield for short-term debt in Equation (1) -- represents about 20% of total debt and has done so since 1998. No significant trend towards more or less Commercial Paper has been observed in recent years. Though I cannot replicate the 17% assumption adopted in the earlier phase, the lack of a significant trend in the data led me to retain the 17% assumption for short-term debt adopted in BellSouth Cost Order. History, however, indicates that the percent of short-term debt held as Commercial Paper is closer to 20% than 17%. Exhibit ___ (GSF-3).

Q: USING THESE INPUTS AND THE COMMISSION'S FORMULA, WHAT IS THE UPDATED, FORWARD-LOOKING COST OF DEBT?

A: The updated, forward-looking cost of debt is

$$C_D = 0.17 \cdot 2.01 + 0.83 \cdot [5.31 + 0.5 \cdot (2.17 + 1.45)] = 6.25\%.$$

If the weight for short-term debt is set at the historical level of 20%, the cost of debt is 6.10%. Exhibit ____ (GSF-4). Note that the long-term cost of debt is 7.12% [= 5.31 + $0.5 \cdot (2.17 + 1.45)$].

Q: WHY IS THIS VALUE LOWER THAN THE COST OF DEBT ESTABLISHED IN THE BELLSOUTH COST ORDER?

A: The reduction in the forward-looking cost of debt is driven primarily by declines in the cost of short-term debt and the risk-free rate. The marginal effects of the changes to inputs are as follows: 1) the reduction in the short-term debt rate reduced the cost of debt by 72 basis points [= $0.17 \cdot (2.01 - 6.22)$]; 2) the decline in the risk-free rate reduced the

cost of debt by 59 basis points [= 0.83·(5.31 – 6.02)]; and 3) the increase in the yield spreads increased the cost of debt by 27 basis points [= 0.83·(1.81 - 1.49)]. The combination of the three marginal effects is a 104 basis point reduction in the forward-looking cost of debt [= -72 - 59 + 27]. Exhibit ____ (GSF-4).

Q: WHAT COST OF DEBT DO YOU RECOMMEND FOR THIS PHASE OF THE PROCEEDING?

A: Adopting the computations prescribed by the Commission in the earlier phase of this proceeding and updating the inputs, I estimate a forward-looking cost of debt of either 6.10% or 6.25%, depending on the assumption made about the weight of short-term debt. Exhibit ___ (GSF-4).

Q: WHAT COST OF DEBT WAS RECOMMENDED BY DR. VANDER WEIDE?

A: Dr. Vander Weide recommends a copy of debt of 7.55%. This figure is the average yield on Moody's A-rated industrial bonds for March 2001. (Vander Weide, p. 49.) The primary difference between Dr. Vander Weide's cost of debt and the Commission's approach is that Dr. Vander Weide has ignored short-term debt. The updated long-term cost of debt of 7.12% is similar to Dr. Vander Weide's recommendation. Thus, the bulk of the difference in the estimated cost of debt rests between the Commission's approach and Dr. Vander Weide is that Vander Weide disregarded the Commission's Order in Phase A calling for the inclusion of short-term debt.

Cost of Equity

Q: HOW WAS THE COST OF EQUITY DETERMINED IN THE BELLSOUTH COST ORDER?

A: The Commission employed the Capital Asset Pricing Model ("CAPM") to determine the cost of equity. The CAPM is summarized by the following equation

$$C_E = R_F + \beta \cdot (R_M - R_F) \quad (2)$$

$$= R_F + \beta \cdot P_M \quad (3)$$

where C_E is the cost of equity, R_F is the risk-free rate, R_M is the return on a broad portfolio of stocks, P_M is the market risk premium, and β is the firm's "Beta." In its BellSouth Cost Order, the Commission selected a risk-free rate of 6.67, a risk premium of 8.35%, and a Beta of 0.66. These input values render a cost of equity of 12.2%.

Q: DOES THE CAPM PRODUCE FORWARD LOOKING ESTIMATES OF THE COST OF CAPITAL?

A: Yes. Because the method is based on stock market prices, which presumably incorporate investors' expectations of the firm's future earnings, the CAPM is forward-looking.

Q: WHAT WAS THE SOURCE FOR THE INPUTS USED TO COMPUTE THE COST OF EQUITY?

A: The risk-free rate was based on the implied yield for Treasury bond futures in May 2000. The risk-premium was computed as the yield spread on the S & P 500 Composite Index and Aaa Corporate Utility bonds over the period October 1987 to May 2000. The Beta was the levered average Beta for the RBOCs and GTE.

Q: DO YOU BELIEVE THE COMMISSION'S COMPUTATION OF THE COST OF EQUITY WAS REASONABLE?

A: Yes, I believe the use of the CAPM was a sensible and appropriate decision and that the Commission should continue to apply it here. But, while the Commission applied a good

theoretical concept, there were a couple of irregularities in the inputs. Notably, all of these irregularities were based on calculations performed by witnesses and not the Commission itself.

Q: WHAT IRREGULARITIES DID YOU FIND IN THE COMPUTATION OF THE COST OF EQUITY?

A: First, there is a fundamental inconsistency in the computation of the risk-free rate and the market risk premium.

Q: PLEASE DESCRIBE THIS INCONSISTENCY.

A: The Commission adopted a market-risk premium from the testimony of BellSouth witness Randall Billingsley. Dr. Billingsley computed the risk premium as the yield spread between the S&P 500 Composite and Aaa Public Utility Debt. The value of this premium was 15.02% as of May 2000. Dr. Billingsley computed a risk-free rate of 6.67%, which was the implied yield on Treasury Bond futures in May 2000. The difference between the two yields is 8.35%, and this value was the market risk premium used in the BellSouth Cost Order.

Q: WHAT IS WRONG WITH THIS CALCULATION?

A: As portrayed in Equation (2), the market risk premium is computed as the difference between the return on stocks and the risk-free rate ($P_M = R_M - R_F$). Yet, this is not the calculation that was used to determine the market risk premium. The respective yields on Treasury Bonds (or Treasury Bond futures) and Aaa Public Utility debt are clearly not the same. In fact, the Commission used the yield spread of 1.01% between the risk-free Treasury bonds and Aaa Public Utility debt to establish the forward-looking cost of debt. Thus, the market risk premium of 8.35% adopted in the BellSouth Cost Order was

understated by about 101 basis points. The corrected market-risk premium would be about 9.36%.

Q: ARE THERE OTHER PROBLEMS WITH THE COMPUTATION OF THE COST OF EQUITY?

A: Yes. The risk-free rate used for the cost of equity was different than the risk-free rate used for the cost of debt. The risk-free rate is the risk-free rate, and it should not differ among the calculations required to compute the cost of capital.

Q: HOW CAN THIS INCONSISTENCY BE REMEDIED?

A: Fortunately, adjusting the analysis is rather straightforward, requiring only that the risk-free rate be applied consistently across calculations. My testimony follows this consistent approach, adopting the updated risk-free rate of 5.31% and the previous risk-free rate of 6.02% for all computations.

Q: WERE THERE OTHER IRREGULARITIES IN THE COMPUTATION OF THE COST OF EQUITY?

A: Yes. In the BellSouth Cost Order, the Commission used a Beta of 0.66, which was a levered Beta for the Regional Bell Companies and GTE as constructed by AT&T/WorldCom witness John Hirshliefer. The irregularity in this instance is that the Commission staff did not endorse Hirshliefer's leveraging of Betas. BellSouth Cost Order, p. 154. The Commission did observe that the levered 0.66 Beta was reasonably close to BellSouth's unlevered BARRA Beta of 0.65 (in December 1999), and the two Betas were sufficiently close for the Commission to conclude that the levered Beta was not unreasonable.

Q: IS IT POSSIBLE TO ELIMINATE THE USE OF LEVERED BETAS WITHOUT ALTERING THE WACC THE IN BELLSOUTH COST ORDER?

A: Yes. Over the twelve-month period June 1999 to July 2000, or January 2000 through December 2000, the average unlevered Beta for the RBOCs was 0.66. This number coincides with the Beta used in the BellSouth Cost Order. Exhibit ____ (GSF-5).

Q: IF THESE IRREGULARITIES ARE REMEDIED, WHAT EFFECT WOULD THE CHANGES TO A MORE CONSISTENT APPROACH HAVE ON THE COST OF EQUITY IN THE BELLSOUTH COST ORDER?

A: Repairing the problems with the computation of the market risk premium, the risk-free rate, and Beta has no impact on the cost of equity determined in the BellSouth Cost Order. The increased market risk premium combined with the consistent treatment of the risk-free rate across debt and equity calculations produces a cost of equity equal at the time to

$$C_E = 6.02 + 0.66 \cdot (9.36) = 12.2\%.$$

Thus, there would be no difference in the cost of equity established in the BellSouth Cost Order if these irregularities were eliminated. Thus, it seems sensible to move to a more consistent approach. To facilitate this consistent approach, I supply the Commission with all the necessary inputs to make the correct calculations.

Q: HAVE YOU UPDATED THE INPUTS REQUIRED TO COMPUTE THE COST OF EQUITY?

A: Yes. As discussed previously, the risk-free rate has declined from 6.02% to 5.31%. I use this updated risk-free rate to compute the cost of equity. Exhibit ___ (GSF-2). The

procedure I employ to estimate the market-risk premium is simple and transparent. The data is publicly available and available on the Internet. Selecting a method to estimate the market risk premium that is simple, produces results consistent with other more complicated methods, and is easily reproduced has obvious benefits.

Q: HAS THE MARKET PREMIUM CHANGED?

A: Yes. According to my calculations, the market risk premium has declined from 9.39% to 8.34%. Exhibit ___ (GSF-6).

Q: HOW DID YOU COMPUTE THE MARKET RISK PREMIUM?

A: I have recomputed the market risk premium for the 20-year period 1981 through 2000, and 1982 through 2001. The former time period coincides with that used in the BellSouth Cost Order of this proceeding and the resulting market risk premium of 9.39% is nearly identical to the "corrected" risk premium of 9.36% used in the earlier phase. Using arithmetic mean returns, the market risk premium in the later period 8.34%. Thus, the market risk premium has declined, and this lower value is used in my calculation of the cost of equity.

Q: IS HISTORICAL DATA APPROPRIATE FOR MEASURING THE FORWARD-LOOKING MARKET RISK PREMIUM?

A: Yes. The risk premium follows no systematic or predictable pattern. Thus, the best estimate of its future value is the arithmetic average of its historical values.

Q: DO YOU BELIEVE YOUR ESTIMATES OF THE MARKET RISK PREMIUM ARE REASONABLE?

A: My goal is not to argue over the levels previously chosen by this Commission. Rather, my efforts are devoted to the replication of the Commission's methodology and the elimination of any irregularities or inconsistencies in that methodology under the constraint that the remedies to these problems do not, in the end, alter the Commission's earlier decision about the cost of capital. That said, the method used to compute the market risk premium is legitimate. There are many methods to estimate the market risk premium, and just as many estimates of the market risk premium as methods. Professor Aswath Damodaran at the Stern Business School, for example, provides a number of estimates of the market risk premium on his website.[2] Generally, the market risk premiums he estimates are considerably smaller than the values I have recommended here. Dr. Vander Weide proposed a market risk premium of 7.8% in his testimony before this Commission in Docket No. 000824-EI. Testimony of James H. Vander Weide, Docket No. 000824-EI, September 14, 2001, p. 38. I believe my estimate of the market risk premium is conservative.

Q: HAVE YOU UPDATED THE BETA?

A: Yes. Over the twelve-month period January 2001 to December 2001, the average RBOC Beta was 0.58. Exhibit ___ (GSF-5).

Q: WHAT WOULD THE RISK-FREE RATE AND MARKET RISK PREMIUM BE IF YOU ADHERED MORE CLOSELY TO THE APPROACH TAKEN IN THE BELLSOUTH COST ORDER?

A: Mirroring the calculations used in Phase A, the implied yield on Treasury futures in December 2001 is 6.02%. Exhibit ___ (GSF-7) . As just discussed, I calculate a market

[2] http://www.stern.nyu.edu/~adamodar/New_Home_Page/data.html.

risk premium on Treasury Bonds of 8.36%. Subtracting the long-term spread between Aaa Public Utility bonds and Treasuries of 1.45%, the implied market risk premium is 6.89%.

Q: WHAT IS THE UPDATED, FORWARD-LOOKING COST OF EQUITY?

A: In my opinion, the best estimate based on the Commission's methodology is about 10%. Exhibit ___ (GSF-8) summarizes the estimated cost of equity under a variety of input combinations, and all estimates are about 10%.

Q: WHAT ASSUMPTION DID YOU MAKE ABOUT CAPITAL STRUCTURE?

A: As in the BellSouth Cost Order, I use a capital structure of 40% debt and 60% equity. The Commission cited a number of sources for this assumed capital structure, including BellSouth's own assertions about its target capital structure. Staff's 5th Set of Interrogatories, TP-990649A-TP, June 13, 2000, Item No. 49, Page 1 of 1. Because RBOC capital structure is not something that undergoes dramatic changes over short periods of time, I see no obvious reasons for adjusting the capital structure assumed in the BellSouth Cost Order. Indeed, the ratio of RBOC (book) debt to market capitalization has remained relatively stable over the past few years. Current financial statistics indicate that the book capital structure of the RBOCs is about 55% debt and 45% equity, so a 40-60 assumption is well below book values. Exhibit __ (GSF-9).

Q: BASED ON THE UPDATED INPUTS, WHAT IS THE FORWARD-LOOKING COST OF CAPITAL?

A: Following the approach of the BellSouth Cost Order, the forward-looking cost of capital is computed using the following formula:

$= 0.40 \cdot C_D + 0.60 \cdot C_E$.

My estimates of the forward-looking cost of debt are 6.10% and 6.25%. Estimates of the forward-looking cost of equity are about 10.0% to 10.1%. Considering these estimates, the updated, forward-looking cost of capital lies between 8.43% and 8.56%, with a mid-point of about 8.50%. Estimates of the cost of capital using different combinations of the updated inputs are provided are provided in Exhibit ___ (GSF-10).

Q: WHAT COST OF CAPITAL DO YOU RECOMMEND FOR THIS PHASE OF THIS PROCEEDING?

A: Using the Commission's prescribed calculations in the BellSouth Cost Order with updated inputs, the forward-looking cost of capital is about 8.5%.

Q: WHY, USING THE SAME METHODOLOGY AS IN THE BELLSOUTH COST ORDER, IS THE UPDATED COST OF CAPITAL SUBSTANTIALLY LESS THAN THE COST OF CAPITAL ESTABLISHED IN THAT EARLIER ORDED?

A: The current economy is markedly different than the economy in late 1999 and early 2000. The cost of debt has fallen substantially, with the risk-free rate down 71 basis points and commercial paper down about 400 basis points. Further, the market risk premium and perceived risk faced by the RBOCs – as measured by Beta – have both declined.

Q: PLEASE SUMMARIZE YOUR TESTIMONY ON THE COST OF CAPITAL.

A. I have followed the Commission's own formula, detailed in the BellSouth Cost Order, for computing the forward-looking cost of capital. The inputs used for the computations are, in most cases, determined in an identical manner to the BellSouth Cost Order. In some cases differences exist, but in these cases I believe my estimates are an improvement over

those used in the BellSouth Cost Order. Using consistent methods and data sets, reasonable estimates of the updated, forward-looking cost of capital is 8.5%.

Comparative Cost Analysis

Q: THIS COMMISSION IS CURRENTLY COMPLETING PHASE A OF THIS PROCEEDING. IN PHASE A, THE UNE RATES FOR BELLSOUTH-FLORIDA ARE BEING DETERMINED. DO THE RATE PRESCRIPTIONS IN THAT PHASE OF THE PROCEEDING SHED ANY LIGHT ON THE UNE RATES FOR VERIZON-FLORIDA?

A: I believe so. For example, if the costs of serving the Verizon regions of the state are identical to the costs of serving the BellSouth regions, then the UNE rates should be roughly identical between the two carriers. If the costs are higher in one region than the other, the UNE rates should reflect those cost differences. If the Commission adopts the same TELRIC principles in this phase as in the former phase of this proceeding, then my analysis indicates that the UNE rates established for Verizon in this proceeding should be slightly less than the UNE rates set for BellSouth. (In making this statement, I do not imply that I believe BellSouth's current UNE rates are at an appropriate level. In the "A" Phase, I have asserted that an application of the same comparison among states indicates BellSouth's Florida UNE-P loop rate is overstated.)

Q: HOW DID YOU REACH THIS OBSERVATION?

A: I used the FCC's Hybrid Proxy Cost Model ("HCPM") to compare the costs of providing elements between BellSouth-Florida and Verizon-Florida. Evaluating the relative cost of providing UNEs across the BellSouth and Verizon territories in Florida with an independent cost model clearly shows that UNE rates in the BellSouth and Verizon regions should be more alike than different. In fact, the costs of UNEs in the Verizon

region are typically less than the costs in the BellSouth region. While this comparative analysis does not produce specific rates – that is the role of the cost models – it does provide some indication of the TELRIC "zone of reasonableness" and operates as a sanity check on the rates proposed by Verizon.

Q: HOW IS THE HCPM USED TO MAKE SUCH COMPARISONS?

A: The general idea is that the ratio of rates between two carriers within a state, or between carriers across states, should roughly approximate the corresponding ratio of costs. If the costs are identical, the rates should be roughly identical. It is that simple.

Q: HAS THE HCPM BEEN USED TO PERFORM SUCH ANALYSES IN OTHER CONTEXTS?

A: Yes. The FCC has used the approach in numerous 271 Orders, beginning with the Oklahoma-Kansas 271 Order. OK-KS Order, ¶84-5. In that Order, the FCC said:

> Our USF cost model provides a reasonable basis for comparing cost differences between states. We have previously noted that while the USF cost model should not be relied upon to set rates for UNEs, it accurately reflects the relative cost differences among states (emphasis added).[3]

Thus, while the HCPM should not be used to determine the absolute level of the UNE rate, the model is a reliable source of how costs differ across states and, similarly, across carriers within a state. The FCC has since applied this principle in subsequent 271 Orders including Massachusetts, Pennsylvania, and Arkansas and Missouri.

The concept of using the HCPM in the way I have described is a rather general concept, and its use in the 271 proceedings is only one of many applications of this idea. This Commission will have to determine the usefulness of this comparative approach in

the instant proceeding. At a minimum, I believe a comparative analysis using the HCPM provides general guidance on the reasonableness of proposed TELRIC rates – at least relative to the rates established for other carriers or in other states.

Q: FOR WHICH ELEMENTS DO YOU COMPARE COSTS BETWEEN BELLSOUTH-FLORIDA AND VERIZON-FLORIDA?

A: The 2-wire analog loop and unbundled switching, including transport. The details of the relevant computations are provided in Exhibit ___ (GSF-11).

Q: WHAT DOES THE HCPM SAY ABOUT THE RELATIVE COST OF LOOPS BETWEEN BELLSOUTH-FLORIDA AND VERIZON-FLORIDA?

A: The HCPM estimates that the cost of a loop for Verizon-Florida is roughly equal to that for Bellsouth-Florida. The average HCPM loop cost for Verizon-Florida is $17.02, whereas the average HCPM loop cost for BellSouth-Florida is $17.21 – about a 1% difference. Thus, we should expect that the TELRIC rates for loops established in the proceeding should be roughly identical between the two carriers.

Q: WHAT DOES THE HCPM SAY ABOUT THE RELATIVE COST OF SWITCHING BETWEEN BELLSOUTH-FLORIDA AND VERIZON-FLORIDA?

A: As with loops, the costs are roughly identical. The average, per-line monthly switching cost for Verizon is $2.13, whereas the average, per-line monthly switching cost for BellSouth-Florida is $2.33 – about a 9% difference. Again, we should expect that the TELRIC rates established for Verizon-Florida in the proceeding for switching (on a monthly, per-line basis) should be slightly less than BellSouth's UNE switching rates.

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[3] FCC KS-OK 271 Order, ¶ 84.

Q: WILL THE SWITCH PORT AND USAGE RATES BE IDENTICAL BETWEEN BELLSOUTH AND VERIZON?

A: Not necessarily. The rates for the individual elements that make up switching may not be equal, but when taking into account usage characteristics of the customers, the average, per-line monthly element costs for switching – including the port and end-office usage – should be approximately the same for the two carriers. So, when evaluating proposed rates, one must account for usage. The relevant usage data is provided in Exhibit ___(GSF-10).

Q: IN YOUR OPINION, DO THE UNE RATES PROPOSED BY VERIZON REFLECT THE RELATIONSHIPS THAT YOU WOULD EXPECT TO SEE?

A: While BellSouth's UNE rates have not been finalized, I think it is worth noting that Verizon has proposed rates that are substantially higher than the rates set forth in the BellSouth Cost Order. For example, the BellSouth Order sets rates for two-wire analog loops for UNE-Combinations at $14.83, $18.24, and $23.98. Verizon has proposed loops rates of $22.17, $30.91, and $77.39. Obviously, these rates are not even remotely similar. The BellSouth Order also set a fixed rate for switch port features of $3.40. Yet, Verizon proposed to charge $4.20 for nothing more than "three-way calling" ($1.46) and remote call forwarding ($2.74). Computing monthly, per-line switching costs using the minutes in Exhibit __ (GSF-11), the rates in the BellSouth Cost Order produce a monthly cost of 3.23 whereas Verizon has proposed to charge 7.27. Verizon's proposed rates, therefore, do not satisfy a comparative cost analysis.

Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes.

Q: PLEASE STATE YOUR NAME AND ADDRESS.

A: My name is George S. Ford. My business address is 601 South Harbour Island Boulevard, Suite 220, Tampa, Florida 33602.

Q: HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A: Yes. I filed revised testimony on January 30, 2002.

Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A: The purpose of my testimony is to respond to the cost of capital testimony filed by Commission Staff Witness David Draper.

Q: PLEASE SUMMARIZE THE RECOMMENDATIONS OF MR. DRAPER AS CONTAINED IN HIS REBUTTAL TESTIMONY.

A: Mr. Draper recommends a cost of capital of 9.67% for Verizon and 9.90% for Sprint. These estimates are based on a cost of equity of 11.30% and a cost of debt of 7.22% for Verizon. For Sprint, the cost of equity was estimated to be 11.55% and the cost of debt 7.43%. Mr. Draper assumes a capital structure of 40% debt and 60% equity.

Q: DO YOU AGREE WITH MR. DRAPER'S ANALYSES AND RECOMMENDATIONS REGARDING THE COST OF CAPITAL?

A: No. First, in my testimony I advocated that the Commission apply in this phase of the UNE investigation the same short-term/long-term yield spread and CAPM approach that it applied to BellSouth a few months ago. By relying only on long-term yield spreads to determine the cost of debt and, in part, on a DCF model to determine the cost

of equity, Mr. Draper departs from that approach. Even if the Commission entertains his methodology, Mr. Draper's analysis is flawed in a number of ways. I address three primary flaws in my testimony. First, Mr. Draper's estimates of the cost of equity are based on an application of the two-stage discounted cash flow ("DCF") model financial model that conflicts with the theory underlying the methodology. Second, Mr. Draper employs an inappropriate set of comparable firms to estimate the cost of equity. Third, I believe Mr. Draper has substantially overstated the cost of short-term debt, thus inflating the cost of debt. In nearly every case, Mr. Draper's flaws not only violate financial theory and practice, but also directly contradict the Commission's decision in the BellSouth Cost Order.

Q: DO YOU PROPOSE REMEDIES TO THE FLAWS MADE BY MR. DRAPER?

A: Yes. In my testimony, I will describe my concerns with Mr. Draper's analysis in detail and will propose alternative assumptions and methodologies. My suggested adjustments to Mr. Draper's analyses are consistent with Commission precedent and standard financial theory and practice, and tied to Mr. Draper's general proposals.

Q: ARE THERE ANY FUNDAMENTAL DIFFERENCES BETWEEN MR. DRAPER'S INTERPRETATION OF THE FORWARD-LOOKING COST OF CAPITAL AND YOUR OWN?

A: Yes. In my Rebuttal Testimony, I did not differentiate between the forward-looking cost of capital for UNEs that should apply to Verizon and Sprint. Conceptually, I believe the forward-looking cost of capital for UNEs should not vary by firm. This view is generally supported by this Commission's Order in the BellSouth Phase, where the Commission

was "deciding the cost of capital for UNEs," and not for BellSouth. BellSouth Cost Order, p. 153. Nevertheless, in the final analysis, the differences proposed by Witness Draper are sufficiently small that dwelling on the issue is perhaps unwarranted. To avoid having my testimony evaluated primarily on this particular dispute, and to focus on the need to adjust Mr. Draper's analyses, my response to Mr. Draper's testimony will adhere to his view that the cost of capital should differ between Verizon and Sprint. If the Commission wishes to homogenize the cost of capital across firms, then the detail provided in my testimony and exhibits provides that flexibility.

Q: HOW HAVE YOU ORGANIZED YOUR TESTIMONY?

A: First, I will point out several shortcomings in Mr. Draper's methods and assumptions. As I do so, I provide simple remedies to these shortcomings. Sequentially, my testimony first addresses Mr. Draper's estimates of the cost of debt and then the cost of equity. To close, I provide an updated estimate of the forward-looking weighted average cost of capital that corresponds to Mr. Draper's approach, once my correcting adjustments have been incorporated.

The Cost of Debt

Q: HOW DOES MR. DRAPER ESTIMATE THE LONG-TERM COST OF DEBT FOR VERIZON AND SPRINT?

A: According to Mr. Draper, Verizon and Sprint have public utility debt ratings of "A" and "BBB." Mr. Draper employs the 10-year treasury as his measure of the risk-free rate when computing the cost of debt. Mr. Draper then computes an average yield spread

between the relevant utility bond and the risk-free security. This yield is then added to the expected risk-free rate to produce an estimate of the long-term cost of debt.

Q: DOES THIS APPROACH DIFFER FROM THE APPROACH TAKEN IN YOUR REBUTTAL TESTIMONY?

A: Yes. In my Rebuttal Testimony, I used the yields on AAA Public Utility bonds and the 30-Year Treasury bond to estimate the long-term cost of debt. My estimates of the long-term cost of debt followed exactly the yield-spread approach created by this Commission and described in the BellSouth Cost Order. This approach uses the average of long-term and short-term yield spreads to estimate the cost of debt. The details are described in my Rebuttal Testimony and the BellSouth Cost Order. Mr. Draper does not employ this approach. He ignores the short-term yield spread in his analysis, thereby ignoring the Commission's finding that consideration of both the short-term and long-term yield spread is "appropriate ... because it allows some weight to the longer term development of the spread and allows for the recent increases in the spread." BellSouth Cost Order, p. 155.

Q: CAN MR. DRAPER'S ESTIMATION PROCEDURES AND YOUR OWN BE RECONCILED?

A: Yes, quite easily. I recommend that the Commission adhere to the estimation procedures employed in the previous phase of this proceeding, as detailed in the BellSouth Cost Order and in my Rebuttal Testimony. Since we can duplicate the calculations from the earlier phase without any difficulty, it seems sensible to do so for the sake of consistency and comparability. Further, this approach is preferable given that this Commission

made an affirmative finding for the use of the short/long-term average spread approach in its BellSouth Cost Order.

Q: SYNTHESIZING MR. DRAPER'S METHODS AND THOSE OF THE BELLSOUTH COST ORDER, WHAT IS THE ESTIMATE FOR VERIZON'S LONG-TERM COST OF DEBT?

A: This synthesis estimate of the long-term cost of debt for Verizon assumes the risk-free rate is measured by the 10-Year Treasury bond and the relevant yield for Verizon is A-rated utility bonds, as assumed by Mr. Draper. Computing the cost of long-term debt using these assumptions and exactly the same methodology found in the BellSouth Cost Order, the long-term cost of debt for Verizon equals

$$4.77 + 0.5(2.91 + 1.99) = 7.22\%.$$

This cost of debt is computed by adding the average of the short-term yield spread (291 basis points) and the long-term yield spread (199 basis points) to the risk-free rate (4.77%). Exhibit GSF-SR1 and Exhibit GSF-SR11.

Q: USING THIS SAME SYNTHESIS APPROACH, WHAT DO YOU BELIEVE IS A REASONABLE PROXY FOR SPRINT'S LONG-TERM COST OF DEBT?

A: For Sprint, Mr. Draper employs the yield on BBB utility bonds as the relevant proxy. Again, using the same calculations set forth in the BellSouth Cost Order, but computing the cost of debt using the 10-Year Treasury and the yield on BBB utility bond (or equivalently Moody's Baa-rating), I compute a long-term cost of debt for Sprint of

$$4.77 + 0.5(3.31 + 2.24) = 7.55\%.$$

This cost of debt is computed by adding the average of the short-term yield spread (331 basis points) and the long-term yield spread (224 basis points) to the risk-free rate (4.77%). Exhibit GSF-SR1 and Exhibit GSF-SR11.

Q: DO THESE CALCULATIONS FOLLOW EXACTLY THE ESTIMATION PROCEDURE EMPLOYED IN THE BELLSOUTH COST ORDER?

A: Yes. These estimates are based on an algorithm identical to that prescribed by this Commission in the earlier phase of this proceeding.

Q: DOES MR. DRAPER CONSIDER SHORT-TERM DEBT IN HIS ESTIMATION OF THE COST OF DEBT?

A: Yes. Consistent with the BellSouth Cost Order, Mr. Draper has included an analysis of short-term debt.

Q: WHAT DOES MR. DRAPER USE AS A PROXY FOR SHORT-TERM DEBT?

A: Mr. Draper uses the prime rate as a proxy for the cost of short-term debt, and selects a cost of short-term debt of 5.36%.

Q: IN YOUR REBUTTAL TESTIMONY, DID YOU USE THE PRIME RATE AS THE PROXY FOR THE COST OF SHORT-TERM DEBT?

A: No. As in the BellSouth Cost Order, I used the cost of commercial paper (3-month, AA Non-Financial) as the proxy for the cost of short-term debt.

Q: DO YOU BELIEVE THE PRIME-RATE IS AN APPROPRIATE PROXY FOR THE SHORT-TERM COST OF DEBT?

A: No. Local exchange carriers, including Verizon and Sprint, do borrow short-term funds from banks. However, such loans make up a very small portion of short-term debt. For example, only about 3% of Verizon's short-term debt and 17% of Sprint's short-term debt is "bank loans," the rest being commercial paper. Likewise, commercial paper makes up over 80% of BellSouth and SBC's short-term debt. Obviously, commercial paper is by far a more substantial component of short-term debt for the local exchange carriers. Exhibit GSF-SR2.

Q: ON AVERAGE, WHAT PERCENT OF SHORT-TERM DEBT IS COMMERCIAL PAPER FOR THE REGIONAL BELL COMPANIES AND SPRINT?

A: In year 2000, commercial paper accounted for 84% of short-term debt. Bank loans made up the remaining 16% of short-term debt.

Q: WHAT IS THE HISTORICAL RELATIONSHIP BETWEEN THE INTEREST RATES ON COMMERCIAL PAPER AND THE PRIME RATE?

A: Historically, the prime rate has been about 300 basis points higher than the commercial paper rate. Exhibit GSF-SR1. Given that commercial paper is by far the most important component of short-term debt, the prime rate *alone* is not a reliable proxy for the cost of short-term debt. Indeed, the prime rate substantially overstates the average cost of short-term debt.

Q: ALTHOUGH THE PRIME RATE IS NOT A REASONABLE PROXY FOR THE AVERAGE COST OF SHORT-TERM DEBT, IS THE PRIME RATE A REASONABLE PROXY FOR THE COST OF SHORT-TERM BANK LOANS?

A: Yes. In the final quarter of year 2000, the average prime rate was 9.5%. Exhibit GSF-SR1. In its Year 2000 10-K, Bellsouth reports an average bank loan rate of 9.6%. Exhibit GSF-SR2. The similarity between the reported rate by BellSouth and the average during the same time-period indicates that the prime rate is a reasonable proxy for the cost of bank loans. Neither Verizon nor SBC provide an estimate of the rate for bank loans. Note that in its Year 2000 10-K, Sprint reports an average rate for bank loans of 7.1%. Exhibit GSF-SR2. Thus, the prime rate overstates the bank rate paid by Sprint by more than 200 basis points.

Q: IS AA NON-FINANCIAL COMMERCIAL PAPER A REASONABLE PROXY FOR COMMERCIAL PAPER RATES PAID BY THE REGIONAL BELL COMPANIES?

A: Yes. The average commercial paper rate for the last quarter of Year 2000 was 6.5%. Exhibit GSF-SR1. Verizon reports in its Year 2000 10-K that its short-term cost of debt -- of which 97% is commercial paper -- was 6.5%. The same is true for BellSouth and SBC, both reporting an average commercial paper rate of 6.5% in year 2000. Exhibit GSF-SR2. Thus, AA-rated non-financial commercial paper is a reasonable proxy for the cost of short-term debt borrowed as commercial paper.

Q: DOES SPRINT REPORT A RATE FOR COMMERCIAL PAPER IN ITS FINANCIAL DOCUMENTS?

A: Sprint reported an average commercial paper rate of 7.5% in Year 2000 – about 100 basis points higher than Verizon and BellSouth. Exhibit GSF-SR2.

Q: HOW WAS THE SHORT-TERM COST OF DEBT DETERMINED IN THE BELLSOUTH COST ORDER?

A: The rate for AA Non-financial commercial paper was the proxy for short-term debt costs in the BellSouth Cost Order. Given that the vast majority of short-term debt is commercial paper, commercial paper is a very reasonable proxy for the cost of short-term debt.

Q: WHAT DO YOU BELIEVE IS THE MOST REASONABLE PROXY FOR THE COST OF SHORT-TERM DEBT?

A: Consistency with the previous phase of this proceeding prescribes the Commission use the yield on commercial paper. That said, bank loans are part of short-term debt, albeit a much smaller part than commercial paper. Thus, including bank loans in the estimation of short-term debt is perhaps reasonable. Using bank loans to proxy the cost of all short-term debt, however, is counterfactual.

Q: WHAT IS REQUIRED TO INCORPORATE BANK LOANS INTO THE COST OF SHORT-TERM DEBT?

A: Incorporating bank loans into the estimate of short-term debt is rather straightforward. Bank-loans, on average, account for about 16% of short-term debt for the Regional Bell Companies (BellSouth, Verizon, and SBC) and Sprint. Exhibit GSF-SR2. Thus, a weighted average of the commercial paper and prime rates, using weights 0.84 and 0.16 for commercial paper and bank loans, is a reasonable approach.

Q: USING THESE WEIGHTS, WHAT IS THE COST OF SHORT-TERM DEBT FOR VERIZON?

A: Year-end yields on commercial paper and bank loans were 2.01% and 5.16%. Using weights of 84% commercial paper and 16% bank loans, the a weighted average cost of short-term debt is 2.51% for Verizon-Florida. Exhibit GSF-SR1.

Q: WHAT IS THE COST OF SHORT-TERM DEBT FOR SPRINT?

A: Adjusting the commercial paper up by 100 basis points and the prime rate down by 200 basis points, Sprint's weighted average cost of short-term debt is 3.03%

Q: HAVE SHORT-TERM YIELDS INCREASED SINCE THE END OF THE YEAR 2001?

A: No. The three-month average yields on commercial paper and bank loans ending February 2002 are 1.76% and 4.78%.[1] So, short-term interest rates have declined since the end of the year. Thus, these estimates based on earlier data are conservative.

Q: MR. DRAPER ASSUMES THAT 25% OF TOTAL DEBT IS SHORT-TERM AND 75% IS LONG-TERM DEBT. DO YOU CONCUR WITH HIS RECOMMENDATION?

A: In my Rebuttal Testimony, I provided evidence that, on average, the Bell Companies had about 20% of total debt in the form of commercial paper. If bank loans are included, short-term debt amounts to about 27% of total debt in year 2000, or about 23% over the years 1998 to 2000. Thus, if we include bank loans in short-term debt, then the 25-75 split between short- and long-term debt is reasonable.

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[1] For December 2001, January 2002, and February 2002, the average yields for AA Non-Financial Commercial Paper (Prime Rate) were 1.78 (4.84), 1.70 (4.75), 1.79 (4.75), respectively.

Source: http://www.stls.frb.org/fred/data/irates.html.

Q: CONSIDERING THE CHANGES TO THE CALCULATIONS JUST DISCUSSED, WHAT ARE THE SYNTHESIS ESTIMATES OF THE COST OF DEBT FOR PROVIDING UNES BY VERIZON AND SPRINT?

For Verizon, the forward-looking cost of debt for UNEs is

$$0.25 \cdot 2.51 + 0.75 \cdot 7.22 = 6.04\%,$$

and for Sprint the forward-looking cost of debt for UNEs is

$$0.25 \cdot 3.02 + 0.75 \cdot 7.55 = 6.42\%.$$

According to this estimation method, Sprint's cost of debt exceeds Verizon's by about 38 basis points.

Q: HOW DO YOUR ESTIMATES OF THE COST OF DEBT COMPARE TO THAT ESTABLISHED IN THE BELLSOUTH COST ORDER?

A: In the Bellsouth Cost Order, the established cost of debt was 7.3%. This cost of debt was based on yield data from the first half of year 2000. Since that time, the 10-Year Treasury yield has fallen by about 150 basis points, commercial paper costs have fallen by over 400 basis points, the prime rate has fallen by nearly 390 basis points, A-rated utility bond yields are down 75 basis points, and Baa-rated utility bond yields are down nearly 50 basis points. Exhibit GSF-SR1. In light of these dramatic reductions in debt costs, it is not difficult to see why the cost of debt is less now than in period relevant for the BellSouth phase.

Q: ACCORDING TO YOUR TESTIMONY, THE RISK-FREE RATE HAS FALLEN SUBSTANTIALLY. IS THE RISK-FREE RATE SIGNIFICANTLY OFF ITS HISTORICAL TREND?

A: No. For either the 6-month or 12-month periods ending December 2001, the risk-free rate has not deviated significantly from its 20-year trend.

Q: HOW DID YOU TEST FOR CHANGES IN THE TREND?

A: Using time-series of the 10-Year Treasury rate, I tested for a change in intercept or slope for the series trend using a least-squares regression. By using a dummy variable to indicate either the last 6 or 12 months of the series, a fully interactive, least-squares regression can detect a statistically significant change in either the intercept or slope of the trend. I find no statistically significant change in the trend for either period. Exhibit GSF-SR3.

Q: DO ANY OF YOUR PROPOSALS CONTRADICT, IN ANY WAY, WHAT THIS COMMISSION DECIDED IN THE BELLSOUTH COST ORDER?

A: No. All of my computations are consistent with those set forth in the BellSouth Cost Order, but I use Mr. Draper's assumptions about the risk-free rate and the relevant bond yields for Verizon and Sprint. I also incorporate the higher cost of bank loans into the estimate of short-term debt, as proposed by Mr. Draper.

Cost of Equity

Q: HAVE YOU REVIEWED MR. DRAPER'S ESTIMATION OF THE COST OF EQUITY?

A: Yes.

Q: WHAT METHODS DID MR. DRAPER USE TO ESTIMATE OF THE COST OF EQUITY?

A: Mr. Draper employs two methods: 1) a two-stage discounted cash flow ("DCF") model and 2) the capital asset pricing model ("CAPM").

Q: WHAT CONCLUSIONS DOES MR. DRAPER DRAW FROM HIS DCF ANALYSIS?

A: Mr. Draper estimates a cost of equity equal to 11.45% using the two-stage DCF model and 11.13% using the CAPM.

Q: LET'S ADDRESS EACH MODEL IN TURN. DO YOU AGREE WITH MR. DRAPER'S COMPUTATIONS IN HIS DCF ANALYSIS?

A: Unfortunately, Mr. Draper's application of the two-stage DCF model is flawed. The fundamental error in Mr. Draper's DCF model causes his estimated cost of equity to be severely skewed upward.

Q: HOW IS MR. DRAPER'S DCF ANALYSIS FLAWED?

A: The benefit of the two-stage over the constant growth version of the DCF model is that the two-stage model allows for two stages of growth: "an initial phase in which the growth rate is high and a subsequent steady state in which the growth rate is stable and is expected to remain so for the long term."[2] Or, as Mr. Draper puts it, the second stage is a "period of sustainable growth." Draper Rebuttal, p. 7. The second phase of stable growth is required so that the firm does not grow indefinitely at a high growth rate, eventually becoming as large as the economy. The first problem with Mr. Draper's two-stage model is that the growth rate in stage two (10.33%) exceeds the growth rate in

[2] Aswath Damodaran, *Damodaran on Valuation*, John Wiley and Sons, Inc.: New York (1994), p. 105.

stage one (3.3%). Thus, Mr. Draper's analysis is entirely at odds with the underlying theory of the two-stage model.

Q: IS IT NOT POSSIBLE FOR A FIRM TO GROW SLOWLY IN THE NEAR TERM, THEN HAVE HIGHER GROWTH IN THE LONGER TERM?

A: Yes. But in that scenario – with Mr. Draper's assumed growth rates -- you would need a three-stage growth model. The issue is not only that Mr. Draper has inverted the growth rates, but that the long-term growth rate substantially exceeds a sustainable long-term growth rate for a firm.

Q: WHY DO BELIEVE MR. DRAPER'S LONG-TERM GROWTH RATE IS TOO HIGH?

A: General financial practice holds that the long-term sustainable growth rate cannot exceed the growth rate of the economy, or at least exceed it by much. As observed by Professor Aswath Damodaran,

> [i]n practical terms, the stable growth rate cannot be larger than the nominal (real) growth rate in the economy in which the firm operates .... Damodaran on Valuation, p. 100.

This restriction on the growth rate is not entirely rigid, as Professor Damodaran observes,

> ... an analyst may be able to stray from a strict limit imposed on the stable growth rate. If a firm is likely to maintain a few years of above-stable growth rates, an approximate value for the firm can be obtained by adding a premium to the stable growth rate, to reflect the above-average growth in the initial years. Even in this case, the flexibility that that analyst has is limited. The sensitivity of the model to growth implies that the stable growth rate cannot be more than 1% or 2% above the growth rate in the economy. If the deviation becomes larger, the analyst will be better served by using a two-stage or three-stage model to capture the supernormal or above-average growth and restricting the use of

> the [constant growth DCF model] to when the firm becomes truly stable. Damodaran on Valuation, p. 101.

Over the past ten years, nominal gross domestic product ("GDP") has grown an average of 5.4%. Exhibit GSF-SR5. Even if we add a growth premium as high as 2% to the 5.4% growth rate of the economy, the long-term growth rate cannot exceed 7.4%. Thus, Mr. Draper's assumed long-term growth rate of 10.3% is well outside the bounds of a reasonable long-term, sustainable growth rate.

Q: DID THIS ISSUE REGARDING LONG-TERM GROWTH RATES ARISE IN THE BELLSOUTH PHASE OF THIS PROCEEDING?

A: Yes. The Commission recognized the problem with high long-term growth rates in the BellSouth Cost Order,

> ... we find some merit in AT&T witness Hirshleifer's suggestion that companies cannot sustain high growth rates indefinitely. According to an article provided by witness Hirshleifer, a firm growing at 12% in an economy growing at 6% will eventually become larger than the economy. We believe this example has some application in this instance .... BellSouth Cost Order, p. 153.

Just like the example cited by Commission in the BellSouth Cost Order (i.e., 12%/6%), Mr. Draper's assumed long-term growth rate is about twice as high as the long-term growth rate in the economy (i.e., 10.3%/5.4%) and, consequently, should be rejected as a reasonable proxy for long-term growth. Later in my testimony, I employ the DCF model with more reasonable estimates of long-term growth.

Q: WHAT OTHER CONCERNS DO YOU HAVE WITH MR. DRAPER'S DCF ANALYSIS?

A: Mr. Draper's comparable firms conflict directly with the Commission's decision in the earlier phase of this proceeding. Exhibit GSF-SR4.

Q: IN WHAT WAY DO THE COMPARABLE FIRMS SELECTED BY MR. DRAPER CONFLICT WITH THE COMMISSION'S EARLIER DECISION?

A: In its BellSouth Cost Order, the Commission concluded "the [Regional Bell Holding Companies] and GTE are an appropriate group to consider when deciding the cost of capital for UNEs." BellSouth Cost Order p. 153. Observe that the Commission is "deciding the cost of capital for UNEs," and not just Bellsouth. Furthermore, of Mr. Draper's seven comparables, only two are consistent with the comparables prescribed by this Commission in the BellSouth Cost Order. Exhibit GSF-SR4.

Q: DOES MR. DRAPER INCLUDE THE REGIONAL BELL COMPANIES, OR WHAT IS LEFT OF THEM, IN HIS GROUP OF COMPARABLE FIRMS?

A: No. Mr. Draper includes BellSouth and Verizon in his DCF analysis, but excludes Verizon from his CAPM analysis. SBC is excluded in both the DCF and CAPM analysis.

Q: DID YOU INCLUDE QWEST AS A COMPARABLE IN THE ANALYSES PRESENTED IN YOUR REBUTTAL TESTIMONY?

A: For two reasons, Qwest was excluded from my list of comparables. First, and perhaps most importantly, Qwest was not included in the list of "[Regional Bell Holding Companies" in the BellSouth Cost Order. BellSouth Cost Order, p. 153. Consistency with that Order, therefore, requires that Qwest be excluded in this case as well. It is difficult to imagine why Qwest is a valid comparable for Verizon, but not for BellSouth. Second, while Qwest did acquire the Regional Bell Company US West, the "merged" Qwest is clearly different from the Regional Bell Companies. Consequently, I do not believe it is

appropriate to include Qwest as a reasonable comparable for deciding the cost of capital for UNEs.

Q: HOW IS QUEST "CLEARLY DIFFERENT" FROM THE REGIONAL BELL COMPANIES?

A: Consider the important financial characteristics of Qwest relative to the Regional Bell Companies. Currently, Qwest has a Beta of 1.42, whereas BellSouth, Verizon, and SBC have Betas of 0.40, 0.51, and 0.48. Thus, Qwest's stock is about three-times as variable as, or has three-times the business risk of, the Regional Bell Companies. US West, however, had one of the lowest Betas of the Regional Bell Companies. Exhibit GSF-SR6. Also, consider analysts expectations of long-term growth for the Bell Companies. While earnings for BellSouth, Verizon, and SBC are all expected to grow at about 8%, Qwest has an expected growth rate of nearly 16%. These averages do not tell the whole story, however. The upper range of earnings growth for BellSouth, Verizon, and SBC is about 15%, whereas for Qwest the higher estimates of growth exceed 40%. At the lower end of the estimates, some analysts expect negative 15% growth by Qwest. The other Regional Bell Companies all have minimum growth expectations of about 4%. Finally, Qwest has a bond rating that is nearly "junk bond" status.[3] Clearly, Qwest does not fit very well into a group of the Regional Bell Companies.

Q: ARE THERE OTHER REASONS TO QUESTION MR. DRAPER'S SELECTION OF COMPARABLES?

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[3] Telecommunications Reports Daily, March 5, 2002.

A: Yes. In the BellSouth Cost Order, the Commission rejected a number of proposed comparable firms because the companies did not receive "revenue for the provision of unbundled network elements." BellSouth Cost Order, p. 153. Three of Mr. Draper's seven comparables do not receive revenue for the provision of unbundled network elements: AT&T, CenturyTel, and Telephone & Data Systems ("TDS"). Additionally, the Commission also concluded that the "provision of local exchange service" was an important criterion to be selected as a comparable. BellSouth Cost Order, p. 153. AT&T is not primarily a local exchange carrier, and TDS receives only about 25% of its revenue from local exchange services with the rest coming from its wireless operations.

Q: CENTURYTEL IS ONE OF MR. DRAPER'S COMPARABLES, AND THE COMPANY RECEIVES MOST OF ITS REVENUE FROM LOCAL EXCHANGE SERVICES. SHOULD IT BE INCLUDED IN THE LIST OF COMPARABLE FIRMS?

A: Including CenturyTel as a comparable in this phase of the proceeding would be inappropriate, given that CenturyTel receives no revenue from the sale of UNEs and was *excluded specifically* as a relevant comparable when deciding the cost of capital for UNEs in the BellSouth phase.

Q: IN WHAT WAY WAS CENTURYTEL EXCLUDED AS A COMPARABLE IN THE BELLSOUTH PHASE?

A: The Beta used in the BellSouth Cost Order was provided by Witness Hirshleifer. While CenturyTel was included in Witness Hirshleifer's original set of comparables, in the final decision the Commission limited the comparables to the Regional Bell Companies and GTE - specifically excluding CenturyTel. Exhibit GSF-SR4. As just stated, Qwest

was also absent from the list of comparables in Witness Hirshleifer's testimony. Thus, both CenturyTel and Qwest were excluded from the relevant list of comparables "when deciding the cost of capital for UNEs" in the earlier phase of this proceeding.

Q: WHAT GROUP OF COMPARABLE FIRMS DO YOU RECOMMEND?

A: Since we are deciding the "cost of capital for UNEs" in this phase as in the earlier phase of this proceeding, it seems sensible to apply the same standards now as applied in that earlier phase. In other words, the appropriate set of comparable firms is the Regional Bell Companies.

Q: SHOULD SPRINT BE INCLUDED AS A COMPARABLE?

A: Sprint is perhaps a reasonable substitute for GTE, the latter of which was eliminated from the list of comparables due to its merger with Bell Atlantic. Sprint is a local exchange carrier and sells unbundled elements. Including Sprint brings the set of comparables back to four firms, as was the case in the BellSouth Cost Order.

Q: WHAT FIRMS ARE IN YOUR FINAL SET OF COMPARABLE FIRMS?

A: There are four firms in my final set of comparables: BellSouth, Verizon, SBC, and Sprint. Given that the inclusion of Sprint is questionable, I provide cost of equity estimates that do and do not include Sprint as a comparable.

Q: ACCORDING TO YOUR TESTIMONY THUS FAR, YOU BELIEVE MR. DRAPER USES THE WRONG COMPARABLES, OVERSTATES THE LONG-TERM GROWTH RATE, AND INVERTS THE GROWTH-RATES FOR THE HIGH AND LOW-GROWTH PERIODS. WITH YOUR CHOSEN SET OF COMPARABLE FIRMS, IS IT

POSSIBLE TO ESTIMATE A DCF MODEL THAT ADJUSTS FOR THESE SHORTCOMINGS?

A: Yes. I have estimated a constant growth and a two-stage DCF model for the correct set of comparable firms using theoretically valid methods and assumptions. The relevant inputs for the procedure are provided in Exhibit GSF-SR7.

Q: WHAT ARE THE RELEVANT INPUTS FOR THE DCF ANALYSIS?

A: The constant growth DCF model is summarized by the equation

$$C_E = D\cdot(1 + g)/P(1 - F) + g$$

where C_E is the cost of equity, D is the current (or last) dividend, P_0 is the current price, F are flotation costs expressed as a percentage of price, and g is the sustainable, long-term growth rate. The long-term growth rate is approximated by the long-term, nominal growth in the economy. The only additional input required for the two-stage model is the growth rate for the high-growth period, because the long-term growth rate from the constant growth version of the model (g) also serves as the long-term growth rate in the two-stage model.

Q: WHAT MODIFIED ASSUMPTION HAVE YOU USED FOR THE LONG-TERM, SUSTAINABLE GROWTH RATE?

A: As mentioned earlier, the economy has grown at a nominal rate of 5.4% over the past 10 years, and this growth rate is my chosen proxy for long-term growth Cost of equity estimates are also provided for long-term growth rates of 6.4% (+ 1%) and 7.4% (+2%).

Q: HOW DID YOU ESTIMATE THE GROWTH RATE FOR THE HIGH-GROWTH PERIOD?

A: Consensus estimates of EPS (earnings per share) are used to proxy the growth rate during the high-growth period. In Exhibit GSF-SR7, consensus estimates from four different sources are provided. These estimates are typically five-year forecasts, so I use a five year, two-stage DCF model whereas Mr. Draper used a four-year model.

Q: WHAT IS THE AVERAGE GROWTH RATE FROM THE CONSENSUS ESTIMATES?

A: The consensus estimate of earnings growth for my comparables is about 8%. Exhibit GSF-SR7. I provide estimates based on each individual estimate of long-term EPS growth, as well as the average of the estimates.

Q: WHAT VALUES DO YOU USE FOR THE OTHER RELEVANT INPUTS OF THE ADJUSTED DCF MODEL?

A: Price (P) is measured as the average price for the comparables during the month of January 2002. The dividend (D) is measured as the comparable-average dividend in year 2001. For the constant growth model, the long-term growth rate (g) is assumed to be 5.4%, 6.4%, or 7.4%. Flotation costs are assumed to be 3% of price, as recommended by Mr. Draper.

Q: USING A CONSTANT GROWTH DCF MODEL, WHAT IS THE ESTIMATED COST OF EQUITY?

A: Using the long-term, sustainable growth rate of 5.4%, 6.4%, and 7.4%, the estimated cost of equity is 8.28%, 9.31%, and 10.33%, respectively. Exhibit GSF-SR8.

Q: DO YOU USE AN ANNUAL OR QUARTERLY DCF MODEL?

A: My estimates are based on an annual model. The quarterly model is computing using

$$C_E = [0.25 \cdot D(1+g)^{0.25}/P(1 - F) + (1+g)^{0.25}]^4 - 1,$$

where the variables are defined as before. The implied cost of equity from the quarterly model is slightly higher than the annual model, but not large enough to change the implied cost of capital at the tenth percentage point. For example, the cost of equity from the quarterly model using a growth rate of 5.4% is 8.31%, which is a 3 basis point difference from the annual model. Exhibit GSF-SR8. While the difference between the two models is not large, in the BellSouth Cost Order the Commission did "agree with witness Hirshleifer that the annual DCF model is the appropriate one ..." BellSouth Cost Order, p. 154.

Q: USING THE TWO-STAGE DCF MODEL, INCLUDING THE RECOMMENDED CHANGES TO MR. DRAPER'S ANALYSIS DESCRIBED IN YOUR RESPONSE TO HIS TESTIMONY, WHAT IS THE ESTIMATED COST OF EQUITY?

A: Across a range of estimates, the average estimated cost of equity from the two-stage model with four comparables is 9.50%, with a range of 8.49% to 10.47%. Exhibit GSF-SR8. Excluding Sprint from the list of comparables, the estimated cost of equity is 9.60%, with a range of 8.63% to 10.56%. Excluding Sprint has a small effect on the estimated cost of equity.

Q: WHAT ASSUMPTION DO YOU CHANGE TO CREATE THE RANGE OF ESTIMATES OF THE COST OF EQUITY?

A: I use 15 versions of the two-stage DCF model to estimate the cost of equity. Five short-term growth rates are used, including the four consensus estimates and the average of these estimates. Three long-term growth rates are used, 5.4%, 6.4%, and 7.4%. Pairing each of these growth rates creates 15 different scenarios. When all four comparables are used, only 14 scenarios are legitimate because in one case the short-term growth rate is less than the long-term growth rate.

Q: WHAT IS THE EFFECT OF FLOTATION COSTS ON THE COST OF EQUITY?

A: Flotation costs increase the cost of equity by about 3 basis points per percentage of flotation costs. Given the assumption of 3% flotation costs, the total effect of flotation costs on the cost of equity is about 9 basis points. The magnitude of this effect depends on the assumed growth rate, according to the following formula:

$$\Delta C_E = \Delta F \cdot 1.03 \cdot D(1 + g)/P$$

for the constant growth model. The effects of flotation costs in the constant-growth and the two-stage model are roughly the same. Given a long-term growth rate of 5.4%, the effect of flotation costs on the cost of equity is equal to $\Delta C_E/\Delta F = 1.03 \cdot 0.03 = 0.03$ per percentage point of flotation costs. So, if $F = 0.03$, then the effect on the cost of equity is $3 \cdot 0.03 = 0.09$. Exhibit GSF-SR8.

Q: HOW DO THESE ESTIMATES OF THE COST OF EQUITY COMPARE TO THOSE SUMMARIZED IN YOUR REBUTTAL TESTIMONY?

A: In my Rebuttal Testimony, the CAPM was used to estimate a cost of equity of about 10%. Thus, once Mr. Draper's DCF method has been adjusted to reflect the items I discussed earlier, it produces estimates very similar to those produced by the CAPM presented in my Rebuttal Testimony.

Q: DO YOU HAVE ANY CONCERNS WITH MR. DRAPER'S APPLICATION OF THE CAPM TO ESTIMATE THE COST OF EQUITY?

A: Yes. As previously discussed, I do not believe the comparables chosen by Mr. Draper are appropriate. Clearly, his comparables are not consistent with the Commission's own analysis set forth the BellSouth Cost Order. Exhibit GSF-SR4.

Q: DO YOU HAVE OTHER CONCERNS WITH MR. DRAPERS USE OF THE CAPM?

A: Yes. Setting the issue of comparables aside for the moment, I disagree with Mr. Draper's recommended Beta of 1.02, which is the average of the Betas for some, but not all, of his comparable firms. I have three concerns related to his recommended Beta. First, the CAPM analysis excludes Verizon and AT&T, but the DCF analysis did not. No explanation for why Verizon and AT&T were excluded from the CAPM analysis was provided. Consequently, only one Regional Bell Company (BellSouth) was included as a comparable in Mr. Draper's application of the CAPM.

Second, a Beta of 1.02 presumes that the UNE business is more risky than the market as a whole. This implication strongly contradicts the Commission's conclusions in the BellSouth Cost Order.

Third, this Commission found, in the BellSouth Cost Order, that a Beta of 0.73 was unreasonably high for UNEs. BellSouth Cost Order, p. 153. To now find that a Beta of 1.02 is reasonable seems a bit arbitrary. For certain, BellSouth likely will take offense at Verizon having its cost of capital based on a Beta of 1.02 versus the 0.66 Beta applied to BellSouth in May of last year.

Finally, the Betas listed in Mr. Draper's testimony are considerably higher than the actual Betas for the listed companies. For example, BellSouth has a Beta just over 0.40, yet Mr. Draper presents a Beta for BellSouth of 0.85 – over twice the actual Beta. As a point of interest, BellSouth has not had a Beta of 0.85 since early 1987.

Q: HAVE YOU COMPUTED THE BETAS FOR MR. DRAPER'S LIST OF COMPARABLES?

A: Yes. If the actual Betas are used for his comparables, the average Beta is 0.83, not 1.02. Exhibit GSF-SR9.

Q: WHY ARE MR. DRAPER'S BETAS SO OVERSTATED?

A: Mr. Draper's Betas are provided by ValueLine. The ValueLine Betas are computed using the following formula:

$$\beta_V = 0.33 + 0.67\beta,$$

where β_V is the ValueLine Beta and β is the actual Beta. Note that I use the actual Beta in my computations. The ValueLine Betas are often called "Blume Betas," because the adjustment is based on a paper written by Marshall Blume in the early 1970s. Marshall Blume, On the Asessment of Risk, *Journal of Finance*, Vol. 26, 1971, pp. 1-10; Marshall

Blume, Betas and Their Regression Tendencies, *Journal of Finance,* vol. 30, 1973, pp. 785-795. In this paper, Blume found that the average Beta of a portfolios of firms -- constructed based on the size of the firm Betas in the first year(s) of the series - was closer to one in the last year(s) of the series. Thus, Blume concludes that Betas tend toward one and suggests an adjustment to account for this proposition. The effect of Blume's adjustment is to increase *indiscriminately* any Beta less than 1.00 and to decrease any Beta greater than 1.00.

Q: IS THIS BLUME ADJUSTMENT APPROPRIATE IN THE PRESENT CONTEXT?

A: No, and I would argue that they are rarely appropriate. I have reviewed Blume's work, and it appears as if ValueLine has made a common error in statistical analysis referred to as "regression to the mean." Nobel Economist Milton Friedman wrote a brief article in 1992 entitled "Do Old Fallacies Ever Die?" regarding the frequency with which this fallacy occurs in academic research.[4] It was published in *Journal of Economic Literature,* Vol. XXX, 1992, pp. 2129-2132. We need not focus on this "theoretical" dispute, however, to show that the Blume or ValueLine Betas are inappropriate in the present context. This very question has been addressed directly in a recent academic paper by Martin Lally entitled "An Examination of Blue and Vasicek Betas, *The Financial Review,* Vol. 33, 1998, pp. 183-198..

Q: WHAT DOES THE RESEARCH OF PROFESSOR LALLY CONCLUDE REGARDING THE USE OF BLUME BETAS?

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A: Professor Lally is critical of the Blume adjustment to Beta because the indiscriminate application of the adjustment fails to take into account the industry in which the firm operates. In a highly relevant analogy, Professor Lally observes:

> A dramatic example of this is in U.S. electric utilities. A typical such firm has an estimated beta (unadjusted) of around 0.4. ... By contrast, Blume adjusts the 0.4 to 0.6 [i.e., 0.33 + 0.67(0.4)]. The result is a dramatic overestimate by Blume, because a singularly relevant fact is ignored, i.e., membership of an industry whose average estimated, and therefore presumably also true, beta is well below one. Lally, p. 192.

In constrast to Blume, Lally finds that industry average Betas tend to "the industry mean rather than the global mean of one." Lally, p. 186. The relevance of Lally's research to the current proceeding is described accurately by the author:

> Given that these firms have output prices that are set so as to recover costs, including the cost of equity, and they have substantial equity investments, then the implications of using Blume betas (i.e., not portioning into industries) for measuring costs of equity are particularly severe. Lally, p. 192.

Thus, the use of ValueLine or Blume Betas is inappropriate when computing the cost of equity for the UNE business, or any line of business for that matter. ValueLine or Blume Betas are only relevant for broad portfolios of stocks grouped only with reference to their observed historical Betas.

Q: DOES THE AVERAGE BETA OF THE BELL COMPANIES SHOW ANY TENDENCY TOWARD ONE?

A: No. Exhibit GSF-SR10 provides graphs of both the average Beta of the Bell Companies (BellSouth, Verizon, and SBC) and the Coefficient of Variation of the Beta over a number of years. These graphs show clearly that the Beta of the Bell Companies (BellSouth,

Verizon, and SBC) exhibits no tendency toward 1.00. In fact, it appears as if the Bell Company Beta is tending toward zero, if anything. Further, the coefficient of variation – that is the standard deviation divided by the mean, where both are computed over twelve month intervals -- exhibits no observable diminution of variance, which is a true test of convergence. Friedman, p. 2129.

Q: ARE THE BETAS PROVIDED BY MR. DRAPER CONSISTENT WITH THE BETAS USED IN THE BELLSOUTH COST ORDER?

A: No. The Betas used in the BellSouth Cost Order were computed using 60 months of returns on the relevant stock price and the S & P 500.

Q: WHAT BETAS DO YOU USE IN YOUR OWN ANALYSIS?

A: Actual Betas, as the Commission did in the Bellsouth Cost Order, without the arbitrary and incorrect Blume adjustments.

Q: MR. DRAPER INCLUDES AN ADJUSTMENT FOR FLOTATION COSTS IN HIS CAPM ANALYSIS. DO YOU BELIEVE THAT IS APPROPRIATE?

A: Given the decision in the BellSouth Cost Order, I believe Mr. Draper's inclusion of an adjustment for flotation costs is reasonable. In the BellSouth Cost Order, the Commission concluded, "[w]e believe flotation costs are appropriate because the evidence shows that these costs are incurred by firms that raise capital and represent a reduction to the proceeds from the issuance of stock." BellSouth Cost Order, p. 153. The 3% figure recommended by Mr. Draper is reasonable, given that this Commission concluded that a "5% flotation allowance may be somewhat high." BellSouth Cost

Order, p. 153. Note, however, that the Commission did not include flotation costs in its final decision in the BellSouth Cost Order.

Q: DO YOU HAVE ANY OTHER COMMENTS ON MR. DRAPER'S IMPLEMENTATION OF THE CAPM?

A: Yes. Mr. Draper employs the 10-Year Treasury for the risk-free rate in his cost of debt calculations. Mr. Draper makes an affirmative case for using the 10-Year Treasury, noting, "the Federal Reserve has stopped issuing the 30-year Treasury bond, [so] I have used the 10-year Treasury Bond in calculating a forecasted cost for long-term debt." Draper Rebuttal at 5. Given his affirmative case for the 10-Year Treasury, it is unclear why he then uses the 30-Year Treasury bond to proxy for the risk-free rate when estimating the cost of equity. While I believe using either the 10-year or 30-year Treasury is reasonable, I believe the same proxy should be used for the cost of debt and for the cost of equity.

Q: WHAT EFFECT WILL CHANGING THE RISK-FREE RATE HAVE ON THE FINAL ESTIMATES OF THE COST OF DEBT AND EQUITY?

A: The difference between the yields is not large, so adopting a more consistent approach has little effect. Since Mr. Draper makes an affirmative case for the use of the 10-year Treasury, I recommend that the yield on the 10-year Treasury, or 4.77%, serve as the risk-free rate for all computations. That said, either the 10- or 30-year Treasury is a

reasonable proxy for the risk-free rate. McKinsey & Company, Inc., recommends using the 10-year Treasury bond for the risk-free rate.[5]

Q: DID YOU ESTIMATE THE COST OF EQUITY USING THE FOUR COMPARABLES AND THE CAPM?

A: Yes. In my Rebuttal Testimony, I employed the average Beta of the Bell Companies (BellSouth, Verizon, and SBC) for year 2001, or 0.58. Adding Sprint to this group of firms increases the Beta to 0.61. Exhibit GSF-SR9. Moving to the 10-year Treasury bond as the risk-free security, Mr. Draper's proposed market-risk premium increases from 5.47 to 6.10. Exhibit GSF-SR11.

Q: INCORPORATING THE CHANGES JUST DISCUSSED, WHAT IS THE ESTIMATE OF THE COST OF EQUITY USING THE CAPM?

A: With a risk-free rate of 4.77%, a Beta of 0.61, a market-risk premium of 6.10%, and flotation adjustment of 9 basis points, the cost of equity is

$$4.77 + 0.61 \cdot 6.10 + 0.09 = 8.58\%.$$

If Sprint is excluded as a comparable, the cost of equity is

$$4.77 + 0.58 \cdot 6.10 + 0.09 = 8.40\%,$$

which is only slightly less than the cost of equity computed using all four comparables.

Q: IN SUM, WHAT IS THE ESTIMATED COST OF EQUITY AFTER THE NECESSARY CHANGES ARE MADE TO MR. DRAPER'S ANALYSES?

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[5] Tom Copeland, Tim Koller, and Jack Murrin, *Valuation: Measuring and Managing the Value of Companies*, 3rd Ed., McKinsey & Company, Inc., (2000).

A: The estimated cost of equity capital is about 9% (i.e., the average of 8.58, 9.45, 9.58, and 9.31). If only the DCF results are used, the cost of equity is closer to 9.5%. From the sensitivity analysis performed using the DCF models, the upper bound on the cost of equity is about 10.5%.

Q: DO YOU BELIEVE THESE ESTIMATES ARE RELIABLE PROXIES FOR THE FORWARD-LOOKING COST OF EQUITY?

A: Yes. The DCF and CAPM estimates are very similar. All estimates are derived from public data and standard methods. Further, these estimates also are a synthesis of Mr. Draper's analysis and the decision made by this Commission in the BellSouth Cost Order. Thus, I believe these estimates are reasonable.

The Weighted-Average Cost of Capital

Q: USING THE DEBT AND EQUITY COSTS THAT RESULT FROM YOUR PROPOSED ADJUSTMENTS TO MR. DRAPER'S ANALYSES, WHAT IS THE INDICATED FORWARD-LOOKING WEIGHTED-AVERAGE COST OF CAPITAL FOR VERIZON?

A: The forward-looking cost of debt for Verizon is estimated to be 6.04%. All three methods used to estimate the cost of equity – the constant growth DCF model, the two-stage DCF model, and the CAPM – produce estimates of about 9%. Assuming a capital structure of 40% debt and 60% equity, the weighted-average cost of capital for Verizon is

$$0.40 \cdot 6.04 + 0.60 \cdot 9.00 = 7.82\%.$$

My sensitivity analysis on the cost of equity produced an estimate as high as 10.56%, which implies a cost of capital of 8.75%. At the other extreme, the low estimate of the cost of capital from the sensitivity analysis is 7.51%. Exhibit GSF-SR11.

Q: AND WHAT IS THE ESTIMATED FORWARD-LOOKING COST OF CAPITAL FOR SPRINT?

A: For Sprint, the cost of debt is estimated to be 6.42%. Given a cost of equity of 9%, the weighted-average cost of capital is

$$0.40 \cdot 6.42 + 0.60 \cdot 9.00 = 7.97\%,$$

or about 8.0%. The sensitivity analysis bounds the cost of capital between 7.53% and 8.90%. Exhibit GSF-SR11.

Q: DO THESE NUMBERS DIFFER SUBSTANTIALLY FROM YOUR REBUTTAL TESTIMONY?

A: No. In my rebuttal testimony, I estimated a weighted average cost of capital of about 8.5%. Thus, Mr. Draper's estimates, corrected to be more consistent with the Bellsouth Cost Order and standard practice and theory, are slightly lower than my estimates, on average. The upper-bound estimates from the adjusted Draper analysis are most consistent with my earlier estimates.

Q: WHAT ARE YOUR FINAL OBSERVATIONS REGARDING THE WEIGHTED AVERAGE COST OF CAPITAL FOR VERIZON AND SPRINT?

A: Based upon my Rebuttal Testimony and the adjusted estimates of Mr. Draper's analysis computed in this testimony, the respective, weighted-average cost of capitals for Verizon

and Sprint are in the 8.0% to 8.5% range, with Sprint's cost of capital being slightly higher than Verizon's.

Q: THESE ESTIMATES ARE ABOUT 200 BASIS POINTS LESS THAN THE COST OF CAPITAL DETERMINED IN THE BELLSOUTH CASE. HOW DO YOU RECONCILE THIS LARGE DIFFERENCE IN THE COST OF CAPITAL BETWEEN THE BELLSOUTH CASE AND NOW?

A: The explanation for this sizeable fall in the cost of capital is detailed in my Rebuttal Testimony and discussion here. The fact is that since the time period used to generate the cost of capital in the BellSouth Cost Order, the 10-Year Treasury yield has fallen by about 150 basis points, commercial paper costs have fallen by over 400 basis points, the prime rate has fallen by nearly 390 basis points, A-rated utility bond yields are down 75 basis points, Baa-rated utility bond yields are down nearly 50 basis points, and the Betas of the Regional Bell Companies are down 30%. At this point, to argue that the cost of capital for the UNE business is anywhere near the 10.24% established in the BellSouth Cost Order requires one to ignore everything that has happened in the financial markets over the past few years. Indeed, any estimate of the current cost of capital for UNEs not substantially below 10.24% is suspect.

Q: HAVE ANY COMMISSIONS IN BELLSOUTH STATES ADOPTED A COST OF CAPITAL IN THE RANGE YOU RECOMMEND?

A: Yes. The current cost of capital is Georgia is 9.27%. Notably, of all the BellSouth states, Georgia has the highest percentage of end-users served by ALECs.[6]

Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes.

[6] Federal Communications Commission, *Local Telephone Competition: Status as of June 30, 2001*, February 2002, Table 6.

Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS

A: My name is George S. Ford. My business address is 601 South Harbour Island Boulevard, Suite 220, Tampa, Florida 33602.

Q: HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

A: Yes. I filed Revised Rebuttal Testimony on January 30, 2002.

Q: WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?

A: In my Revised Rebuttal testimony, I described the use of the output of the FCC's HCPM cost model to develop relationships between the costs that BellSouth and Verizon incur to provide UNEs and the rates that correspond to those costs. During my deposition I was apprised that the FCC recently made adjustments to its computation of loop and switching costs within the context of this comparative analysis. I have updated my calculations to mirror those the FCC employed in the 271 Orders beginning with the Pennsylvania 271 Order. These computations are made using the most recent version of HCPM output files. The purpose of this supplemental testimony is to sponsor Exhibit ___ (GSF-12), which shows the results of the update. The exhibit is attached.

Q: DOES THE RESULT OF APPLYING THE MOST RECENT CALCULATIONS AND VINTAGE OF HCPM LEAD YOU TO ALTER YOUR CONCLUSIONS IN ANYWAY?

A: No. As the exhibit shows, the use of the updated calculations does not result in any material changes to my earlier exhibit. In fact, the discrepancies that I described in my earlier testimony are slightly more pronounced in the updated exhibit.

Q: DOES THAT COMPLETE YOUR TESTIMONY?

A: Yes.

CHAIRMAN JABER: Okay. Staff, what's next?

MR. FUDGE: Go through the stipulated exhibits for Sprint.

We'll begin with Sprint's Stip 1. It includes Sprint's Response to Staff's Interrogatories 1 through 209 and Sprint's Response to Staff's Production of Documents, Items 1 through 51.

CHAIRMAN JABER: Okay. Just for the sake of convenience, the list you've given me consists of two pages. It's identified as Staff's exhibit list. It's dated April 25th at 1:45 p.m. Is that the latest version?

MR. FUDGE: Yes.

CHAIRMAN JABER: I'm going to quickly run down the list and identify these exhibits. And if I make a mistake, just correct me. Okay?

MR. FUDGE: Okay.

CHAIRMAN JABER: Exhibit 10 will be Sprint's Stip 1. Exhibit 11, Sprint Stip 2. Exhibit 12 is TOC-1D. Exhibit 13, JRD-1D. Exhibit 14, KWD-1D. Exhibit 15, MRH-1D. BKS-1D is Exhibit 16. Exhibit 17 looks like a confidential exhibit, Staff?

MR. FUDGE: Yes, Commissioner.

CHAIRMAN JABER: And that's Sprint Stip 1. Exhibit 18 is Verizon Stip 1. Exhibit 19, Verizon Stip 2. Exhibit 20 is Verizon Stip 3. Exhibit 21 is a confidential exhibit,

Verizon Stip 1. Exhibit 22 is JVW-1D. Exhibit 23, DBT/TRD-1. Exhibit 24, AS-1D. Exhibit 25, DGT-1D. Exhibit 26, LR-1D. Exhibit 27, ALEC Stip 1. Exhibit 28, AHA-1D. Exhibit 29, AHA-2D. Exhibit 30, WRF-1D. Exhibit 31, SLM-1D. Exhibit 32, SLM-2D. Exhibit 33 is KMC Stip 1. Exhibit 34, FWW-1D. Exhibit 35, Z-Tel Stip 1. Exhibit 36, GSF-1D. And Exhibit 37, DJD-1D. That completes the list.

MR. FUDGE: Yes, Commissioner.

CHAIRMAN JABER: Hang on, Ms. Caswell. I know you have another list. But does that complete Staff's list?

MR. FUDGE: I just wanted to note that today Verizon updated one of their responses to Staff's discovery, that's Stip 2, so that would include Verizon's updated response.

CHAIRMAN JABER: Okay. Let's make sure. Ms. Caswell, why don't you go ahead and read what your understanding of Verizon's Stip 2, what that includes.

MS. CASWELL: Stip 2 would include everything that Staff has listed on the cover page of Stip 2, with the addition of Verizon Florida, Inc.'s, revised response to Staff Interrogatory Number 219.

CHAIRMAN JABER: Okay. Anything else on Staff's list before I admit these into the record? Staff?

MR. FUDGE: Those are all, Commissioner.

CHAIRMAN JABER: Okay. Then Exhibits 10 through 37 are admitted into the record.

(Exhibits 10 through 37 marked for identification and admitted into the record.)

CHAIRMAN JABER: Okay. Staff?

MR. FUDGE: Verizon has a list that they would like to introduce as stipulated exhibits.

MS. CASWELL: Verizon handed out its list earlier today. It consists of Staff's Response and Objection to Verizon Florida's First Request for Production of Documents and Z-Tel Communications' Response to Verizon Florida's First Request for Production of Documents.

CHAIRMAN JABER: Okay. Ms. Caswell, how about we identify Staff's response to the first --

MS. CASWELL: We can identify the whole -- well, it's up to you whether you want to do it as a composite or --

CHAIRMAN JABER: Okay. Let's do it as a composite exhibit. Staff's Response and Objection to Verizon's Request for POD Number 1 and Z-Tel's Response to Verizon's Request for Production of Document Number 1 are Composite Exhibit 38.

MS. CASWELL: Thank you.

CHAIRMAN JABER: And Composite Exhibit 38 is admitted into the record.

(Composite Exhibit 38 marked for identification and admitted into the record.)

CHAIRMAN JABER: Are there any other stipulated exhibits that we need to address, Mr. Fudge?

MR. FUDGE: No, Commissioner. I believe that concludes the Sprint portion of the hearing.

CHAIRMAN JABER: All right. We need to excuse the Z-Tel witness and the KMC witness.

MR. FUDGE: And Staff's witness.

CHAIRMAN JABER: And Mr. Draper.

Sprint, thank you. And let me thank all the parties for reaching an agreement at least with respect to the witnesses.

MR. FONS: Thank you for the opportunity.

CHAIRMAN JABER: Any time. Okay. Mr. Fudge, that brings us to the Verizon part?

MR. FUDGE: Yes, Commissioners. On April 12th, 2002, the prehearing officer issued an order denying Verizon's motion to compel discovery from the ALEC Coalition and Z-Tel. On April 23rd, 11 days later, Verizon filed two separate motions for reconsideration.

Staff believes those motions are untimely pursuant to 25-22.0376. Those responses should have been filed within 10 days, as also detailed in the notice of further proceedings attached to the prehearing officer's order.

CHAIRMAN JABER: All right. How would you recommend we go forward? This is a motion for reconsideration that Verizon has requested the full Commission consider.

MR. FUDGE: Yes, Commissioner.

CHAIRMAN JABER: And your recommendation is what?

MR. FUDGE: Is that the motions are untimely and, therefore, should be denied.

CHAIRMAN JABER: Commissioners, we have a motion for reconsideration by Verizon that Staff believes is untimely.

As I understand it, the request for reconsideration to a prehearing officer's order would have been due within 10 days of the order. The order was issued April 12th. The motion for reconsideration came in April 23rd. Do I have a motion or how would you like to go forward?

MR. HUTHER: Chairman Jaber, this is Chris Huther on behalf of Verizon. If I might be heard.

CHAIRMAN JABER: Hang on one second. Commissioner Bradley?

COMMISSIONER BRADLEY: Why don't we hear him and then I'll make my comments.

CHAIRMAN JABER: Okay. Go ahead.

MR. HUTHER: As noted in our motion for reconsideration which was filed pursuant to Florida Administrative Code, Section 25-22.060, Motion For Reconsideration, the time period for filing a motion for reconsideration under Section E(3) entitled, "Time," provides that a motion for reconsideration of a final order shall be filed within 15 days after issuance of the order. That was the basis of our motion. That is the Administrative Code. And, as

Mr. Fudge noted, it was filed well within that 15-day time period.

MR. McGLOTHLIN: Chairman Jaber?

CHAIRMAN JABER: Excuse me. Hang on one second. Give me your name one more time. It's Mr. Huther?

MR. HUTHER: That's correct, Chairman.

CHAIRMAN JABER: Thank you. Who was that? Mr. McGlothlin.

MR. McGLOTHLIN: Over here. Chairman Jaber, so that all the Commissioners are aware, Z-Tel filed a motion to strike the motion for reconsideration as untimely last Friday invoking Rule -- which governs the nonfinal order such as orders by a prehearing officer.

CHAIRMAN JABER: Staff, there is a pending motion to strike filed by Z-Tel alleging that Verizon's motion for reconsideration is untimely. It seems to me we should rule on the motion to strike first.

MR. FUDGE: That is correct, Commissioners. But you could do it either way; you could rule on your own motion that the motions for reconsideration are untimely or, if you do decide to rule on a motion to strike, you would have to provide Verizon an opportunity to respond to the motion to strike today or they would have to waive their opportunity to respond.

COMMISSIONER DEASON: Let me ask Staff a question. The rule cited by Verizon is the wrong rule applicable to this

situation because it's a nonfinal order?

MR. FUDGE: Yes, Commissioner. Yes. That's correct.

CHAIRMAN JABER: And I have an additional question. Staff, the order, as I read it, actually gives the parties the appropriate recourse to follow, at least that's my understanding. Now was that language included in this order?

MR. FUDGE: Yes, Commissioner. I have the order, and at the back of the order in the notice of further proceedings it says, "Any party adversely affected by this order which is preliminary, procedural or intermediate in nature may request reconsideration within 10 days pursuant to Rule 25-22.0376, if issued by a prehearing officer."

CHAIRMAN JABER: Now remind me. This is going back from my days in legal. I remember a court case where the Commissioners extended the reconsideration period and the case went up on appeal, something completely different, and the court came back and said the Commission exceeded its jurisdictional authority. Are you familiar with that case? I'm speaking off of memory.

MR. FUDGE: Yes, Chairman. That's the City of Hollywood case. In that case the court determined that an agency could not extend the time for filing motions for reconsideration because that infringed upon the court's jurisdiction to hear the matter. And in a proceeding before the Commission, an application for rate increase in Brevard

County by Florida Water, the Commission noted that, quoting, "We believe that granting Mr. Dire (phonetic) an opportunity to file a revised motion for reconsideration would, in effect, extend the period provided in the rule for filing a motion for reconsideration. The Florida courts have held that a state agency cannot extend the time for filing a motion for reconsideration beyond the time set forth in its rules."

CHAIRMAN JABER: Commissioners, what's your pleasure? Do you have a motion or do you need to discuss it further? Commissioner Bradley, you're recognized.

COMMISSIONER BRADLEY: For discussion.

CHAIRMAN JABER: Go ahead.

COMMISSIONER BRADLEY: The only thing that gives me a little heartburn about, about the motion itself is the fact that, that there may be some relevant testimony that's extremely germane to the proceeding that we are involved in today. And I recognize that Verizon has missed a time frame and that we have some legal technicalities involved here. But my only question is, as I said, my question is how do we get the information that we may be denying so that we can give a really good, comprehensive, have a process that allows us to discover each and every item and to have all the information that we need to have in order to make a good, sound discovery, I mean, decision about what we're considering? And I'm just concerned that I would rather err in the direction of having

too much information rather than too little. And I heard what, what, what Staff said, but I'm just concerned that --

CHAIRMAN JABER: Well, let me see if I can help you out, Commissioner Bradley, by putting sort of the whole motion in perspective.

Even if we legally can deal with the, the time period for when the motion for reconsideration could have been filed or should have been filed --

COMMISSIONER BRADLEY: Uh-huh.

CHAIRMAN JABER: -- the standard, and, Staff, you need to jump in if I say anything incorrectly, but the standard for reconsideration is did the prehearing officer make a mistake of fact or a mistake of law. And it doesn't matter from that standpoint how we would have ruled on the motion to compel or the request for discovery, but rather from a legal standpoint did the prehearing officer make a mistake of fact or law? Now we haven't reached that question because we've got to address the timeliness of the motion.

So the first, it seems to me the first thing we need to do, Commissioners, is take up the motion to strike.

Commissioner Bradley, does that help you out a little bit? I understand the frustration, but those are -- you're sort of preaching to the choir because I have shared that frustration on motions for reconsideration in the past. But it's a strict legal standard: Was there a mistake of fact or

law? And it doesn't matter how the rest of us would have ruled or, you know, what went into the ruling. The question is was there a mistake of fact or law made? But before we can reach that, we've got to address timeliness.

COMMISSIONER PALECKI: Madam Chairman, I'm of the opinion that the motion was untimely filed, the motion for reconsideration. I would move that the motion to strike be granted.

CHAIRMAN JABER: Commissioners, there's been a motion to grant Z-Tel's motion to strike.

COMMISSIONER DEASON: Second.

CHAIRMAN JABER: There's been a motion and a second. All those in favor, say aye.

(Simultaneous affirmative vote.)

CHAIRMAN JABER: The motion to strike has been granted unanimously.

So, Staff, that renders, that renders the motion for reconsideration stricken?

MR. FUDGE: Yes, Commissioner. No ruling would be required on those motions.

CHAIRMAN JABER: Okay. Any other pending motions?

MR. FUDGE: Staff is not aware of any.

CHAIRMAN JABER: Okay. Are we at the point where I can swear in the witnesses now for Verizon for the Verizon portion of the hearing?

MR. FUDGE: There still are pending stipulations on some of the witnesses for the Verizon portions. If we can go over those now.

MR. HATCH: Madam Chair, could I ask one clarification question?

CHAIRMAN JABER: The microphone system is not working very well, y'all, so you need to speak right into the microphone. Go ahead, Mr. Hatch.

MR. HATCH: I just had one quick clarification. With respect to all of the exhibits, there was a number, a fair number of supplemental responses to all of the interrogatories all the way around. I'm assuming when these were admitted into the evidence it included the final supplemental answer, the final answer of everybody on the question. I'm assuming that's correct.

CHAIRMAN JABER: Staff is shaking their head. But just so that the record is clear, the supplemental, the responses to the discovery for the exhibits that we admitted into the record include the supplemental responses.

MR. FUDGE: Yes, Commissioner.

MR. HATCH: Thank you.

MR. FUDGE: Before we go on, I'd like to get a clarification on the ruling. Z-Tel only moved to strike the motion for reconsideration in response to its portion of the order, and I think you ruled that both motions for

reconsideration were untimely. Is that correct?

CHAIRMAN JABER: No. We granted Z-Tel's motion to strike. That is all we did. So is there something else we need to do?

MR. FUDGE: Yes. There was a companion motion for reconsideration of the same order filed the same day, and Staff believes the same rule would apply, that that motion is also untimely.

CHAIRMAN JABER: By Verizon?

MR. FUDGE: Yes, Commissioner.

CHAIRMAN JABER: And so what do you need from us? On our own motion you need, we need to make a ruling that --

MR. FUDGE: That motion --

CHAIRMAN JABER: Motion for reconsideration was untimely.

MR. FUDGE: Consideration of that order was untimely.

COMMISSIONER PALECKI: I would move that the motion for reconsideration, the second motion, which was not the motion stricken, was also untimely filed and would move that Staff's recommendation be approved.

COMMISSIONER BRADLEY: Madam Chair, before we --

CHAIRMAN JABER: Go ahead, Commissioner Bradley.

COMMISSIONER BRADLEY: -- vote on that motion, also I have the same concern about this motion as I had about the last motion. I'm just concerned that we may not be hearing

testimony that's extremely relevant as it relates to this particular case, and I think it's important that we err on the side of having too much information rather than too little. But I, I recognize that legal maneuvers, by all means, are very much a part of this process, and I respect those time frames and the fact that other parties have the prerogative to do what they need to do in order to deal with the legality of the situation. So I respect that.

But I would like to just let it be known that I do have a concern about us not being able to hear all of the testimony, and as a result we may be erring on the side of not having enough information, but.

CHAIRMAN JABER: Okay. There's been a motion to find the rest of the motion for reconsideration filed by Verizon as untimely. Is there a second?

COMMISSIONER DEASON: Second.

CHAIRMAN JABER: Motion and a second. All those in favor, say aye.

(Simultaneous affirmative vote.)

CHAIRMAN JABER: Okay. That is a unanimous vote.

Staff, it's my understanding we've resolved now all of the reconsideration requests filed by Verizon.

MR. FUDGE: Yes, Commissioner.

CHAIRMAN JABER: Okay.

MR. FUDGE: We can now move on to the stipulation of

testimony for the Verizon portion.

CHAIRMAN JABER: Okay. Let me catch up with you. Hang you. Will that start with Mr. Sovereign?

MR. FUDGE: Yes, Chairman.

CHAIRMAN JABER: Okay. Go ahead. Ms. Caswell?

MS. CASWELL: Yes. And before we get into the specific witnesses, I'd like to point out that in the prehearing order at Page 80 where it talks about stipulations and proposed stipulation of witnesses, the Sprint portion of the docket, it's made clear that the witnesses' testimony will be stipulated along with discovery responses, prefiled testimony, prefiled exhibits, deposition transcripts, including any late-filed exhibits. But then the Verizon portion of the docket, the order notes that the parties have agreed to stipulate the prefiled testimony in.

I would just like the record to reflect that the arrangement was supposed to be the same both for Sprint and Verizon, and I think Staff understands that. I think there's a common understanding among the parties.

CHAIRMAN JABER: Okay. Great. And when we introduced the Staff exhibits, we did also include some of those --

MS. CASWELL: Included probably most of them.

CHAIRMAN JABER: Excellent. And along the way if there are some that are not included, you'll point those out to

me.

MS. CASWELL: Yes, ma'am. Thank you.

CHAIRMAN JABER: Okay. Great.

MS. CASWELL: Our first witness is Allen Sovereign, who had direct testimony of 25 pages. I would ask that that testimony be inserted into the record as though read.

CHAIRMAN JABER: The prefiled direct testimony of Allen E. Sovereign shall be inserted into the record as though read.

MS. CASWELL: Mr. Sovereign had two exhibits labeled AES-1 and AES-2. Those were attached to his direct testimony. May I have those marked for identification purposes and moved into the record at this time, please?

CHAIRMAN JABER: AES-1 and AES-2 are identified as Composite Exhibit 39. And Composite Exhibit 39 is admitted into the record.

(Composite Exhibit 39 marked for identification and admitted into the record.)

MS. CASWELL: Mr. Sovereign also had surrebuttal testimony consisting of six pages. I would ask that that be moved into the record as though read.

CHAIRMAN JABER: The prefiled surrebuttal testimony of Allen E. Sovereign shall be inserted into the record as though read.

DIRECT TESTIMONY OF ALLEN E. SOVEREIGN

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, ADDRESS AND PRESENT POSITION.

A. My name is Allen E. Sovereign. My business address is 600 Hidden Ridge, Irving, Texas 75038. Verizon Services Corporation employs me as Group Manager-Capital Recovery.

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I received a Bachelor of Science Degree in Electrical Engineering from Michigan Technological University, Houghton, Michigan, in 1971. I received a Master of Science Degree in Business Administration from Indiana University, Bloomington, Indiana, in 1980. I have attended courses in depreciation and life analysis provided by Depreciation Programs, Inc., of Kalamazoo, Michigan. I have also attended and instructed basic and advanced GTE courses in depreciation life analysis. I am a Senior Member of the Society of Depreciation Professionals.

Q. PLEASE BRIEFLY DESCRIBE YOUR WORK EXPERIENCE WITH VERIZON.

A. I have worked for Verizon, and the former GTE Companies, for 27 years, with 20 of those years in the depreciation study area. I have held various positions in Engineering and Construction, Capital Budgeting, Marketing, and Product Development. I was named to my current position in

February 1994.

Q. WHAT ARE YOUR RESPONSIBILITIES IN YOUR CURRENT POSITION?

A. I am responsible for the preparation, filing and resolution of capital recovery studies and the determination of economic lives for Verizon Service Corporation, Inc.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN FLORIDA?

A. Yes.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY OTHER REGULATORY BODIES?

A. Yes, I have also testified before state utility commissions in Arkansas, California, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Nebraska, Nevada, New Mexico, Ohio, Pennsylvania, South Carolina, Texas, Virginia, Washington, and Washington DC. I have also testified before the Federal Communications Commission (FCC).

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of this testimony is to respond to Issue 7b in this proceeding, regarding the appropriate depreciation lives and future net salvages to be used in the unbundled network element ("UNE") cost studies Verizon Florida Inc. ("Verizon" or "Company") has submitted in

this proceeding.

Q. WHAT DEPRECIATION INPUTS DID VERIZON USE IN ITS COST STUDIES?

A. Verizon used the forward-looking economic lives and future net salvages recommended in this testimony. These are the same depreciation inputs that Verizon uses for financial reporting to its stockholders. These depreciation inputs are developed in accordance with Generally Accepted Accounting Principles (GAAP). A complete list of Verizon's proposed depreciation lives and future net salvage percentages is attached as Exhibit AES-1.

Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.

A. The Florida Public Service Commission ("FPSC") should approve the economic depreciation inputs Verizon used in its cost studies. Like the cost study methodology prescribed for use in this proceeding, Verizon's depreciation inputs are forward-looking. This forward-looking approach produces a more accurate estimate of assets' economic lives than an outdated, historical approach.

When all local exchange companies were monopoly providers, regulators could defer capital recovery without affecting the ability of the regulated company to recover its investments. With the advent of local competition, regulators no longer have the luxury of postponing capital recovery in the rate-setting process. The changing telecommunications environment

must be taken into consideration when determining the proper recovery period of an asset. The methodology described in my testimony considers these developments.

II. ECONOMIC LIVES MUST BE USED IN FORWARD-LOOKING COST STUDIES

Q. PLEASE DEFINE THE TERM "ECONOMIC LIFE" AND HOW IT RELATES TO VERIZON'S COST STUDIES.

A. Economic life can be defined as the period of time over which an asset is used to provide economic value. Verizon's proposed depreciation parameters consider the decline in an asset's value from all causes, including competition and technological change. They reflect the principle that depreciation parameters should be consistent with forward-looking economic assumptions and based on competitive market asset lives.

Q. WHAT ARE "COMMISSION-PRESCRIBED DEPRECIATION LIVES"?

A. These are the lives set by regulatory commissions for regulatory accounting purposes. As I explain below, the FPSC no longer prescribes depreciation lives for Verizon or other price-cap regulated companies.

Q. IS AN ASSET'S ECONOMIC LIFE EQUAL TO THE DEPRECIATION LIFE OF THAT ASSET AS PRESCRIBED BY STATE COMMISSIONS OR THE FCC?

A. Economic lives are generally shorter than prescribed asset lives.

Q. WHY ARE ECONOMIC LIVES SHORTER THAN PRESCRIBED LIVES?

A. Historically, regulatory commissions prescribed asset lives under the assumption that there would be little or no competition and that technological innovation would continue at its traditional pace. The Telecommunications Act of 1996 ("Act") is intended to spur a new competitive environment that invalidates that basic assumption.

As previously discussed, the economic life of an asset is the period of time over which that asset is used to provide economic value. Both increased competition and technological change shorten the period over which an asset will provide economic value. In a world where Verizon was the sole provider, depreciation rates were based upon artificially long asset lives. By basing depreciation rates on long asset lives, the depreciation rates were lower, and the period of time over which the asset was depreciated was longer. Longer depreciation lives helped state commissions to keep consumer prices artificially low. Today's market environment reduces the length of time over which Verizon can recover its investment in an asset and renders unsustainable the use of artificially long asset lives in calculating depreciation rates.

Q. WHEN ESTIMATING ECONOMIC LIVES, IS IT POSSIBLE TO USE TRADITIONAL LIFE ESTIMATION TECHNIQUES?

A. No. Traditional life estimation techniques are used to predict an asset's

physical life, but not its *economic* life. The physical life of an asset ends upon that asset's retirement. Economic lives, however, can be affected when no retirements are evident. For example, assume Verizon has a 1,200 pair cable that has been used to provide service to 1,000 customers in the pre-1996 single-provider environment. Next, assume that in the post-1996 industry, only 500 pairs of the 1,200 pair cable are being used (*i.e.*, providing service to customers and economic value to Verizon) as a result of 500 customers leaving for competitors' networks. Retirement-based analysis (*i.e.*, the traditional physical life estimation technique) assumes that all plant in service has economic life. However, under this scenario, only 50% of the originally utilized investment actually has economic life. The economic life of the asset is severely affected by competition, but there are no associated retirements of the asset.

Q. HAS THE FLORIDA PUBLIC SERVICE COMMISSION FOLLOWED THE TRADITIONAL METHOD FOR SETTING DEPRECIATION LIVES?

A. Historically, the FPSC followed the traditional method for setting depreciation rates. However, since January 1996, Verizon has been permitted to set depreciation rates that reflect competitive and technological advancements in the marketplace. Verizon uses the same depreciation inputs for FPSC regulatory purposes that it uses for financial reporting purposes, and those are the same inputs I recommend here.

Q. WHAT DID THE FPSC RECOMMEND THE LAST TIME IT PRESCRIBED DEPRECIATION INPUTS?

A. As previously stated, the FPSC no longer prescribes depreciation inputs for Verizon for regulatory reporting purposes. The last time it did so was in Docket 920284-TL, in 1992. The Commission did, however, recommend depreciation inputs in its 1998 proceeding to determine the cost of basic local service for purposes of establishing a universal service fund (USF) mechanism (Docket 980696-TP). The chart below compares the FPSC-ordered depreciation lives in Docket 980696-TP with the depreciation lives Verizon uses in its cost studies for the major technology-sensitive accounts. A complete comparison of all accounts is attached as Exhibit AES-2.

A Comparison of FPSC-Ordered and Verizon's Proposed Depreciation Lives

	FPSC Ordered	Verizon Proposed
Digital Switching Equipment	13	10
Circuit Equipment	8	9
Copper Cable		
Aerial	18	15
Underground	23	15
Buried	18	15
Fiber Cable		
Aerial	20	20
Underground	20	20

Buried	20	20

As the chart illustrates, the FPSC accepted Verizon's lives in some of the major technology-sensitive accounts, but ordered somewhat longer lives in others.

Establishing the proper economic lives for these assets is critical to determining economic depreciation in a forward-looking cost study. Economic lives of other assets are used in Verizon's cost studies, but the changes in those assets' economic lives (*e.g.*, motor vehicles) as compared to the prescribed lives are extremely small and have little impact on the depreciation rates for those assets.

Q. DID THE FPSC RECENTLY APPROVE DEPRECIATION INPUTS FOR BELLSOUTH IN THIS DOCKET?

A. Yes. On April 18, 2001, the FPSC approved its Staff's recommended depreciation inputs. The inputs for the technology-sensitive network accounts were similar to those ordered in the USF docket discussed above. The chart below compares the FPSC-approved depreciation lives for BellSouth with the depreciation lives Verizon uses in its cost studies for the major technology-sensitive accounts. A complete comparison of all accounts is attached as Exhibit AES-2.

A Comparison of FPSC-Approved BellSouth and Verizon's Proposed Depreciation Lives

	FPSC BS Approved	Verizon Proposed
Digital Switching Equipment	13	10
Digital Circuit Equipment	9	9
Copper Cable		
Aerial	18	15
Underground	23	15
Buried	18	15
Fiber Cable		
Aerial	20	20
Underground	20	20
Buried	20	20

As the chart shows, the depreciation lives the FPSC approved for BellSouth's fiber accounts and those ordered for the large local exchange companies in the USF docket are the same. Verizon recommends the same 20-year life for these fiber cable accounts in this proceeding, so there should be no question about its reasonableness.

There are differences between Verizon's recommendations and the lives approved for BellSouth in certain other areas—principally, the Digital Switching and Copper Cable accounts. Verizon's recommendations for these accounts more accurately reflect the

competitive and technological conditions of the highly competitive Tampa Bay area in which Verizon operates, as discussed further in this testimony.

III. COMPETITION AND TECHNOLOGICAL INNOVATION REQUIRE THE USE OF ECONOMIC LIVES

Q. WHAT FACTORS SHOULD THE COMMISSION CONSIDER IN APPROVING DEPRECIATION INPUTS FOR THE COST MODEL?

A. The two most important factors that must be considered in establishing the economic value of Verizon's assets are: (1) technological innovation and (2) impact of competition.

Q. WHAT TECHNOLOGICAL INNOVATIONS WERE CONSIDERED IN ESTABLISHING VERIZON'S ECONOMIC LIVES?

A. Prior to the passage of the 1996 Telecommunications Act, depreciation analysis consisted primarily of mortality analysis with only slight adjustments for technological change. Now, the rapid pace of advancement in technological innovations must be considered in establishing the depreciation inputs for Verizon's assets. For example, data traffic is outpacing voice traffic. Packet Switching is much more efficient in carrying data, as further advancements in voice over packet occur, the network will evolve over time from a circuit switched to a packet network. As another example, even with maximum use of DSL, as customer bandwidth demand increases, fiber will need to continually

be moved closer and closer to the consumer, displacing copper.

Q. WHAT KINDS OF COMPETITIVE DEVELOPMENTS WERE CONSIDERED IN ESTABLISHING VERIZON'S ECONOMIC LIVES?

A. Verizon witness Dr. James Vander Weide discusses the competitive risk and Florida-specific competition in his Direct Testimony. Florida is a particularly attractive market for entry by alternative competitive local exchange carriers. Some 463 CLECs are certificated to offer local exchange service, and CLECs have access to all of Verizon Florida's lines. CLECs own and operate at least 36 switches in Verizon's service area. Facilities-based competitors to Verizon include, among others, 2nd Century, AT&T, Intermedia, ITC Deltacom, KMC, MCI WorldCom, Sprint, Teligent, and Time Warner.

In addition, the FPSC's Division of Policy Analysis and Intergovernmental Liaison recently observed that the local broadband services markets are increasingly competitive. ILECs are, and will be, battling on a number of fronts for control of the marketplace, Many consumers now have a number of choices for local telephone and broadband services from a variety of service providers and technologies. Cable, wireless, satellite, competitive local exchange companies are fiercely competing with the ILECs for subscribers in one or more arenas. Because of this competition, the number of access lines in service has declined for a number of ILECs. (Understanding the Local Exchange and Broadband Markets in Florida, Telecommunications Competition and its

Developments, Prepared by The Division of Policy Analysis and Intergovernmental Liaison, October 2001 (Broadband Study), at 26). The report also noted that the telecommunications industry is undergoing dramatic structural and technological changes: "The global phone system is on the verge of its biggest technology shift since Alexander Graham Bell's invention eclipsed the telegraph" (quoting a June 24, 2001, *Florida Times Union* article). Data traffic has now surpassed voice traffic and continues to grow. It is possible, with today's technology, to deliver integrated voice, data and video services over existing connections. This opens up tremendous possibilities for new applications, revenue sources, and network efficiencies for companies that successfully combine voice and data technologies and networks to bring integrated services to homes and businesses over a single broadband connection. (Broadband Study at 25).

The FPSC's December 2000 Report on Competition in Telecommunications Markets in Florida likewise noted the competitive strides ALECs have made and continue to make. The Commission's own statistics (based on ALECs' self-reported data) demonstrate the acceleration of competitive activity in Verizon's territory, particularly in the business market. This trend will only become more pronounced, as more and more competitors enter the market.

Q. SHOULD ONLY THE CURRENT LEVEL OF COMPETITION AND TECHNOLOGY BE CONSIDERED IN DEVELOPING DEPRECIATION

INPUTS?

A. No. The expected competitive impacts and anticipated advancements in technology over the entire expected life of the assets should be considered.

IV. VERIZON PROPERLY WEIGHS ALL RELEVANT FACTORS IN DETERMINING ECONOMIC LIVES.

Q. WHAT METHOD DOES VERIZON USE TO DETERMINE THE ECONOMIC LIFE OF AN ASSET?

A. When estimating economic lives, Verizon (a) evaluates the criteria that are used to establish the retirement lives of assets as a guideline for estimating economic lives, (b) considers industry benchmark comparisons, and (c) considers the effect the evolving competitive market will have on the economic lives of many of Verizon's assets.

Q. WILL YOU PLEASE EXPLAIN THE USE OF THESE FACTORS IN MORE DETAIL?

A. Verizon first considers the National Association of Regulatory Utility Commissioners' description of factors that cause property to be retired. (Public Utility Depreciation Practices, National Association of Regulatory Utility Commissioners (NARUC), 1996, at 15).

These include:

1. Physical Factors
   a. Wear and tear

b. Decay or deterioration

c. Action of the elements and accidents

2. Functional Factors

a. Inadequacy

b. Obsolescence

c. Changes in art and technology

d. Changes in demand

e. Requirements of Public Authorities

f. Management discretion

3. Contingent Factors

a. Casualties or disasters

b. Extraordinary obsolescence

These same factors can be used to help estimate an asset's economic life expectancy by allocating the appropriate weighting to each factor. That is, Verizon uses the NARUC factors as a guideline for choosing economic lives of certain assets, but only after allocating proper weighting to those factors that reflect the significant roles competition and technological change play in determining an asset's economic life.

Specifically, the "Functional Factors" (Part 2 of the NARUC factors) are sensitive to competition and technological change and are given substantially greater weight when Verizon considers the NARUC criteria in establishing the economic lives of Verizon's assets. As I explained above, the effects of competition and technological change on an asset's

economic life must be properly considered when determining competitive market asset lives. It has long been recognized in the industry that traditional methods for determining lives for accounts most affected by technology and competition are inadequate. Most Commissions, including this one, have thus seen it fit to make adjustments to the physical life indications produced by historical mortality analysis.

Q. WHAT OTHER GUIDES DO YOU USE IN ESTABLISHING ASSET LIVES?

A. To help quantify our professional judgment as to the appropriate lives for telephone plant, Verizon also benchmarks against competitors, such as AT&T, MCI Worldcom, and cable television providers, and considers industry studies performed by Technology Futures Inc. ("TFI").

Q. PLEASE EXPLAIN WHY BENCHMARKING IS USEFUL AND APPROPRIATE.

A. Benchmarking affords an excellent example of the reasonableness of Verizon's recommended depreciation lives. As we transition to a competitive environment, we should be treated the same as our competitors with respect to setting depreciation rates. Competitors' depreciation rates are not reviewed or approved by any regulatory body, and are a good guide to reasonable practices in a competitive market.

Q. WHAT DID YOU DETERMINE USING BENCHMARK COMPARISONS WITH AT&T?

A. Comparing the economic lives proposed by Verizon to the lives AT&T uses affords an excellent example of how reasonable Verizon's recommendations are. AT&T's 2000 annual report states that the useful life of communications and network equipment ranges from 3 to 15 years. The useful life of other equipment ranges from 3 to 7 years. The useful life of buildings and improvements ranges from 10 to 40 years. Verizon's recommended lives are not as short as AT&T's. In comparison, Verizon's recommendation for network equipment ranges from 9 to 50 years. My testimony also recommends 5 to 15 years for Other Equipment, and 35 years for buildings.

Q. WHAT WAS DETERMINED BY THE COMPARISON WITH MCI WORLDCOM?

A. MCI WorldCom's 1996 annual report stated that the weighted average depreciable life of the assets comprising the communications system in service approximates 10 years. Furniture, fixtures and equipment are depreciated over a weighted average life of 6 years. Buildings are depreciated using lives of up to 35 years. In comparison, Verizon's recommendation for equipment that comprises the communication system ranges from 9 to 50 years. My testimony recommends 5 to 15 years for furniture, fixtures and equipment, and 35 years for buildings.

In 1998, MCI WorldCom again shortened the lives of its communications facilities from approximately 10 years to 9 years, stating that the company periodically reviews and adjusts the useful lives assigned to fixed assets

to ensure that depreciation charges provide appropriate recovery of capital costs over the estimated physical and technological lives of the assets. The weighted average of depreciable life of the assets comprising the communications system in service approximates nine years.

Q. WHAT WAS DETERMINED BY THE COMPARISONS TO LIVES USED BY THE CABLE TELEVISION (CATV) OPERATORS?

A. Verizon's lives are not as short as the lives used by CATV operators. The FCC adopted a flexible range of lives to be used by CATV operators seeking to justify depreciation rates in cost of service filings. The useful lives adopted by the FCC for distribution facilities were from 10 to 15 years. This range was developed from a statistical analysis of lives used by CATV operators for their own facilities. The 15-year economic life for copper cable and the 20-year life for fiber cable calculated selected by Verizon are not as short as the lives within the FCC-allowed range for CATV distribution facilities. Additionally, the lives proposed by Verizon for support assets such as office furniture and equipment, vehicles, and buildings are reasonable when compared to the FCC-allowed ranges for CATV operators. The FCC CATV range for office furniture and equipment is 9-11 years, which compares favorably to Verizon's proposal of 10-15 years for these accounts. The FCC range for vehicles and equipment is 3-7 years, which is shorter than Verizon's proposal of 8-12 years. The FCC range for buildings is 18-33 years, which is shorter than Verizon's proposal of 35 years. (FCC MM Docket No. 93-215,

Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation and FCC CS Docket No. 94-28, Adoption of a Uniform Accounting System for Provision of Regulated Cable Service, Second Report and Order, First Order on Reconsideration, and Further Notice of Proposed Rulemaking, January 26, 1996).

Q. HAVE ANY OTHER COMMISSIONS DETERMINED THAT BENCHMARKING IS A VIABLE METHOD TO ASSESS THE REASONABLENESS OF VERIZON'S PROPOSED DEPRECIATION INPUTS?

A. Yes. The Missouri Public Service Commission Staff agreed that benchmarking is a viable method to determine the reasonableness of Verizon's proposal, stating:

> Staff believes that benchmarking GTE TELRIC rates against those booked for financial purposes of likely competitors and other companies using similar technologies is appropriate and is the best method to determine if GTE's TELRIC rates pass the muster of reasonableness.

(Case No. TO-97-63, Missouri Public Service Commission, Final Arbitration Order, July 31, 1997 ("Missouri Order"), Attachment C at 77).

The Missouri Staff chose 19 of the largest IXC, CATV, cellular, CAP, and PCS companies to benchmark against and found that the depreciation rates used to calculate GTE TELRIC costs were at the bottom or second

from the bottom of the list and were significantly lower than several companies in similar industries, concluding that "This is the most significant factor to Staff's belief that GTE's proposed depreciation rates are reasonable." (Missouri Order, Attachment C at 79).

Q. HAVE ANY ALECS PROVIDED INFORMATION IN THIS DOCKET THAT CONFIRMS THE REASONABLENESS OF VERIZON'S PROPOSED LIVES?

A. Yes. A number of ALECs responded to BellSouth's discovery requests in its phase of this docket.

For example, Florida Digital Network confirmed that it owned or operated switches and cable in Florida to provide telephone exchange services. It stated that the life it uses for switches is 10 years, which is the same as Verizon recommends; and 15 years for cable, which is the same as Verizon's recommended 15 years for copper cable and shorter than Verizon's recommended 20 years for fiber cable. It also listed lives for support equipment which ranged from 5–10 years, which were generally shorter or the same as Verizon's recommendations of 5–15 years for similar equipment. (BellSouth Hearing, Ex. 33.)

Intermedia Communications also responded to BellSouth interrogatories (BellSouth Hearing, Ex. 35). Intermedia stated that it uses a 7-year life for switches, which is the much shorter than Verizon's recommendation of 10 years; and 20 years for fiber cable, which is the same as Verizon's

recommended 20 years. It also listed lives for telecommunication equipment and furniture and fixtures which ranged from 2–7 years, which is shorter than Verizon's recommendations of 5–15 years for similar equipment.

In its responses (BellSouth Hearing, Ex. 36), Rhythms Links admitted that that it owns or operates digital circuit equipment used to provide digital subscriber line services in Florida. Rhythms uses a 5-year life for digital circuit equipment, which is much shorter than Verizon's recommendation of 9 years. Its lives for equipment and furniture ranged from 3–7 years, which are also shorter than Verizon's recommendations of 5–15 years for similar equipment. Even though Rhythms is in bankruptcy, its assets have value (they have been acquired by WorldCom) and depreciation rates for those assets still provide useful benchmarks.

Time Warner Telecom of Florida also owns or operates facilities to provide telephone exchange services in Florida. It uses a 10-year life for switches, which is the same as Verizon recommends; and 15 years for fiber cable, which is shorter than Verizon's proposed 20 years. For vehicles and other equipment, Time Warner's lives range from 3–10 years, which are generally shorter or the same as Verizon's recommendations of 5–15 years for similar equipment. (BellSouth Hearing, Ex. 36.)

This information provides further evidence that Verizon's

recommendations are reasonable and should be accepted in this proceeding.

Q. PLEASE EXPLAIN VERIZON'S USE OF THE INDUSTRY STUDIES PERFORMED BY TECHNOLOGY FUTURES INC. (TFI).

A. TFI forecasts the remaining lives for certain assets when technological change is driving the shortening of asset lives. To quantify this technological change, TFI uses a model to analyze remaining economic lives using patterns of technological substitution observed in the communications industry, as well as other industries. The industry studies conducted by TFI forecast the combined effects that competition and technological change will have on an asset's remaining useful life. The studies generally project shorter lives than traditionally prescribed by most Commissions. Verizon uses the TFI lives as a reasonableness benchmark comparison with the lives used by other companies, both regulated and non-regulated, with similar types of telecommunications assets.

Q. WHAT DO THE TFI STUDIES RECOMMEND VERIZON USE AS ECONOMIC LIVES FOR ITS ASSETS?

A. Verizon's recommendations here are in line with TFI's recommended economic life ranges, as shown by the following chart. (*Transforming the Local Exchange Network: Analyses and Forecasts of Technology Change*, Larry K. Vanston, Ray L. Hodges, and Adrian J. Poitras, 2d Ed. 1997, Technology Futures, Inc., at 33).

A Comparison of The TFI Ranges with Verizon's Proposed Economic Lives

	TFI Ranges	Verizon Economic
Digital Switching Equipment	9-12	10
Circuit Equipment	6-9	9
Copper Cable	14-20	15
Fiber Cable	20	20

TFI specifically addresses the appropriate lives to be used for outside plant cable, central office switching, and circuit equipment accounts, as these accounts report equipment that are most affected by changes in competition and technology.

V. VERIZON'S ECONOMIC LIVES HAVE BEEN ENDORSED BY OTHER STATE REGULATORY COMMISSIONS

Q. HAS ANY OTHER REGULATORY BODY APPROVED THE ECONOMIC LIVES PRESENTED HERE?

A. Yes. In 1996, the California Public Utilities Commission ("CPUC") endorsed the use of the same economic lives presented here except that they approved a 14-year life for copper cable, one year less than

requested here. The CPUC concluded that the economic lives used by GTE and Pacific Bell for external financial reporting were the appropriate forward-looking lives for cost studies. The CPUC rejected the suggestion made by AT&T and others that FCC-prescribed lives are forward-looking, stating:

> We agree with Pacific that the schedules formally adopted in the represcription proceeding reflect the previous paradigm of the regulated monopoly environment, and so are difficult to justify in a cost study that looks forward to an environment in which there is local exchange competition. We also see little merit in the Coalition's original suggestion that we use FCC schedules. These schedules also reflect the previous paradigm; moreover, they are based on different assumptions and applied in different ways than our own. It also seems to be the case, however, that Pacific is now using these schedules in financial reports it is required to file, and thus for purposes of these cost studies, the schedules also appear consistent with generally accepted accounting principles. The schedules also appear realistic for a firm having to operate in a competitive environment, as Pacific will soon have to do. Accordingly, we will approve their use in this proceeding.

(California Public Utilities Commission Decision No. D.96-08-

021, August 2, 1996, in Rule Making R.93-04-003, I.93-04-002).

In 1997, the Missouri Public Service Commission, likewise, adopted the same economic lives proposed in this case, stating:

> Staff's goal has been to recommend depreciation rates based on parameters that GTE is likely to experience for financial purposes so as to fully recover its long run capital costs in a timely fashion.
>
> (Missouri Order, Attachment C at 76.)

In 1998, the Michigan Commission approved GTE's use of economic lives:

> GTE proposes to reduce its asset lives in accordance with their economic lives....The Staff's view is that GTE's proposed asset lives are largely consistent with a forward-looking approach and are reasonable....The Commission finds that GTE's proposal related to depreciation is appropriate for TSLRIC purposes....The Commission further finds AT&T/MCI's proposal to be insufficiently forward looking for purposes of a TSLRIC study.
>
> (Michigan Docket No. U-11281, Feb. 25, 1998 Order,

Section d).

VI. CONCLUSION

Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.

A. Traditional historical methods of establishing depreciation lives are not forward-looking. The economic lives used in Verizon's cost studies are properly based on a forward-looking approach. Verizon's proposed rates are reasonable in comparison to the financial reporting lives of competitive telecommunications providers, including those in this docket, and should be approved by this Commission for use in establishing permanent UNE rates.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

SURREBUTTAL TESTIMONY OF ALLEN E. SOVEREIGN

Q. PLEASE STATE YOUR NAME, ADDRESS AND PRESENT POSITION.

A. My name is Allen E. Sovereign. My business address is 600 Hidden Ridge, Irving, Texas 75038. Verizon Services Corporation employs me as Group Manager-Capital Recovery.

Q. DID YOU PREVIOUSLY FILE TESTIMONY IN THIS DOCKET?

A. Yes. I filed direct testimony in this docket on November 7, 2001.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I will respond to the rebuttal testimonies of ALEC Coalition witnesses Ankum and Fischer, with regard to their criticisms of the depreciation lives and future net salvages Verizon Florida Inc. (Verizon) has used in its cost studies in this proceeding.

Q. WHAT DEPRECIATION INPUTS DO DR. ANKUM AND MR. FISCHER RECOMMEND VERIZON USE IN ITS COST STUDIES?

A. Dr. Ankum recommends using depreciation inputs either within FCC ranges or those approved for BellSouth in its UNE ratesetting case (Ankum Rebuttal Testimony (RT) at 109; Ankum Rebuttal Ex. AHA-12). Mr. Fischer merely advises the Commission to adopt Dr. Ankum's depreciation recommendation (Fischer RT at 4).

Q. DO YOU AGREE WITH DR. ANKUM'S RECOMMENDATION?

A. No. The FCC last prescribed depreciation lives and salvage values for Verizon over six years ago, in 1995. These FCC values, approved before the passage of the Telecommunications Act of 1996 and the widespread opening of local exchange markets, are obviously outdated and do not reflect today's environment. Indeed, as I discussed in my Direct Testimony, this Commission in 1998 approved depreciation inputs for Verizon in the universal service fund (USF) docket that were shorter than the FCC ranges (Sovereign Direct Testimony (DT) at page 7 and Ex. AES-2). So this Commission has already found that lives within FCC ranges are not appropriate for Verizon's forward-looking cost study.

As the New York Public Service Commission observed recently in approving Verizon's recommended depreciation inputs, "those shorter lives may well be appropriate for a TELRIC study, in that they better reflect the treatment of depreciation in the competitive market contemplated by TELRIC." (*Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements*, Order, Case 98-C-1357, at 78 (Jan. 28, 2002).)

Q. IS DR. ANKUM'S ALTERNATIVE RECOMMENDATION ACCEPTABLE?

A. No. Dr. Ankum's alternative recommendation is that Verizon use the depreciation inputs approved for BellSouth in this docket. This position is based not on any analysis, but solely on the assumption that Verizon could not face more risk than BellSouth (Ankum RT at 109).

There is no evidence to support this assumption. The depreciation lives Verizon used in its cost studies are the true economic lives of its assets, and are thus appropriate values to use in a forward-looking economic cost study. In fact, as Verizon witness Tucek points out in his Surrebuttal Testimony, Verizon's depreciation proposal does not use the significantly shorter lives that would be required by the instantaneous switch replacement assumption Dr. Ankum makes. (Ankum RT at 84).

If the Commission wishes to consider in this case the approved depreciation inputs for BellSouth, they should only be considered a **starting point** for Verizon's inputs. From that baseline, the Commission should then factor in the particular risk Verizon faces in its serving territory, and then adjust the BellSouth lives downward. This process should yield the depreciation inputs Verizon has recommended for setting Verizon's own UNE rates.

Q. DO YOU AGREE WITH DR. ANKUM'S ASSESSMENT OF RISK FACED BY VERIZON ?

A. No. Dr. Ankum believes that Verizon could not face more risk than BellSouth since BellSouth serves the majority of access lines in the state (Ankum RT at 109). That fact is precisely why Verizon does face more risk than BellSouth. Verizon's serving territory is centered in the highly concentrated, highly competitive Tampa Bay area. Verizon is thus more vulnerable to competitive risk than BellSouth, which operates over a wider and more varied base, both urban and rural, throughout the state. As Dr. Vander Weide and I discussed in our Direct Testimonies (Vander Weide DT at 37-44; Sovereign DT at 11),

Verizon's operating area is very competitive. In fact, Time Warner Communications plans to launch its first widespread offering of local and long distance telephone service in Verizon's Tampa Bay serving area. Time Warner already has 900,000 cable customers in the Bay area. That number is about half of Verizon's residential lines, so the competitive threat Time Warner raises to Verizon is obviously very serious. ("Time Warner Takes Phone Fight to Verizon," St. Petersburg Times, Dec. 22, 2001, http://pqasb.pqarchiver.com/sptimes/main/doc/000000096521722.html).

Verizon also faces risk of local wireline entry into its territory by BellSouth, the largest ILEC in Florida. BellSouth already provides local wireless telephone service in Verizon's territory, and it could readily leverage this platform into the wireline market.

As to wireless competition itself, as I discussed in my Direct Testimony, it is one of the plainest and most serious threats to Verizon's wireline service. A March 13, 2002 Wall Street Journal article reported that 46% of the U.S. population had wireless phones by the end of 2001. ("Domino Effect: Telecom's Troubles Spread From Upstarts To Sector's Leaders," The Wall Street Journal, p. A8, col. 4, Mar. 13, 2002). Increasingly, wireless flat-rate pricing plans, which routinely include long-distance minutes, have made cellular service an attractive option for the average consumer. In fact, some consumers rely on their wireless phones to the degree that they are disconnecting their wireline service. The above-mentioned Wall Street Journal article confirms consumers' greater reliance on their wireless

phones; the number of customers using their wireless phones at home increased over 40% from 1999 to 2000, and is even higher now. This trend can only be expected to increase.

Verizon's access line statistics are tangible proof of Verizon's increasing competitive risk. In 2001, total access lines served by Verizon decreased for the first time in its operating history.

In short, there is no basis to accept Dr. Ankum's assumption that Verizon faces less risk than BellSouth. Verizon's proposed depreciation inputs should be approved because they properly reflect the competitive conditions Verizon faces.

Q. HAVE THERE ALSO BEEN RECENT ADVANCEMENTS IN SWITCHING TECHNOLOGY THAT FURTHER VALIDATE VERIZON'S DEPRECIATION INPUTS?

A. Yes. Nortel and Sprint recently announced that Sprint plans to replace its circuit switches with packet switches over the next 8 years ("Sprint Awards US $1.1 Billion Deal to Nortel Networks for Next Generation Network," Nortel News Release, Nov. 5, 2001, http://www.nortelnetworks.com/corporate /news/newsreleases/2001d/). The Nortel website also states that cable television companies are implementing voice over Internet protocol (VoIP) telephony ("Motorola, Nortel Networks Team to Deliver VoIP Solutions for Broadband-Cable Market," Nortel News Release, Feb. 4, 2002, http://www.nortelnetworks.com/corporate/news/newsreleases/2002a/). As I

just noted, Time Warner will offer local and long-distance phone service in the Tampa Bay area using VoIP technology. The earlier-mentioned St. Petersburg Times article quotes a Time Warner spokesman stating that the IP technology it will use in Florida has evolved to such high-quality reception "that you could hear a pin drop."

These developments will further pressure the industry to evolve the circuit switched network to a packet switched one—and, in turn, cause increased downward pressure on Verizon's recommended 10-year depreciation life for the digital switching account.

Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.

A. The Commission should approve Verizon's depreciation recommendations in this docket. Verizon's inputs, unlike those recommended by Dr. Ankum and Mr. Fischer, are properly forward-looking and appropriate for use in a forward-looking cost study to set UNE rates. The 1995 FCC lives are outdated, as this Commission recognized in approving shorter lives for Verizon in the 1998 universal service docket. The recently approved depreciation inputs for BellSouth should, if anything, be used only as a starting point determining Verizon's inputs, with consideration of the additional risks Verizon faces.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

(Transcript follows in sequence in Volume 3.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, RPR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 2ND DAY OF MAY, 2002.

LINDA BOLES, RPR
FPSC Official Commissioner Reporter
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