REDACTED

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Complaint against Verizon Florida, LLC and MCI Communications Services, Inc. d/b/a Verizon Business Services for failure to pay intrastate access charges for the origination and termination of intrastate interexchange telecommunications service, by Bright House Networks Information Services (Florida), LLC.

Docket No. 110056-TP

DIRECT TESTIMONY OF

MICHAEL STARKEY

ON BEHALF OF

BRIGHT HOUSE INFORMATION SERVICES (FLORIDA) LLC

NOVEMBER 1, 2011

COM _____ APA _____ ECR _____ GCL _|___ RAD _____ SRC _____ ADM _____ OPC _____ CLK ____

PUBLIC VERSION Confidential Information Redacted

08052 NOV-I =

DOCUMENT NUMPER-DATE

- FPSC-COMMISSION CLERK

TABLE OF CONTENTS

Ι. Π	NTRODUCTION	1
II.B	BRIGHT HOUSE SWITCHED ACCESS SERVICE	3
Q.	WHAT FUNCTIONS OR SERVICES DOES BRIGHT HOUSE PERFORM FOR MCI COMMUNICATIONS SERVICES, INC. D/B/A VERIZON BUSINESS SERVICES (COMMISSION ISSUES LIST QUESTION 2)?	5
III.	THE RELATIONSHIP BETWEEN BRIGHT HOUSE (THE CLEC), BRIGHT HOUSE'S CABLE VOICE AFFILIATE AND THE CABLE AFFILIATE'S CUSTOMER	20
Q.	WHAT FUNCTIONS OR SERVICES DOES BRIGHT HOUSE NETWORKS INFORMATION SERVICES (FLORIDA), LLC ("BRIGHT HOUSE") PERFORM FOR BRIGHT HOUSE NETWORKS, LLC ("BRIGHT HOUSE CABLE")? (COMMISSION ISSUES LIST OUESTION 1)	24
IV.	QUESTION 1). BRIGHT HOUSE SWITCHED ACCESS SERVICES ARE INTRASTATE TELECOMMUNICATIONS SERVICES	
Q.	DOES FLORIDA LAW REQUIRE VERIZON TO PAY BRIGHT HOUSE	
	INTRASTATE ACCESS CHARGES ON CALLS THAT ORIGINATE OR TERMINATE IN IP FORMAT? (COMMISSION ISSUE LIST	
	TERMINATE IN IP FORMAT? (COMMISSION ISSUE LIST QUESTION 5)	
A	TERMINATE IN IP FORMAT? (COMMISSION ISSUE LIST	
	TERMINATE IN IP FORMAT? (COMMISSION ISSUE LIST QUESTION 5)	31
B	TERMINATE IN IP FORMAT? (COMMISSION ISSUE LIST QUESTION 5) A. THE SERVICES AT ISSUE ARE INTRASTATE SERVICES.	31 39
B	TERMINATE IN IP FORMAT? (COMMISSION ISSUE LIST QUESTION 5)	31 39 45

Table of Contents - 1

Q.	IS VERIZON BUSINESS REQUIRED TO PAY THE RATES	
	CONTAINED IN BRIGHT HOUSE'S ACCESS CHARGE PRICE LIST	
	FOR THE SERVICES THAT BRIGHT HOUSE PROVIDES TO	
	VERIZON BUSINESS? (COMMISSION ISSUES LIST QUESTION 6)	53
Q.	IF VERIZON BUSINESS IS NOT REQUIRED TO PAY BRIGHT HOUSE	
	THE RATES IN BRIGHT HOUSE'S PRICE LIST FOR THE SERVICES	
	BRIGHT HOUSE PROVIDES, IS THERE A JUST AND REASONABLE	
	RATE THAT BRIGHT HOUSE SHOULD BE PAID? (COMMISSION	
	ISSUES LIST QUESTION 7)	54
Q.	IF VERIZON BUSINESS IS OBLIGED TO PAY BRIGHT HOUSE SOME	
	AMOUNT FOR THE SERVICES BRIGHT HOUSE PROVIDES, HOW	
	MUCH DOES VERIZON BUSINESS OWE BRIGHT HOUSE?	
	(COMMISSION ISSUES LIST QUESTION 8)	57

Exhibit MTS-001	Curriculum Vitae
Exhibit MTS-002	Diagram 1 - Bright House's Provision of Switched Access Services
Exhibit MTS-003	Diagram 2 - IP Conversion points
Exhibit MTS-004	CONFIDENTIAL Diagram 3 – Ownership
Exhibit MTS-005	Diagram 4 - DigitalVoice described in the FCC's Vonage Order

Table of Contents - 2

1 <u>I. INTRODUCTION</u>

Q. PLEASE STATE YOUR NAME, EMPLOYER AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Michael Starkey. I am employed by QSI Consulting, Inc. ("QSI").
My business address is 243 Dardenne Farms Drive, Cottleville, MO 63304.

6 Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND
 7 EDUCATIONAL HISTORY.

8 A. I have served as President of OSI since its inception in 1999. OSI is a privately-9 held consulting firm specializing in the regulation of network industries, financial 10 and economic cost modeling, and litigation and regulatory support. I have been a 11 consultant specializing in telecommunications since I co-founded Competitive 12 Strategies Group, Inc. in 1996. Since 1996, I have assisted more than one 13 hundred and fifty individual telecommunications clients including local exchange 14 carriers ("LECs"), interexchange carriers ("IXCs"), Internet Service Providers 15 ("ISPs"), cable operators, equipment manufacturers, governmental agencies and 16 public advocates. Prior to 1996, I was employed by the Maryland Public Service 17 Commission as the Director of its Telecommunications Division. Mv 18 responsibilities included managing the Telecommunications Staff of engineers, 19 economists, tariff analysts and other specialists tasked as the Maryland 20 Commission's primary advisors on all issues related to telecommunications. 21 Before joining the Maryland Commission, I served as the Senior Policy Analyst 22 in the Illinois Commerce Commission's Office of Policy and Planning. I began 23 my professional career in 1991 with the Missouri Public Service Commission as a

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 2 of 57

1		Senior Economist within the Telecommunications Department, Utility Operations
2		Division. I received a Bachelor of Science degree in Economics from Missouri
3		State University in 1991. My curriculum vitae is attached as Exhibit MTS-001
4		and includes a more detailed description of my professional experience.
5	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA
6		PUBLIC SERVICE COMMISSION (HEREAFTER "COMMISSION")?
7	A.	Yes, I have. Though it has been a few years, I testified before the Commission on
8		several occasions. Likewise, I have in the past provided testimony before
9		approximately 35 other state utility commissions, the Federal Communications
10		Commission ("FCC"), various state legislatures, courts of varying jurisdictions
11		and other regulatory and administrative bodies (e.g., the United States Patent
12		Office, the Ontario Energy Board, etc.).
13	Q.	ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?
14	А.	My testimony is filed on behalf of Bright House Network Information Services
15		(Florida) LLC. I will refer to this legal entity either as "Bright House" or
16		"BHNIS." ¹
17	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?

18 A. Using the Tentative Issues List adopted in the Commission's September 27, 2011
 19 Order Establishing Procedure, my testimony will describe the switched exchange
 20 access services Bright House provides to interexchange carriers ("IXCs")

¹ In the course of my testimony it will also be necessary from time to time to refer to Bright House's affiliate that provides cable service, high-speed Internet access service, and voice service to consumers and businesses. That entity's formal legal name is "Bright House Networks, LLC." I will refer to that entity in this testimony either as "Bright House Cable" or "BHN."

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 3 of 57

including Verizon.² I will explain how Bright House's switched access service is 1 provided both from a technical and functional perspective. I will also explain that 2 Bright House provides its switched exchange access services consistent with its 3 price list and various rules of this Commission. While this dispute relates to 4 5 purely intrastate services, I also note that Bright House's provision of switched access services is consistent with the rules regarding such services put forward by 6 7 the FCC. Finally, in light of certain claims made by Verizon in some of its earlier filings in this proceeding. I will show that the switched access services that Bright 8 House provides to Verizon are intrastate telecommunications services, not 9 interstate services, and not information services. 10

11

II. BRIGHT HOUSE SWITCHED ACCESS SERVICE

12 Q. WHAT IS SWITCHED EXCHANGE ACCESS SERVICE?

A. "Switched Access" is a defined term in Bright House's Florida Access Services
Price List.³ That definition provides a high-level view of the service as follows:
"A service in which the Company establishes originating or terminating
connections between an End User and a Customer by means of switching or
routing on a Call-by-Call basis."⁴ In this definition, the "Customer" is an
interexchange carrier ("IXC") like Verizon⁵ and the "End User" is a subscriber to

⁵ Bright House Florida Access Price List, Section 1.1, First Revised page 8.

² Throughout this testimony I will refer to MCI Communications Services, Inc. d/b/a/ Verizon Business Services as "Verizon." My understanding is that, while Verizon Florida LLC, Verizon's Florida incumbent local exchange carrier ("ILEC") affiliate, was originally a defendant, that entity and Bright House settled, and the ILEC entity was dismissed. Where necessary, I will refer to the ILEC entity as "Verizon ILEC."

³ Bright House Networks Information Services (Florida), LLC, Access Services, Florida Price List No. 2 (hereafter "Bright House Florida Access Price List").

⁴ Bright House Florida Access Price List, Section 1.1, Original Page 11.1.

1	whom Verizon wishes to terminate a long-distance call (or from whom a toll-free
2	"800" call is originated). ⁶
3	In simplest terms, switched access charges compensate a local exchange
4	carrier ("LEC") when an IXC uses its network as part of the IXC's telephone toll
5	service, to reach end users; <i>i.e.</i> , either the end user originating the call or the end
6	user to whom the call is directed/terminated. The basic switched access service
7	provided by LECs to IXCs has not changed in decades, and was succinctly
8	explained by the FCC in 1996 as follows:
9 10 11 12 13 14	"Access charges were developed to address a situation in which three carriers – typically, the originating LEC, the IXC, and the terminating LEC – collaborate to complete a long-distance call. As a general matter, in the access charge regime, the long-distance caller pays long distance charges to the IXC, and the IXC must pay both LECs for originating and terminating access service." ⁷
15	The services that Bright House provides to Verizon and other IXCs, in accordance
16	with its Price List, are entirely consistent with this long-standing concept of what
17	switched access is, and what role it plays in originating and terminating long
18	distance calls.

⁶ In the Price List, the term "End User" is used to help illustrate and explain various aspects of the switched access services Bright House offers to IXCs. *See* Bright House Florida Access Price List, Section 1.1, First Revised page 9. In order to encompass the different aspects of switched access service illustrated, in part, by using the term "End User," the definition of that term is broad. As relevant to the services at issue in this dispute, the "End User" will normally be a voice service subscriber who is making or receiving long distance calls.

⁷See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, 15509, (1996) (Local Competition First Report and Order), ¶1034. See also, FCC Rule 47 C.F.R. 61.26(a)(3):

Interstate switched exchange access services shall include the functional equivalent of the ILEC interstate exchange access services typically associated with following rate elements: carrier common line (originating); carrier common line (terminating); local end office switching; interconnection charge; information surcharge; tandem switched transport termination (fixed); tandem switched transport facility (per mile); tandem switching.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 5 of 57

- Q. WHAT FUNCTIONS OR SERVICES DOES BRIGHT HOUSE PERFORM
 FOR MCI COMMUNICATIONS SERVICES, INC. D/B/A VERIZON
 BUSINESS SERVICES (COMMISSION ISSUES LIST QUESTION 2)?
- 4 A. Bright House provides Verizon with plain-vanilla, industry-standard switched 5 access services. Mostly this service is provided to enable Verizon to complete 6 calls made by Verizon's end users to Bright House's end users (that is, long 7 distance calls coming into Bright House from Verizon). A smaller but still 8 significant amount of the service is provided to originate certain toll-free calls 9 made by Bright House's end users who are calling Verizon end users (typically 10 businesses) who have purchased toll-free "8YY" services from Verizon. Bright 11 House provides these switched access services in accordance with the terms of its 12 Switched Access Price List. That document describes industry-standard switched 13 access services, with which an IXC like Verizon will have been entirely familiar, 14 literally for decades.

Q. HOW DOES BRIGHT HOUSE'S PRICE LIST DEFINE THE SWITCHED
 ACCESS SERVICES THAT IT PROVIDES TO VERIZON AND OTHER
 IXCS?

18 A. Bright House's Price List defines the basic function of its switched access service

19 as follows:

20

21

22

23

24

25

26

This service allows for a two point communications path between a Customer's premises and an End User. Switched Access Service provides the ability to originate Calls from an End User to a Customer's premises, and to terminate Calls from a Customer's premises to an End User. It provides for the use of common terminating, switching and trunking facilities, and for the use of common subscriber plant of the Company. Switched Access service provides for the ability to originate calls from an 2 3 4

1

End User's premises to a Customer's Premises and to terminate calls from a Customer's premises to an End User's premises in the LATA where it is provided.⁸

As described by the Price List, the basic function of Bright House's switched access service is to provide a two point communications path between an IXC's premises (generally referred to as a "Point of Presence" or a "POP") and an End User's premises (generally a home or business). This is what Bright House provides to Verizon every time Verizon sends a call from one of its end users to Bright House's end users, and every time that a Bright House end user makes a toll-free call to a toll-free service that Verizon provides to one of its end users.

12 Q. DOES VERIZON BENEFIT FROM THE SWITCHED ACCESS 13 SERVICES THAT BRIGHT HOUSE PROVIDES?

14 A. Yes, certainly. Verizon sells long distance services to end users. The value of 15 that service depends on those end users being able to make calls to (or, in the case 16 of toll-free services, receive calls from) other end users around the state and 17 around the country - including Bright House's end users. When Verizon's end 18 users dial a number assigned to a Bright House end user, the Verizon end user is 19 asking Verizon to complete the call as dialed. Verizon can only do that if it is 20 able to receive switched access services from the LEC that provides the Bright 21 House end user with connectivity to the PSTN – that is to say, Bright House itself. 22 So, there is no question that Verizon benefits from the switched access services 23 that Bright House provides.

⁸ Bright House Florida Access Price List, Section 3.13(A), First Revised Page 67.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 7 of 57

PLEASE DESCRIBE FOR THE COMMISSION THE TYPICAL WAY IN 1 Q. 2 WHICH A CALL FROM Α VERIZON TOLL SUBSCRIBER 3 TERMINATES TO AN END USER USING BRIGHT HOUSE'S 4 **TERMINATING SWITCHED ACCESS SERVICE.**

5 A. Assume a caller in Orlando calls a Bright House subscriber in Tampa Bay. 6 Further assume that the Orlando caller uses Verizon as its long distance carrier. 7 When the Orlando caller dials the telephone number of the Tampa Bay subscriber, the call is transmitted by the originating LEC to Verizon (likely via originating 8 9 switched access service if Verizon is not also the originating caller's LEC). 10 Verizon's IXC network (by querying industry databases) recognizes the dialed telephone number as belonging to Bright House. As such, Verizon carries the call 11 to its own POP closest to the Bright House end office to which the telephone 12 number is assigned. In Tampa, Verizon does not have direct connections to 13 Bright House. Instead, it connects to Bright House through the tandem of its 14 affiliate, Verizon Florida, LLC (the ILEC in the Tampa Bay area). Bright House 15 picks up the call at the Verizon ILEC tandem switch. From that point forward, 16 the call is handled via Bright House's terminating switched access service. First, 17 Bright House transports the call from the Verizon ILEC tandem to its own 18 telecommunications switching platform. Bright House uses its own (or leased) 19 facilities to carry this portion of the call. Charges associated with using Bright 20

1 2 House facilities to collect and carry the call from the Verizon tandem are generally referred to as "transport charges" in switched access vernacular.⁹

3 Once the call reaches Bright House's switching platform, Bright House uses the dialed digits provided to it by Verizon to identify the intended 4 terminating subscriber.¹⁰ Importantly, Verizon's network has no information 5 6 regarding the location or identification of the actual called party (sometimes) 7 known as the called party "station" location). Verizon's network knows only that 8 the call should be transmitted to the Bright House network for further instructions. 9 Part of the terminating switched access service that Bright House provides to 10 Verizon is precisely the function of interpreting the dialed number in order to 11 identify which subscriber's service should receive the call and then switching the call to the facilities which support that subscriber's service. This function is 12 generally referred to as "Local Switching."¹¹ Finally, the call itself must be 13 14 transmitted from the Bright House switch to the end user's premises so that the called party can talk with the originating caller. Verizon pays for the use of the 15 16 facilities connecting the end user to the Bright House switch via the Carrier 17 Common Line charge. It is via this combination of transport, switching and 18 common line facilities and functions that Bright House "allows for a two point

¹¹See Bright House Florida Access Price List, Section 3.14(C)(1)(b), First revised page 70.

⁹See Bright House Florida Access Price List, Section 3.14(C)(1)(e) and (f) for a description of "transport mileage" and "transport termination" (First revised page 70). Transport termination compensates the access provider for the use of electronics at each end of a transport circuit. Transport mileage compensates the access provider for the use of actual transport circuits between the point at which the call is provided to the access provider, and the access provider's switch.

¹⁰ The dialed digits and other relevant signaling information is communicated from Verizon to Bright House and vice versa by means of a parallel network, to which all major carriers on the Public Switched Telephone Network ("PSTN") are connected, known as the Signaling System 7, or SS7, network.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 9 of 57

2

1

3

communications path between a Customer's [Verizon's] premises and an End User ... to terminate Calls from a Customer's [Verizon's] premises to an End User," consistent with its Price List.

4 Q. IN ITS MOTION TO DISMISS, VERIZON CLAIMED THAT BRIGHT
5 HOUSE PROVIDES SOME OF THESE FUNCTIONS USING AN IP6 ENABLED NETWORK.¹² EVEN IF THAT IS TRUE, DOES IT MAKE
7 ANY DIFFERENCE TO THE SERVICE THAT BRIGHT HOUSE
8 PROVIDES TO VERIZON?

9 A. No. First, as discussed in a bit more detail later in this testimony, Bright House's 10 Price List is quite explicit that Bright House may provide the switched access 11 functions described therein using any technology that it wants, as long as the 12 actual requirements of the service are met. Nothing about the Price List, and 13 nothing about the nature of switched access service itself, requires Bright House 14 to use any particular technology or network arrangement so long as Bright House 15 provides "a two point communications path between a Customer's [IXC's] 16 premises and an End User."

17 In fact, it is clear to me that Verizon has misconstrued a number of 18 important regulatory decisions and principles in trying to justify its conclusion 19 that it is exempt from switched access charges – even when it is plainly receiving 20 switched access service – simply because some portion of the network and 21 transmission functionalities Bright House provides to Verizon uses Internet 22 Protocol ("IP") instead of more traditional circuit-switched technology.

¹²Verizon's Motion to Dismiss or Stay Bright House's Complaint, filed March 14, 2011, pgs. 4 and 5.

1

Q. PLEASE EXPLAIN THAT ANSWER IN MORE DETAIL.

2 A. As described above, Bright House provides Verizon with a number of features 3 and functions that constitute switched access service (generally transport, 4 switching and termination via common line facilities). Indeed, as I understand the 5 issues, the fact that Verizon receives these functions from Bright House, and uses them in support of its telephone toll service, is not in dispute. Likewise, it does 6 7 not appear that Verizon takes issue with the quality of the services and functions 8 that Bright House provides, or the compatibility of those functions with Verizon's 9 provision of toll services. As such, there seems to be little debate about whether 10 Verizon is being provided the switched access features and functions Bright 11 House says it will provide in its access Price List. Instead, Verizon has been 12 refusing to pay its switched access bills based upon an opportunistic reading of 13 various orders and decisions from certain regulatory agencies and courts. While I 14 will address many of those decisions later in this testimony, I think it is important 15 to begin the conversation by pointing out that Verizon receives good and valuable 16 service from Bright House, perfectly consistent with the Bright House Price List, 17 which likewise establishes the rates it will charge when providing those services -18 rates that Verizon then refuses to pay, after having already used the services.

Q. PLEASE DESCRIBE THE EXTENT TO WHICH BRIGHT HOUSE USES IP-BASED TECHNOLOGY IN PROVIDING ITS SWITCHED ACCESS SERVICES TO VERIZON AND OTHER IXCs.

A. Bright House transmits traffic between its network and the networks of other
 telecommunications carriers (including Verizon) using standard circuit-switched

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 11 of 57

(or Time-Division Multiplexed - "TDM") format(s).¹³ Likewise, at a called 1 2 party's premises, traffic is converted back to a traditional circuit-based format so 3 that subscribers can use standard retail consumer telephone equipment with 4 standard PSTN interfaces to make and receive calls.¹⁴ Bright House uses IP-5 based technology only for purposes of switching traffic within its network and 6 transporting traffic between the elements of its IP-based switch and the edge of the network located at a subscriber's premises. The diagram below illustrates the 7 8 Bright House voice network in Florida.

¹⁴ That is, the consumer can simply plug his/her telephone into a standard telephone jack (known in the industry as an "RJ-11" jack) available in a standard wall outlet in order to make and receive calls.

¹³ I say "format(s)" because the traditional PSTN includes, and has long included, a variety of different technologies and signaling formats. These include, for example, a simple analog copper loop (consisting of a single pair of wires) running from a home all the way to an analog telephone switch; a four-wire, digital loop running from a business private branch exchange ("PBX") back to a digital telephone switch; a fiber connection from a large business's PBX network directly into a trunk port on a digital telephone switch; party lines in which multiple customers share a single two-wire loop; multiple individual customer loops multiplexed onto 4-wire copper or fiber facilities back to a telephone switch; and various wireless transmission formats. The technology used in the PSTN to provide telephone service is continually evolving. It is highly misleading to suggest that there is one way to provide phone service on the PSTN, and one new, IP-based way. Not only are there many different ways to handle telephone traffic on the PSTN, there are many different ways that IP-based technology can be used to handle such traffic. As discussed later in my testimony, the fact that a carrier uses a new technology to provide an established telecommunications service like switched access does not magically convert the established telecommunications service into something else.

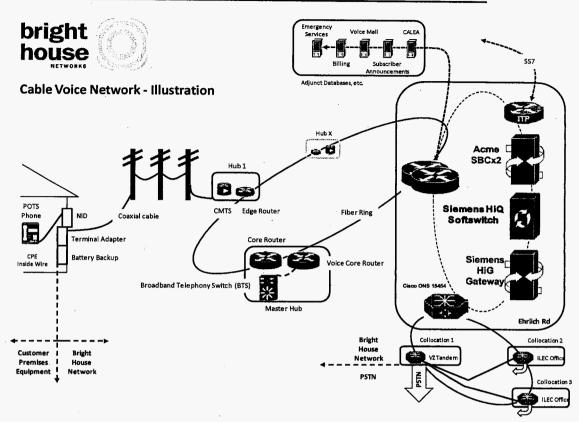


Diagram 1 - Bright House's Provision of Switched Access Services¹⁵

Beginning at the left of the diagram, the network interfaces with a voice service subscriber's standard customer premises equipment ("CPE") using a multi-media terminal adapter ("MTA") provided as part of the Bright House network.¹⁶ For purposes of illustration, assume the subscriber dials a long-distance call to be carried by Verizon (*e.g.*, a toll-free call). The call is originated by the subscriber using the same standard analog signal the subscriber would use with any other LEC, including Verizon. Once the signal reaches the Bright House network at the

¹⁵ This diagram is also provided as a separate exhibit (MTS-002).

¹⁶ [BEGIN CONFIDENTIAL]

1

2

3

4

5

6

7

8

9

END CONFIDENTIAL

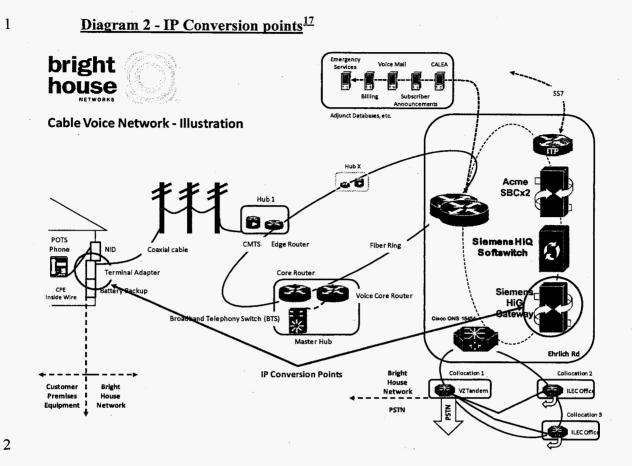
Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 13 of 57

1 MTA, the signal is converted from a standard analog transmission, to a digitized 2 The call remains in IP-format through the Bright House IP transmission. 3 switching platform, until it reaches the PSTN-facing side of the Siemens HiG 4 Gateway. The Gateway converts the transmission from IP format back to a circuit-switched format (e.g., TDM) for interaction with the PSTN. Bright House 5 6 transports the call in TDM format from its Gateway over Bright House owned or 7 leased facilities to the ILEC's tandem (shown in the chart as a Verizon-ILEC 8 tandem, although the same arrangement is used in Orlando, where the ILEC is 9 AT&T). At that point, Bright House hands the call to the ILEC (again, shown 10 here as Verizon-ILEC), which then transmits the call to Verizon itself (Verizon-11 the-IXC). The Bright House network and the ILEC network (and, indirectly, the 12 Verizon-IXC network) interact in a standard TDM format.

13 Q. PLEASE ILLUSTRATE THE TWO CONVERSION POINTS YOU 14 DESCRIBE ABOVE.

A. Below, I have recreated the diagram shown above, with two changes. The only
changes are the addition of circles that highlight conversion points in the network
where circuit-switched transmissions are converted to/from IP:

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 14 of 57



Q. ARE ALL IP-ENABLED FEATURES AND FUNCTIONS INVOLVED IN
 PROVIDING SWITCHED ACCESS SERVICES TO IXCs LIMITED TO
 TRANSMISSION WITHIN THE BRIGHT HOUSE NETWORK?

6 A. Yes.

7 Q. DOES THE FACT THAT BRIGHT HOUSE USES IP-BASED
8 TECHNOLOGY FOR SOME PORTION OF ITS SWITCHED ACCESS
9 SERVICE MEAN THAT THE SERVICE THAT BRIGHT HOUSE

¹⁷ This diagram is also provided as a separate exhibit (MTS-003).

1

2

PROVIDES TO VERIZON AND OTHER IXCS IS AN "ENHANCED" OR "INFORMATION" SERVICE?

3 No. The access service provided by Bright House to Verizon and other IXCs is A. 4 not an "enhanced" or "information" service. For example, consider a terminating 5 switched access call. Bright House accepts the call from Verizon at the Verizon 6 ILEC tandem, transports and switches the call within its network (some portion of 7 which is in IP format) and delivers the call to the end user with exactly the same 8 content and in the same form as Bright House received it. As far as the provision 9 of access services is concerned, IP is used simply to gain networking efficiencies -10 not to provide additional or enhanced features to the service being provided to 11 Verizon.¹⁸ In this regard, the fact that the traffic between the end user's premises and the Bright House softswitch is in IP format is entirely transparent to 12 13 Verizon and other IXCs who use Bright House's switched access service to get 14 calls to or from the end users. Certain portions of that network (along with other 15 equipment, not shown in the diagram) are also used to provide video and high-16 speed data services, but that has no effect whatsoever on the basic transmission 17 function that Bright House provides to IXCs, such as Verizon, in getting long 18 distance calls to and from the end users. Those calls are delivered between

¹⁸ Note that Bright House provides local telephone service – the ability to send and receive local calls, access to E911, access to the long distance network, etc. – to its affiliate. Its affiliate then provides voice and other services directly to residential and business end users. [BEGIN CONFIDENTIAL]

END CONFIDENTIAL

1 2

Verizon and the end user with no relevant change in the form or content of the call.

3 Q. WHAT IS THE SIGNIFICANCE OF THE FACT THAT BRIGHT HOUSE 4 DELIVERS THE CALL IT RECEIVES FROM VERIZON TO THE 5 INTENDED SUBSCRIBER WITHOUT CHANGING "THE FORM OR 6 CONTENT" OF THE CALL?

7 The extent to which the form or content of the call is changed, or not, is the core A. 8 of what constitutes a telecommunications service. As I describe in more detail 9 below, the Telecommunications Act of 1996 defines telecommunications at 47 10 U.S.C. $\S153(43)$ as "the transmission, between or among points specified by the 11 user, of information of the user's choosing, without change in the form or 12 content of the information as sent and received." [Emphasis added.] Regardless 13 of the fact that Bright House uses IP technology within its network to deliver the 14 call, the fact that Bright House does not change the form or the content as 15 received (or sent) by the user dictates that the service is a telecommunications 16 (not an "information") service.

17 Q. WHY DID YOU QUALIFY YOUR EARLIER ANSWER BY SAYING
18 THAT THERE WERE NOT "RELEVANT" CHANGES IN FORM OR
19 CONTENT?

A. As I mentioned in a footnote, above, the PSTN uses many different technologies
to handle telephone traffic. Transformations among those different technologies
certainly result in change in the "form" of a telephone call in a literal sense, but
those kinds of changes have never been considered relevant. In the case of

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 17 of 57

1 Verizon exchanging traffic with Bright House, as discussed in more detail below, Bright House picks up the traffic from Verizon-ILEC's tandem switch for routing 2 3 onto high-capacity digital special access circuits. Normal end user telephones cannot handle or process traffic in that high-capacity digital format. As part of 4 5 the switched access service that Bright House provides to Verizon (and other 6 IXCs), it accepts traffic in high-capacity digital format, but delivers it to end users 7 in low-capacity, single-circuit analog format. Of course, this is what every LEC of any size does when it provides switched access service to any IXC. I 8 9 emphasize this point because it shows that any number of "technical," changes in 10 the "format" of telephone calls occur routinely in the PSTN – and specifically in the course of providing switched access service – without any suggestion that 11 those changes somehow mean that the IXC can get the access service for free. 12 Yet that is what Verizon apparently is arguing here. 13

14Q.IS THE FACT THAT BRIGHT HOUSE USES THE TECHNOLOGY15DESCRIBED ABOVE WITHIN ITS NETWORK TO PERFORM THE16SWITCHED ACCESS FUNCTIONS SET OUT IN ITS PRICE LIST A17REASONABLE BASIS UPON WHICH VERIZON SHOULD REFUSE TO18PAY FOR THE SWITCHED ACCESS SERVICES IT RECEIVES?

A. No. As just discussed, Verizon is being provided the exact features and functions
it requires to terminate (and in some cases originate) its telephone toll traffic
to/from end users - *i.e.*, the subscribers to Bright House Cable's voice services.
The features and functions provided by Bright House to Verizon comport with the
description of switched access services described in Bright House's Price List.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 18 of 57

1	Importantly, Bright House's Price List is technology neutral with respect
2	to how those features and functions will be provided. The Price List does not
3	require the specific use of any particular type of facility (or technology) to
4	provide the service, but not surprisingly, focuses on the functions ultimately
5	provided to the customer (in this case Verizon). For example, consider Section
6	3.3.2 of the Access Price List (section entitled "Provision of Company Equipment
7	and Facilities"). That section makes clear that Bright House will be solely
8	responsible for choosing the facilities needed to provide the relevant services, and
9	that its primary obligation is to provide the necessary "technical parameters"
10	required by the customer: "The Company may substitute, change or rearrange
11	any equipment or facility at any time and from time to time, but shall not thereby
12	alter the technical parameters of the service provided to the Customer." Further,
13	at Section 3.15(B) entitled "Design and Traffic Routing of Switched Access
14	Service," Bright House explains that: "Selection of facilities and equipment and
15	traffic routing of the service are based on standard engineering methods, available
16	facilities and equipment and the Company's traffic routing plans." Nowhere does
17	the Price List require the use of any particular technology, protocol or format to
18	provide the service.

In this regard, I would note that the industry-standard definition of "telecommunications services," contained in federal law, makes essentially the same point. That definition, set out in the federal Communications Act (at 47 U.S.C. § 153(53), says that "telecommunications services" means providing "telecommunications" (transmission of information) to the public for a fee,

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 19 of 57

1 *"regardless of the facilities used.*" As a policy matter, it makes sense, in 2 evaluating a service, to focus on what features and functionalities the service 3 provides to the customer, not on the technical details of how those features and 4 functionalities are provided. Yet Verizon's position in this case seems based 5 substantially, if not entirely, on the details of the facilities that Bright House uses 6 to provide switched access services.

Q. HAS THE FCC RECOGNIZED THAT ACCESS SERVICES SHOULD BE
DEFINED BY THE FUNCTIONALITY PROVIDED TO THE IXC,
RATHER THAN THE UNDERLYING TECHNOLOGY OR NETWORK
CONFIGURATION USED TO PROVIDE THE SERVICE?

11 A. Yes. When analyzing and ultimately adopting rules that would govern interstate 12 access charges for CLECs, the FCC recognized that CLECs were unlikely to 13 configure their networks in the same way or use the same technologies used by 14 ILECs. In order to encourage this type of technological innovation, the FCC's 15 rules ensure that as long as a CLEC provides the "functional equivalent" of an 16 ILEC's specific switched access service, the CLEC can assess the same switched 17 access rates as the ILEC:

47 C.F.R. 61.26 - Tariffing of competitive interstate switched exchange 18 19 access service 20 (3) Interstate switched exchange access services shall include the functional equivalent of the ILEC interstate exchange access services 21 22 typically associated with following rate elements: carrier common line (originating); carrier common line (terminating); local end office 23 switching; interconnection charge; information surcharge; tandem 24 switched transport termination (fixed); tandem switched transport facility 25 (per mile); tandem switching. [Emphasis added.] 26 27

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 20 of 57

As stated above, Bright House clearly provides the functional equivalent of carrier common line, local end office switching and tandem switched transport functions that might be provided by an ILEC were an ILEC to serve the subscriber to whom Verizon's telephone toll calls are terminated. The fact that Bright House may use IP-enabled technology within its network to accomplish those functions is irrelevant to whether Bright House has provided switched access service consistent with its Price List.

8III.THE RELATIONSHIP BETWEEN BRIGHT HOUSE (THE CLEC),9BRIGHT HOUSE'S CABLE VOICE AFFILIATE AND THE CABLE10AFFILIATE'S CUSTOMER

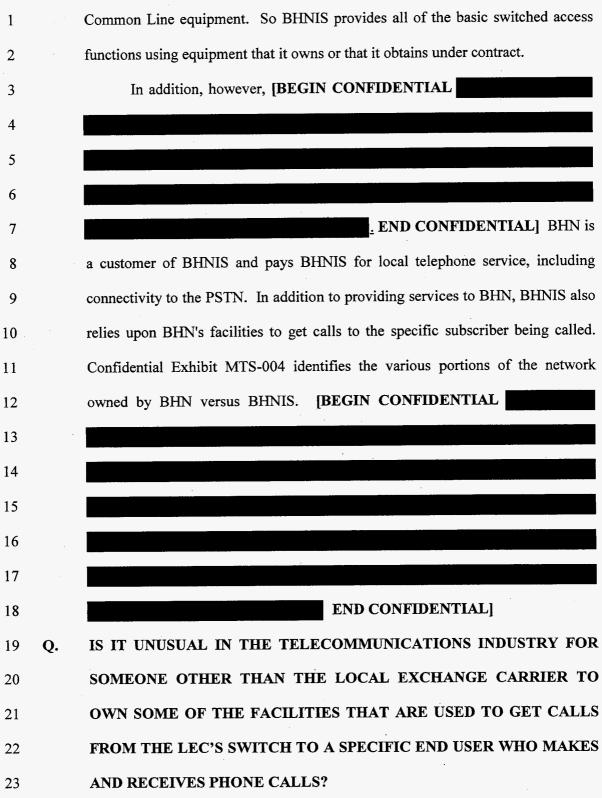
11 Q. IDENTIFY THE BRIGHT HOUSE ENTITY THAT IS A CERTIFICATED 12 CLEC.

A. BHNIS (*i.e.*, Bright House Networks Information Services (Florida), LLC) is a
 certificated telecommunications carrier in the State of Florida.

15 Q. DOES BHNIS USE FACILITIES OF AN AFFILIATE TO PROVIDE
 16 PORTIONS OF ITS SWITCHED ACCESS SERVICE?

A. In part, yes. BHNIS – the CLEC – owns (or obtains under contract in its own name) the essential equipment used to provide switched access service. BHNIS
purchases special access lines from the ILEC to transmit access traffic from the ILEC tandem back to BHNIS's switching equipment; BHNIS owns the softswitch and related equipment that switches the TDM-formatted access traffic it receives from Verizon Business and other IXCs. BHNIS also owns transmission and other equipment on the "end user" side of its softswitch, which functions as Carrier

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 21 of 57



Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 22 of 57

1	A.	No, not at all. The best example is probably the situation of a large business
2		customer that uses a private branch exchange, or PBX. A large PBX connects to
3		a LEC for connectivity to the PSTN. The LEC transmits all traffic bound for the
4		PBX – which may have hundreds or thousands of individual stations "behind" it –
5		to the PBX itself, not to any individual loop or circuit dedicated to a particular
6		called party. The PBX then switches the traffic that comes in from the LEC to the
7		appropriate individual called party. In this scenario, the PBX, and the links from
8		the PBX to the individual called party, are not owned by the LEC and may well
9		be (indeed, typically are) owned and managed by the company that is the LEC's
10		customer. Yet, I am not aware that anyone has ever seriously suggested that a
11		LEC that routes inbound long distance calls to a customer with a large PBX is not
12		providing a full and complete switched access service.
13		In the case of BHNIS's access service, Bright House Cable and its
14		network could be viewed as in the same position as a business with a large PBX.
15		BHNIS routes traffic bound for the individual stations "behind" the interface
16		between BHNIS and Bright House Cable to Bright House Cable's equipment,
17		[BEGIN CONFIDENTIAL
18		. END CONFIDENTIAL]
19		In fact, BHNIS is more involved in providing access service than is a
20		typical LEC serving a large PBX. [BEGIN CONFIDENTIAL
21		
22		
23		END CONFIDENTIAL] Certainly the fact that legal

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 23 of 57

title to certain equipment lies with the cable affiliate and not with BHNIS does not 1 alter the service that BHNIS is providing to Verizon Business and other IXCs. 2 3 IN YOUR PBX EXAMPLE, THE PEOPLE WHO ACTUALLY SEND AND Q. **RECEIVE PHONE CALLS ARE TYPICALLY EMPLOYEES OF THE** 4 COMPANY THAT OWNS THE PBX AND BUYS THE PHONE SERVICE 5 FROM THE LEC. DOESN'T THAT MAKE A DIFFERENCE HERE, 6 WHERE THE VOICE END USERS ARE NOT EMPLOYEES OF BRIGHT 7 8 **HOUSE CABLE?**

9 No. Any such concern would be based on a misconception of the different A. situations in which phone service is provided. Consider large hotels and resort 10 11 complexes that often use PBXs to provide service to individual rooms or units. 12 The guests in the hotel who actually make and receive calls are customers of the 13 hotel, just as the end users who use Bright House Cable's voice services are 14 customers of Bright House Cable. Yet, a LEC that serves a hotel with a PBX is 15 providing a full and complete switched access service when IXCs send the LEC 16 long distance calls bound for the hotel.

Other situations from the traditional PSTN support this conclusion. For example, so-called "shared tenant service" arrangements involved situations in which the owner of an apartment building or office complex would buy a PBX and buy phone service to connect that PBX to the PSTN. The building owner would then sell phone service to the tenants in the building in its own name, as a "shared tenant service" provider. When the tenants in the building send or receive

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 24 of 57

1 long distance calls, the LEC that connects the shared tenant service system to the 2 PSTN provides to IXCs, and charges for, switched access service. All of this goes to show that the correct focus in considering the services 3 that Bright House provides to IXCs such as Verizon Business is the functions that 4 5 Bright House performs for Verizon – transport, switching, and common line – and not irrelevant matters such as the ownership of each and every piece of equipment 6 7 that a call might traverse from the switch to the ultimate end user. 8 OR SERVICES DOES BRIGHT HOUSE Q. WHAT **FUNCTIONS** 9 **NETWORKS INFORMATION SERVICES (FLORIDA), LLC ("BRIGHT** HOUSE") PERFORM FOR BRIGHT HOUSE NETWORKS, LLC 10 11 ("BRIGHT HOUSE CABLE")? (COMMISSION ISSUES LIST 12 **QUESTION 1).** 13 A. The discussion so far has been focused on the switched access services and 14 functions that Bright House provides to IXCs such as Verizon Business. This

question asks instead about the functions that Bright House performs for BrightHouse Cable.

Broadly speaking, Bright House provides local telephone service to Bright House Cable, akin to the service that LECs have long provided to large businesses with PBX systems or other private network arrangements. This includes PSTN connectivity (the ability to send and receive local and long distance calls), including SS7 signaling management and connectivity; access to directory assistance, operator services, emergency services, etc.; and various support functions such as management of the number portability process, ensuring that

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 25 of 57

end users who wish to be listed in ILEC and other directories and directory 1 2 assistance databases are properly included, etc. In performing these functions, BHNIS manages and facilitates interaction between Bright House Cable and its 3 4 end users with the PSTN and other carriers (e.g., interconnection, number administration, etc.). 5 In addition, while Bright House Cable provides voice, video and Internet 6 services directly to residential and business subscribers, it has chosen to focus its 7 own technical efforts on the provision of the latter two services. **BEGIN** 8 9 CONFIDENTIAL 10 11 12 . END CONFIDENTIAL] 13 14 In return for these functions, BHN (Bright House Cable) pays BHNIS a 15 **BEGIN CONFIDENTIAL** fee. 16

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 26 of 57

IV. BRIGHT HOUSE SWITCHED ACCESS SERVICES ARE INTRASTATE TELECOMMUNICATIONS SERVICES Q. DOES FLORIDA LAW REQUIRE VERIZON TO PAY BRIGHT HOUSE INTRASTATE ACCESS CHARGES ON CALLS THAT ORIGINATE OR TERMINATE IN IP FORMAT? (COMMISSION ISSUE LIST QUESTION 5)

I am not an attorney and as such, cannot provide the legal analysis likely required 7 A. to answer this question fully. However, I think the following technical and policy 8 9 issues compel an affirmative answer. First, it is my understanding that Florida law requires that "an intrastate interexchange company...shall continue to pay 10 11 intrastate switched network access rates or other intercarrier compensation to the local exchange telecommunications company or the competitive local exchange 12 telecommunications company for the origination and termination of interexchange 13 telecommunications service."¹⁹ Verizon is an intrastate interexchange company. 14 15 BHNIS is a competitive local exchange telecommunications company. Verizon 16 has used BHNIS's telecommunications services to originate and terminate 17 intrastate interexchange telecommunications services. These facts would seem to 18 require that Verizon pay BHNIS for the switched access services it has used.

19 Second, it is worth noting that the fundamental basis of the question (*i.e.*, 20 that calls originate/terminate in IP format) is not entirely accurate, depending on 21 what meaning one gives to the terms "originate" and "terminate." As discussed 22 above, when BHNIS handles an incoming or outgoing call on Verizon's behalf, it

¹⁹ Florida Statutes §364.02(14)(g).

uses IP telephony only within those network facilities. Once the call reaches the 1 subscriber's home or business, the communication is transmitted in standard 2 analog format, just as Verizon or any other LEC would deliver the call to an 3 ordinary telephone. With that in mind, a terminating call is transmitted to BHNIS 4 from Verizon in a standard circuit-switched format, and likewise delivered to the 5 customer in a standard circuit-switched format. From this perspective, the call 6 does not "terminate" in IP (and likewise, a call would not "originate" in IP either). 7 8 BHNIS and Bright House Cable do not change the form or the content of the 9 communication as sent by the caller and received by the called party. IP format is 10 used only "in the middle" of the communication as it is transmitted from the subscriber's premises and ultimately switched by BHNIS.²⁰ 11

THE STATUTE YOU OUOTE ABOVE INDICATES THAT ACCESS 12 Q. CHARGES MUST BE PAID BY AN IXC FOR "... THE ORIGINATION 13 14 AND OF TERMINATION **INTEREXCHANGE** 15 **TELECOMMUNICATIONS SERVICE."** THE SERVICE BHNIS IS 16 **ORIGINATES** OR TERMINATES FOR VERIZON Α "TELECOMMUNICATIONS SERVICE?" 17

18 A. Yes. The quote above is from Florida's statutes, which (as I understand it) does
19 not have a formal definition of "interexchange telecommunications service."
20 Generally speaking, however, terms and definitions used in the federal
21 Communications Act provide a reasonable backdrop for understanding language

²⁰ As discussed earlier in my testimony, there are any number of ways in which normal PSTN carriers change the "form" of communications they carry, without any concern that the basic communications services they offer are transformed, as a result, into information services.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 28 of 57

- used in the communications industry (including state-level statutes) that are not 1 separately and expressly defined in a particular context. Here, the term 2 "telecommunications service" is defined in the Telecommunications Act of 1996 3 as follows at 47 U.S.C. §153(53): 4 (53) TELECOMMUNICATIONS SERVICE.—The term "telecommunications 5 service" means the offering of telecommunications for a fee directly to the 6 public, or to such classes of users as to be effectively available directly to 7 8 the public, regardless of the facilities used. 9 The term "telecommunications" is likewise defined at 47 U.S.C. §153(50): 10 (50) TELECOMMUNICATIONS .-- The term "telecommunications" means the 11 transmission, between or among points specified by the user, of 12 information of the user's choosing, without change in the form or content 13 of the information as sent and received. 14 15 Verizon Business is certainly an IXC. It provides telephone toll services that 16 17 allow callers from one exchange to dial subscribers in a different exchange and, 18 thereafter, converse. Verizon's IXC service allows the user to specify the end 19 points of the call (by choosing the phone to call from and then dialing the 20 particular digits identifying the called party) and Verizon, thereafter, transmits the 21 voice conversation (which is clearly information of the user's choosing). To 22 Bright House's knowledge, Verizon does not change "the form or content of the 23 information as sent and received." As such, the Verizon service that Bright House 24 helps to originate or terminate is "telecommunications." Clearly, Verizon offers 25 its IXC services directly to the public for a fee. Telecommunications offered for a 26 fee to the public is, by definition, a "telecommunications service." As for Bright House, when Verizon sends Bright House a call along with 27 28

the dialed telephone number, that telephone number amounts to a direction from

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 29 of 57

Verizon (or, more precisely, the Verizon end user that originated the call) to send 1 the call to the specific Bright House end user whose service has been assigned the 2 telephone number dialed. That is, the dialed telephone number is what the PSTN 3 uses to indicate one of the "points specified by the user" of the 4 telecommunications service - specifically, the end point of the call. So, Bright 5 House's switched access service involves taking a call from the hand-off point 6 between Bright House and Verizon (one of the points specified by Verizon, the 7 "user" in this situation) and delivering the call to the specific party being called, 8 9 as indicated by the dialed telephone number (the other end point specified by Verizon). The service that Bright House provides to Verizon, therefore, is clearly 10 11 a telecommunications service.

VERIZON CLAIMED IN ITS MOTION TO DISMISS THAT THE 12 Q. 13 FLORIDA STATUTE CITED ABOVE [§364.02(14)(g)] REQUIRES ONLY 14 THAT VERIZON PAY **SWITCHED** ACCESS "OR **OTHER** 15 INTERCARRIER COMPENSATION." VERIZON ARGUES THAT BY 16 PAYING \$0.0007, IT IS **"OTHER INTERCARRIER** PAYING 17 CONSISTENT WITH THE LAW. COMPENSATION" PLEASE 18 COMMENT.

A. There are a number of problems with this claim. First, as the Commission
recognized in its August 26, 2011 Order Denying Motion to Dismiss in this case,
from 2007 (when Bright House began providing services using its own switching
and other equipment) until August 2010, Verizon paid Bright House's tariffed
switched access charges for the traffic at issue in this proceeding. According to

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 30 of 57

the Commission, this was "a tacit admission on Verizon Business's part that the charges were legitimate."²¹ Importantly, the Commission also notes that Verizon cites "no statutory change or reinterpretation of existing law to support nonpayment." In other words, Verizon is unable to point to any relevant change in law or circumstance that would support its unilateral decision to change the rate it pays for an ongoing service, the content and form of which has not changed.

1

2

3

4

5

6

Second, it is important to note that while Verizon is correct in stating that 7 the law requires payment of either switched access charges "or other intercarrier 8 compensation" for the termination of interexchange traffic, nowhere does it 9 provide Verizon or any other IXC the right to set its own rate as Verizon has 10 11 done. Clearly if both Verizon and Bright House could agree to a rate/structure 12 different than that contained in BHNIS' switched access Price List, then "other 13 intercarrier compensation" might be appropriate. For example, I understand that 14 in their most recently signed interconnection agreement Verizon's ILEC 15 operations have agreed with Bright House to treat all intra-LATA traffic 16 (including interexchange traffic) as "local" traffic for which agreed upon transport 17 and termination rates, rather than switched access rates will apply (regardless of underlying technology).²² That situation, however, is very different than the 18 19 situation at issue in this proceeding. The carriers have not agreed to a new or 20 different structure or rate. Instead, Verizon has unilaterally decided it will pay

²¹Order Denying Motion to Dismiss, Docket NO. 110056-TP, Issued August 26, 2011, pg. 7.

²² See Bright House's "Response to Supplement to Verizon's Motion to Dismiss," Docket No. 110056-TP (filed June 7, 2011); Interconnection Agreement between BHNIS and Verizon-ILEC, Interconnection Attachment, § 8.6.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 31 of 57

1		substantially less, based upon its interpretation of various court proceedings in
2		other jurisdictions and actions Verizon believes the FCC may take in the future.
3		It is difficult for me to believe that the drafters of §364.02(14)(g) had this type of
4		self-help in mind when they suggested that IXCs must continue to pay access
5		charges "or other intercarrier compensation."
6		A. THE SERVICES AT ISSUE ARE INTRASTATE SERVICES
7	Q.	VERIZON IN ITS MOTION TO DISMISS ARGUED THAT THE BHNIS
8		ACCESS SERVICE IS AN INTERSTATE INFORMATION SERVICE. DO
9		YOU AGREE?

10 A. No. I am advised by my client that all monies in dispute in this proceeding relate 11 to switched access services provided to Verizon where both the calling party and 12 the called party are located in Florida. A call that originates and terminates in one 13 state is, by definition, an intrastate call. I am not aware that Verizon even 14 disputes these facts.

Q. IF IT IS UNDISPUTED THAT CALLS ORIGINATE AND TERMINATE
WITHIN THE STATE, HOW DOES VERIZON ARGUE THAT THEY
ARE INTERSTATE SERVICES?

18 A. In its Motion to Dismiss, Verizon claims that state level regulatory authority over 19 any and all "VoIP" services has been preempted by the FCC.²³ Based on the 20 assertion that the BHNIS service Verizon receives is a VoIP service, it concludes 21 that only the FCC, not this Commission, has jurisdiction to regulate the rates

²³ Verizon Motion to Dismiss, pgs. 19-23.

1 2 charged for the service. Verizon relies upon the FCC's Vonage Order²⁴ to support its argument.

3 Q. DOES THE FCC'S VONAGE ORDER SUPPORT VERIZON'S CLAIM
4 THAT THE SWITCHED ACCESS SERVICES IT RECEIVES FROM
5 BHNIS ARE INTERSTATE SERVICES?

- No. As an initial matter, the FCC's Vonage Order focuses on a voice service 6 A. offered directly to end users using the public Internet. The service at issue here 7 (switched access) is offered by BHNIS, only to telecommunications carriers like 8 9 Verizon. Traffic is handed to BHNIS by Verizon in standard telecommunications format, and as described earlier, terminated by BHNIS in standard 10 telecommunications format as well. Further, neither BHNIS nor Verizon changes 11 the form or content of the information from that originally chosen by the user 12 (*i.e.*, the person making the call). With this in mind, the service at issue here is 13 very, very different from the service the FCC examined in its Vonage Order. 14
- 15 Q. PLEASE DESCRIBE THE FCC'S VONAGE ORDER.
- 16 A. The FCC's *Vonage Order* discusses DigitalVoice service. DigitalVoice is a 17 relatively typical "nomadic VoIP" service whereby customers use special IP-18 compatible CPE to connect to a broadband connection. The customer's special 19 IP-compatible CPE communicates via the Internet with various servers and 20 equipment owned by Vonage for purposes of supporting voice communications 21 between the DigitalVoice customer and other Vonage customers as well as more

²⁴See Memorandum Opinion and Order, Vonage Holdings Cop. Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, 19 FCC. Rcd 22404 (2004). petitions for review denied, Minnesota Pub. Utils. Commn v. FCC, 483 F.3d 570 (8th Cir. 2007), hereafter "Vonage Order."

traditional users on the PSTN. I provide below a simple illustration of this type of "nomadic" VoIP service:

DigitalVoice described in the FCC's Vonage Order²⁵

Vonage Servers (°PF INTERNET t Phone oiceAgent RJ45 Broadband Connection

Diagram 4:

1

2

3

4

5 As depicted in the diagram above, Vonage's DigitalVoice service requires special 6 CPE that connects directly into a broadband connection to the public Internet 7 either in the customer's home/business, or "on the road." Because the service 8 relies upon the public Internet to connect the customer to Vonage's service 9 platform, a DigitalVoice customer can use his/her CPE anywhere there is a 10 working broadband connection to the public Internet. Vonage (and similar 11 nomadic VoIP providers) take no responsibility for, and do not get involved in, 12 the management or operation of the broadband connection that ultimately links the end user to the PSTN. For nomadic VoIP services, that link between the 13 14 PSTN and the end user is provided by the public Internet itself. Indeed, this is 15 what allows the services to be nomadic in the first place - anywhere that the end

²⁵ This diagram is also provided as a separate exhibit (MTS-005).

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 34 of 57

- user can connect to the public Internet, the Vonage service can reach them. These are, in fact, the key characteristics that the FCC relied upon in determining DigitalVoice to be an interstate service.
- 4

18

3

1

2

Q. WHY ARE THESE "KEY CHARACTERISTICS"?

5 A. These are the "key characteristics" because the FCC relied on them in 6 determining that it was impossible to identify the location of DigitalVoice 7 customers and, therefore, that it was appropriate to preempt state regulation of 8 that service. Beginning at paragraph 23 of its Vonage Order the FCC identifies 9 four primary criteria which not only define a service like DigitalVoice, but also, 10 per the FCC's reasoning, make it "impossible" to discern the inter- or intra-state 11 nature of the service (thereby resulting in a determination that they are by default, 12 interstate services):

- 13
 1. "Vonage has no means of directly or indirectly identifying the
 geographic location of a DigitalVoice Subscriber;"²⁶
- 15
 2. The service requires "a broadband connection from the user's
 16
 location,"²⁷which, in this context, means a broadband connection
 17
 to the public Internet;

3. The service requires "IP-compatible CPE;"²⁸ and

- The service includes "a suite of integrated capabilities and features,
 able to be invoked sequentially or simultaneously, that allows
 customers to manage personal communications dynamically,
 - ²⁶Vonage Order, ¶ 23
 - ²⁷Vonage Order, ¶ 32
 - ²⁸Vonage Order, ¶ 32

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 35 of 57

1	including	enabling	them	to	originate	and	receive	voice
2	communic	ations and	access	other	features	and o	capabilities,	even
3	video." ²⁹							

4 Q. IS IT POSSIBLE TO DETERMINE WHERE A SWITCHED ACCESS 5 CALL CARRIED BY BHNIS ON BEHALF OF VERIZON ORIGINATES 6 OR TERMINATES?

7 A. Yes. BHNIS can specifically identify the subscriber and the subscriber location 8 to which access calls are terminated (and originated). Unlike Vonage's 9 DigitalVoice service, the equipment used by BHNIS to originate and terminate 10 calls on the BHN network are fixed (not nomadic). BHN subscribers cannot take 11 some special equipment with them (which, in BHN's case, would be the MTA) 12 and use BHN's voice service from another location (e.g., a hotel room in another 13 state when they may be traveling for business). BHNIS provides switched access 14 only to BHN subscriber locations. Because those locations are fixed and known, 15 none of the concerns raised by the FCC in its Vonage Order related to identifying 16 the origination or termination location of the call are applicable with BHNIS's 17 switched access services.

18 Q. WAS THE FACT THAT VONAGE COULD NOT DETERMINE THE
19 LOCATION OF THE DIGITALVOICE SUBSCRIBER A KEY
20 COMPONENT OF THE FCC'S FINDING THAT THE VONAGE
21 SERVICE WAS AN INTERSTATE SERVICE?

²⁹Vonage Order, ¶ 32

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 36 of 57

- 1 A. Yes. The FCC determined that it must preempt state regulation of the Vonage 2 service, in large part, on the basis of "impossibility," i.e., "Vonage has no means 3 of directly or indirectly identifying the geographic location of a DigitalVoice subscriber."³⁰ The FCC went on to suggest that even if a method of identifying 4 5 the location of the subscriber could be implemented, to do so, given the nature of 6 the service, would substantially reduce the benefits of the service as it was 7 intended to be provided: 8 DigitalVoice harnesses the power of the Internet to enable its users 9 to establish a virtual presence in multiple locations simultaneously, to be reachable anywhere they may find a broadband connection. 10 and to manage their communications needs from any broadband 11 connection. The Internet's inherently global and open architecture 12 13 obviates the need for any correlation between Vonage's DigitalVoice service and its end users' geographic locations.³¹ 14 15 16 IS THE VOICE SERVICE PROVIDED BY BHN CONSTRUCTED TO 17 Q. PROVIDE THESE SAME TYPES OF GEOGRAPHICALLY AGNOSTIC 18 19 **FEATURES AND FUNCTIONS?** 20 No. BHN'S subscribers cannot "establish a virtual presence in multiple locations A. 21 simultaneously, to be reachable anywhere they may find a broadband connection, 22 and to manage their communications needs from any broadband connection." 23 The service provided to BHN subscribers is available only at the premises to 24 which it is provided. As such, the switched access services BHNIS makes 25 available to Verizon and other IXCs is likewise confined to those same locations. Further, it is important to note that BHN's service does not rely upon a broadband 26
 - ³⁰Vonage Order, ¶ 23

³¹Vonage Order, ¶ 24

1 connection to the public Internet to reach its subscribers. While the public 2 Internet is the sole means by which Vonage connects an end-user to its Vonage 3 DigitalVoice platform, BHN, in combination with BHNIS, uses a private 4 fiber/coaxial network to connect its switching facilities with its subscribers' 5 premises (much as the Verizon ILECs use private copper/fiber telephone 6 networks to serve their end-users). As such, when the FCC notes that "[t]he 7 Internet's inherently global and open architecture obviates the need for any 8 correlation between Vonage's DigitalVoice service and its end-users' geographic 9 locations," it is clearly identifying a key characteristic of DigitalVoice that is not 10 provided by or enabled through BHN's subscriber service, or BHNIS' switched 11 access service.

12 Q. DOES THE SWITCHED ACCESS SERVICE PROVIDED BY BHNIS TO 13 VERIZON REQUIRE A BROADBAND CONNECTION AT THE 14 SUBSCRIBER'S PREMISES?

15 A. No. Note that in the diagram above specific to Vonage's DigitalVoice service the 16 customer's special IP-enabled CPE must connect directly to a broadband/Ethernet 17 (RJ45) connection in order to work (because it must access the Internet before it 18 can reach Vonage's service platform).³² No such Ethernet (or other broadband) 19 connection is required to use either BHN's or BHNIS' service. Indeed, BHN's 20 subscribers do not need any special CPE equipment to use the service. They

³² In the Vonage diagram above the "broadband connection" is identified as an RJ45 jack. Most consumers and businesses access their broadband service using a standard RJ45 jack to which computers, routers and VoIP-enabled phones connect. Earlier in this testimony I referred to an RJ11 jack that represents a typical narrow-band connection used to access standard telephone wiring (rather than broadband wiring) within a house or business.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 38 of 57

1 connect to BHN's network using their traditional telephone equipment via the 2 copper-based inside wire in their homes/businesses including standard telephone 3 jacks (RJ11) you find in any residence/business. While a Vonage customer must 4 first have an Internet connection at his/her premises before they can use 5 DigitalVoice, BHN's subscribers do not. Indeed, BHN serves a number of customers who take only its telephone service, but not its Internet service. 6 7 BHNIS provides Verizon switched access connections to those all BHN 8 subscribers, even those who choose only telephone service without Internet 9 access.

10 Q. DOES BHN EMPLOY A TERMINAL ADAPTER AT THE CUSTOMER'S
11 PREMISE TO CONVERT THE IP-TELEPHONY TRAFFIC ON ITS
12 NETWORK TO A MORE TRADITIONAL ANALOG SIGNAL AT THE
13 CUSTOMER'S PREMISES?

14 Yes, it does. As described above, the terminal adapter at a BHN subscriber's Α premises interacts with elements of the BHNIS soft switch platform using IP 15 protocol. The two-way communication path that is established via that interaction 16 is used by BHNIS to provide aspects of its switched access service. However, use 17 18 of IP protocol (and broadband connectivity) in that two-way communications path 19 is confined to the intra-networking aspects of the service. The IP format used for portions of a switched access call within the BHNIS/BHN network does nothing 20 21 to "enhance" the service Verizon offers its telephone toll customer.

1		B. THE SERVICES AT ISSUE ARE TELECOMMUNICATIONS
2		SERVICES
3	Q.	IS THE SERVICE PROVIDED BY BHNIS TO VERIZON AN
4		"INFORMATION SERVICE?"
5	A.	No. The service BHNIS provides to Verizon is a telecommunications service.
6	Q.	VERIZON INDICATED IN ITS MOTION TO DISMISS THAT THE FCC
7		HAS YET TO DETERMINE WHETHER VOIP IS AN INFORMATION
8		SERVICE OR A TELECOMMUNICATIONS SERVICE. DO YOU
9		DISAGREE? ³³
10	А.	That statement is true as far as it goes, but it has nothing to do with the issues in
11		this case. The FCC in its February 9, 2011 ICC/USF Notice stated as follows:
12		"The Commission has never addressed whether interconnected VoIP is subject to
13		intercarrier compensation rules, and if so, the applicable rate for such traffic." ³⁴
14		Verizon interprets this finding by the FCC to suggest that the FCC has never
15		determined whether IP-enabled services of the type provided by BHNIS might be
16		subject to intercarrier compensation, or not. That interpretation is in error.
17	Q.	PLEASE EXPLAIN.

³³ Verizon Motion to Dismiss, pg. 26.

³⁴Connect America Fund; a National Broadband Plan for Our Future, Establishing Just and reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing a Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC docket No. 96-45, WC Docket No. 03-109 ("ICC/USF Notice"), 77 603-619 (Feb. 9, 2011).

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 40 of 57

In 2004 AT&T asked the FCC for a Declaratory Ruling finding that switched
access charges are not applicable to IP-enabled services. ³⁵ Much like Verizon
here, AT&T contended that, because some portion of the toll call between the
originating caller and the terminating caller was transmitted using IP-protocol,
AT&T should be exempt from access charges. The FCC disagreed. At paragraph
12 of its Order the FCC explained that introduction of IP protocol is not, in and of
itself, enough to make a service an information service:
Users of AT&T's specific service obtain only voice transmission with no net protocol conversion, rather than information services such as access to stored files. More specifically, AT&T does not offer these customers a "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information;" therefore, its service is not an information service under section 153(20) of the Act. End user customers do not order a different service, pay different rates, or place and receive calls any differently than they do through AT&T's traditional circuit-switched long distance service; the decision to use its Internet backbone to route certain calls is made internally by AT&T. To the extent that protocol conversions associated with AT&T's specific service take place within its network, they appear to be "internetworking" conversions, which the Commission has found to be telecommunications services. <i>We clarify, therefore, that AT&T's specific service constitutes a telecommunications service.</i> ⁵⁴
⁵⁴ This determination is consistent with the Commission's tentative conclusion in the Stevens Report that phone-to-phone IP telephony bears the characteristics of telecommunications service. Stevens Report, 13 FCC Rcd at 11544, para. 89. AT&T's specific service meets the four conditions that the Commission stated "it tentatively intend[ed] to refer to" as phone-to-phone IP telephony. Stevens Report, 13 FCC Rcd at 11543-44, para. 88. [other footnotes omitted][emphasis added]

31

32 .

Unlike the Vonage Order relied upon by Verizon, the FCC in its AT&T VoIP-inthe-Middle decision specifically addressed access charges and their applicability

³⁵In the Matter of Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges, WC Docket No. 02-361, Order, Released April 21, 2004, FCC 04-97 ("AT&T IP-in-the-Middle").

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 41 of 57

when IP-protocol is introduced into the communications path. In the *AT&T IP-inthe-Middle* order the FCC, at paragraph 1, established three primary criteria by which services like that provided by AT&T should be evaluated to discern whether access charges would apply:

1

2

3

4

5

6 7

8 9

10

11

12

13 14

15

We emphasize that our decision is limited to the type of service described by AT&T in this proceeding, i.e., an interexchange service that: (1) uses ordinary customer premises equipment (CPE) with no enhanced functionality; (2) originates and terminates on the public switched telephone network (PSTN); and (3) undergoes no net protocol conversion and provides no enhanced functionality to end-users due to the provider's use of IP technology. Our analysis in this order applies to services that meet these three criteria regardless of whether only one interexchange carrier uses IP transport or instead multiple service providers are involved in providing IP transport.

- 1617Q.DOES THE TRAFFIC AT ISSUE IN THIS PROCEEDING MEET THE18THREE CRITERIA PUT FORWARD BY THE FCC IN DETERMINING19THAT ACCESS CHARGES SHOULD APPLY?
- 20 A. Yes, it does. As described above, BHN's subscribers to whom BHNIS provides 21 access via its switched access service, use their existing, ordinary CPE (*i.e.*, inside 22 wire and a standard telephone) to access telephone service. They do not require Likewise, calls to/from those subscribers originate and 23 specialized CPE. 24 They use standard telephone numbers and terminate on the PSTN. 25 interconnections between certified telecommunications carriers to make and 26 receive telephone calls. Indeed, that is one critical role played by BHNIS (*i.e.*, to 27 provide BHN subscribers connectivity to/from the PSTN). Finally, as described 28 above, there is no enhanced functionality provided to the subscriber via the use of 29 the IP protocol used to transmit their messages within the BHNIS/BHN network.

1	Q.	THE FCC, AT PARAGRAPH 12 OF ITS AT&T VOIP-IN-THE-MIDDLE
2		ORDER, FOUND THAT PROTOCOL CONVERSIONS UNDERTAKEN
3		BY AT&T WERE "INTERNETWORKING CONVERSIONS" WHICH
4		THE FCC HAD ALREADY DETERMINED TO BE
5		TELECOMMUNICATIONS SERVICES. IS ANY PROTOCOL
6		CONVERSION UNDERTAKEN BY BHNIS IN THE PROVISION OF
7		ACCESS SERVICES AN "INTERNETWORKING" CONVERSION?
8	A.	Yes. The FCC previously described these "internetworking" conversions as
9		follows in its Non-Accounting Safeguards Order: ³⁶
10 11 12 13 14 15 16 17 18 19 20 21		106. We note that, under Computer II and Computer III, we have treated three categories of protocol processing services as basic services, rather than enhanced services, because they result in no net protocol conversion to the end-user. These categories include protocol processing: 1) <i>involving</i> <i>communications between an end-user and the network itself</i> (e.g., for initiation, routing, and termination of calls) rather than between or among users; 2) in connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing CPE); and 3) involving internetworking (conversions taking place solely within the carrier's network to facilitate provision of a basic network service, that result in no net conversion to the end- user.[Emphasis added.]
22		Below, I have reinserted the earlier diagram indicating where, within the
23		BHNIS/BHN network, IP conversions take place.

³⁶Amendment to Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry); and Policy and Rules Concerning Rates for Competitive Common Phase II Carrier Service and Facilities Authorization Thereof; Communications Protocols Under Section 64.702 of the Commission's Rules and Regulations, CC Docket No. 85-229, Report and Order, 2 FCC Rcd 3072, 3081-82, paras. 64-71 (1987) (Computer III Phase II Order); Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905, 21957-58, para. 106 (1996) (Non-Accounting Safeguards Order).

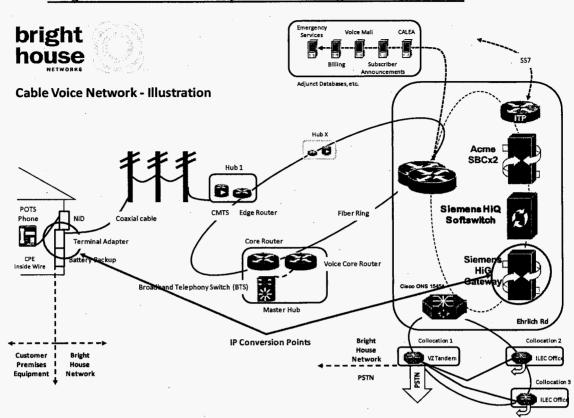


Diagram 2 - IP Conversion points in the Bright House Network³⁷

If we were tracking a call from the subscriber's CPE to the long distance network of Verizon (*i.e.*, working from the left side of the diagram to the right side), the first protocol conversion would take place at Terminal Adapter, i.e., the very edge of the BHNIS/BHN network. The call, which originates in analog format via the customer's standard telephone equipment, is converted by the Terminal Adapter to an IP format. As noted in the quote from the Non-Accounting Safeguards Order above, protocol conversions between the end user and the network don't

³⁷ Also available as Exhibit MTS-003

1

2

3

4

5

6

7

8

9

count to convert a service from a telecommunications service into an information service.³⁸

1

2

In any case, from that point the call is transmitted in that same IP format 3 across the BHNIS/BHN network to the Siemens HiG Gateway located in the 4 central office. At the gateway the transmission is converted again, this time from 5 6 an IP format back to a more traditional TDM format, in one of which the call was originated. The call is then transmitted by BHNIS to the intended third-party 7 carrier (e.g., Verizon), in a standard TDM format. Both protocol conversions 8 happen inside the BHNIS/BHN network and are undertaken solely for purposes of 9 internetworking. No additional features, functions or services are made available 10 to the subscriber or the IXC via the conversion of the signal to IP format in the 11 middle of the transmission (just as AT&T added no discernable features or 12 functions when it introduced IP to the middle of its service, which the FCC 13 ultimately determined was a telecommunications service subject to access 14 charges).39 15

³⁸ In fact, that same portion of the order indicates that the only protocol conversions that count would occur "between or among users." That suggests that as long as the call in question originates and ends with standard consumer CPE plugged into standard RJ-11 wall jacks, the end-to-end service is a telecommunications service no matter what technology is used in the middle. That is exactly the situation here.

 $^{^{39}}$ I note here that one of the primary definitional distinctions between a "telecommunications service" on the one hand, and an "information service" on the other, is that a telecommunications service transmits information "without change in the form or content of the information as sent and received." (47 U.S.C. \$153(20) and (46)). In other words, while an information service changes the actual information (in terms of form and/or content) being transmitted between end users (indeed, that is one reason it is often referred to as an "enhanced" service), telecommunications services do not change the form/content. The BHNIS access service does not change either the form or the content of the communication between end users, it simply passes along the same voice communication from originating party to terminating party without any enhancement.

1

2

Q. DOES BHNIS UNDERTAKE A "NET PROTOCOL" CONVERSION IN PROVIDING SWITCHED ACCESS SERVICES TO VERIZON?

3 A. No. While BHNIS does convert the TDM signal it receives from Verizon to IP for transport within its network, the BHNIS/BHN network does the identical 4 5 backward conversion before delivering the signal in analog format to the BHN subscriber. That is, Bright House picks up calls from Verizon in a high-capacity 6 7 digital PSTN format, converts them to IP format for part of their path through the 8 BHNIS/BHN network, but then makes sure that they are converted back to 9 standard (low-capacity) PSTN format at the end user's premises, in order to allow 10 the end user to send and receive calls with standard CPE. In sum, the call is 11 received by BHNIS in traditional circuit-switched format and is terminated to the subscriber in that same format, specifically so that the customer can use standard 12 inside wire and telephone equipment to use the service. That is not a "net 13 protocol conversion" under any reasonable understanding of that term. 14

15 V. OTHER QUESTIONS FROM THE COMMISSION'S ISSUES LIST

16 Q. PLEASE ADDRESS THE REMAINING QUESTIONS PUT FORWARD IN

17 ATTACHMENT A TO THE COMMISSION'S SEPTEMBER 27, 2011

18 ORDER ESTABLISHING PROCEDURE (TENTATIVE ISSUES LIST).

A. In my preceding testimony I responded directly to Questions 1, 2 and 5. The
remaining questions appear to focus on Florida or federal law. Because I am not
an attorney I will not attempt to respond to the legal aspect of those issues.
However, there are technical, policy, and economic considerations that bear on
each of those questions. In the remainder of my direct testimony below, I discuss

- those technical, policy, and economic considerations in an effort to assist the
 Commission in resolving those issues.
- Q. DOES FLORIDA LAW GIVE THE COMMISSION JURISDICTION TO
 GRANT BRIGHT HOUSE'S CLAIM FOR PAYMENT OF INTRASTATE
 ACCESS CHARGES ON THE TRAFFIC AT ISSUE HERE, WHEN THAT
 TRAFFIC ORIGINATES OR TERMINATES IN INTERNET PROTOCOL
 ("IP") FORMAT? (COMMISSION ISSUES LIST QUESTION 3)
- A. As stated above, I do not think it is fair to characterize the traffic as "originating"
 or "terminating" in IP format, since the traffic is delivered to the customer entirely
 in TDM format. That said, my understanding is that the point of this question is
 to ask whether the Florida Legislature's decision to deregulate "VoIP" services
 (that is, to take them out of the Commission's jurisdiction) applies or should apply
 to the access services that Bright House provides to Verizon.
- Again, putting aside any legal considerations, as a technical, economic, and policy matter, I disagree with the notion that deregulation of VoIP services provided to end users should somehow extend to access services provided to IXCs, when the legislature specifically determined that IXCs must continue to pay for switched access services.
- 19 Q. WHY DOES IT MAKE NO SENSE TO VIEW THE DEREGULATION OF
 20 CONSUMER VOIP SERVICES AS EXTENDING TO BRIGHT HOUSE'S
 21 ACCESS SERVICES?
- A. There are several reasons for this conclusion. From a technical perspective, the
 provision of access services involves different equipment and activities, and is

1 provided to different customers, than is VoIP service provided to end users. 2 Bright House has equipment that is designed to, and indeed is dedicated to, interfacing with other carriers on the PSTN in standard, traditional PSTN format. 3 4 It uses that equipment to provide a service that is functionally identical to 5 traditional PSTN switched access services offered by traditional PSTN LECs -6 that is, it gets calls to and from end users, on a call-by-call basis, based on the 7 standard PSTN telephone number the caller dials. While the precise technology 8 Bright House uses to provide this service may differs from that used by a 9 traditional PSTN LEC, that doesn't matter. In fact, traditional PSTN LECs use 10 many different technologies to provide their own switched access services.

11 From an economic and policy point of view, the considerations that 12 underlie a legislative or regulatory decision to deregulate a service offered to end 13 users, such as VoIP service here, are entirely different from the considerations 14 that bear on the proper regulatory treatment of carrier-to-carrier services in 15 general and intercarrier compensation issues in particular. Broadly speaking, 16 while carriers can and should compete aggressively with each other for the 17 business of end users, in order for telephone service to continue to work, those 18 same competitors have to work cooperatively with each other in innumerable 19 ways in order to ensure that calls continue to go through and, indeed, to make the 20 competition for end users even possible. A decade ago the FCC realized that even 21 robust and unregulated competition between ILECs and CLECs for end users did 22 not mean that CLEC access charges assessed on IXCs could or should be 23 unregulated. While I am not a lawyer, I would note that the Florida Legislature

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 48 of 57

seems to have recognized exactly this point when it stated that the deregulation of 1 VoIP did not affect the obligation of carriers to pay access charges, and that the deregulation of interexchange services did not affect the obligation of IXCs to continue to pay access charges. The lawyers will address the legal significance of those provisions, but from a policy perspective, they are exactly right: 5 deregulation of some or all end user services, including VoIP services, is an 6 entirely different question, raising entirely different policy concerns, than 7 deregulation of carrier-to-carrier services such as switched access service. 8

In this regard, I would also note that Verizon, in its Motion to Dismiss, 9 often attempts to group BHNIS's access services together with BHN's cable voice 10 service, and speaks to them as if they are a single service. Either Verizon 11 misunderstands the technical and economic facts surrounding the two services, or 12 Verizon is deliberately trying to "muddy the water." As just discussed, the fact is 13 that they are two different and distinct services, provided to two completely 14 different sets of customers. This is true even though the two services are to some 15 extent provisioned using much of the same physical network equipment. It is 16 certainly possible that the cable voice service provisioned by BHN to its 17 subscribers would properly be classified as VoIP under either the Florida-specific 18 or FCC's definitions, while the access service provided by BHNIS would not be. 19 Even if the BHN cable voice service provides features and functions that render it 20 an information service (a question on which I express no opinion here), it is clear 21 that no such features or functions are made available via BHNIS's switched access 22 service. That service does nothing more than transport, switch and terminate the 23

2

3

4

same voice communication that was originated by Verizon's telephone toll
 subscriber.

Q. IF THE COMMISSION HAS JURISDICTION OVER BRIGHT HOUSE'S CLAIM UNDER STATE LAW, DOES FEDERAL LAW NEVERTHELESS PRECLUDE THE COMMISSION FROM EXERCISING THAT JURISDICTION?(COMMISSION ISSUES LIST QUESTION 4)

- This issue is framed as a matter of law, so I cannot address the ultimate question. 7 A. However, I would note that as I discussed in relation to the Vonage Decision and 8 the "IP in the Middle" decision above, the FCC has not pre-empted non-nomadic 9 cable telephony services like those offered by Bright House Cable. Likewise, the 10 FCC's "IP in the Middle" order shows that toll services involving some IP 11 transmission and routing are still telecommunications services subject to normal 12 regulatory rules, including the normal split of regulatory authority as between 13 interstate and intrastate jurisdictions. That same logic applies fully to the 14 switched access services that Bright House provides to Verizon and that are at 15 16 issue in this case.
- 17 Q. FROM A POLICY AND FACTUAL PERSPECTIVE, SHOULD
 18 INTERCARRIER COMPENSATION FOR THE TRAFFIC AT ISSUE IN
 19 THIS CASE BE VIEWED AS A MATTER FOR FEDERAL RATHER
 20 THAN STATE REGULATION?
- A. No. An important policy issue under the 1996 Act is the role of the states, versus
 the role of the federal government, in regulating rates and related matters in the
 telecommunications industry. Whatever the FCC might have the legal authority

to do to push aside state regulators, the general rule for nearly a hundred years has been that states are responsible for regulating "intrastate" communications – calls that begin and end within the boundaries of a single state. There is no question that the traffic at issue in this case is intrastate in nature, or, more precisely, that there is no more ambiguity about the jurisdictional status of this traffic than any other traffic on the PSTN.

7 Q. PLEASE EXPLAIN WHAT YOU MEAN.

1

2

3

4

5

6

8 A. As I noted earlier in this testimony, the telephone network itself has no real 9 information about the specific location of an individual end user. The telephone 10 network relies on the dialed telephone number to determine which carrier the call 11 should be delivered to. It is up to that carrier to then switch and transmit the call to the proper subscriber location. When it comes time to bill for traffic that has 12 13 been exchanged, carriers typically look at the calling and called telephone 14 numbers and associate those numbers with particular locations. For example, the Commission's consumer assistance line can be reached on 850-413-6100. The 15 first six digits of that number - the "850-413" part - show that the number is 16 17 associated with the Tallahassee area. On the other hand, a colleague of mine who 18 has previously testified before this Commission lives in the Tampa area. His 19 telephone number is 727-372-5599. The first six digits of *that* number – the 20 "727-372" part - show that the number is associated with the Tampa area. So, 21 any call between those two numbers will be regarded by the telephone network, 22 for routing and billing purposes, as running between Tallahassee and Tampa - an 23 intrastate call.

1

2

Q. BUT ISN'T IT IMPOSSIBLE TO TELL WHERE A VOIP CALL BEGINS OR ENDS?

3 А. Not at all. This raises the important distinction, noted above, between "nomadic" 4 and "fixed" VoIP services. A nomadic VoIP service is designed to work using specialized (non-PSTN) customer premises equipment, from any broadband 5 6 Internet connection. So, for example, a Vonage customer can take their so-called 7 "SIP Phone" and receive calls to their same assigned telephone number literally 8 anywhere in the world that they can find a broadband Internet connection. 9 Indeed, I use the Vonage softphone agent on my laptop regularly when I travel 10 abroad because it represents a convenient and cost effective way to stay in touch 11 with colleagues and family at home. It is this "nomadic" nature of IP-originated 12 VoIP that the FCC (as discussed earlier) found to be problematic in establishing the proper jurisdictional parameters of the service. In this regard, a nomadic VoIP 13 service is akin to a wireless phone service. Even if someone with a Tallahassee 14 15 number for their wireless phone in fact normally makes and receives calls in 16 Tallahassee, their phone is designed to accompany them wherever they might go.

17

Q. IS FIXED VOIP DIFFERENT?

18 A. Yes, it is quite different. A fixed VoIP service is offered to a specific location.
19 Thus, when Bright House Cable provides its voice service to a specific subscriber,
20 it does so by associating the subscriber's phone number with a particular piece of
21 equipment in its network (not CPE) – i.e., the MTA – that remains in that
22 subscriber's home. As a result, the telephone number assigned to that subscriber

provides a highly reliable indication of where calls to and from that number end
 or begin.

3 Q. IS IT LITERALLY IMPOSSIBLE FOR A SUBSCRIBER TO MOVE
4 THEIR FIXED VOIP EQUIPMENT TO ANOTHER LOCATION?

A. It is not literally impossible, but Bright House and other fixed VoIP providers
work diligently to keep subscribers from doing so, and the technology itself works
against such mobility. And, my understanding is that any subscriber who
attempts to move his/her MTA from the assigned premises is in conflict with the
Bright House terms of service.⁴⁰

10 Q. SO, DOES THIS MEAN THAT THE FCC CANNOT TAKE OVER THE

11 REGULATION OF FIXED VOIP SERVICES, AND INTERCARRIER

12 COMPENSATION FOR CALLS TO AND FROM SUCH SERVICES?

A. Again, I am not a lawyer and so cannot say what the FCC may or may not legally
do. I *can* say that as a factual matter, there is no merit to any claim that we do not
really know, based on their assigned telephone numbers, where fixed VoIP
subscribers are located. We know where those subscribers are with the same
degree of certainty that we know where traditional, normal telephone subscribers

⁴⁰ See <u>http://www.brighthouse.com/central-florida/policies/residential-agreement</u>. It reads as follows:

⁽c) The location and address associated with my Home Phone Service will be the address identified on the Work Order. I acknowledge that, under Section 4(d) of this Agreement, I am not permitted to move BHN Equipment from the location and address in which it has been installed. Furthermore, if I move my voice-enabled cable modem to an address different than that identified on the Work Order, calls from such modem to 911 will appear to 911 emergency service operators to be coming from the address identified on the Work Order and not the new address. I acknowledge that if I call 911 or another emergency Service through a personal computer's "click2call" capability from a location other than the address listed on my Work Order, then the emergency services may not respond to the location from where the 911 call was made.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 53 of 57

1 2 are. Any regulatory or legal decision that relies on the idea that we do *not* know will be simply mistaken, as a factual matter.

3 Q. HOW DOES THE FCC'S RECENT DECISION REGARDING
 4 INTERCARRIER COMPENSATION AND UNIVERSAL SERVICE
 5 AFFECT THIS ISSUE?

6 A. On October 27, 2011, the FCC voted on an order that addresses a wide variety of 7 issues involving intercarrier compensation and universal service. As of the date 8 of this testimony, the FCC's actual order (which is rumored to exceed 500 pages 9 in length) has not been released. The FCC did release an 8-page, single-spaced 10 "Executive Summary" of its order, one brief paragraph of which addresses VoIP. 11 It is, however, difficult to discern exactly what the FCC's actual order says about 12 this topic. Once the actual order is released, I (and, I am certain, both Verizon 13 and Bright House) will review it carefully with an eye towards its effect, if any, 14 on this case. Assuming the FCC's order is released prior to the date for rebuttal 15 testimony (December 2, 2011), I will address it in that rebuttal testimony and/or, 16 if necessary and permitted by the Commission, surrebuttal testimony.

17 Q. IS VERIZON BUSINESS REQUIRED TO PAY THE RATES CONTAINED
18 IN BRIGHT HOUSE'S ACCESS CHARGE PRICE LIST FOR THE
19 SERVICES THAT BRIGHT HOUSE PROVIDES TO VERIZON
20 BUSINESS? (COMMISSION ISSUES LIST QUESTION 6)

A. To the extent that this question is purely legal in nature (what Verizon Business
might be "required" to do), I expect the attorneys to fully address it. I can say that

12

as a matter of economic policy and regulatory fairness, Verizon Business should be required to pay the rates contained in Bright House's Price List.

3 Earlier in this testimony, I discussed Florida Statute §364.02(14)(g). I 4 described the fact that Verizon had paid Bright House's tariffed switched access 5 charges for a number of years before abruptly refusing to continue paying those 6 rates in August 2010. The fact that Verizon is unable to point to any meaningful 7 change in the service or the law that prompted its decision to no longer pay those 8 rates makes clear that those rates are no less valid/reasonable today, then they 9 were during the years when Verizon paid them without complaint. I would add to 10 that discussion (included here by reference), the fact that tariffs and price lists play an important role in the industry. They inform a customer of the rates, terms 11 12 and conditions under which the carrier in question will offer services. In other words, Verizon knew/knows the rate Bright House expects to be paid for the 13 14 switched access service Verizon uses.

Q. IF VERIZON BUSINESS IS NOT REQUIRED TO PAY BRIGHT HOUSE
THE RATES IN BRIGHT HOUSE'S PRICE LIST FOR THE SERVICES
BRIGHT HOUSE PROVIDES, IS THERE A JUST AND REASONABLE
RATE THAT BRIGHT HOUSE SHOULD BE PAID? (COMMISSION
ISSUES LIST QUESTION 7)

A. Even if Verizon Business is not literally legally "required" to pay the rates in
Bright House's Price List, those rates still, in fact, constitute just and reasonable
rates for the services that Bright House has provided and will continue to provide
to Verizon Business.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey Direct Testimony, Page 55 of 57

1

Q. ON WHAT DO YOU BASE THAT CONCLUSION?

2 A. As far as I am aware, Florida has not adopted any specific regulatory policy 3 regarding how to assess the reasonableness of CLEC access charge rates. In the 4 absence of any such specific regulatory policy, it is reasonable and sensible to use 5 the policy that the FCC established for interstate CLEC access rates ten years ago, 6 which is that rates that are at or below the rates charged by the ILEC in the same 7 service area, for functionally equivalent services, should be deemed just and 8 reasonable. See 47 C.F.R. § 61.26, discussed above. Here, Bright House's 9 intrastate switched access rates are at or below the level of the comparable ILEC rates for functionally equivalent services. As a result, Bright House's existing 10 intrastate switched access rates should be considered just and reasonable, 11 regardless of whether it is ultimately determined that they are "legally binding" by 12 virtue of being set out in Bright House's Price List. 13

14

Q. WHY DOES THIS POLICY MAKE SENSE?

This policy makes sense for a number of reasons. First, traditionally regulators 15 A. have focused their attention on the access rates of dominant market players - in 16 this case, the ILECs. If the ILEC's rate for access services is deemed to be 17 reasonable, it makes sense to treat CLEC rates for the same (or functionally 18 equivalent) services as reasonable, if they are no higher than the ILEC's rates. 19 This policy creates a sound incentive for CLECs to provide those services in the 20 most efficient way possible, because if they can provide functionally equivalent 21 services more efficiently, they can earn profits commensurate with their 22

efficiency. This is good for the overall economic efficiency of the telecommunications market.

2

3

4

5

6

7

8

9

10

1

Second, this policy makes it unnecessary to delve into the specific costs and operations of numerous CLECs. Over the last several decades, regulators at both state and federal levels have been understandably reluctant to analyze the information necessary to set specific service rates based on the costs incurred or that might be incurred by individual carriers. Of course, in some cases it will be necessary (or preferable) to undertake a cost analysis – typically of ILEC operations – but to the extent the CLEC feels that the ILEC rate is compensatory, mirroring is likely to lead to reasonable rates.

Third, adopting the rate parity rule described above is particularly 11 important to ensure the continued development of fair competition in local 12 telephone service. Historically, ILECs have used revenues from intrastate access 13 charges to allow them to charge lower retail rates to their end users. This means 14 that when a CLEC or other competitor sets retail rates for end users to compete 15 with the ILEC, the ILEC price - the price that the competitor faces in the market 16 - has been set by the ILEC based on its receipt of often significant amounts of 17 intrastate access charge revenue, derived from intrastate long distance calls to and 18 from the ILEC's end users. To enable CLECs to compete for end users on a level 19 20 playing field, the CLECs should be permitted to charge the same rates for the same functions - that is, CLECs should be entitled to charge the same amount to 21 long distance carriers for calls to and from the CLEC's customers as the ILEC's 22 can charge. Otherwise the ILECs will have a competitive advantage in the market 23

- for serving end users, not based on any superior efficiency or better service, but
 simply as a result of regulatory policy that favors them. That is obviously a bad
 idea bad for competition, and bad for consumers. Allowing CLECs to charge
 the same rates for intrastate access as charged by the ILECs against which the
 CLECs compete allows head-to-head competition for end users to proceed on a
 fair and reasonable basis.
- 7 Q. IF VERIZON BUSINESS IS OBLIGED TO PAY BRIGHT HOUSE SOME
 8 AMOUNT FOR THE SERVICES BRIGHT HOUSE PROVIDES, HOW
 9 MUCH DOES VERIZON BUSINESS OWE BRIGHT HOUSE?
 10 (COMMISSION ISSUES LIST QUESTION 8)
- This issue is addressed in the testimony of Mr. Paul Woelk, Bright House's 11 A. Director of Finance and Business Development. As a general matter, my 12 understanding is that Verizon Business has not materially disputed Bright House's 13 bills with respect to the number of minutes of traffic for which Verizon Business 14 is being billed. The only question, then, is what per-minute rate to apply. As 15 described above, the rate in Bright House's Price List should apply for a variety 16 of policy reasons and, though I am not an attorney, I suspect for some legal 17 reasons as well. This means that Bright House's bills to Verizon Business -18 which I understand were determined by applying the Price List rates to the 19 undisputed number of minutes of traffic - determine how much Verizon Business 20 21 owes Bright House.
- 22

Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?

23 A. Yes, it does.

DOCKET NO. 110056-TP

BRIGHT HOUSE INFORMATION SERVICES, LLC

EXHIBIT MTS-001

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-001, 1 of 23

Michael Starkey

President Founding Partner QSI Consulting, Inc.

243 Dardenne Farms Drive Cottleville, MO 63304 (636) 272-4127 voice (636) 448-4135 mobile (866) 389-9817 facsimile mstarkey@gsiconsulting.com



Biography

Mr. Starkey currently serves as the President and Founding Partner of QSI Consulting, Inc. QSI is a consulting firm concentrating primarily on regulated markets including the telecommunications industry. QSI assists its clients in the areas of regulatory policy, business strategy, financial and econometric analysis and inter-carrier issues involving rates and charges assessed by incumbent carriers. Prior to founding QSI Mr. Starkey served as the Senior Vice President of Telecommunications Services at Competitive Strategies Group, Ltd. in Chicago, Illinois.

Mr. Starkey's consulting career began in 1996 shortly before the passage of the Telecommunications Act of 1996. Since that time, Mr. Starkey has advised some of the world's largest companies (e.g., AT&T, MCI, Time Warner, T-Mobile, Comcast, Siemens Corporation, etc.) on a broad spectrum of issues including the most effective manner by which to interconnect competing networks. Mr. Starkey's experience spans the landscape of competitive telephony including interconnection agreement negotiations, mediation, arbitration, and strategies aimed at maximizing new technology. Mr. Starkey's experience is often called upon as an expert witness. Mr. Starkey has since 1991 provided testimony in greater than 150 proceedings before approximately 40 state commissions, the FCC and courts of varying jurisdiction.

Mr. Starkey's expertise with competitive communications issues is rooted not only in his consulting experience, but also in his previous employment. Mr. Starkey has worked for the Missouri, Illinois and Maryland public utility commissions, including his most recent position as Director of the Maryland Commission's Telecommunications Division (and as the Senior Policy Analyst for the Illinois Commission's Office of Policy and Planning and Senior Economist with the Missouri Public Service Commission).

Educational Background

Bachelor of Science, Economics, International Marketing Missouri State University (f/k/a Southwest Missouri State University) Cum Laude Honor Graduate

Graduate Coursework, Finance Lincoln University

Numerous telecommunications industry training courses



Michael Starkey

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-001, 2 of 23



Professional Experience

Competitive Strategies Group 1996 – 1999 Senior Vice President Managing Director of Telecommunications Services

Illinois Commerce Commission 1993 – 1994 Senior Policy Analyst Office of Policy and Planning Maryland Public Service Commission 1994-1995 Director Telecommunications Division

Missouri Public Service Commission 1991-1993 Senior Economist Utility Operations Division – Telecommunications

Professional Activities

Former Co-Administrator of the Missouri Universal Service Fund on behalf of the Missouri Universal Service Board.

Facilitator, C^3 Coalition (Competitive Carrier Coalition - Ameritech Region). Facilitate industry organization representing 10-15 competitive carriers seeking to share information and "best practices" with respect to obtaining effective interconnection, UNEs and resold services from SBC/Ameritech.

Former member of the Missouri Public Service Commission's Task Force on FCC Docket Nos. 91-141 and 91-213 regarding expanded interconnection, collocation, and access transport restructure

Former member of the AT&T / Missouri Commission Staff, *Total Quality Management Forum* responsible for improving and streamlining the regulatory process for competitive carriers

Former member of the Missouri, Oklahoma, Kansas, Texas, and Arkansas five state Southwestern Bell Open Network Architecture (ONA) Oversight Conference

Former delegate to the Illinois, Michigan, Indiana, Ohio, and Wisconsin Ameritech Regional Regulatory Conference (ARRC) charged with the responsibility of analyzing Ameritech's "Customers First" local exchange competitive framework for formulation of recommendations to the FCC and the U.S. Department of Justice

Former Co-Chairman of the Maryland Local Number Portability Industry Consortium responsible for developing and implementing a permanent database number portability solution

Former member of the Illinois Local Number Portability Industry Consortium responsible for developing and implementing a permanent database number portability solution

Michael Starkey



Expert Testimony – Profile

The information below is Mr. Starkey's best effort to identify all proceedings wherein he has provided pre-filed written testimony, an expert report, live testimony or participated in some other meaningful way (e.g., deposition).

Before the Ontario Energy Board EB-2011-0120

In the Matter of an application by Canadian Distributed Antenna Systems Coalition for certain orders under the Ontario Energy Board Act, 1998 On behalf of Toronto Hydro-Electric System Limited

Federal Communications Commission File No. EB-11-MD-006

In the Matter of Sprint Communications Company, L.P., v. Tekstar Communications, Inc. On behalf of Tekstar Communications, Inc.

Before the Michigan Public Service Commission Case No. U-16467

Lu the matter of the notition and

In the matter of the petition and application of TDS Metrocom, LLC and McLeodUSA Telecommunications Services, L.L.C., d/b/a Paetec Business Services against AT&T Michigan to establish or alter a network element ate

On behalf of McLeodUSA and TDS Metrocom

US District Court, Northern District of Texas, Fort Worth Division

Case No. 4:09-cv-755-A Transcom Enhanced Services, Inc. v. Qwest Corporation On behalf of Transcom Enhanced Services, Inc.

United States Patent and Trademark Office

Inter Partes Reexamination of U.S. Patent No. 7,123,708 On behalf of Peerless Network, LLC

Before the Illinois Commerce Commission

Docket No. 09-0315

Investigation into whether Intrastate Access Charges of McLeodUSA Telecommunications Services, Inc. d/b/a PAETEC Business Services are Just and Reasonable On behalf of PAETEC Business Services

Before the Public Service Commission of Wisconsin Docket No. 6270-TI-221

TDS Metrocom LLC and McLeodUSA Telecommunications Services, Inc. d/b/a PAETEC Business Services Petition to Determine Rates and Costs for Unbundled Network Elements or Unbundled Service Elements of Wisconsin Bell, Inc. d/b/a AT&T Wisconsin

On behalf of TDS Metrocom LLC and McLeodUSA Telecommunications Services, Inc. d/b/a PAETEC Business Services

United States District Court for the Northern District of Illinois

Case No. 1: 08-cv-03402 Neutral Tandem, Inc. v. Peerless Network, LLC On behalf of Peerless Network, LLC

Commonwealth of Massachusetts Appellate Tax Board Docket No. 293831

AT&T Corp. vs. Commissioner of Revenue

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 4 of 23

Michael Starkey



consulting, inc.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-001, 3 of 23

Michael Starkey

Expert Testimony – Profile

The information below is Mr. Starkey's best effort to identify all proceedings wherein he has provided pre-filed written testimony, an expert report, live testimony or participated in some other meaningful way (e.g., deposition).

Before the Ontario Energy Board

EB-2011-0120

In the Matter of an application by Canadian Distributed Antenna Systems Coalition for certain orders under the Ontario Energy Board Act, 1998 On behalf of Toronto Hydro-Electric System Limited

Federal Communications Commission

File No. EB-11-MD-006

In the Matter of Sprint Communications Company, L.P., v. Tekstar Communications, Inc. On behalf of Tekstar Communications, Inc.

Before the Michigan Public Service Commission Case No. U-16467

In the matter of the petition and application of TDS Metrocom, LLC and McLeodUSA Telecommunications Services, L.L.C., d/b/a Paetec Business Services against AT&T Michigan to establish or alter a network element rate

On behalf of McLeodUSA and TDS Metrocom

US District Court, Northern District of Texas, Fort Worth Division

Case No. 4:09-cv-755-A Transcom Enhanced Services, Inc. v. Qwest Corporation On behalf of Transcom Enhanced Services, Inc.

United States Patent and Trademark Office

Inter Partes Reexamination of U.S. Patent No. 7,123,708 On behalf of Peerless Network, LLC

Before the Illinois Commerce Commission

Docket No. 09-0315

Investigation into whether Intrastate Access Charges of McLeodUSA Telecommunications Services, Inc. d/b/a PAETEC Business Services are Just and Reasonable On behalf of PAETEC Business Services

Before the Public Service Commission of Wisconsin

Docket No. 6270-TI-221

TDS Metrocom LLC and McLeodUSA Telecommunications Services, Inc. d/b/a PAETEC Business Services Petition to Determine Rates and Costs for Unbundled Network Elements or Unbundled Service Elements of Wisconsin Bell, Inc. d/b/a AT&T Wisconsin

On behalf of TDS Metrocom LLC and McLeodUSA Telecommunications Services, Inc. d/b/a PAETEC Business Services

United States District Court for the Northern District of Illinois

Case No. 1: 08-cv-03402 Neutral Tandem, Inc. v. Peerless Network, LLC On behalf of Peerless Network, LLC

Commonwealth of Massachusetts Appellate Tax Board Docket No. 293831 *AT&T Corp. vs. Commissioner of Revenue*

SI

nsulting, inc.

Michael Starkey

Docket No. P-421/AM-06-713

In the Matter of Qwest Corporation's Application for Commission Review of TELRIC Rates Pursuant to 47 U.S.C. §251

On behalf of Integra Telecom of Minnesota, Inc.; McLeodUSA Telecommunications Services, Inc.; POPP.com, Inc.; DIECA Communications, Inc. d/b/a Covad Communications Company; TDS Metrocom; and XO Communications of Minnesota, Inc.

Before the Maine Public Utilities Commission

Docket No. 2007-67

Verizon New England Inc., Northern New England Telephone Operations Inc., Enhanced Communications of Northern New England Inc., Northland Telephone Company of Maine, Inc., Sidney Telephone Company, Standish Telephone Company, China Telephone Company, Maine Telephone Company, and Community Service Telephone Co., Re: Joint Application for Approvals Related to Verizon's Transfer of Property and Customer Relations to Company to be Merged with and into FairPoint Communications, Inc. Advisor to the Maine Public Utilities Commission

In the United States District Court for the Northern District of Illinois, Eastern Division Case No. 06 C 3431

Illinois Bell Telephone Company, Inc., Plaintiff, v. Global NAPs Illinios Inc., et al., Defendants On behalf of Global NAPs Illinois, Inc. et al.

Before the Minnesota Public Utilities Commission

MPUC Docket #P-421/CI-05-1996

In the Matter of a Potential Proceeding to Investigate the Wholesale Rate Charged by Qwest On behalf of Eschelon Telecom, Inc., Integra Telecom of Minnesota, Inc. McLeodUSA Telecommunications Services, Inc., POPP.com, Inc., Covad Communications Company, TDS Metrocom and XO Communications of Minnesota, Inc.

Before the Public Utilities Commission of the State of Hawaii Docket No. 2006-0450

In the Matter of Pacific Lightnet, Inc., Complainant, vs. Hawaiian Telcom, Inc., Respondent On behalf of Pacific Lightnet, Inc.

Before the Public Utility Commission of Texas

SOAH Docket No. 473-07-1365

PUC Docket No. 33545

Application of McleodUSA Telecommunications Services, Inc. for Approval of Intrastate Switched Access Rates Pursuant to PURA Section 52.155 and PUC Subst. R. 26.223 On behalf of McLeodUSA Telecommunications Services, Inc.

Before the Public Utility Commission of Oregon Docket No. ARB 775

In the Matter of the Petition of Eschelon Telecom of Oregon, Inc. For Arbitration with Qwest Corporation, Pursuant to 47 U.S.C. Section 252 of the Federal Telecommunications Act of 1996 On behalf of Eschelon Telecom, Inc.

Before the Public Utilities Commission of Colorado Docket No. 06B-497T

In the Matter of the Petition of Qwest Corporation for Arbitration with Eschelon Telecom, Inc. Pursuant to 47 U.S.C. Section 252 of the Federal Telecommunications Act of 1996 On behalf of Eschelon Telecom, Inc.

Before the Washington Utilities and Transportation Commission Docket No. UT-063061

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 6 of 23

Michael Starkey



In the Matter of the Petition of Qwest Corporation for Arbitration with Eschelon Telecom, Inc. Pursuant to 47 U.S.C. Section 252 of the Federal Telecommunications Act of 1996 On behalf of Eschelon Telecom, Inc.

Before the Arizona Corporation Commission Docket No. T-03406A-06-0572

Docket No. T-01051B-06-0572

In the Matter of the Petition of Eschelon Telecom of Arizona, Inc. For Arbitration with Qwest Corporation, Pursuant to 47 U.S.C. Section 252 of the Federal Telecommunications Act of 1996 On behalf of Eschelon Telecom, Inc.

Before the Office of Administrative Hearings, For the Minnesota Public Utilities Commission PUC Docket No. P-5340, 421/IC-06-768

OAH Docket No. 3-2500-17369-2

In the Matter of the Petition of Eschelon Telecom, Inc. For Arbitration with Qwest Corporation, Pursuant to 47 U.S.C. Section 252 of the Federal Telecommunications Act of 1996 On behalf of Eschelon Telecom, Inc.

Before the Public Utilities Commission of Colorado

Docket No. 06F-124T

In the Matter of: McLeodUSA Telecommunications Services, Inc., Complainant, v. Qwest Corporation, Respondent

On behalf of McLeodUSA Telecommunications Services, Inc.

American Arbitration Association Case No. 74 494 J 00703 06 BEAH

Saturn Telecommunications Services, Inc. v. Covad Communications Company On behalf of Covad Communications Company

Before the Arizona Corporation Commission

Docket No. T-03267A-06-0105

Docket No. T-01051B-06-0105

In the Matter of: McLeodUSA Telecommunications Services, Inc., Complainant, v. Qwest Corporation, Respondent

On behalf of McLeodUSA Telecommunications Services, Inc.

Before the Washington Utilities and Transportation Commission

Docket No. UT-063013

McLeodUSA Telecommunications Services, Inc., Petitioner, v. Qwest Corporation, Respondent On behalf of McLeodUSA Telecommunications Services, Inc.

Before the Public Service Commission of Utah

Docket No. 06-2249-01

In the Matter of the Complaint of McLeodUSA Telecommunications Services, Inc., against Qwest Corporation for Enforcement of Commission-Approved Interconnection Agreement On behalf of McLeodUSA Telecommunications Services, Inc.

Before the Iowa Utilities Board

Docket No. FCU-06-20

McLeodUSA Telecommunications, Inc., v. Qwest Communications On behalf of McLeodUSA Telecommunications Services, Inc.

American Arbitration Association Case No. 77 181 0289 MAVI

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 7 of 23

consulting, inc.

Michael Starkey

T-Mobile USA, Inc., Claimant, vs. Qwest Corporation (f/k/a US West Communications, Inc.), Respondent On behalf of T-Mobile USA, Inc.

In the United States District Court for the Eastern District of North Carolina, Western Division Case No. 5:04-CV-96-BO(1)

Global NAPs North Carolina, Inc., Global NAPs Georgia, Inc., and Global NAPs South, Inc., Plaintiffs, v. BellSouthTelecommunications, Inc., Defendant On behalf of Global NAPs (collectively)

Before the Illinois Commerce Commission

Docket No. 05-0575

Illinois Bell Telephone Company Compliance with Requirements of 13.505.1 of the Public Utilities Act (Payphone Rates) On behalf of The Illinois Public Telecommunications Association

Before the Public Utilities Commission of the State of California Application 05-07-024

Application of Pacific Bell Telephone Company, d/b/a SBC California for Generic Proceeding to Implement Changes in Federal Unbundling Rules Under Sections 251 and 252 of the Telecommunications Act of 1996

On behalf of MCIMetro Access Transmission Services, LLC, Covad Communications Company and Arrival Communications, Inc.

Before the Public Service Commission of Wisconsin

Docket No. 6720-TI-108

Investigation of the Access Line Rates of Wisconsin Bell, Inc., d/b/a SBC Wisconsin, that Apply to Private Payphone Providers

On behalf of The Wisconsin Pay Telephone Association

Before the Public Utilities Commission of the State of California Docket No. A.05-05-027

Application by Pacific Bell Telephone Company d/b/a SBC California (U 1001 C) for Arbitration of an Interconnection Agreement with MCImetro Access Transmission Services LLC (U 5253 C) Pursuant to Section 252(b) of the Telecommunications Act of 1996. On behalf of MCIMetro Access Transmission Services, LLC

Before the Michigan Public Service Commission

Case No. U-14447

In the matter, on the Commission's own motion to commence a collaborative proceeding to monitor and facilitate implementation of Accessible Letters issued by SBC Michigan and Verizon On behalf of Covad Communications Company.

Before the Public Utilities Commission of Ohio

Case No. 05-887-TP-UNC

In the matter of the Establishment of Terms and Conditions of an Interconnection Agreement Amendment Pursuant To The Federal Communications Commission's Triennial Review Order and Its Order on Remand.

On behalf of MCIMetro Access Transmission Services, LLC

Before the Public Service Commission of Wisconsin

Docket No. 05-MA-138

Petition of MCImetro Access Transmission Services, LLC and MCI WorldCom Communications, Inc. for Arbitration of Interconnection Terms and Conditions and Related Arrangements with Wisconsin Bell, Inc., d/b/a SBC Wisconsin Pursuant to Section 252(b) of the Telecommunications Act of 1996

Michael Starkey



On behalf of MCIMetro Access Transmission Services, LLC and MCI Worldcom Communications, Inc.

Indiana Utility Regulatory Commission

Cause No. 42893-INT 01

Indiana Bell Telephone Company, Incorporated d/b/a SBC Indiana Petition for Arbitration of Interconnection Rates Terms and Conditions and Related Arrangements with MCImetro Access Transmission Services LLC, Intermedia Communications LLC, and MCI Worldcom Communications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996

On behalf of MCIMetro Access Transmission Services, LLC, Intermedia Communications, LLC and MCI Worldcom Communications, Inc.

Before the Illinois Commerce Commission Docket No. 05-0442

Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 with Illinois Bell Telephone Company to Amend Existing Interconnection Agreements to Incorporate the Triennial Review Order and the Triennial Review Remand Order

On behalf of Access One, Inc.; Broadview Networks, Inc.; BullsEye Telecom, Inc.; Cbeyond Communications, LLC; USXchange of Illinois, LLC, d/b/a ChoiceOne Communications; CIMCO Communications, Inc.; First Communications, LLC; Forte Communications, Inc.; Globalcom, Inc.; ICG Telecom Group, Inc.; King City Telephone, LLC, d/b/a Southern Illinois Communications; KMC Telecom V, Inc.; McLeodUSA Telecommunications Services, Inc.; Mpower Communications Corporation, d/b/a Mpower Communications of Illinois; Neutral Tandem – Illinois, LLC; New Edge Network, Inc.; nii Communications, Ltd.; Novacon Holdings, LLC; Nuvox Communications of Illinois, Inc.; OnFiber Carrier Services, Inc.; Talk America, Inc.; TCG Chicago; TCG Illinois; TDS Metrocom, LLC; and Trinsic Communications, Inc.

Before The Hawaii Public Utilities Commission Docket No. 04-0140

Application of Paradise MergerSub, Inc., GTE Corporation, Verizon Hawaii Inc., Bell Atlantic Communications, Inc., and Verizon Select Services Inc. For Approval of a Merger Transaction and Related Matters

On behalf of the Hawaii Public Utilities Commission

Before the Illinois Commerce Commission

Docket No. 04-0469

Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Ilinois Bell Telephone Company Pursuant to Section 252(b) of the Telecommunications Act of 1996 On behalf of MCImetro Access Transmission Services, LLC, MCI Worldcom Communications, Inc. and Intermedia Communications LLC

Before the Public Utility Commission of Texas Docket No. 28821

Arbitration of Non-Costing Issues for Successor Interconnection Agreements to The Texas 271 Agreement. On behalf of MCImetro Access Transmission Services, LLC

Before the Public Service Commission of Wisconsin

Docket No. 6720-TI-187

Petition of SBC Wisconsin to Determine Rates and Costs for Unbundled Network Elements On behalf of AT&T Communications of Wisconsin, LP, TCG Milwaukee and MCI, Inc.

Before the Illinois Commerce Commission Docket No. 02-0864

Filing to increase Unbundled Loop and Nonrecurring Rates (Tariffs filed December 24, 2002)

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 9 of 23

Michael Starkey



On behalf of *The CLEC Coalition* (AT&T, Worldcom, Inc., McLeodUSA, Covad, TDS Metrocom, Allegiance, RCN Telecom, Globalcom, Z-Tel, XO Illinois, Forte Communications, CIMCO Communications)

Before the Connecticut Department of Public Utility Control

Docket No. 03-09-01PH02

DPUC Implementation of the Federal Communications Commission's Triennial Review Order – Hot Cut/Batch

On behalf of MCI

Before the Public Utilities Commission of the State of California Rulemaking 95-04-043, Investigation 95-04-044

Order Instituting Rulemaking on the Commission's Own Motion into Competition for Local Exchange Service.

On behalf of MCImetro, MCI Worldcom

Before the Public Utility Commission of Texas

Docket No. 28607 Impairment Analysis of Local Circuit Switching for the Mass Market On behalf of MCImetro, MCI Worldcom, Brooks Fiber Communications of Texas

Before the State Corporation Commission of the State of Kansas Docket No. 03-GIMT-1063-GIT

In the Matter of a General Investigation to Implement the State Mandates of the Federal Communications Commission's Triennial Review Order On behalf of MCImetro, MCI Worldcom

Before the Public Utilities Commission of Ohio

Case No. 04-34-TP-COI In the Matter of the Implementation of the Federal Communications Commission's Triennial Review Regarding Local Circuit Switching in SBC Ohio's Mass Market On behalf of MCImetro, MCI Worldcom

Before the Michigan Public Service Commission

Case No. U-13891 In the matter, on the Commission's own motion, to investigate and to implement, a batch cut migration process

On behalf of MCImetro, MCI Worldcom

Before the Michigan Public Service Commission Case No. U-13796

In the matter, on the Commission's own motion, to facilitate the implementation of the Federal Communication Commission's Triennial Review determinations in Michigan On behalf of MCImetro, MCI Worldcom

Before the Missouri Public Service Commission

Case No. TO-2004-0207

In the Matter of a Commission Inquiry into the Possibility of Impairment Without Unbundled Local Circuit Switching when Serving the Mass Market On behalf of Sage Telecom, Inc.

Before the State of New York Public Service Commission Case No. 02-C-1425

Michael Starkey



Proceeding on Motion of the Commission to Examine the Process, and Related Costs of Performing Loop Migrations on a More Streamlined (e.g., Bulk) Basis On behalf of MCImetro, MCI Worlcom

Before the Indiana Utility Regulatory Commission

Cause No. 42393

In the Matter of the Commission Investigation and Generic Proceeding of Rates and Unbundled Network Elements and Collocation for Indiana Bell Telephone Company, Incorporated d/b/a SBC Indiana Pursuant to the Telecommunications Act of 1996 and Related Indiana Statutes

On behalf of The CLEC Coalition (AT&T, TCG Indianapolis, Worldcom, Inc., McLeodUSA, Covad, Z-Tel).

Before the Michigan Public Service Commission

Case No. U-13531

In the matter, on the Commission's own motion, to review the costs of telecommunications services provided by SBC Michigan

On behalf of AT&T, Worldcom, Inc., McLeodUSA and TDS Metrocom.

Before the Illinois Commerce Commission

Docket No. 03-0323

Petition to Determine Adjustments to UNE Loop Rates Pursuant to Section 13-408 of the Illinois Public Utilities Act

On behalf of *The CLEC Coalition* (AT&T, Worldcom, Inc., McLeodUSA, Covad, TDS Metrocom, Allegiance, RCN Telecom, Globalcom, Z-Tel, XO Illinois, Forte Communications, CIMCO Communications)

Before the Public Utility Commission of Ohio

Case No. 96-1310-TP-COI

In the Matter of the Commission's Investigation into the Implementation of Section 276 of the Telecommunications Act of 1996 Regarding Pay Telephone Services On behalf of the Payphone Association of Ohio

Before the Wisconsin Public Service Commission

Docket No. 6720-TI-177

Investigation Into Ameritech Wisconsin's Loop Conditioning Services and Practices On behalf of WorldCom, Inc., AT&T Communications of Wisconsin, L.P. and TCG Milwaukee, McLeodUSA Telecommunications Services, Inc., TDS Metrocom, LLC

Before the Michigan Public Service Commission Case No. U-11756 - REMAND

Complaint Pursuant to Sections 203 and 318 of the Michigan Telecommunications Act to Compel Respondents to Comply with Section 276 of the Federal Telecommunications Act On behalf of the Michigan Pay Telephone Association

Before the New York Public Service Commission Case No. 00-C-0127

Proceeding on the Motion of the Commission to Examine Issues Concerning Provision of Digital Subscriber Line Services

On behalf of MCI Worldcom Network Services, Inc.

Before the Indiana Utility Regulatory Commission Cause No. 42236

Michael Starkey



Complaint of Time Warner Telecom Against Ameritech Indiana Regarding Its Unlawful Market Practice of Issuing Equipment Vouchers in Violation of the Indiana Code and Opportunity Indiana II and Petition for Emergency Suspension of any and all Ameritech Indiana Equipment Voucher Marketing Practices Pending Commission Investigation

On behalf of Time Warner Telecom of Indiana, LP

Before the Pennsylvania Public Utility Commission Docket No. P-00930715F0002

Re: Verizon Pennsylvania Inc., Petition and Plan for Alternative Form of Regulation Under Chapter 30, 2000 Biennial Update to Network Modernization Plan On behalf of MCI Worldcom Network Services, Inc.

Before the Illinois Commerce Commission Docket No. 01-0609

Investigation of the propriety of the rates, terms, and conditions related to the provision of the Basic COPTS Port and the COPTS-Coin Line Port

On behalf of Payphone Services, Inc., DataNet Systems, LLC, Illinois Public Telecommunications Association

Before the Indiana Utility Regulatory Commission

Cause No. 40611-S1 (Phase II)

In the Matter of: The Commission Investigation and Generic Proceeding on Ameritech Indiana's Rates for Interconnection Service, Unbundled Elements, and Transport and Termination under the Telecommunications Act of 1996 and Related Indiana Statutes On behalf of AT&T, Worldcom, Inc., and McLeodUSA Telecommunications Services, Inc.

Before the State of North Carolina Utility Commission

Docket No. P-7, Sub 980, P-10, Sub 622

Enforcement of Interconnection Agreement Between KMC Telecom III, Inc. and KMC Telecom V, Inc., against Carolina Telephone and Telegraph Company and Central Telephone Company On behalf of KMC Telecom, Inc.

Before the Illinois Commerce Commission

Docket Nos. 98-0252, 98-0335, 98-0764 (Reopening)

SBC/Ameritech Merger, Reopening to Discuss Settlement Agreement Regarding Merger Savings On behalf of AT&T, Worldcom, Inc., and McLeodUSA Telecommunications Services, Inc.

Before the Public Utility Commission of Ohio Docket No. 01-1319-TP-ARB

In the Matter of MCImetro Access Transmission Services, LLC Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Ameritech Ohio

On behalf of MCIWorldcom, Inc.

Before the Illinois Commerce Commission Docket No. 00-0393 (Rehearing)

Illinois Bell Telephone Company, d/b/a Ameritech Illinois Proposed Implementation of High Frequency Portion of the Loop (HFPL)/Line Sharing Service On behalf of AT&T Communications of Illinois, Inc. and Worldcom, Inc.

Before the Wisconsin Public Service Commission

Case No. 6720-TI-167

Complaint Against Ameritech Wisconsin Filed by Wisconsin Builders Association, Inc.

Michael Starkey



On behalf of Wisconsin Builders Association, Inc.

Before the Public Service Commission of South Carolina Docket No. 2001-65-C

In the Matter of Generic Proceeding to Establish Prices For BellSouth's Interconnection Services, Unbundled Network Elements and Other Related Elements and Services On behalf of NuVox Communications, Broadslate Networks, KMC Telecom, New South Communications, ITC^Deltacom Communications

Before the Louisiana Public Service Commission

Docket No. 27821 In the Matter of Generic Proceeding to Establish Interim and Permanent Prices for Docket No. 27821 xDSL Loops and/or Related Elements and Services On behalf of Covad Communications

Before the Public Utility Commission of Ohio

Case No. 00-942-TP-COI In the Matter of the Further Investigation into Ameritech Ohio's Entry into In-Region Interlata Service Under Section 271 of the Telecommunications Act of 1996 On behalf of AT&T, WorldCom and XO Communications

Before the Washington Utilities and Transportation Commission

Docket No. UT 003013, Part B In the Matter of the Continued Costing and Pricing of Unbundled Network Elements, Transport and Termination On behalf of Focal Communications, XO Washington, Inc.

Before the Illinois Commerce Commission

Docket No. 98-0195 Investigation into certain payphone Issues as directed in Docket No. 97-0225 On behalf of the Illinois Pay Telephone Association

Before the Alabama Public Service Commission

Docket No. 27821 Generic Proceeding to Establish Interim and Permanent Prices for xDSL Loops and/or Related Elements and Services On behalf of The Data Coalition (Covad Communications and Broadslate Networks of Alabama, Inc.)

Before the Wisconsin Public Service Commission

Docket No. 6720-TI-160 Docket No. 6720-TI-161 Investigation Into Ameritech Wisconsin's Unbundled Network Elements On behalf of AT&T, Worldcom, McLeodUSA, TDS Metrocom, KMC Telecom, Time Warner Telecom, Rhythms Links,

Before the Tennessee Regulatory Authority

Docket No. 00-00544

Generic Docket to Establish UNE Prices for Line Sharing per FCC 99-355, and Riser Cable and Terminating Wire as Ordered in Authority Docket No. 98-00123 On behalf of Covad Communications, Inc., Mpower Communications and BroadSlate Networks of Tennessee, Inc.

Before the Public Utilities Commission of the State of Hawaii

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 13 of 23

Michael Starkey



Docket No. 7702, Phase III

Instituting a Proceeding on Communications, Including an Investigation of the Communications Infrastructure of the State of Hawaii On behalf of GST Telecom Hawaii, Inc.

Before the North Carolina Utilities Commission Docket P100 Sub 133d, Phase II

General Proceeding to Determine Permanent Pricing for Unbundled Network elements On behalf of a consortium of 13 new entrant carriers

Before the Federal Communications Commission

CCB/CPD No. 00-1 In the Matter of Wisconsin Public Service Commission Order Directing Filings On behalf of the Wisconsin Pay Telephone Association

Before the North Carolina Utilities Commission

Docket P100 Sub 133d, Phase I General Proceeding to Determine Permanent Pricing for Unbundled Network elements On behalf of a consortium of 13 new entrant carriers

Before the State of New York Public Service Commission

Case No. 98-C-1357 Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements On behalf of the CLEC Coalition

Before the Public Utilities Commission of the State of California

Rulemaking 0-02-05 Order Instituting Rulemaking on the Commission's Own Motion into reciprocal compensation for telephone traffic transmitted to Internet Service Providers modems On behalf of ICG Telecom Group, Inc.

Before the Public Utilities Commission of the State of Colorado

Docket No. 00B-103T In the Matter of Petition by ICG Telecom Group, Inc. for Arbitration of an Interconnection Agreement with US West Communications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996. On behalf of ICG Telecom Group, Inc.

Before the Delaware Public Service Commission

PSC Docket No. 00-205 For Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Bell Atlantic – Delaware, Inc. On behalf of Focal Communications Corporation of Pennsylvania

Before the Georgia Public Service Commission

Case No. 11641-U Petition of Bluestar Networks, Inc. for Arbitration with BellSouthDocket No. 11641-U Telecommunications, Inc. pursuant to Section 252(b) of the Telecommunications Act of 1996 On behalf of BlueStar Networks, Inc.

Before the New Jersey Board of Public Utilities

Docket No. TO00030163

For Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Bell Atlantic-New Jersey, Inc.

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-001, 14 of 23

Michael Starkey



On behalf of Focal Communications Corporation

Before the Pennsylvania Public Utility Commission

Docket No. A-310630F.0002 For Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Bell Atlantic-Pennsylvania On behalf of Focal Communications Corporation

Before the Michigan Public Service Commission

Case No. U-12287

In the matter of the application, or in the alternative, complaint of AT&T COMMUNICATIONS OF MICHIGAN, INC. against Michigan Bell Telephone Company, D/B/A, Ameritech Michigan On behalf of AT&T Communications of Michigan, Inc.

Before the Missouri Public Service Commission

Case No. 99-483

An Investigation for the Purpose of Clarifying and Determining Certain aspects Surrounding the Provisioning Of Metropolitan Calling Area Services After the Passage and Implementation Of the Telecommunications Act of 1996

On behalf of McLeodUSA Telecommunications Services, Inc.

Before the Illinois Commerce Commission

Docket No. 98-0396

Investigation into the compliance of Illinois Bell Telephone Company with the order in Docket 96-0486/0569 Consolidated regarding the filing of tariffs and the accompanying cost studies for interconnection, unbundled network elements and local transport and termination and regarding end to end bundling issues.

On behalf of AT&T Communications of Illinois, Inc. and McLeodUSA Telecommunications Services, Inc.

Before the Illinois Commerce Commission

Docket No. 99-0593 Investigation of Construction Charges On behalf of McLeodUSA Telecommunications Services, Inc., MCI WorldCom, Inc. and Allegiance Telecom, Inc.

Before the Public Service Commission of Wisconsin

Case No. 05-TI-283 Investigation of the Compensation Arrangements for the Exchange of Traffic Directed to Internet Service Providers On behalf of AT&T Communications of Wisconsin, AT&T Local Services, KMC Telecom, Inc., MCI WorldCom, Inc., McLeodUSA Telecommunications Services, Inc., TDS MetroComm, Time Warner Telecom

Before the Public Utility Commission of Texas

Docket No. 21982 Proceeding to Examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996 On behalf of ICG Communications, Inc.

Before the Public Service Commission of the Commonwealth of Kentucky

Case No. 99-498 Petition of BlueStar Networks, Inc. for Arbitration with BellSouth Telecommunications, Inc. Pursuant to Section 252 of the Telecommunications Act of 1996. On behalf of BlueStar Networks, Inc.

Michael Starkey



Before the Illinois Commerce Commission

Docket No. 00-0027

Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Illinois Bell Telephone Company d/b/a Ameritech Illinois. On behalf of Focal Communications Corporation of Illinois

Before The Indiana Utility Regulatory Commission

Cause No. 41570

In the Matter of the Complaint of McLeodUSA Telecommunications Services, Inc. against Indiana Bell Telephone Company, Incorporated, d/b/a Ameritech Indiana, Pursuant to the Provisions of I.C. §§ 8-1-2-54, 81-12-68, 8-1-2-103 and 8-1-2-104 Concerning the Imposition of Special Construction Charges. On behalf of McLeodUSA Telecommunications Services, Inc.

Before the Florida Public Service Commission

Docket No. 991838-TP

Petition for Arbitration of BlueStar Networks, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996 On behalf of BlueStar Networks, Inc.

Before the Public Utility Commission of Ohio

Case No. 99-1153-TP-ARB

In the Matter of ICG Telecom Group, Inc.'s Petition For Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements with Ameritech Ohio On behalf of ICG Telecom Group, Inc.

Before the Public Utility Commission of Oregon

ARB 154 Petition for Arbitration of GST Telecom Oregon, Inc. Against US West Communications, Inc. Under 47 U.S.C. §252(b)

On behalf of GST Telecom Oregon, Inc.

Before the Michigan Public Service Commission

Docket No. U-12072

In the matter of the application and complaint of WORLDCOM TECHNOLOGIES INC. (f/k/a MFS INTELENET OF MICHIGAN, INC., an MCI WORLDCOM company) against MICHIGAN BELL TELEPHONE COMPANY d/b/a AMERITEHC MICHIGAN, AMERITECH SERVICES, INC., AMERITECH INFORMATION INDUSTRY SERVICES, AND AMERITECH LONG DISTANCT INDUSTRY SERVICES relating to unbundled interoffice transport.

On behalf of WorldCom Technologies, Inc.

Before the Illinois Commerce Commission

Docket No. 99-0525

Ovation Communications, Inc. d/b/a McLeodUSA, Complaint Against Illinois Bell Telephone Company d/b/a Ameritech Illinois, Under Sections 13-514 and 13-515 of the Public Utilities Act Concerning the Imposition of Special Construction Charges and Seeking Emergency Relief Pursuant to Section 13-515(e) On behalf of McLeodUSA

Before the Public Service Commission of the Commonwealth of Kentucky

Case No. 99-218

Petition of ICG Telecom Group, Inc. for Arbitration with BellSouth Telecommunications, Inc. Pursuant to Section 252 of the Telecommunications Act of 1996. On behalf of ICG Telecom Group, Inc.

Michael Starkey

Consulting, inc.

Before the Tennessee Regulatory Authority

Docket No. 1999-259-C Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996 On behalf of ICG Communications, Inc.

Before the New Mexico Public Regulation Commission

Case No. 3131 In the Matter of GST Telecom New Mexico, Inc.'s Petition for Arbitration Against US West Communications, Inc., Under 47 U.S.C. § 252(b). On behalf of GST Telecom New Mexico, Inc.

Before the Georgia Public Service Commission

Docket No. 10767-U Petition of ICG Telecom Group, Inc. for Arbitration with BellSouth Telecommunications, Inc. Pursuant to Section 252 of the Telecommunications Act of 1996. On behalf of ICG Telecom Group, Inc.

Before the Public Service Commission of New York

Case No. 99-C-0529 Proceeding on Motion of the Commission to Re-examine Reciprocal Compensation On behalf of Focal Communications, Inc.

Before the Florida Public Service Commission

Docket No. 990691-TP

Petition by ICG Telecom Group, Inc. for Arbitration of an Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996 On behalf of ICG Telecom Group, Inc.

Before the Louisiana Public Service Commission

Docket No. U-24206 Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996 On behalf of ITC^DeltaCom, Inc.

Before the South Carolina Public Service Commission

Docket No. 199-259-C Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996 On behalf of ITC^DeltaCom, Inc.

Before the Alabama Public Service Commission

Docket No. 27069 Petition by ICG Telecom Group, Inc. for Arbitration of an Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996 On behalf of ICG Telecom Group, Inc.

Before the State of North Carolina Utilities Commission

Docket No. P-582, Sub 6 Petition by ICG Telecom Group, Inc. for Arbitration of Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996 On behalf of ICG Telecom Group, Inc.

Before the Missouri Public Service Commission

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 17 of 23

Michael Starkey



Case No. TO-99-370

Petition of BroadSpan Communications, Inc. for Arbitration of Unresolved Interconnection Issues Regarding ADSL with Southwestern Bell Telephone Company On behalf of BroadSpan Communications, Inc.

Before the Michigan Public Service Commission

Case No. U-11831

In the Matter of the Commission's own motion, to consider the total service long run incremental costs for all access, toll, and local exchange services provided by Ameritech Michigan. On behalf of MCIWorldCom, Inc.

Before the Illinois Commerce Commission

Docket Nos. 98-0770, 98-0771 cons.

Proposed Modifications to Terms and Conditions Governing the Provision of Special Construction Arrangements and, Investigation into Tariff Governing the Provision of Special Constructions Arrangements

On behalf of AT&T Communications of Illinois, Inc.

Before the Michigan Public Service Commission

Case No. U-11735 In the matter of the complaint of BRE Communications, L.L.C., d/b/a PHONE MICHIGAN, against Michigan Bell Telephone Company, d/b/a AMERITECH MICHIGAN, for violations of the Michigan Telecommunications Act On behalf of BRE Communications, L.L.C.

Before the Indiana Utility Regulatory Commission

Cause No. 40830

In the Matter of the request of the Indiana Payphone Association for the Commission to Conduct an Investigation of Local Exchange Company Pay Telephone tariffs for Compliance with Federal Regulations, and to Hold Such Tariffs in Abeyance Pending Completion of Such Proceeding On behalf of the Indiana Payphone Association

Before the Michigan Public Service Commission

Case No. U-11756

Complaint Pursuant to Sections 203 and 318 of the Michigan Telecommunications Act to Compel Respondents to Comply with Section 276 of the Federal Telecommunications Act On behalf of the Michigan Pay Telephone Association

Before the Missouri Public Service Commission

Case No. TO-98-278

In the Matter of the Petition of Birch Telecom of Missouri, Inc., for Arbitration of the Rates, Terms, Conditions, and Related Arrangements for Interconnection with Southwestern Bell Telephone Company On behalf of Birch Telecom of Missouri, Inc.

Before the Public Service Commission of the Commonwealth of Kentucky

Administrative Case No. 361

Deregulation of Local Exchange Companies' Payphone Services On behalf of the Kentucky Payphone Association

Before the Public Utilities Commission of Ohio

Case No. 96-899-TP-ALT The Application of Cincinnati Bell Telephone Company for Approval of a Retail Pricing Plan Which May Result in Future Rate Increases On behalf of the MCI Telecommunications Corporation

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 18 of 23

Michael Starkey

SQS1 consulting, inc.

Before the Public Utilities Commission of the State of Hawaii

Docket No. 7702

Instituting a Proceeding on Communications, Including an Investigation of the Communications Infrastructure of the State of Hawaii On behalf of GST Telecom Hawaii, Inc.

Before the Michigan Public Service Commission

Case No. U-11410

In the Matter of the Petition of the Michigan Pay Telephone Association to initiate an investigation to determine whether Michigan Bell Telephone Company d/b/a Ameritech Michigan and GTE North Incorporated are in compliance with the Michigan Telecommunications Act and Section 276 of The Communications Act of 1934, as amended

On behalf of the Michigan Pay Telephone Association

Before the Indiana Utility Regulatory Commission

Cause No. 40849

In the matter of Petition of Indiana Bell Telephone Company, Incorporated d/b/a Ameritech Indiana for the Commission to Decline to Exercise in Whole or in Part its Jurisdiction Over, and to Utilize Alternative Regulatory Procedures For, Ameritech Indiana's Provision of Retail and Carrier Access Services Pursuant to I.C. 8-1-2.6 Et Seq.

On behalf of AT&T Communications of Indiana, Inc.

Before the Federal Communication Commission

C.C. Docket No. 97-137 In the Matter of Application by Ameritech Michigan for Authorization under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of Michigan. On behalf of the AT&T Corporation

Before the Indiana Utility Regulatory Commission

Cause No. 40611

In the Matter of the Commission Investigation and Generic Proceeding on Ameritech Indiana's Rates for Interconnection, Service, Unbundled Elements and Transport and Termination under the Telecommunications Act of 1996 and Related Indiana Statutes On behalf of the MCI Telecommunications Corporation

Before the Public Utility Commission of Ohio

Case No. 97-152-TP-ARB In the matter of the petition of MCI Telecommunications Corporation for arbitration pursuant to section 252(b) of the Telecommunications Act of 1996 to establish an interconnection agreement with Cincinnati Bell Telephone Company

On behalf of the MCI Telecommunications Corporation

Before the Michigan Public Service Commission

Case No. U-11280

In the matter, on the Commission's own motion to consider the total service long run incremental costs and to determine the prices of unbundled network elements, interconnection services, and basic local exchange services for AMERITECH MICHIGAN

On behalf of the MCI Telecommunications Corporation

Before the Illinois Commerce Commission

Docket No. 96-0486

Investigation into forward looking cost studies and rates of Ameritech Illinois for interconnection, network elements, transport and termination of traffic

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-001, 19 of 23

Michael Starkey



On behalf of the MCI Telecommunications Corporation

Before the Public Utility Commission of Ohio

Case No. 96-922-TP-UNC

In the Matter of the Review of Ameritech Ohio's Economic Costs for Interconnection, Unbundled Network Elements, and Reciprocal Compensation for Transport and Termination of Local Telecommunications Traffic

On behalf of the MCI Telecommunications Corporation

Before the New Jersey Board of Public Utilities

Docket No. TX95120631

In the Matter of the Investigation Regarding Local Exchange Competition for Telecommunications Services On behalf of the MCI Telecommunications Corporation

Before the Michigan Public Service Commission

Case No. U-11104

In the matter, on the Commission's Own Motion, to Consider Ameritech Michigan's Compliance With the Competitive Checklist in Section 271 of the Telecommunications Act of 1996 On behalf of AT&T Communications of Indiana, Inc.

Before the Public Utility Commission of Ohio

Case Nos. 96-702-TP-COI, 96-922-TP-UNC, 96-973-TP-ATA, 96-974-TP-ATA, Case No. 96-1057-TP-UNC

In the Matter of the Investigation Into Ameritech Ohio's Entry Into In-Region InterLATA Services Under Section 271 of the Telecommunications Act of 1996. On behalf of AT&T Communications of Ohio, Inc.

Before the Illinois Commerce Commission

Docket No. 96-0404 Investigation Concerning Illinois Bell Telephone Company's Compliance With Section 271(c) of the Telecommunications Act of 1996 On behalf of AT&T Communications of Illinois, Inc.

Before the Commonwealth of Massachusetts Department of Public Utilities

In the Matter of: D.P.U. 96-73/74, D.P.U. 96-75, D.P.U. 96-80/81, D.P.U. 96-83, D.P.U. 96-94, NYNEX-Arbitrations

On behalf of the MCI Telecommunications Corporation

Before the Pennsylvania Public Utility Commission

Docket No. A-31023670002

In the Matter of the Application of MCI Metro Access Transmission Services, Inc. For a Certificate of Public Convenience and Necessity to Provide and Resell Local Exchange Telecommunications Services in Pennsvlvania

On behalf of MCImetro Access and Transmission Services, Inc.

Before the New Jersey Board of Public Utilities

Docket No. TO96080621

In the Matter of MCI Telecommunications Corporation for Arbitration with Bell Atlantic-New Jersey, Inc. Pursuant to Section 252 of the Telecommunications Act of 1996 On behalf of the MCI Telecommunications Corporation

Before the Indiana Utility Regulatory Commission Cause No. 40571-INT-01

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 20 of 23

Michael Starkey



Petition for Arbitration of Interconnection Rates, Terms and Conditions, and Related Arrangements with Wisconsin Bell Telephone Company d/b/a Ameritech Wisconsin On behalf of AT&T Communications of Wisconsin, Inc.

Before the Public Utility Commission of Ohio

Case No. 96-752-TP-ARB

Petition for Arbitration of Interconnection Rates, Terms and Conditions, and Related Arrangements with Ohio Bell Telephone Company d/b/a Ameritech Ohio On behalf of AT&T Communications of Ohio, Inc.

Before the Illinois Commerce Commission

Docket No. 96-AB-003

Docket No. 96-AB-004 Consol.

Petition for Arbitration of Interconnection Rates, Terms and Conditions, and Related Arrangements with Illinois Bell Telephone Company d/b/a Ameritech Illinois On behalf of AT&T Communications of Illinois, Inc.

Before the Michigan Public Service Commission

Case No. U-11151

Petition for Arbitration of Interconnection Rates, Terms and Conditions, and Related Arrangements with Michigan Bell Telephone Company d/b/a Ameritech Michigan On behalf of AT&T Communications of Michigan, Inc.

Before the Indiana Utility Regulatory Commission

Cause No. 40571-INT-01

In the Matter of the Petition of AT&T Communications of Indiana, Inc. Requesting Arbitration of Certain Terms and Conditions and Prices for Interconnection and Related Arrangements from Indiana Bell Telephone Company, Incorporated d/b/a Ameritech Indiana Pursuant to Section 252 (b) of the Communications Act of 1934, as Amended by the Telecommunications Act of 1996. On behalf of AT&T Communications of Indiana, Inc.

Before the Missouri Public Service Commission

Case No. TT-96-268

Application of Southwestern Bell Telephone Company, Inc. to Revise P.S.C. Mo.-No. 26, Long Distance Message Telecommunications Service Tariff to Introduce the Designated Number Optional Calling Plan On behalf of the MCI Telecommunications Corporation

Before the Corporation Commission of the State of Oklahoma

Cause No. PUD 950000411

Application of Southwestern Bell Telephone Company for an Order Approving Proposed Revisions in Applicant's Long Distance Message Telecommunications Service Tariff Southwestern Bell Telephone Company's Introduction of 1+ Saver Directsm On behalf of the MCI Telecommunications Corporation

Before the Georgia Public Service Commission

Docket No. 6415-U and 6537-U cons. Petition of MCImetro to Establish Nondiscriminatory Rates, Terms and Conditions for the Unbundling and Resale of Local Loops On behalf of MCImetro Access Transmission Services

Before the Public Service Commission of the State of Mississippi

Docket No. 95-UA-358 Regarding a Docket to Consider Competition in the Provision of Local Telephone Service On behalf of the Mississippi Cable Television Association

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 21 of 23

onsulting, inc.

Michael Starkey

Before the Maryland Public Service Commission

Docket No. 8705 In the Matter of the Inquiry Into the Merits of Alternative Plans for New Telephone Area Codes in Maryland On behalf of the Staff of the Maryland Public Service Commission

Before the Maryland Public Service Commission

Docket No. 8584, Phase II In the Matter of the Application of MFS Intelenet of Maryland, Inc. for Authority to Provide and Resell Local Exchange and Inter-Exchange Telephone Service; and Requesting the Establishment of Policies and Requirements for the Interconnection of Competing Local Exchange Networks

In the Matter of the Investigation of the Commission on its Own Motion Into Policies Regarding Competitive Local Exchange Telephone Service On behalf of the Staff of the Maryland Public Service Commission

Before the Illinois Commerce Commission

Docket No. 94-0400 Application of MCImetro Access and Transmission Services, Inc. For a Certificate of Exchange Service Authority Allowing it to Provide Facilities-Based Local Service in the Chicago LATA On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Illinois Commerce Commission

Docket No. 94-0315 Petition of Ameritech-Illinois for 708 NPA Relief by Establishing 630 Area Code On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Illinois Commerce Commission

Docket No. 94-0422 Complaints of MFS, TC Systems, and MCI against Ameritech-Illinois Regarding Failure to Interconnect On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Illinois Commerce Commission

Docket Nos. 94-0096, 94-0117, and 94-301 Proposed Introduction of a Trial of Ameritech's Customers First Plan in Illinois, et al. On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Illinois Commerce Commission

Docket No. 94-0049 Rulemaking on Line-Side and Reciprocal Interconnection On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Illinois Commerce Commission

Docket No. 93-0409

MFS-Intelenet of Illinois, Inc. Application for an Amendment to its Certificate of Service Authority to Permit it to Operate as a Competitive Local Exchange Carrier of Business Services in Those Portions of MSA-1 Served by Illinois Bell Telephone and Central Telephone Company of Illinois On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Illinois Commerce Commission

Docket No. 94-0042, 94-0043, 94-0045, and 94-0046

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 22 of 23

Michael Starkey



Illinois Commerce Commission on its own motion. Investigation Regarding the Access Transport Rate Elements for Illinois Consolidated Telephone Company (ICTC), Ameritech-Illinois, GTE North, GTE South, and Central Telephone Company (Centel) On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Illinois Commerce Commission

Docket No. 93-0301 and 94-0041 GTE North Incorporated. Proposed Filing to Restructure and Consolidate the Local Exchange, Toll, and Access Tariffs with the Former Contel of Illinois, Inc. On behalf of the Office of Policy and Planning, Illinois Commerce Commission

Before the Public Service Commission of the State of Missouri

Case No. TC-93-224 and TO-93-192 In the Matter of Proposals to Establish an Alternate Regulation Plan for Southwestern Bell Telephone Company On behalf of the Telecommunications Department, Missouri Public Service Commission

Before the Public Service Commission of the State of Missouri

Case No. TO-93-116 In the Matter of Southwestern Bell Telephone Company's Application for Classification of Certain Services as Transitionally Competitive On behalf of the Telecommunications Department, Missouri Public Service Commission

Selected Reports, Presentations and Publications

In Band Auction Cap; Promoting Sustainable Competition in the Canadian Mobile Wireless Industry Through an Equitable Auction Design Presented to Industry Canada (Consultation Notice SMSE-018-10); Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum April 2011

Exchange Access Rates for Competitive Local Exchange Carriers A Basis for Economically Rational Pricing Policies Presented to the FCC (and various state agencies), CC Docket No. 01-92 August 2008

IP-Enabled Voice Services

Impact of Applying Switched Access Charges to IP-PSTN Voice Services QSI Technical Document 012605A Presented to the FCC Wireline Competition Bureau, Docket Nos. 04-36, 03-266 Washington, D.C., January 2006

Litigating Telecommunications Cost Cases TELRIC Principles and Other Sources of Enlightenment Two Day Teaching Seminar for Public Utility Commissions and their Staff (Western States) Denver, Colorado, February 5&6, 2002

Interconnect Pricing Critique of FCC Working Paper Nos. 33 & 34

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT_MTS-001, 23 of 23

Michael Starkey



NARUC Winter Meeting 2001 Washington, D.C., February 25, 2001

Telecommunications Costing and Pricing Interconnection and Inter-Carrier Compensation Advanced Regulatory Studies Program Michigan State University Cincinnati, Ohio, October 13, 2000

Telecommunications Pricing in Tomorrow's Competitive Local Market Professional Pricing Societies 9th Annual Fall Conference Pricing From A to Z Chicago, Illinois, October 30, 1998

Recombining Unbundled Network Elements: An Alternative to Resale ICM Conferences' Strategic Pricing Forum January 27, 1998, New Orleans, Louisiana

MERGERS – Implications of Telecommunications Mergers for Local Subscribers National Association of State Utility Consumer Advocates Mid-Year Meeting, Chicago, Illinois, June 24 1996

Unbundling, Costing and Pricing Network Elements in a Co-Carrier World Telecommunications Reports' Rethinking Access Charges & Intercarrier Compensation Washington, D.C., April 17, 1996

Key Local Competition Issues Part I (novice) Key Local Competition Issues Part II (advanced) with Mark Long National Cable Television Associations' 1995 State Telecommunications Conference Washington, D.C., November 2, 1995

Competition in the Local Loop

New York State Telephone Association and Telephone Association of New England Issues Forum Springfield, Massachusetts, October 18, 1995

Compensation in a Competitive Local Exchange National Association of Regulatory Utility Commissioner Subcommittee on Communications' Summer Meetings San Francisco, California, July 21, 1995

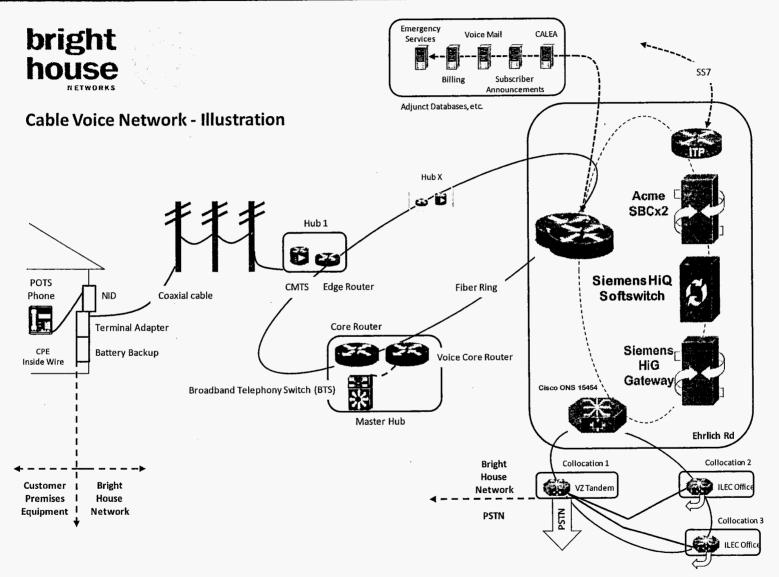
Fundamentals of Local Competition and Potential Dangers for Interexchange Carriers COMPTEL 1995 Summer Business Conference Seattle, Washington, June 12, 1995

BRIGHT HOUSE INFORMATION SERVICES, LLC

EXHIBIT MTS-002

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-002, Page 1 of 1

Diagram 1 - Bright House's Provision of Switched Access Services

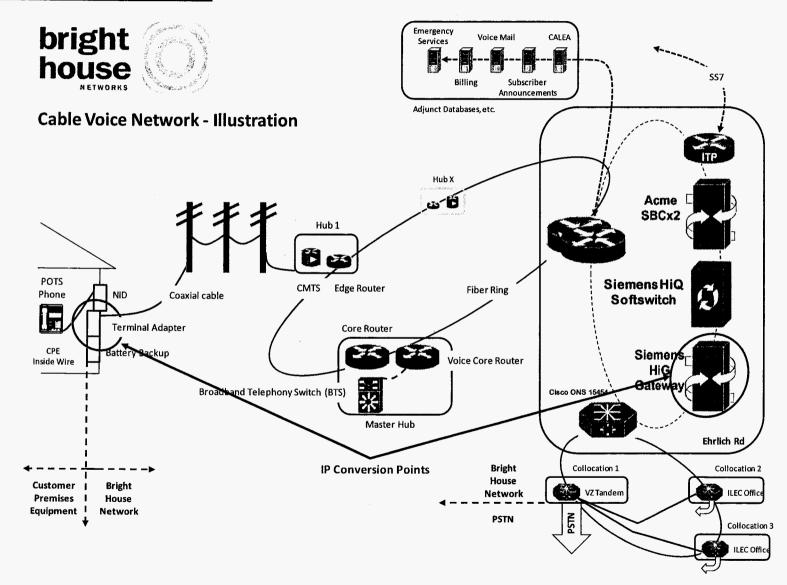


BRIGHT HOUSE INFORMATION SERVICES, LLC

EXHIBIT MTS-003

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-003, Page 1 of 1

Diagram 2 - IP Conversion points



BRIGHT HOUSE INFORMATION SERVICES, LLC

EXHIBIT MTS-004

[CONFIDENTIAL]

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-004, Page 1 of 1

CONFIDENTIAL Diagram 3 - Ownership

CONFIDENTIAL INFORMATION HAS BEEN REDACTED

BRIGHT HOUSE INFORMATION SERVICES, LLC

EXHIBIT MTS-005

Docket No. 110056-TP Bright House Information Services LLC Michael Starkey EXHIBIT MTS-005, Page 1 of 1

Diagram 4: DigitalVoice described in the FCC's Vonage Order

;

