at&t

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July 9, 2012

VIA OVERNIGHT MAIL

Mr. Jeff Derouen
Executive Director
Public Service Commission
211 Sower Boulevard
P. O. Box 615
Frankfort, KY 40602

Re: BellSouth Telecommunications, LLC, d/b/a AT&T Kentucky, Complainant v. Halo Wireless, Inc., Defendant
PSC 2011-00283

Dear Mr. Derouen:

Enclosed for filing in the above-referenced case are the original and ten (10) copies of Rebuttal Testimony of AT&T Kentucky's witnesses, Raymond W. Drause, J. Scott McPhee, and Mark Neinast.

Please let me know if you have any questions.

Sincerely,

Mary K. Keyer

Enclosures

cc: Parties of Record

1039084

CERTIFICATE OF SERVICE – PSC 2011-00283

I hereby certify that a copy of the foregoing was served on the following individuals by mailing a copy thereof via U.S. Mail, this 9th day of July 2012.

Russell Wiseman
President & CEO
Halo Wireless, Inc.
2351 West Northwest Hwy., Suite 1204
Dallas, TX 75220

Jennifer M. Larson
McGuire, Craddock & Strother, P.C.
2501 N. Harwood, Suite 1800
Dallas, TX 75201

Katherine W. Ross, Esq.
Regard Law Group, PLLC
269 W. Main Street, Suite 600
Lexington, KY 40507-1759

Mary K. Keyer

1029992

COMMONWEALTH OF KENTUCKY

KENTUCKY PUBLIC SERVICE COMMISSION

COUNTY OF COLE

STATE OF MISSOURI

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Raymond W. Drause, who being by me first duly sworn deposed and said that he is appearing as a witness on behalf of BellSouth Telecommunications, LLC d/b/a AT&T Kentucky before the Kentucky Public Service Commission in Docket Number 2011-00283, *In the Matter of: BellSouth Telecommunications, LLC, d/b/a AT&T Kentucky, Complainants v. Halo Wireless, Inc., Defendant,* and if present before the Commission and duly sworn, his statements would be set forth in the annexed rebuttal testimony consisting of 16 pages and 5 exhibits.

Raymond W. Drause

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 27th DAY OF JUNE, 2012

Tammy R. Morris
Notary Public

My Commission Expires: 6/28/2012

TAMMY R. MORRIS NOTARY PUBLIC NOTARY SEAL COMMISSION #08414247 COLE COUNTY STATE OF MISSOURI MY COMMISSION EXPIRES 06/28/12

1039040

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of	)	
	)	
BELLSOUTH TELECOMMUNICATIONS, LLC d/b/a AT&T KENTUCKY,	)	
	)	Case No. 2011-00283
Complainant,	)	
	)	
v.	)	
	)	
HALO WIRELESS, INC.,	)	
	)	
Defendant.	)	

REBUTTAL TESTIMONY OF RAYMOND W. DRAUSE ON BEHALF OF AT&T KENTUCKY

July 10, 2012

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

A. My name is Raymond W. Drause. I hold the position of Senior Wireless Engineer at McCall-Thomas Engineering Company, Inc. I provide engineering support to various independent telephone companies and electric co-operatives. My business address is 845 Stonewall Jackson Boulevard, Orangeburg, South Carolina.

Q. PLEASE STATE YOUR EXPERIENCE AND EDUCATIONAL BACKGROUND.

A. I am a Registered Professional Engineer. I graduated with honors from Herzing University, in Madison, Wisconsin, with an Associate of Science in Electronics Engineering Technology degree. I have worked for over 42 years in the telecommunications engineering field. I have been employed by McCall-Thomas Engineering Company for the past five years as Senior Wireless Engineer. My experience includes the design, installation and operation of switching, transport, fiber optic, wireless, video and power systems.

My work assignments over the past 42 years have ranged from large and well established companies, such as AT&T and Southwestern Bell, cutting edge regional companies in the CLEC industry, such as NewSouth Communications and NuVox Communications, as well as telecommunications providers serving single communities. My responsibilities on these assignments have ranged from detailed engineering of individual telecommunications systems to the overall engineering management of entire multi-state telecommunications networks. A more detailed summary of my work experience is included as **Exhibit RD-1**.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of AT&T Kentucky.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will address portions of the testimony of Russ Wiseman and Robert Johnson, both of which were filed on behalf of Halo Wireless, Inc. ("Halo") on July 3, 2012.

Q. HAVE YOU PREVIOUSLY TESTIFIED?

A. Yes. I had never testified in a regulatory proceeding before these cases involving Halo. As of the date of this testimony, however, I have submitted pre-filed testimony in state commission cases similar to this one in Wisconsin, South Carolina, Georgia, Louisiana, Illinois, Missouri and Florida, and I testified at the evidentiary hearings in all of those proceedings except Florida, which has not yet occurred.

Q. WHAT MATERIALS HAVE YOU REVIEWED IN ORDER TO PREPARE YOUR TESTIMONY?

A. I have reviewed testimony, exhibits and transcripts from this proceeding and parallel proceedings in other state commissions, as well as the Airspan specification documents and technical user guides for the equipment installed at the Halo tower site in Paducah Kentucky. More specifically, I reviewed the following documents:

1. Pre-filed testimony of Russ Wiseman on behalf of Halo in this docket. I also reviewed Mr. Wiseman's Wisconsin, South Carolina, Georgia, Louisiana, Florida, Illinois and Missouri testimony.

2. Pre-filed testimony of Robert Johnson on behalf of Halo in this docket. I also reviewed Mr. Johnson's Wisconsin, South Carolina, Georgia, Louisiana, Florida, Illinois and Missouri testimony. In addition, I attended, by telephone, a deposition of Mr. Johnson that was taken by AT&T in May, and I have reviewed the transcript of that deposition.

3. The record in the Public Service Commission of Wisconsin ("PSCW") proceeding, *Investigation into Practices of Halo Wireless, Inc., and Transcom Enhanced Services, Inc.,* Docket No. 9594-TI-100, as well as Halo Wireless, Inc., and Transcom Enhanced Services, Inc.'s 2nd Amended Responses to Staff Data Request #1, dated January 11, 2012, and Halo Wireless, Inc., and Transcom Enhanced Services, Inc.'s Amended Responses to Supplemental Staff Data Request #1, dated January 20, 2012 in the PSCW proceeding.

4. January 23, 2012, Transcript of Proceedings before the Tennessee Regulatory Authority in Docket No. 11-00108, *Complaint of Concord Telephone Exchange, Inc.; Humphreys County Telephone Co.; Tellico Telephone Company; Tennessee Telephone Company; Crockett Telephone Company, Inc.; Peoples Telephone Company; West Tennessee Telephone Company, Inc.; North Central Telephone Coop., Inc.; and Highland Telephone Cooperative, Inc. against Halo Wireless, LLC; Transcom Enhanced Services, Inc. and other Affiliates for Failure to Pay Terminating Intrastate Access Charges for Traffic and Other Relief and Authority to Cease Termination of Traffic.*

5. April 18, 2012, Partial Transcript of Proceedings (cross-examination of Robert Johnson) before the South Carolina Public Service Commission in Docket No. 2011-304-C, *Complaint and Petition for Relief of BellSouth Telecommunications, LLC d/b/a AT&T Southeast d/b/a AT&T South Carolina v. Halo Wireless, Inc. for Breach of the Parties' Interconnection Agreement.*

6. April 26, 2012, Transcript of Proceedings before the Georgia Public Service Commission in Docket No. 34219, *Complaint of TDS Telecom on Behalf of its Subsidiaries Blue Ridge Telephone Company, Camden Telephone & Telegraph Company, Inc., Nelson-Ball Ground Telephone Company, and Quincy Telephone Company, Against Halo Wireless, Inc., Transcom Enhanced Services, Inc., and Other Affiliates for Failure to Pay Terminating Intrastate Access Charges for Traffic and for Expedited Declaratory Relief and Authority to Cease Termination of Traffic.*

7. Equipment Lease between SATNet, LLC and Halo Wireless, LLC, dated June 1, 2010.

8. Proffer of Testimony of Russ Wiseman on behalf of Halo Wireless, Inc., the Debtor in Case No. 11-42464-BTR-11, In Re: Halo Wireless, Inc., Debtor, before the United States Bankruptcy Court for the Eastern District of Texas, Sherman Division.

9. Product Specification: Airspan WiMAX MiMAX-Pro V-Series.

10. HiperMAX Product Specification.

11. HiperMAX Technical User's Guide - HiperMAX Commissioning - SDR-micro.

12. HiperMAX Base Station Data Sheet.

I was aided in my understanding of the documents by the experience I have acquired while providing engineering type work for communications projects that utilize Airspan WiMAX and pre-WiMAX systems.

Q. HAVE YOU VISITED A HALO TOWER SITE?

A. Yes. An AT&T attorney arranged a visit to a Halo tower site in another state, and I spent about one hour and 20 minutes there earlier this year. I had a chance to look at and photograph the Halo and Transcom Enhanced Services, Inc. ("Transcom") equipment I describe in this testimony, and to get a good look at the site. Halo has agreed that the tower site I visited is sufficiently representative of the Halo tower site in Paducah, Kentucky, for all relevant purposes, so that my visit to that site was equivalent to a visit to the Halo site in Paducah.

Q. PLEASE GIVE AN OVERVIEW OF THE STRUCTURES AT THE HALO TOWER SITE.

A. There are three structures: two small buildings and a tower. You can see them on **Exhibit RD-2**, which is a photograph I took during the site visit. (Again, Halo has agreed that the photograph is a fair representation of a Halo site in Kentucky.) The concrete building housing the Halo and Transcom equipment, which Transcom witness Johnson refers to as the "shelter," is about 24 feet long, 10 feet wide and 10 feet tall. The base of the wireless tower is about 10 feet from the side wall of that shelter.

Q. BASED ON THE DOCUMENTS THAT YOU REVIEWED AND THE FIELD INSPECTION, DO YOU HAVE AN UNDERSTANDING OF THE EQUIPMENT LOCATED AT THE TOWER SITE IN PADUCAH, KENTUCKY, AND THE FLOW OF TRANSCOM AND HALO TRAFFIC?

A. Yes. As a result of my field visit and examination of the documents, I have gained a high-level understanding of the equipment used by Halo and Transcom at the tower site serving Kentucky, as well as at the other Halo tower sites across the country. The documents I reviewed provided sufficient information to permit me to create a site drawing included with my testimony as **Exhibit RD-3** that conceptually illustrates the significant pieces of Halo and Transcom equipment located at the tower site. The documents that I reviewed also provided information that describes how a telephone call would enter a tower site and pass between the various pieces of equipment at the tower site before being sent on to a Halo POP for delivery to a tandem switch. I used that call-flow information to populate the site drawing (Exhibit RD-3) with lines and arrows that illustrate the manner in which a telephone call would flow through the various pieces of equipment at the tower site. (A "POP" is a point of presence. Robert Johnson, the Transcom representative who testifies on behalf of Halo, has expressed a preference for the term "data center," so I use that term, instead of "POP" in the exhibit.) Exhibit RD-3 also references equipment and systems installed at other locations that interoperate over unspecified transmission facilities with the tower site equipment. The Dallas soft-switch is illustrated on Exhibit RD-3, and is an important system that interoperates with the tower site equipment.

Q. BASED ON THE DOCUMENTS YOU REVIEWED AND YOUR EXPERIENCE IN THE INDUSTRY, HOW WOULD YOU DESCRIBE THE FLOW OF A TELEPHONE CALL THROUGH THE TOWER SITE SERVING KENTUCKY?

A. The IP data stream that is carrying the telephone call enters the shelter at the tower site and passes through a Cisco Router and an Extreme Networks Fast Ethernet Switch (labeled as Switch/Router Cloud on Exhibit RD-3) before being sent over a Category 5 ("CAT5") Ethernet cable to Transcom's Airspan MiMAX Pro-V Customer Premise Equipment. The Airspan MiMAX Pro-V takes the IP data stream that is presented to it over the Ethernet cable, converts it to a 3.65GHz radio signal and transmits it to Halo's Airspan SDR-Micro Base Station. The function of the Airspan equipment is simply to transport the IP data stream from one place to another. More specifically, the IP data stream is transported from the Airspan MiMAX Pro-V Customer Premise Equipment that is mounted on a pipe attached to the shelter to the Airspan antenna and SDR-Micro Single Channel RF Transceiver that are mounted on the tower and then back down the tower over a fiber optic cable to the Airspan SDR-Micro Base Station that is located in the shelter.

The Airspan SDR-Micro Base Station system converts the wireless IP data stream that it receives from the Airspan MiMAX Pro-V Customer Premise Equipment back into a form that can be sent over an Ethernet cable. From there, the IP data stream is carried over an Ethernet cable to the Extreme Networks Fast Ethernet Switch and then to the Halo Router located in the shelter. The IP data stream leaves the Halo Router and is transported over unspecified facilities to the softswitch cloud in Dallas. The IP data stream is handled by the equipment in the Dallas Softswitch Cloud, then leaves the Dallas Softswitch Site and is sent

over unspecified facilities to a Halo point of presence ("POP") in Atlanta, Dallas, Los Angeles or New York. At the Halo POP, the IP data stream carrying the call undergoes a conversion from IP to TDM, and is sent to a tandem switch for delivery to a subtending office where the call terminates.

Q. IN YOUR OPINION, WHAT ENGINEERING PURPOSE IS SERVED BY THE WIRELESS CONNECTION BETWEEN THE TRANSCOM CUSTOMER PREMISES EQUIPMENT AND THE HALO BASE STATION?

A. The only purpose is to include a wireless transportation segment. If we review the call-flow, we discover that the IP data stream carrying the call enters the Ethernet cable connected to the Airspan MiMAX Pro-V Customer Premise Equipment, travels through this customer premises equipment over the 3.65 GHz radio link to the antenna and Airspan Transceiver and then on to the Airspan Base Station. The call-related characteristics of the IP data stream that emerges from the Airspan Base Station are unchanged from the form they were in when they entered the Airspan MiMAX Pro-V Customer Premise Equipment. The Airspan Customer Premises Equipment and Base Station serve no networking purpose other than to carry the IP data from one point within the building to another point within the building. The Airspan equipment does not contain externally controlled, dynamic Ethernet switching apparatus and cannot modify the content of the IP data stream to change call-related routing or signaling information that it may be carrying. If the Airspan equipment were replaced by a piece of Ethernet cable, the call could be completed just as it is today. This was confirmed by Halo witness Robert Johnson in his testimony at hearings in the related cases I mentioned above. Mr. Johnson acknowledged that if the Airspan

equipment were replaced with a piece of CAT5 Ethernet cable, calls would still complete as they do today.

Q. HOW FAR DOES THE WIRELESS TRANSMISSION FROM THE BUILDING TO THE TOWER GO?

A. Approximately 159 feet. This is the distance between Transcom's MiMAX Pro-V wireless equipment mounted on a pipe bolted to the wall of the building and Halo's antenna mounted on the tower.

Q. WOULD REPLACING THE AIRSPAN EQUIPMENT WITH A PIECE OF ETHERNET CABLE HAVE ANY EFFECT ON THE RELIABILITY OF THE NETWORK?

A. Yes. By eliminating the Airspan equipment and the wireless leap from the building to the tower, the resulting configuration would actually provide a more reliable level of service. According to the Airspan HiperMAX Product Specification document, the predicted Mean Time Between Failure of hardware in the SDR-Micro Base Station is 115,000 hours. This does not include failures that are caused by lightning, electrostatic discharge, voltage spikes and other harmful electrical events that frequently occur at sites with large towers. An Ethernet copper cable, which unlike the Airspan equipment has no delicate electronic components, is much less subject to failure. Also, all of the packet loss, jitter and latency that are inherent in the wireless connection would be totally eliminated.

Q. DOES HALO TAKE ISSUE WITH YOUR OBSERVATIONS THAT THE ONLY PURPOSE OF THE WIRELESS CONNECTION IS TO ALLOW HALO AND TRANSCOM TO SAY THEY ARE CONNECTED WIRELESSLY, AND THAT THE WIRELESS EQUIPMENT COULD BE REPLACED WITH A CABLE?

A. Halo has suggested that if the link between Halo and Transcom were longer than about 328 feet (rather than the 159 feet it actually is), the connection could not be cabled, because Ethernet cable can carry IP packets only about 328 feet before the quality of the signal degrades.

Q. HOW DO YOU RESPOND?

A. In the first place, I am addressing the physical reality that actually exists at the tower site, not the alternate, hypothetical scenario that Halo posits. Second, if the link were longer than 328 feet (100 meters) the degradation that Halo notes could easily be eliminated by deploying a device that regenerates the signal along the pathway. Alternatively, inexpensive fiber optic cable and fiber interface devices could be used to carry the signal for several miles without any need for further regeneration.

Most importantly, though, my basic point is that the wireless connection between Transcom and Halo serves no engineering purpose; all it does is allow Halo and Transcom to label the connection wireless. To illustrate that point, I noted that the wireless equipment could be replaced with a piece of CAT5 cable. There is an alternative illustration that makes the same point: As I explained above, before traffic reaches Transcom's Airspan equipment mounted on the outside of the shelter, it passes through an Extreme Networks Fast Ethernet Switch in the shelter – and the call also passes through that same Ethernet switch after it leaves the Halo Airspan Base Station. The switch could easily be

programmed so that traffic is handed off by Transcom to Halo within the switch, without ever passing through the Airspan wireless equipment at all.

Q. IN YOUR OPINION IS THE AIRSPAN MIMAX PRO-V CUSTOMER PREMISE EQUIPMENT CAPABLE OF ORIGINATING A CALL?

A. No. None of the Airspan equipment, including the MiMAX Pro-V Customer Premise Equipment, the Airspan SDR-Micro Single Channel RF Transceiver, and the Airspan SDR-Micro Base Station, contains externally controlled, dynamic Ethernet switching apparatus that might be used for call routing. In other words, all the Airspan Customer Premises Equipment does is convert the IP data stream it receives into a radio signal. This is unlike a wireless handset, which contains intelligence capable of creating the data stream which instructs the wireless network where to send the telephone call.

As I mentioned, Mr. Johnson has acknowledged that if the Airspan equipment were replaced with a piece of CAT5 Ethernet cable, calls would still complete as they do today. The Airspan equipment has the same ability to originate a call as does that piece of CAT5 Ethernet cable that Mr. Johnson acknowledges could replace it – that is, no ability whatsoever.

Q. IS THERE AN ADDITIONAL REASON FOR YOUR CONCLUSION THAT TRANSCOM'S AIRSPAN MIMAX PRO-V CUSTOMER PREMISE EQUIPMENT AT THE TOWER SITE IS NOT ORIGINATING COMMUNICATIONS?

A. Yes. The common understanding in the industry is that a communication is originated when it is launched on the switched network along with instructions to the network as to where the communication is to be delivered. Thus, for example, a user of a regular landline phone or a cell phone originates a call by dialing a phone number. No such process occurs at Transcom's Airspan

equipment. On the contrary, the instructions to the network are already present when the communication arrives at that equipment. All Transcom's wireless radio equipment can do, and all it does do, is to carry information that is already on Transcom's network from one point to another. If one accepts, just for the sake of discussion, the Halo/Transcom position that Transcom terminates calls and then originates further communications, the origination necessarily occurs not at the tower site in Paducah, but at one of the four Transcom data centers, in Atlanta, New York City, Dallas or Los Angeles. It is there, if anywhere, that Transcom imparts routing instructions for the communication. The wireless equipment at the tower site merely passes that information along.

My view in this regard was corroborated by Halo witness Johnson, at his deposition in May of this year. As I mentioned above, I attended that deposition by phone, and have also reviewed the transcript. Mr. Johnson stated that Transcom originates communications at its media gateways and session border controllers – pieces of equipment that are housed in the Transcom data centers in Atlanta, New York City, Dallas and Los Angeles.[1]

Q. IS TRANSCOM AN ENHANCED SERVICE PROVIDER ("ESP")?

A. To answer that question, one must apply the law governing enhanced services to the facts concerning what Transcom does. I do not purport to have expertise in the law, but counsel advises that "enhanced service" means "services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content,

[1] *See* **Exhibit RD-4**, excerpts from Mr. Johnson's deposition, at 87, line 18 – page 89, line 7.

code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information."[2] Counsel advises that the FCC has ruled that the "enhanced" service designation does *not* apply to services that merely facilitate establishment of a basic transmission path over which a telephone call may be completed, without altering the fundamental character of the telephone service. To qualify as an enhanced service, counsel further advises, a service must be "not incidental" to a telecommunications service, but rather must be the essential service provided. Where the enhancement does not, from the end user's perspective, alter the fundamental character of the communication, the service is not an enhanced service.

Q. BASED UPON ALL THE MATERIAL YOU HAVE REVIEWED CONCERNING TRANSCOM'S OPERATIONS, WHAT ARE THE PERTINENT FACTS FOR DETERMINING WHETHER TRANSCOM IS OR IS NOT AN ESP?

A. I carefully examined the testimonies of Mr. Johnson, and compared his description of Transcom's service platform to that of a softswitch. There is nothing unique in the use of a softswitch; they are widely deployed throughout the telecommunications industry. If the use of softswitch technology is the determining factor in deciding if an entity is an ESP, then Transcom and all other entities utilizing softswitch technology might well claim to be ESPs. The capabilities that Mr. Johnson attributes in his testimony to the Transcom service platform are entirely consistent with those commonly found in softswitches, including:

[2] 47 C.F.R § 64.702.

- Protocol conversion and packet sequencing
- Replacement of missing packets
- Compatibility with Time Division Multiplexing ("TDM")
- Examination of digitized audio stream to determine:
  - If voice signal is present
  - If ambient noise is present
  - If packets that don't contain voice signals should be discarded
- Employment of complex algorithms and sophisticated codecs
- Employment of sophisticated systems to create sounds
- Creation of new sound information to enhance communications
- Delivery of newly created sound to the end user

Thus, the sound heard by the receiver in any communication involving a softswitch is not exactly the sound transmitted, but rather portions of it have been created by the system to enhance the delivered sound. Pages 69 – 70 of the McGraw-Hill publication titled "Softswitch Architecture for VoIP" (ISBN-13 978-0071409773) explain softswitch architecture and affirm that the characteristics shown above are those of a softswitch.

The characteristics of what Mr. Johnson calls Transcom's "enhanced service platform" are identical to the characteristics of a softswitch. A service provider that uses a softswitch to originate, terminate or transport voice traffic is using a system that has been designed to provide the very same capabilities that Transcom is attributing to its "enhanced service platform."

The sophisticated hardware, software and voice-processing algorithms inherent in a softswitch platform are important elements of the call conditioning process, but are not "enhanced services." Transcom has produced nothing – other than its own claims – to substantiate that the audio quality delivered by Transcom is equal to or perceptibly superior to that delivered by other users of softswitch technology. Transcom has not shown that its softswitch modifies the

sound that is delivered to a customer in any way that is different than that which is inherently found in an ordinary softswitch. With that being said, there is little to support a claim that an enhanced service is actually being provided or that Transcom is an ESP. The functionalities described by Mr. Johnson are what the rest of the industry refers to as "call conditioning."

Q. MR. JOHNSON, HOWEVER, ARGUES THAT THE PROPRIETARY ALGORITHMS USED IN TRANSCOM'S "ENHANCED SERVICE PLATFORM" ALLOW TRANSCOM TO PUT "NEW AND BETTER INFORMATION INTO THE SAME SIZED 'PIPE' AS THE ORIGINAL INFORMATION WOULD HAVE NEEDED."[3] DO YOU FIND THAT PERSUASIVE?

A. No, and I will explain why: The range of frequencies that are used by the human voice is quite broad, extending from about 60 Hz to around 7,000 Hz.[4] Therefore, the "pipe" that Mr. Johnson describes would need to transport this "Enhanced" frequency range, which is a much broader range than the 300 Hz to 3300 Hz range of frequencies (often referred to as the "Voice Band") that typical telephone End Offices and Tandem Switching Offices are capable of passing. Frequencies that are significantly outside the Voice Band simply cannot and do not pass through the Public Switched Telephone Network (PSTN). Therefore, calls delivered to Transcom from the PSTN would typically not contain speech components that are outside of the 300 Hz to 3300 Hz frequency range.

The same limitation applies to calls that are delivered by Transcom to the PSTN for completion. The PSTN network is not capable of passing the expanded range of frequencies that Transcom claims that its Enhanced Service

[3] Pre-filed Testimony of Robert Johnson on Behalf of Halo ("Johnson Testimony), at 15, lines 9-11.

[4] Cisco suggests that the range might actually be broader than that, extending from 30 Hz up to 18,000 Hz. To transport a human voice that spans this range of frequencies, the "pipe" that Mr. Johnson describes would need to allow all frequencies from 30 Hz to 18,000 Hz to pass through it.

Platform creates. Once Transcom delivers a call to the PSTN for completion, only the Voice Band frequencies would pass through the network and actually reach the end user. The "enhanced" speech components that Transcom claims to add back into the call would be eliminated because they fall in a frequency range that tandem switches and end office switches are unable to pass.

Simply stated, the enhancements that Transcom claims to perform that occur outside of the 300 Hz to 3300 Hz frequency range – to put "new and better information into the same sized 'pipe' as the original information would have needed" – would not be present when the call is delivered to the called party. Transcom's "Enhanced Service Platform" may do things that manipulate the voice stream in the middle of a call that's already in transit, but I see no indication that Transcom does anything that provides any actual benefit to telephone users beyond what occurs with conventional call conditioning.

Q. DO THE CARRIERS ORIGINATING THE TRAFFIC THAT TRANSCOM DELIVERS VIA HALO UNDERTAKE THE TYPE OF CALL CONDITIONING THAT TRANSCOM DESCRIBES THAT IT UNDERTAKES?

A. Carriers that use softswitch and VoIP technology in the origination, delivery or termination of voice-type traffic have the ability to utilize powerful call conditioning capabilities that are comparable to those that Transcom claims are "enhancements." Transcom has presented nothing, so far, in the record of this proceeding or in earlier proceedings to demonstrate that the capabilities it claims are anything more than call conditioning.

Q. IS THERE ANYTHING ABOUT THE MARKETING OF THE EQUIPMENT TRANSCOM USES THAT CORROBORATES YOUR VIEW THAT TRANSCOM IS NOT PROVIDING ANY MEANINGFUL "ENHANCEMENT" TO THE TRAFFIC IT PROCESSES?

A. Yes. The manufacturer of the I-Gate 4000 Media Gateway that Transcom uses touts its product as follows: "Delivers packet voice quality that equals established PSTN standards."[5] If the equipment delivered voice quality superior to the standard for the Public Switched Telephone Network, I'm confident it would say so.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, thank you.

1039864

[5] *See* **Exhibit RD-5** hereto, which is a page from the manufacturer's website.

Raymond W. Drause, P.E.

40 Keenan Creek Way ◊ Simpsonville, SC 29680 ◊ (864)-444-7839 ◊ rdrause@charter.net

PROFESSIONAL SUMMARY

Results-driven Engineering Manager with multi-faceted Telecommunications Engineering and Operations experience. Strong general management qualifications in planning, project management, budgeting and human resources. Extensive experience in Network Planning, Engineering, and Operations in both start-up and large-scale companies.

CAREER EXPERIENCE

McCall-Thomas Engineering Company, Inc. — May 2007 - present
Senior Wireless Engineer

Provide engineering support to various Independent Telephone Companies and Electric Co-ops.

- Develop Point-to-Point and Point-to-Multipoint wireless system designs using UHF and Microwave Radio Systems.
- Coordinate installation and testing of wireless systems.
- Coordinate with the Department of Defense Joint Spectrum Center to facilitate installations of Cellular Mobile Radio System equipment on military facilities.
- Develop fiber optic network designs using Passive Optical Networks (PONs).
- Provide training on National Electrical Safety Code, Providing IPTV over ADSL2+, Central Office Grounding (single point grounding), Network Interface/Optical Network Terminal bonding and grounding, Basic Electronics.
- Develop and present instructional technical programs to SC Telephone Assn., Georgia Telephone Assn., NC Tri-State Telephone Assn. and others.

Telecommunications Consulting Service — May 2006 – April 2007
Owner

Establish a telecommunications consulting service to provide engineering and operations support for a client group founding a new telecommunications company.

- Work jointly with client's IT manager to develop, deploy and operate the core network infrastructure needed to support VoIP and data services.
- Evaluate WiMAX systems. Design, deploy and operate point-to-multipoint wireless systems that link subscribers to client's network. Conduct RF spectrum analyses. Design and deploy custom antenna arrays required to serve targeted coverage areas and null designated areas. Develop "best practices" for equipment installations at customer sites. Conduct field trials to confirm system performance levels.
- Design and install point-to-point microwave systems. Conduct path surveys, negotiate tower leases. Acquire Metro-Ethernet circuits for back haul of traffic from main hub.
- Design backup AC and DC power systems for network and operational support systems.

Nuvox Communications, Greenville, SC — May 2004 (merger) – May 2006

Vice President – Network Planning, Engineering & Optimization
November 2005 – May 2006

Senior executive responsible for leading 7 Director organizations in planning, engineering, budgeting and deploying the equipment, facilities and systems making up the Nuvox Network.

- Deploy Voice and Signaling Gateways, Feature Server, Session Border Controller, and Voice Mail platform required for VoIP implementation. Integrate VitalNet and Empirix Network Performance Management systems into VoIP engineering processes.
- Establish Traffic Engineering and Capacity Management processes providing enhanced visibility to VoIP and Core Data Networks performance.
- Support interoperability testing of VoIP elements.
- Develop Transmission Engineering Standards for SONET/ DWDM designs. Deploy DWDM rings utilizing Lucent DMX and Cisco ONS multiplexers.
- Develop interim growth architecture for legacy TDM network, reducing CAPEX requirements by over 27%. Introduce E911 data warehouse plan yielding ongoing annual OPEX savings of over $1.5 million.
- Create and implement Capacity Management initiative to achieve "zero capacity-related held customer orders".

Vice President – Network Optimization
February 2005 – October 2005

Senior executive responsible for development and implementation of initiatives designed to optimize the financial and operational performance of the Nuvox Network.

- Create new multi-state organization. Direct hiring and training of 100+ contractors and integrate them into a base of 52 employees to execute Network Optimization initiatives.
- Manage a diverse array of Operational Excellence initiatives in 15 state area.
- Implement extensive network changes arising from the FCC TRO rulings. Negotiate changes to ILEC Interconnect Agreements. Responsible for MSS circuit designs, switch and router translations, ILEC circuit ordering and physical grooms at collocation sites and customer locations. Produced recurring annual savings of over $1.45 million.
- Integrate network and customer-specific data residing in two legacy MetaSolv TBS Systems and one internally developed OS into one common data repository (MSS).
- Implement conversion of customer facilities to HDSL2, producing ongoing annual savings of over $1.2 million.

Vice President – Network Engineering
May 2004 – February 2005

Senior executive responsible for engineering, deployment, capacity management and budgeting of the equipment and systems making up the Nuvox Network.

- Integrate the Network Engineering organizations of Nuvox Communications and NewSouth Communications following their merger.
- Manage Network Integration projects designed to capture operational synergies and cost benefits resulting from the merger (Migration of circuits from 5ESS/DMS switches to Sonus switch, deployment of Adtran GR303 equipment to collocation sites).
- Manage initial deployment of Sonus and Cisco VoIP equipment to new markets.

NewSouth Communications, Greenville, SC November 1999 – April 2004 (merger)

***Vice President – Network Engineering* & Technical Services**
July 2000 – April 2004

Senior executive responsible for engineering, deployment, capacity management and budgeting of the equipment and systems making up the NewSouth network.

- Lead 4 Director organizations in the construction and ongoing growth of 13 switch sites and 230 collocation sites located across the Company's 10 state area.
- Manage the engineering and installation of Cisco ATM switches, Lucent 5ESS and Siemens EWSD switches, Alcatel and Tadiran DCSs and all ancillary equipment.
- Establish CAPEX and OPEX budgeting processes for Engineering.
- Establish Capacity Management and Network Data Integrity processes.
- Manage engineering-related activities associated with UCI Communications and Nuvox Communications mergers.

Director – Network Engineering
November 1999 - June 2000

Responsible for the design and build-out of Lucent 5ESS switch sites and collocation sites, including all AC/DC power, data networking, transport equipment, and mechanical systems in the NewSouth Network.

Southwestern Bell Telephone Company, Little Rock, AR 1980 – 1999 (retired)

Area Mgr. - Maintenance & Transmission Engineering
1992 – June 1999 (retired)

- Lead a team of 15 Engineers and support personnel located in Arkansas, Kansas and Oklahoma. Provide advanced technical support for ATM , TDM and Electronic switches and associated transport, power and radio systems in over 360 central offices.
- Develop and implement Operational Test & Analysis Review processes for switch, transport and power equipment. Conduct COE Installation Supplier Quality assessment audits and Network Reliability audits. Conduct grounding and bonding audits.
- Create transmission designs for fiber optic cable routes, and SONET, microwave and VHF/UHF mobile radio systems. Responsible for Network Synchronization.
- Conduct Beta testing during SONET and ATM equipment trials.
- Served on SW Bell/Pacific Bell Merger Team - Developed "Seven State Process" which assessed "Best Practices" used by each company, leading to the adoption of uniform Maintenance & Transmission Engineering processes across the combined company.
- Pioneered use of Infrared Scanners for central office power inspections and use of unlicensed spread-spectrum 2.4 GHz radio for emergency restorations and facility relief.

Area Mgr. - Real Estate & Architecture
1980 – 1991

- Manage and coordinate five teams of architectural project managers, engineers and consultants in planning, designing and implementing central office, radio and administrative building projects. Manage annual CAPEX budget of $7,900,000.
- Select and hire contractors and consultants. Establish performance standards. Develop and direct engineering records mechanization process.
- Manage and supervise the planning, negotiating, purchasing and leasing of land, buildings and floor space. Administer $2,400,000 annual leasing budget. Personally negotiate/administer $1,200,000 in annual leasing and brokerage transactions.
- Conduct economic studies. Develop lease documents and investor solicitation packages for build/lease projects. Represent company in zoning/land-use hearings. Acquire microwave and cellular tower sites.

Wisconsin Bell Telephone Company, 1969 – 1979

Engineer – Central Office Equipment Planning *Milwaukee, Wisconsin*
1978 - 1979

- Conduct Network Planning economic studies involving central office projects.
- As member of Speakers Panel, present company programs to civic clubs and schools.

Assistant Engineer – Central Office Equipment Engineering *Madison, Wisconsin*
1969 - 1977

- COE Engineering for switching, transport and power equipment.
- Developed first plan in company for reuse of MDF for dial-to-dial conversions.

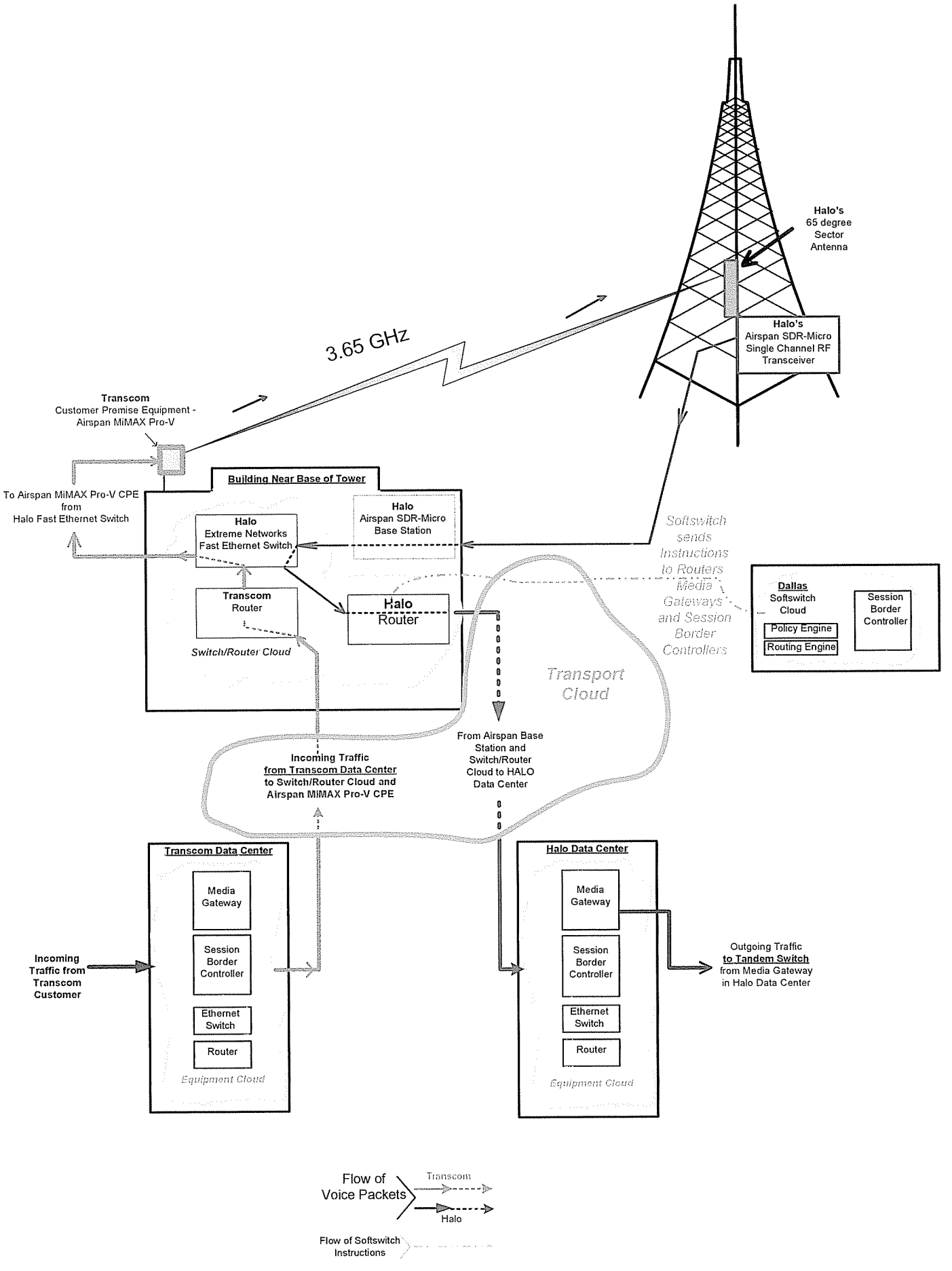
Education:
Associate in Science - Electronics Engineering Technology
Herzing College - Madison, Wisconsin

Specialized Training:
Numerous technical, management, building and real estate courses from Greenville Technical College, Nortel, Lucent, Fujitsu, Alcatel, Cisco, Telcordia, Southwestern Bell Center for Learning and others. VoIP Analyst Certification – Spirit Telecom. MS Office proficient.

Professional Licenses:
Registered Professional Engineer (Electrical) - Arkansas
FCC Radio License
Real Estate Broker's License (lapsed)

Affiliations:
National Society of Professional Engineers (lapsed)
Institute of Electrical and Electronics Engineers (lapsed)
American Radio Relay League

Typical HALO Tower Site


Halo's
65 degree
Sector
Antenna
Halo's
Airspan SDR-Micro
Single Channel RF
Transceiver
3.65 GHz
Transcom
Customer Premise Equipment -
Airspan MiMAX Pro-V
To Airspan MiMAX Pro-V CPE
from
Halo Fast Ethernet Switch
Building Near Base of Tower
Halo
Extreme Networks
Fast Ethernet Switch
Halo
Airspan SDR-Micro
Base Station
Transcom
Router
Halo
Router
Switch/Router Cloud
Softswitch
sends
Instructions
to Routers
Media
Gateways
and Session
Border
Controllers
Dallas
Softswitch
Cloud
Policy Engine
Routing Engine
Session
Border
Controller
Transport
Cloud
From Airspan Base
Station and
Switch/Router
Cloud to HALO
Data Center
Incoming Traffic
from Transcom Data Center
to Switch/Router Cloud and
Airspan MiMAX Pro-V CPE
Transcom Data Center
Media
Gateway
Session
Border
Controller
Ethernet
Switch
Router
Equipment Cloud
Halo Data Center
Media
Gateway
Session
Border
Controller
Ethernet
Switch
Router
Equipment Cloud
Incoming
Traffic from
Transcom
Customer
Outgoing Traffic
to Tandem Switch
from Media Gateway
in Halo Data Center
Flow of
Voice Packets
Transcom
Halo
Flow of Softswitch
Instructions

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

The Ohio Bell Telephone Company d/b/a AT&T Ohio,	)	
Complainant	)	
v.	)	Case No. 12-1075-TP-CSS
Halo Wireless, Inc.	)	
Respondent	)	

****

ORAL DEPOSITION OF

ROBERT JOHNSON

MAY 22, 2012

****

ORAL DEPOSITION OF ROBERT JOHNSON, produced as a witness at the instance of the Complainant, and duly sworn, was taken in the above-styled and numbered cause on the 22nd day of May, 2012, from 10:20 a.m. to 2:39 p.m., before Amy Davidson-Enberg, CSR in and for the State of Texas, reported stenographically, at the offices of McGuire, Craddock & Strother, P.C., 2501 North Harwood Street, Suite 1800, Dallas, Texas 75201, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record or attached hereto.

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I N D E X

EXHIBITS INDEX

NUMBER	DESCRIPTION	IDENTIFIED
Exhibit 1	TDM Call Flow Diagram	13
Exhibit 2	Pre-Filed Testimony of Robert Johnson on Behalf of Halo Wireless, Inc. May 15, 2012	87
Exhibit 3	IP Call Flow Diagram	99

P R O C E E D I N G S

(Exhibit 1 marked)

MR. FRIEDMAN: All right. So before you administer the oath even, I will mention that I believe we have an agreement that the transcript of this deposition may be used in any of the proceedings in which Halo and/or Transcom and various AT&T entities are parties, and then notwithstanding I guess the caption of this transcript will refer to the Ohio proceeding where I think we gave you the notice of deposition.

MR. THOMAS: Right.

MR. FRIEDMAN: And in light of that, we have agreed that the deposition will proceed in accordance with the federal rules of civil procedure.

MR. THOMAS: Right. And, of course, we're not agreeing as to admissibility.

MR. FRIEDMAN: Of course.

MR. THOMAS: We're just agreeing that it's as if you had issued notices from each of the different places where we have cases going in the state commissions.

MR. FRIEDMAN: Right. Will you administer the oath, please.

MR. THOMAS: And are you -- AT&T -- is AT&T limiting this only to the cases where AT&T is -- I

mean where Halo is a party, or are you doing it with Halo and Trans -- I'm not sure if there are any cases where AT&T and Transcom --

MR. FRIEDMAN: That may well be.

MR. THOMAS: Yeah. But your thinking was it's so that AT&T doesn't have to issue notices in each of those --

MR. FRIEDMAN: Right.

MR. THOMAS: -- jurisdictions?

MR. FRIEDMAN: Yeah.

ROBERT JOHNSON,

having been first duly sworn, testified as follows:

EXAMINATION

BY MR. FRIEDMAN:

Q. Please state your name and your work address for the record.

A. Robert Johnson. My work address is 307 West 7th Street, Suite 1600, that's in Fort Worth, Texas, and I believe the ZIP code is 76102.

Q. And I take it that you are the same Robert Johnson who has submitted pre-filed testimony supporting the position of Halo Wireless, Inc. in various proceedings to which Halo and various AT&T incumbent local exchange carriers are parties?

A. I am.

12:50 Q. (By Mr. Friedman) So we have marked as Johnson Exhibit 2 what appears to be the pre-filed testimony of Robert Johnson on behalf of Halo Wireless, Inc. dated May 15, 2012 in Docket No. 12-0182 in the Illinois
12:50 Commerce Commission.

Do you recognize this as testimony that was filed in that case, Mr. Johnson?

A. I do.

Q. Okay. I said we were going to do some routine
12:50 and we just did it.

MR. THOMAS: And I would just add that, I mean, you haven't had a chance to look through this -- we haven't had a chance to look through it, but as far as you can tell, it looks like what was done, right?

12:50 THE WITNESS: It does.

MR. THOMAS: Okay.

(Luncheon recess 12:50 to 1:43)

Q. (By Mr. Friedman) Shortly before we broke I understood from you that the telecommunication that the
01:42 girl in California originates may arrive at the Transcom gateway where it's handed off by Transcom's customer still in the form of a telecommunication, correct?

A. That's possible.

Q. But if that does happen, it is your view that
01:43 Transcom then terminates that telecommunication, correct?

A. Yes.

Q. And it terminates it at the media gateway. Is that the point of termination?

A. Yes.

Q. Transcom then originates a further communication?

A. Yes.

Q. At that media gateway?

A. The further communication is originated from a piece of equipment that is part of the platform -- enhancers platform. It may or may not be that particular gateway.

Q. If it is not that particular gateway, what would it be? What could it be?

A. It would be a different gateway or the session border controller.

Q. If it's not the media gateway where the call terminated, would it be another media gateway in the same cage?

A. It could be a media gateway in the same cage, yes.

Q. Or it could be in an altogether different data center?

A. It could be.

Q. But it would be a Transcom media gateway?

01:44 A. Yes.

Q. And if the call -- I'm sorry -- if the further communication was originated by a session border controller, I take it that it might or might not be a
01:44 session border controller in the same cage as the media gateway where the telecommunication was terminated?

A. Correct.

Q. All of this depending on direction given by the brains in Dallas?

01:44 A. Yes.

Q. So immediately before we broke I had put in front of you what we marked as Johnson Exhibit 2, your pre-filed testimony from the Illinois case, and I did that actually just so that you could -- I could refer you
01:45 to the definition of telecommunications that you have in the footnote on the bottom of page 9, which I will now do.

A. Okay.

Q. And I'll read it and then ask some questions.
01:45 The term telecommunications means the transmission between or among points specified by the user of information of user's choosing without change in the form or content of the information as sent and received.

We're still agreed that the girl in
01:45 California that we've been talking about, when she said

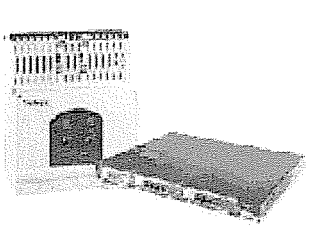
I Gate 4000 Media Gateway Characteristics

Manufacturer's Web Site:

http://www.dialogic.com/en/products/gateways/i-gate-media-gateways/i-gate-4000-media-gateways.aspx

Home Products Media Gateways & Bandwidth Optimization I Gate 4000 Media Gateways

Dialogic® I Gate® 4000 Media Gateways



Overview Features & Benefits Specifications Documents Where To Buy

Features	Benefits
Proven bandwidth optimization technology for circuit-switched networks extended to VoIP networks	Delivers packet voice quality that equals established PSTN standards
Field-proven voice processing technology and advanced codec implementations, coupled with a rich set of bandwidth optimization and voice quality protection techniques	Enables carriers to realize bandwidth savings of up to 16:1
Bandwidth-efficient and reliable transport of CCS for SS7, PRI, and QSIG and CAS, despite network impairments	Delivers bandwidth savings, full signaling robustness, and a high CCR along with enabling cost-effective network topologies based on the optimal location of signaling gateways at a small number of strategic sites

COMMONWEALTH OF KENTUCKY

KENTUCKY PUBLIC SERVICE COMMISSION

COUNTY OF COLE

STATE OF MISSOURI

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared J. Scott McPhee, who being by me first duly sworn deposed and said that he is appearing as a witness on behalf of BellSouth Telecommunications, LLC d/b/a AT&T Kentucky before the Kentucky Public Service Commission in Docket Number 2011-00283, *In the Matter of: BellSouth Telecommunications, LLC, d/b/a AT&T Kentucky, Complainants v. Halo Wireless, Inc., Defendant,* and if present before the Commission and duly sworn, his statements would be set forth in the annexed rebuttal testimony consisting of 27 pages and 0 exhibits.

J. Scott McPhee

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 27th DAY OF JUNE, 2012

Tammy R. Morris
Notary Public

My Commission Expires: 6/28/2012

TAMMY R. MORRIS NOTARY PUBLIC NOTARY SEAL COMMISSION #08414247 COLE COUNTY STATE OF MISSOURI MY COMMISSION EXPIRES 06/28/12

1039040

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of	)	
	)	
BELLSOUTH TELECOMMUNICATIONS, LLC d/b/a AT&T KENTUCKY,	)	
	)	
	)	Case No. 2011-00283
Complainant,	)	
	)	
v.	)	
	)	
HALO WIRELESS, INC.,	)	
	)	
Defendant.	)	

Rebuttal Testimony of J. Scott McPhee
On Behalf of AT&T Kentucky

July 10, 2012

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME.

A. My name is J. Scott McPhee.

Q. ARE YOU THE SAME SCOTT MCPHEE WHO SUBMITTED DIRECT TESTIMONY IN THIS CASE ON JUNE 15, 2012?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will respond to certain assertions made by Halo witnesses Russ Wiseman and Robert Johnson that relate to matters I discussed in my direct testimony.

II. HALO'S DELIVERY OF LANDLINE TRAFFIC IN BREACH OF ICA.

Q. YOU SHOWED IN YOUR DIRECT TESTIMONY THAT THE HALO-AT&T KENTUCKY INTERCONNECTION AGREEMENT ("ICA") REQUIRES HALO TO SEND ONLY WIRELESS-ORIGINATED TRAFFIC TO AT&T KENTUCKY. DOES HALO DISAGREE WITH THAT?

A. No.

Q. DOES HALO IDENTIFY ANY ACTIONS IT HAS TAKEN TO MAKE SURE IT DOES NOT SEND LANDLINE-ORIGINATED TRAFFIC TO AT&T KENTUCKY?

A. No. To the contrary, Mr. Wiseman states that "Halo is not in a position to determine where or on what network the call[s] started, and we have not asked our customer [*i.e.* Transcom]."[1]

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[1] Pre-Filed Testimony of Russ Wiseman on Behalf of Halo Wireless, Inc. ("Wiseman Testimony"), at 32, lines 9-10.

Q. DOES HALO DENY THAT IT HAS BEEN SENDING TRAFFIC TO AT&T KENTUCKY THAT BEGINS ON LANDLINE EQUIPMENT?

A. No. To the contrary, Mr. Wiseman admits that "[m]ost of the calls" Halo sends to AT&T Kentucky probably started on other networks and that it "would not surprise me if some of them started on the PSTN" (Public Switched Telephone Network).[2] I read that as Mr. Wiseman's understated way of admitting that Halo is, in fact, sending AT&T Kentucky traffic that originates with landline equipment connected to the PSTN.

Q. GIVEN THESE ADMISSIONS, HOW CAN HALO CLAIM IT HAS NOT BREACHED THE ICA?

A. I don't think it can. Halo argues, however, that even when calls begin as landline calls, they somehow "originate" again as wireless calls when they pass through Transcom before reaching Halo. More specifically, Halo contends that Transcom is an "Enhanced Service Provider," or "ESP," that ESPs are treated as "end users," and that ESPs are deemed to originate (or re-originate) calls that pass through them. That argument fails, however, for reasons that Mark Neinast and I have discussed in our testimony, some of which I return to below, and that AT&T Kentucky will set forth in full in its legal briefs.

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[2] *Id.* at 32, lines 5-6.

Q. MR. WISEMAN SUGGESTS THAT EVEN IF THE COMMISSION CONCLUDES THAT HALO IS WRONG, THE COMMISSION SHOULD NOT CONDEMN OR PENALIZE HALO FOR MAKING A BUSINESS PLAN THAT HALO BELIEVED WAS LAWFUL AT THE TIME.[3] HOW DO YOU RESPOND?

A. AT&T Kentucky is not asking the Commission to condemn or penalize Halo, or to decide with what state of mind Halo breached its ICA. AT&T Kentucky's only claims in this case concerning the traffic that Halo has delivered to AT&T are that Halo has, in fact, breached the ICA and that Halo is liable to AT&T Kentucky for the access traffic Halo has delivered to AT&T Kentucky. AT&T Kentucky is asking the Commission to authorize AT&T Kentucky to discontinue service to Halo under the ICA and to find that Halo is liable for access charges on the access traffic it has delivered. These are not penalties; they are the normal consequences of a material breach of contract such as Halo's.

Q. IN LIGHT OF HALO'S TESTIMONY, DO THE PARTIES STILL DISAGREE ABOUT WHETHER TRANSCOM IS AN ESP?

A. Yes. Given the fact that Halo is indisputably sending AT&T Kentucky traffic that originated on landline equipment, Halo's defense is that (1) Transcom is an ESP, and (2) because Transcom is an ESP it is therefore an "end user" and, consequently, all traffic that passes through Transcom actually terminates on Transcom's equipment, which then initiates a further communication – the communication that Halo delivers to AT&T Kentucky. AT&T Kentucky continues to maintain that Transcom is not an ESP, and that even if it is, that does not mean it terminates and originates calls, as Halo contends.

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[3] *E.g., id.* at 40, lines 5-7, and at 48, lines 2-10.

Q. HAVE YOU YOURSELF TESTIFIED THAT TRANSCOM IS NOT AN ESP?

A. Only in a very limited way. To the extent that the question whether Transcom is an ESP is a legal question, AT&T Kentucky will address it primarily in its legal briefs, though Mr. Neinast touches on that subject. To the extent that the question is factual, Mr. Neinast has discussed the pertinent facts. In my direct testimony, I discussed the FCC's Order in *Connect America Fund*,[4] which rejected Halo's theory that calls that originate on landline equipment somehow become wireless calls when they pass through Transcom on the way to Halo.

In addition, I pointed out that Transcom has billed itself as a provider of voice termination services, which is very different than, and inconsistent with, Halo's litigation position that Transcom is an ESP. Specifically, Transcom's website proclaimed:

> **Voice Termination Service**
> *This is our core service offering*. Transcom provides termination services throughout the world with a focus on North America.[5]

Obviously, the statement that voice termination service is Transcom's core service offering is not consistent with Halo's litigation position that Transcom is an enhanced service provider. In addition, that statement appeared on a Transcom webpage entitled "Products and Services," which made no mention of "enhancements" or audio quality. It is striking, to say the least, that Transcom claims to be an ESP based on purported enhancements to audio quality, but that

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[4] *Connect America Fund*, FCC 11-161, 2011 WL 5844975 (rel. Nov. 18, 2011) ("*Connect America Order*").

[5] Direct Testimony of J. Scott McPhee ("McPhee Direct"), Exhibit JSM-3 (Transcom web pages) (second emphasis added).

Transcom's own marketing description of its Products and Services did not mention enhancements or audio quality.

This absence of any mention of enhancements in Transcom's marketing description of its Products and Services is consistent with something we learned in the parallel Halo proceedings before the Wisconsin Public Service Commission: None of Transcom's marketing materials (not just its website) and none of Transcom's contracts with its customers made any mention of the supposed "enhancements" that Halo touts in this case. I do not believe enhancements can be an important part of what Transcom is selling its customers when Transcom's marketing materials do not mention the enhancements and, more important, when Transcom's contracts with its customers do not require Transcom to provide enhancements.

As I noted in my direct testimony, Halo changed its website after AT&T pointed out in proceedings like this one that Transcom's depiction of itself on the website was inconsistent with its position in these proceedings, but Halo cannot undo the effect of its admissions by erasing them.

Q. IN YOUR DIRECT TESTIMONY, YOU STATED THAT "IN ITS *CONNECT AMERICA ORDER*, THE FCC REJECTED HALO'S ARGUMENT ABOUT WHERE CALLS ORIGINATE."[6] YOU THEN SAID, BASED ON YOUR PARTICIPATION IN PARALLEL CASES WITH HALO IN OTHER STATES, THAT IT APPEARS THAT HALO, AFTER SOME INITIAL RESISTANCE, NOW ACKNOWLEDGES THAT THE FCC DID INDEED REJECT ITS POSITION.[7] DOES HALO'S TESTIMONY IN THIS CASE CONFIRM THAT?

A. Yes. Mr. Wiseman states, "We acknowledge that the FCC . . . apparently now believes ESPs . . . do not originate calls."[8] When he says this, Mr. Wiseman is admitting that the FCC has rejected Halo's theory, because the only basis for Halo's theory that Transcom originates the calls that Halo delivers to AT&T Kentucky was Halo's contention that Transcom is an ESP and an end user.

Q. MR. WISEMAN CONTENDS, HOWEVER, THAT THE FCC'S VIEW THAT TRANSCOM DOES NOT ORIGINATE CALLS IS A DEPARTURE FROM PRIOR PRECEDENT, DOESN'T HE?

A. Yes, he says that the FCC's holding that Transcom does not originate calls is a "revers[al] [of] course from prior precedent."[9]

Q. DOES AT&T KENTUCKY AGREE?

A. No. Nothing in the FCC's discussion of Halo and Transcom (which I quoted at pages 16-17 of my direct testimony) suggests the FCC thought it was departing from prior precedent. On the contrary, it is clear that the FCC was applying its existing rules to Halo's activity.

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6 McPhee Direct at 16, lines 4-5.

7 *Id.* at 17, line 30 to page 18, line 18.

8 Wiseman Testimony at 50, lines 15-16.

9 *Id.*

The FCC's discussion of Halo comes immediately after paragraph 1004, which reads:

> The record presents several issues regarding the scope and interpretation of the intraMTA rule. Because the changes we adopt in this Order ***maintain***, during the transition, distinctions in the compensation available under the reciprocal compensation regime and compensation owed under the access regime, ***parties must continue to rely on the intraMTA rule*** to define the scope of LEC-CMRS traffic that falls under the reciprocal compensation regime. We therefore take this opportunity ***to remove any ambiguity regarding the interpretation of the intraMTA rule***. (Emphases added.)

The FCC was not creating some new rule that would apply only on a going-forward basis. Instead, the FCC expressly stated that it was "removing any ambiguity" regarding the ***existing*** intraMTA rule that "parties must ***continue*** to rely on" during the transition period.

The FCC then discussed Halo in the next two paragraphs of its Order (paragraphs 1005 and 1006). In that discussion, the FCC stated, "We ***clarify*** that a call is considered to be originated by a CMRS provider for purposes of the intraMTA rule only if the calling party initiating the call has done so through a CMRS provider."[10] I read a good many FCC orders, and it is my understanding that when the FCC says it is "clarifying" a point, that means it is making clear a point that was already true – not that it is departing from prior precedent. And it was in that same *clarifying* paragraph that the FCC said, "the 're-origination' of a call over a wireless link in the middle of the call path does not convert a wireline-originated call into a CMRS-originated call for purposes of reciprocal

[10] *Connect America Order* at ¶ 1006 (emphasis added).

compensation, and we disagree with Halo's contrary position." Plainly, the FCC did not think it was departing from prior precedent.

Q. IS THERE ANOTHER REASON THAT AT&T KENTUCKY BELIEVES THE FCC'S REJECTION OF HALO'S POSITION WAS NOT A DEPARTURE FROM PRIOR PRECEDENT?

A. Yes. The question whether Transcom is an ESP or a call originator is a legal question that AT&T Kentucky will address in its briefs. To give the Commission a general idea of AT&T Kentucky's position, however, I am informed by counsel that the FCC has *never* held that an ESP "originates" calls that started elsewhere and end elsewhere and merely pass through the ESP somewhere in the middle. I am further informed by counsel that AT&T Kentucky will show in its briefs that:

- ESPs are treated as end-users only for the purpose of applying access charges, and treated as end users only for purposes of the FCC's access charge rules.

- An ESP cannot use this limited "end-user" status to claim it "originates" calls that actually began when someone else picked up a phone and dialed a number.

- The ESP exemption from access charges applies only to the ESP itself, not to any telecommunications carrier that serves the ESP. Thus, even if Transcom were an ESP, Halo could not claim the benefit of the exemption.

Q. MR. WISEMAN STATES: "WHILE WE ACKNOWLEDGE THAT THEY [THE FCC] HELD THAT THIS TRAFFIC DOES NOT ORIGINATE ON HALO'S NETWORK 'FOR PURPOSES OF THE INTRAMTA RULE,' THAT DOES NOT MEAN IT DOES NOT 'ORIGINATE' FROM TRANSCOM FOR OTHER PURPOSES, INCLUDING THE PROVISION IN THE ICA IN ISSUE IN THIS CASE."[11] IS THAT A PERSUASIVE POINT?

A. No. That is one of those statements that at first blush may sound like it makes some sense, but that does not hold up if you give it even a little thought. As I noted above, and as AT&T Kentucky will further explain in its legal briefs, the FCC's exemption of ESPs from access charges is just that – a rule that says ESPs, instead of paying interstate access charges, are treated as end users for purposes of the FCC's access charge regime, and thus do not pay access charges. The *only* sense in which the rule treats ESPs as end users is by exempting them from access charges; the rule does not deem ESPs originators of all traffic that passes through them. Thus, when the FCC rejected Halo's contention that Transcom's presence in the middle of the call meant that the call originated with Transcom for purposes of the intraMTA rule (that is, for purposes of intercarrier compensation), the FCC was rejecting *in its entirety*, and for all purposes, Halo's view of Transcom as a call originator.

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[11] Wiseman Testimony at 34, lines 6-9. Mr. Johnson makes the same point in his testimony, at 6, lines 23-25, and at 29, lines 16-21 (Pre-Filed Testimony of Robert Johnson on Behalf of Halo Wireless, Inc. ("Johnson Testimony")). He introduces the point, however, by saying that AT&T Kentucky "claim[s], incorrectly, that the FCC has declared Transcom's traffic to be 'landline' traffic and therefore not wirelessly-originated . . . ." *Id.* at 6, lines 23-25. That simply is not so. AT&T Kentucky merely pointed out, accurately, that the FCC disagreed with Halo's position and stated that landline traffic did not convert to wireless traffic because it traveled over a wireless link in the middle.

Q. MR. WISEMAN ALSO SUGGESTS THAT THE FCC ACTUALLY DEEMED THE TRAFFIC THAT HALO PASSES ON TO INCUMBENT LOCAL EXCHANGE CARRIERS ("ILECS") TO BE NON-ACCESS TRAFFIC.[12] DO YOU AGREE?

A. No. It is absolutely clear that in paragraphs 1005 and 1006 of the *Connect America Fund* Order, which I quoted in my direct testimony, the FCC was saying that the traffic that Halo was claiming was non-access traffic was in reality access traffic. Indeed, that is the very point the FCC was making. Mr. Wiseman's theory is based on the premise that when the FCC used the term "transiting" in paragraph 1006, it was using it in the same sense as when it later defined transit service, in an entirely separate part of the Order discussing an entirely different issue, as involving "non-access traffic." Based on this, he suggests that Halo's traffic cannot be subject to access charges. Given how clear it is that the FCC was saying in paragraphs 1005 and 1006 that the traffic at issue was access traffic, Halo's suggestion that the FCC meant exactly the opposite based on something the FCC said in an entirely different part of the Order is nonsensical. Moreover, the primary issue in this case is whether the traffic Halo has been sending to AT&T Kentucky is landline-originated, and Halo's argument about the term "transiting" has nothing to do with that point.

Q. MR. WISEMAN SAYS HE EXPECTS THE COURT OF APPEALS FOR THE TENTH CIRCUIT WILL REVERSE THE FCC'S *CONNECT AMERICA FUND* ORDER.[13] HOW DO YOU RESPOND?

A. Needless to say, this Commission should apply the law as it exists today and decline Halo's invitation to speculate about what may or may not happen in a

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[12] Wiseman Testimony at 34, lines 10-17.

[13] *Id.* at 34, line 15.

challenge to the FCC's decision. This is particularly appropriate given that in the past, Halo has asserted with great conviction that the FCC would see things Halo's way and that state commissions should not hear AT&T's complaints against it. As the Commission is aware from AT&T Kentucky's previous submissions in this docket, the FCC did not see things Halo's way, and federal courts across the nation, including in Kentucky, have held that state commissions should hear these complaints.

Q. MR. WISEMAN TESTIFIES THAT THE ICA HAS A "CHANGE OF LAW PROVISION," AND THAT HALO INTENDS TO INVOKE IT.[14] BEFORE YOU ADDRESS HALO'S INTENT TO INVOKE CHANGE OF LAW, PLEASE EXPLAIN THE CHANGE OF LAW PROVISION TO WHICH MR. WISEMAN REFERS.

A. Most provisions in virtually any interconnection agreement reflect the law as it existed at the time the ICA was entered – particularly including the requirements in section 251 of the Telecommunications Act of 1996 (interconnection, unbundled elements, resale, collocation, etc.), the FCC's rules implementing those requirements, and FCC and state commission orders applying those requirements. Not all ICA provisions reflect the law, because parties are free to depart from the requirements of the 1996 Act when they negotiate an ICA, but most provisions do, either because the parties agree on language that reflects current law or because the parties fail to agree and arbitrate language, in which event the state commission must impose language that reflects current law.

[14] *Id.* at 68, lines 7-11.

The law changes, however – not the 1996 Act itself, but the FCC's implementing Rules and FCC and state commission interpretations of the law. Recognizing that fact, interconnection agreements typically include "change of law" provisions that allow for language in the ICA to be changed if the law on which that language was based changes during the term of the ICA. The change of law provision in the Halo/AT&T Kentucky ICA appears in XVII.E of the ICA, which is Exhibit JSM-4 to my direct testimony.

Q. HOW DO YOU RESPOND TO MR. WISEMAN'S STATEMENT THAT HALO INTENDS TO INVOKE THE CHANGE OF LAW PROVISION IN LIGHT OF THE *CONNECT AMERICA FUND* ORDER?

A. If Halo does ask to amend the ICA pursuant to the change of law provision, AT&T Kentucky will respond as appropriate. That said, the *Connect America Fund* Order did not change the law that led the FCC to reject Halo's argument concerning the origination of traffic that passes through Transcom. The FCC did not create a new rule in that regard, but instead clarified the same rule that has been in effect since the parties entered into the ICA. Beyond that, the FCC's clarification makes clear that Halo's position in this proceeding is, and always has been, wrong.

I also note that If Halo wants to change the parties' ICA, that can only mean that Halo is not happy with what the ICA says now. Carriers do not invoke change of law just because the law changes; they do so only when they do not like the provisions in their existing ICA and they believe the change of law benefits them. It is understandable that Halo does not like its ICA with AT&T

Kentucky, because Halo, while purporting to carry out its business plan, is methodically breaching that ICA.

The important point for present purposes, though, is that this case must be decided under the existing contract language – language that Halo admits is unfavorable to Halo when it states it will seek to amend the ICA.

Q. MR. WISEMAN ALSO SAYS "WE ARE PREPARED TO OPERATE UNDER THE FCC'S NEW REGIME . . . BUT WE MUST BE GIVEN A CHANCE TO BRING OUR ARRANGEMENTS AND OPERATIONS INTO COMPLIANCE, AND THE FULL SET OF FCC RULES MUST BE IMPLEMENTED."[15] WHAT IS YOUR REACTION TO THAT?

A. As I have said, AT&T Kentucky does not think there is anything new about the legal principles that mean that Halo has breached the ICA. And as I understand it, it is for the bankruptcy court to decide if Halo can come up with a workable business plan. In any event, for purposes of this case Halo's plea seems to me to be just the latest in a very long – and unsuccessful – line of stall tactics. Halo has made many futile attempts to deter this Commission, and other state commissions, from deciding AT&T's claims,[16] and Mr. Wiseman's appeal for time to bring its operations into compliance with the law sounds like yet another variation on the same theme. This proceeding does not present the question whether Halo can devise a viable business plan any more than it presents the question whether Halo is entitled to a change in the terms of its ICA. AT&T

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[15] Wiseman Testimony at 30, lines 3-6.

[16] These include Halo's removals to federal court, motions to stay state commission proceedings, motions to dismiss, and motions to strike AT&T's testimony – all of which have been denied in every state that has ruled on them.

Kentucky respectfully urges the Commission to decide the questions that are presented in this proceeding as promptly as practicable.

Q. HALO/TRANSCOM RELY ON RULINGS BY A BANKRUPTCY COURT FINDING TRANSCOM AN ESP IN 2005-2007, AND MR. JOHNSON SAYS THAT AT&T'S WITNESSES "ARGUE, ILLOGICALLY, THAT THIS COMMISSION SHOULD IGNORE FEDERAL COURT RULINGS THAT TRANSCOM IS AN ESP IN FAVOR OF THE TENNESSEE REGULATORY AUTHORITY ('TRA') RULING THAT TRANSCOM IS NOT SIMPLY BECAUSE THE TRA RULING IS NEWER, INSTEAD OF HOLDING THE FEDERAL RULINGS IN THE SAME OR HIGHER DIGNITY."[17] HOW DO YOU RESPOND?

A. That is really a subject for the legal briefs, but I will note that AT&T Kentucky has not suggested that the Commission should "ignore" the bankruptcy rulings (which Halo calls the "ESP Rulings"). There are powerful reasons for giving more weight to the TRA's decision than to the ESP Rulings, however, not the least of which is that Halo made the same arguments about the ESP Rulings to the TRA that it is making here, and the TRA was not persuaded. The point is *not*, as Mr. Wiseman puts it, that the TRA decision is "newer"; it is that the TRA considered, and rejected, the bankruptcy court findings. The TRA gave detailed and cogent reasons for its determination that Transcom is not an ESP,[18] and its decision was in accord with the decision of the only other state commission that had previously ruled on the question of whether Transcom is an ESP, the Pennsylvania Public Utility Commission ("PPUC").[19]

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17 Johnson Testimony at 6, line 26 to page 7, line 2.

18 *See* Direct Testimony of Mark Neinast on Behalf of AT&T Kentucky ("Neinast Direct") at 25, line 19 to page 27, line 5.

19 *Id.* at 27, lines 6-18.

The TRA's decision is also more pertinent here than the so-called ESP Rulings because it was, at the time I submitted my direct testimony, the only decision by any state commission on the precise issue presented here: whether Halo is breaching its ICA with AT&T by delivering landline-originated traffic to AT&T. Since then, the South Carolina Public Service Commission has also ruled for AT&T in a parallel case against Halo.[20] None of the ESP Rulings held that Transcom was an end user, or that calls terminate with or originate with Transcom.

The ESP Rulings carry little precedential weight for other reasons as well. The earliest ESP Ruling on which Halo relies was vacated on appeal, and vacated rulings have no preclusive effect. *E.g.*, *Kosinski v. C.I.R.*, 541 F.3d 671, 676-77 (6th Cir. 2008) (collecting cases). And the ESP Ruling that confirmed Transcom's plan of reorganization did not resolve any dispute between parties regarding whether Transcom was an ESP – much less whether all calls that pass through Transcom must be deemed to be wireless-originated – because that point was neither contested in that proceeding nor necessary to the order. Perhaps most important, none of the ESP Rulings says that Transcom somehow originates or re-originates, and changes to wireless, every call that passes through it, for none of the decisions addresses that issue. Accordingly, the ESP Rulings have little bearing on the matters that are at issue here. If any decision is controlling in this case, it is the FCC's rejection in *Connect America Fund* of precisely the position that Halo asserts here.

[20] *See* Neinast Rebuttal, Ex. MN-11.

Finally, the determinations by the Tennessee, Pennsylvania, and South Carolina commissions that Transcom is not an ESP also carry more weight than the bankruptcy court finding because state utility commissions are more knowledgeable about these matters than bankruptcy courts are. To be sure, some aspects of this case may be unusual for this Commission, and others, but the basic subject matters – call origination, intercarrier compensation, and even access charge avoidance schemes – are very familiar. For most bankruptcy courts, however, even the most basic telecommunications concepts are Greek.

Q. MR. WISEMAN EMPHASIZES THAT SOME OF THE TRAFFIC HALO DELIVERS TO AT&T KENTUCKY IS VOIP TRAFFIC.[21] TAKING THAT AS TRUE FOR THE SAKE OF DISCUSSION, WHY IS IT SIGNIFICANT?

A. It is not at all significant, at least for purposes of the issues in this docket. Mr. Wiseman's point is that VoIP traffic that is allegedly "originated" or "re-originated" by Transcom and delivered after December 29, 2011, is not subject to access charges. But the only thing that point could possibly bear on is the determination of how much money Halo owes AT&T Kentucky in unpaid access charges, and AT&T Kentucky has been very clear it is not asking the Commission to make that determination in this case.

[21] Wiseman Testimony at 40, line 13 to page 42, line 22.

III. FAILURE TO PAY FOR INTERCONNECTION FACILITIES

Q. ON PAGES 68-76 OF HIS TESTIMONY, MR. WISEMAN DISCUSSES THE FACILITIES CHARGES THAT AT&T KENTUCKY CLAIMS HALO OWES. BASED ON YOUR REVIEW OF MR. WISEMAN'S TESTIMONY, WHAT IS HALO'S POSITION?

A. Halo maintains that each carrier is entirely responsible for all facilities on its side of the Point of Interconnection ("POI") where the parties' networks meet for the exchange of traffic. Mr. Wiseman repeatedly asserts that the POI is the point of demarcation that separates the interconnection facilities for which Halo is financially responsible from the interconnection facilities for which AT&T Kentucky is financially responsible.

Q. IS MR. WISEMAN CORRECT?

A. As applied here, no. As I explained in my direct testimony, there are situations – specifically relating to interconnection between two *landline carriers* – where the POI does indeed serve as a financial demark, so that each carrier is solely responsible for all of the facilities on its side of the POI.[22] However, as I also explained, that is not the case when the interconnection is with a wireless carrier,[23] which Halo claims to be and, more important for present purposes, claimed to be when it entered into its ICA with AT&T Kentucky. Halo's ICA is a wireless ICA, and it provides that the cost of the entire facility is to be shared between Halo and AT&T Kentucky based upon each carrier's proportional usage.

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22 McPhee Direct at 23, lines 19-28.

23 *Id.* at 24, line 25 to page 26, line 9.

Q. IS "POINT OF INTERCONNECTION" A DEFINED TERM IN THE ICA?

A. Yes. Section I.I provides:

> **Point of Interconnection (POI)** is defined as the physical geographic location(s), within BellSouth's service area within a LATA, at which the Parties interconnect their facilities for the origination and/or termination of traffic. ***This point establishes the technical interface, the test point(s), and the point(s) for operational division of responsibility between BellSouth's network and Carrier's network.*** (Emphasis added.)

This definition clearly defines what a POI is for purposes of the ICA between Halo and AT&T Kentucky pursuant to which AT&T Kentucky provided the facilities at issue here.

Q. DOES THE DEFINITION OF "POI" IN THE ICA INDICATE THAT THE POI IS THE POINT OF DEMARCATION FOR FINANCIAL RESPONSIBILITY FOR INTERCONNECTION FACILITIES, AS MR. WISEMAN CONTENDS IT IS?

A. No, it does not. The definition clearly states that the point of interconnection establishes only "the technical interface, the test point(s), and the point(s) for operational division of responsibility between" the Parties.[24] It does not indicate in any way that the point of interconnection also serves to allocate financial responsibility for interconnection facilities, as Halo contends it does. If that were the intent, the definition would say so – and it certainly would not expressly define the other functions of the POI while omitting the financial demarcation function.[25]

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[24] Operational responsibilities include the provisioning of the facilities, as well as any maintenance in order to ensure continued operation.

[25] Counsel for AT&T Kentucky me there is a Latin phrase for this concept: "Expressio unius est exclusio alteriis," *i.e.*, to express the inclusion of one thing is to imply the exclusion of others.

Q. SO WHERE DOES THE ICA ASSIGN "FINANCIAL RESPONSIBILITY" FOR THE INTERCONNECTION FACILITIES BETWEEN HALO AND AT&T KENTUCKY?

A. First, facilities costs aren't "assigned" to a specific party as Halo believes (by using the POI as an assignment demarcation, for example); instead, per the terms of the ICA, *the costs of the entire facility between Halo and AT&T Kentucky* are shared based upon each carrier's proportional use. Under ICA Section VI, "Compensation and Billing," "Compensation of Facilities" is addressed in subsection B. Section VI.B.2 specifically addresses two-way interconnection facilities, which are currently in place between Halo and AT&T Kentucky:

> 2. The Parties agree to share proportionately in the recurring costs of two-way interconnection facilities.
>
> a. To determine the amount of compensation due to Carrier for interconnection facilities with two-way trunking for the transport of Local Traffic originating on BellSouth's network and termination on Carrier's network, Carrier will utilize the prior months undisputed Local Traffic usage billed by BellSouth and Carrier to develop the percent of BellSouth originated Local Traffic.
>
> b. BellSouth will be Carrier for the entire cost of the facility. Carrier will then apply the BellSouth originated percent against the Local Traffic portion of the two-way interconnection facility charges billed by BellSouth to Carrier. Carrier will invoice BellSouth on a monthly basis, this proportionate cost for the facilities utilized by BellSouth.

As I explained in my direct testimony, under this ICA, the costs for wireless facilities are apportioned based upon the percentage of total traffic for which each carrier is responsible. AT&T Kentucky is responsible for the portion of traffic that originates with AT&T Kentucky end users and is destined for Halo. Halo, on the other hand, is responsible for the portion of traffic Halo sends to AT&T Kentucky for termination to AT&T Kentucky end users. Halo is also

responsible for any intermediary (transit) traffic exchanged between itself and third party carriers that is transported via these facilities.

Q. IF AT&T KENTUCKY END USERS WERE MAKING CALLS TO HALO END USERS OVER THE PARTIES' INTERCONNECTION, WOULD HALO BE ENTITLED TO COMPENSATION FROM AT&T KENTUCKY FOR A PORTION OF THE INTERCONNECTION FACILITIES HALO HAS PROVISIONED?

A. Yes. For example, imagine that Halo were responsible for 80% of the traffic and AT&T Kentucky were responsible for 20% of the traffic, based upon relative volumes of traffic exchanged between the parties. Halo would then be entitled to compensation from AT&T Kentucky for 20% of the cost of interconnection facilities that Halo provisioned, and AT&T Kentucky would be entitled to compensation from Halo for 80% of the cost of the interconnection facilities that AT&T Kentucky provisioned. In this way, the entire interconnection facility is shared proportionally between the Parties, based upon their respective percentages of traffic.

Q. BASED ON THE TRAFFIC HALO AND AT&T KENTUCKY ARE ACTUALLY EXCHANGING, FOR WHAT PERCENTAGE OF THE TOTAL INTERCONNECTION FACILITY IS HALO RESPONSIBLE?

A. Halo is responsible for 100% (or very close to 100%) of the traffic. That is simply because AT&T Kentucky originates no (or very little) traffic destined to Halo.[26] Therefore, the shared cost of the facility is assigned 100% to Halo; AT&T Kentucky owes Halo no compensation for the facilities Halo has provisioned; and

[26] I say 100% or nearly 100% based upon recorded data for Halo's traffic. For example, the January 2012 usage data shows AT&T sent just 435 MOUs to Halo across the entire nine-state AT&T Southeast Region.

Halo owes AT&T Kentucky 100% of the cost of the facilities AT&T Kentucky has provisioned.

Q. DOES IT SURPRISE YOU THAT AT&T ORIGINATES VIRTUALLY NO TRAFFIC DESTINED TO HALO?

A. No, because as I noted in my direct testimony, Halo has no end user customers in Kentucky.[27] In other words, there simply are no Halo customers in Kentucky for anyone to call, so it is not surprising that AT&T Kentucky originates next-to-no traffic destined to Halo.

Q. MR. WISEMAN CONTENDS THAT SOME OF THE CHARGES AT ISSUE ARE NOT "FACILITIES" CHARGES BUT INSTEAD RELATE TO "TRUNKS" AND "TRUNK GROUPS."[28] DOES THE ICA ADDRESS HOW ALL OF THESE DISPUTED CHARGES – WHETHER "FACILITIES," "TRUNKS" OR "TRUNK GROUPS" – ARE TO BE COMPENSATED?

A. Yes. For ease of reference, AT&T Kentucky categorized all of the disputed charges associated with interconnection facilities and trunking as a "facilities dispute." Perhaps a better term would be "interconnection dispute." Regardless, the ICA does indeed address compensation for trunk groups, and, like the facilities I just discussed, the ICA provides in Section V.B that costs for trunk groups will be apportioned according to the Parties' relative use, just like interconnection facilities:

> If the Parties mutually agree upon a two-way trunking arrangement, the following will apply:

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[27] McPhee Direct at 7, lines 12-15 (noting Halo statement that it has no "consumer customers" in Kentucky).

[28] Wiseman Testimony at 72, lines 1-5.

> BellSouth and Carrier will share the cost of the two-way trunk group carrying both Parties traffic proportionally when purchased via this Agreement or the General Subscriber Services Tariff, Section A35, or, in the case of North Carolina, in the North Carolina Connection and Traffic Interchange Agreement effective June 30, 1994, as amended from time to time. BellSouth will bear the cost of the two-way trunk group for the proportion of the facility utilized for the delivery of BellSouth originated Local traffic to Carrier's POI within BellSouth's service territory and with the LATA (calculated based on the number of minutes of traffic identified as BellSouth's divided by the total minutes of use on the facility), and Carrier will provide or bear the cost of the two-way trunk group for all other traffic, including Intermediary traffic.

As Halo is responsible for 100% (or nearly 100%) of the traffic exchanged between the Parties, Halo is responsible for 100% of the costs associated with the cost of the two way trunk group.

Q. IS THE PROPORTIONAL SHARING OF TRUNKING COSTS APPLICABLE ONLY "WHEN HALO USES AT&T KENTUCKY-SUPPLIED FACILITIES TO SUPPORT TRUNKING AS ONE OF THE ALTERNATIVES IN [SECTION] IV TO GET TO THE POI," AS MR. WISEMAN CONTENDS?[29]

A. No. As Section V.B.[30] plainly states, the apportioning of trunking costs applies "if the Parties mutually agree upon a two-way trunking arrangement." There is no basis for the notion that Section V.B. (Two Way Trunk Arrangement) is any sort of "alternative" to Section IV (Methods of Interconnection). In order for traffic to be exchanged between carriers, the carriers must have a means – or method – to interconnect their parties' networks, and they must also have trunking in order to route and exchange traffic. "Methods of interconnection" and "trunking

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29 *Id.* at 74, lines 14-15.

30 Mr. Wiseman mistakenly refers to ICA Section V.C. when he meant V.B.

arrangements" are both prerequisites to interconnection; they are not mutually exclusive as Mr. Wiseman suggests.

Q. HOW DO YOU RESPOND TO MR. WISEMAN'S CONTENTION THAT FACILITIES COSTS ARE COVERED BY RECIPROCAL COMPENSATION CHARGES?[31]

A. I have a great deal of experience with reciprocal compensation issues,[32] and I cannot recall any party to an ICA ever having expressed the view that reciprocal compensation charges cover the costs of physical facilities. It is fundamental that reciprocal compensation charges are *per minute usage* charges for the incremental costs incurred to transport and terminate traffic, whereas facilities charges are *non-usage-sensitive recurring charges for the cost of the facilities themselves.*[33]

Q. DOES HALO ADMIT TO ORDERING THE FACILITIES AND TRUNK GROUP ELEMENTS FOR WHICH AT&T KENTUCKY SEEKS PAYMENT?

A. Yes. Mr. Wiseman concedes that Halo followed "AT&T's Type 2A interconnection implementation process [that] requires the CMRS provider to submit the order, even when part of what is being 'ordered' pertains to facilities, trunks and other things on AT&T's side of the POI."[34] There is also no dispute that AT&T Kentucky provided the facilities and trunk groups that Halo ordered.

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31 Wiseman Testimony at 73, line 14 to page 74, line 9.

32 From 2000 to 2003, I was Product Manager for Reciprocal Compensation at SBC.

33 To avoid possible confusion, note that because of the facilities cost-sharing arrangement established by the ICA, each Party's proportional share of the facilities cost is determined by how that party's usage of the facilities compares with the other party's usage. However, the facilities costs are still "non-usage sensitive" in that the amounts do not depend on the minutes of usage. In other words, if Halo had ten minutes of usage and AT&T Kentucky had none, Halo's financial responsibility for the facilities costs would be the same as if Halo had a million minutes of usage and AT&T Kentucky had none.

34 Wiseman Testimony at 75, lines 5-7.

Because the ICA clearly states that the costs of these interconnection facilities will be shared based upon each carriers' proportional use, and because Halo is responsible for 100% (or nearly 100%) of the traffic that has been exchanged between the Parties, Halo is 100% responsible for the costs of the facilities and trunk groups. Halo's failure to pay what it owes for these facilities and trunk groups is yet one more breach of the parties' ICA.

IV. TERMINATION OF SERVICE TO HALO

Q. MR. WISEMAN TESTIFIES THAT AT&T KENTUCKY IS MISTAKEN IN ITS CONTENTION THAT HALO PROVIDES NO VALUE TO COMMUNICATIONS CUSTOMERS, AND THAT HALO IN FACT DOES PROVIDE VALUE AND SO SHOULD NOT BE REMOVED FROM THE MARKETPLACE.[35] HOW DO YOU RESPOND?

A. I have three responses. *First*, if Halo is materially breaching its contract with AT&T Kentucky, which it is, then the law, as I understand it, entitles AT&T Kentucky to discontinue performance of the contract, whether or not Halo is providing value to anybody; this is not a policy judgment for the Commission to make based on its assessment of the value Halo provides or does not provide. *Second*, the point that Mr. Neinast made in his direct testimony concerning AT&T Kentucky's termination of service to Halo was not that it would be harmless because Halo provides no value; rather, it was that it would not cause any consumers to lose dial tone and would not cause any calls not to complete.[36] *Third*, it does not seem to me that Halo provides any meaningful value to consumers in Kentucky. I mention that with some reluctance, because it is not

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35 *Id.* at 21, line 1 to page 22, line 14.

36 *See* Neinast Direct at 33, line 10 to page 36, line 14.

particularly germane to the determinations the Commission must make, but I did not want to let Mr. Wiseman's claim go unchallenged.

Q. WHAT VALUE DOES MR. WISEMAN SAY HALO PROVIDES?

A. Actually, and intriguingly, he does not say that *Halo* provides any value. He has a question that reads "Does Halo provide any value or benefit to the consumers in Kentucky?" But in his answer to that question, he contends that *Transcom* provides value; he does not say a word about any benefit provided by Halo, the company of which he is President.[37] Even if it were true that *Transcom* provides some value (which I do not believe it does), that does not mean that *Halo* provides any value.

Q. WHAT VALUE DOES MR. WISEMAN SAY TRANSCOM PROVIDES?

A. Mr. Wiseman says: "[M]ajor providers of communications services voluntarily choose to purchase Transcom's services, and incorporate them into the delivery of service to their consumer customers." ***Therefore***, Transcom provides a valuable service, "not only to the service providers" who are Transcom's customers, "but, ***by extension***, to the service providers' end consumers. Thus, if Transcom, and Halo as one of Transcom's service vendors, are removed from the marketplace, this means that the preferred provider of service to these service providers is taken away, forcing these providers to employ their 'second best' choice, assuming they have such a choice."[38]

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[37] Wiseman Testimony at 21, line 17 to page 22, line 14.

[38] *Id.* at 21, line 17 to page 23, line 5 (emphasis added).

That makes no sense to me, for two primary reasons. First, Halo claims that it is just one of a number of Transcom vendors – vendors that Halo repeatedly describes as multiple and essentially interchangeable.[39] If *Transcom* provides value, as Mr. Wiseman claims it does, there is no reason to believe that *Transcom* will disappear merely because AT&T Kentucky discontinues service to *Halo*; Transcom can simply move its traffic to its other vendors. Unless, of course, Halo is, contrary to Halo's own representations, indispensable to Transcom because the two companies inextricably engage together in an access charge avoidance scheme that depends on Halo's unique status among Transcom's supposedly multiple vendors.

Second, Mr. Wiseman's logic is that the service providers that are Transcom's customers must see value in Transcom because they choose to be Transcom's customers, and if there is value for the service providers, it necessarily follows that there is value ("by extension") for their consumer customers. I am not an economist (and neither is Mr. Wiseman), but that seems like an awfully big stretch. If Transcom is providing any value to its customers, it is the avoidance of access charges. And for every dollar of "benefit" that someone is getting by not paying the applicable access charge, AT&T Kentucky or some other carrier loses a dollar. If we assume, along with Mr. Wiseman, that the savings on his side of the ledger somehow wind up benefiting the consumers on that side of the ledger, doesn't the corresponding loss on the AT&T Kentucky (or another carrier's) side of the ledger have a correspondingly negative effect

[39] *See, e.g.,* Johnson Testimony at 13, lines 9-22.

on AT&T Kentucky's (or another carrier's) consumer customers? As I understand it, the existing intercarrier compensation regime at least attempts to be economically rational, to the ultimate benefit of the consuming public. If that is so, then conduct such as Halo's that distorts or games the system is, one would presume, not beneficial for the consuming public.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

1039904

COMMONWEALTH OF KENTUCKY

KENTUCKY PUBLIC SERVICE COMMISSION

COUNTY OF COLE

STATE OF MISSOURI

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Mark Neinast, who being by me first duly sworn deposed and said that he is appearing as a witness on behalf of BellSouth Telecommunications, LLC d/b/a AT&T Kentucky before the Kentucky Public Service Commission in Docket Number 2011-00283, *In the Matter of: BellSouth Telecommunications, LLC, d/b/a AT&T Kentucky, Complainants v. Halo Wireless, Inc., Defendant,* and if present before the Commission and duly sworn, his statements would be set forth in the annexed rebuttal testimony consisting of 28 pages and 3 exhibits.

Mark Neinast

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 27th DAY OF JUNE, 2012

Tammy R. Morris
Notary Public

My Commission Expires: 6/28/2012

TAMMY R. MORRIS NOTARY PUBLIC NOTARY SEAL COMMISSION #08414247 COLE COUNTY STATE OF MISSOURI MY COMMISSION EXPIRES 06/28/12

1039040

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of	)	
	)	
BELLSOUTH TELECOMMUNICATIONS, LLC d/b/a AT&T KENTUCKY,	)	
	)	Case No. 2011-00283
Complainant,	)	
	)	
v.	)	
	)	
HALO WIRELESS, INC.,	)	
	)	
Defendant.	)	

REBUTTAL TESTIMONY OF MARK NEINAST ON BEHALF OF AT&T KENTUCKY

July 10, 2012

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME.

A. My name is Mark Neinast.

Q. ARE YOU THE SAME MARK NEINAST WHO SUBMITTED DIRECT TESTIMONY IN THIS MATTER ON JUNE 6, 2012?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will respond to some assertions in the pre-filed direct testimony of Halo witnesses Russ Wiseman and Robert Johnson that relate to the issues I discussed in my direct testimony. I will be selective, however, because I believe that much of what Halo's witnesses say warrants no response.

Q. WHY DO YOU SAY THAT MUCH OF WHAT HALO'S WITNESSES SAY WARRANTS NO RESPONSE?

A. The AT&T Kentucky claims I discussed in my direct testimony are straightforward: Halo is breaching the parties' ICA by sending AT&T Kentucky landline-originated traffic, which the ICA does not permit, and by providing inaccurate call detail (at least until December 29, 2011). To decide those claims, the Commission must answer only a few questions.

The first question is whether Halo is sending AT&T Kentucky calls that are made by calling parties using landline equipment, and the answer to that question is "yes." Given that, the only defense Halo has asserted is that all of those landline-originated calls are converted into wireless-originated calls when they pass through Transcom, because Transcom, according to Halo, is an Enhanced Service Provider ("ESP") and therefore an "end user" that terminates

every call that comes its way and then originates a further communication to AT&T Kentucky.

In considering Halo's defense, the Commission must answer two additional questions: (i) whether Transcom is an ESP, as Halo contends, and (ii) if Transcom is an ESP, does that mean it originates every call that passes through its equipment, as Halo also contends? If the answer to either of those questions is "no" (and AT&T Kentucky maintains that the answer to *both* questions is "no") the Commission must conclude that Halo has breached its contract with AT&T Kentucky.

Mr. Wiseman and Mr. Johnson discuss many things that it seems to me have no bearing on any of those questions. I suspect this may be because Halo has decided to throw as many things at the wall as it can think of to see if anything sticks. In any event, I will devote little space to assertions of Halo's witnesses that are not pertinent to the issues the Commission must decide.

Q. WHAT ARE THE ANSWERS TO THE THREE QUESTIONS YOU IDENTIFIED ABOVE?

A. There is no disagreement about the answer to the first question: Our call studies conclusively demonstrate that Halo is sending AT&T Kentucky substantial volumes of landline-originated traffic. I indicated in my direct testimony that Halo would quibble about our numbers, and Halo does so in Mr. Wiseman's testimony. I respond briefly to those quibbles. At the end of the day, however, they make no difference, because Halo does not deny it is delivering significant amounts of traffic that originates on landline equipment, and for purposes of this case, it does not matter exactly what percentage of Halo's traffic is landline-originated.

The question then becomes whether Transcom is an ESP and, if it is, whether that means that every call that passes through Transcom on its way to AT&T Kentucky is re-originated by Transcom. As I stated in my direct testimony, those are ultimately legal questions. Halo has chosen to set forth its legal arguments in its testimony. As a result, much of Mr. Wiseman's testimony is really a legal brief that Mr. Wiseman recites "on the advice of counsel."[1] AT&T Kentucky will not adopt this approach, but instead will present its legal arguments in its legal briefs. To give the Commission some sense of AT&T Kentucky's position on the legal issues, however, I will make a few general points "on the advice of counsel."

Q. ARE THERE OTHER REASONS THAT YOUR REBUTTAL TESTIMONY IS LIMITED?

A. Yes. My direct testimony anticipated many of the points that Halo's witnesses make in their testimony. In some instances, I will respond to Halo's testimony by referring the Commission to my direct testimony.

Q. HOW IS YOUR REBUTTAL TESTIMONY ORGANIZED?

A. This introductory discussion is followed by five more sections. Section II responds to two overarching assertions made by Mr. Wiseman. Section III further demonstrates that much of the traffic Halo is delivering to AT&T Kentucky originates on landline equipment. Sections IV and V address Halo's defense that

[1] There are at least 36 instances in which Mr. Wiseman explicitly states that he is expressing a view of the law on the advice of counsel. Pre-Filed Direct Testimony of Russ Wiseman on Behalf of Halo Wireless, Inc. ("Wiseman Testimony") at 25: lines 3, 10, 16; 32: lines 11, 15, n6; 33: lines 3, 10, 12, n7; 36: line 13; 37: line 8; 39: line 22; 40: line 2; 44: lines 8, 11; 45: line 16; 46: line 16; 47: lines 1, 2, 4, 9, 12, 14, n22; 48: lines 17, 20, 21; 49: line 11, n23; 50: lines 4, n24; 58: line 22; 60: line n26; 61: line n27; 75: line n39.

Transcom is an ESP that re-originates all the calls that pass through it on the way to AT&T Kentucky. Finally, Section VI addresses Halo's improper alteration of call detail.

II. OVERARCHING POINTS

Q. MR. WISEMAN STATES THAT AT&T KENTUCKY'S ASSERTIONS ARE "FOUNDED ON TRADITIONAL INTERPRETATIONS AND APPLICATIONS OF THE TERMS 'WIRELESS' AND 'ORIGINATED.'"[2] HOW DO YOU RESPOND?

A. The terms "wireless" and "originated" mean exactly the same thing today as they have "traditionally" meant, and Mr. Wiseman does not say anything that suggests otherwise. To be sure, technology has changed, and the changes include new applications of wireless and landline equipment. But those new applications do not change the meaning or use of the terms "wireless" and "originated." Mr. Wiseman's observation that AT&T Kentucky's assertions are founded on traditional views of those two terms, therefore, is an acknowledgment that AT&T Kentucky's position in this case is soundly based on well-settled principles.

Q. MR. WISEMAN ALSO ASSERTS THAT AT&T KENTUCKY IS "ASKING THE COMMISSION TO ASSUME AWAY HOW THE INDUSTRY ACTUALLY OPERATES TODAY, HOW CURRENT TECHNOLOGY CAN BE USED AND IS USED, AND MOST IMPORTANT, THE WAY THAT USERS ARE ACTUALLY EMPLOYING THIS TECHNOLOGY TO COMMUNICATE."[3] IS THAT CORRECT?

A. No. AT&T Kentucky is asking the Commission to apply the principles that have been in effect since Halo started delivering traffic to AT&T Kentucky, and that are still in effect today, to traffic that is subject to those current rules. Halo's real

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[2] Wiseman Testimony at 26, lines 17-23.

[3] *Id.* at 31, lines 20-22.

grievance seems to be that the rules have not kept up with technology, at least in Halo's opinion. For example, Mr. Wiseman has stated in parallel proceedings in other states, "[w]e also do not believe that the industry can continue to rely on the 'calling party number' as some indicator of where and on what network a call started."[4] Perhaps the industry some day will adopt a new means of determining where a call originates, as Mr. Wiseman evidently believes it should. But as Mr. Wiseman's statement acknowledges, the industry today relies on calling party number ("CPN") as the most reliable indicator of where and on what network a call originated.[5] As a result, Mr. Wiseman's contention that AT&T Kentucky's call studies are faulty because they relied on CPN is simply wrong.

Furthermore, Mr. Wiseman's ruminations on new technology and Halo's lofty aspirations about promoting the "growth of low cost, high value IP communication services for all Americans"[6] relate only to a red herring – namely, Halo's contention that some of what appears to be landline-originated traffic that Halo delivers to AT&T Kentucky may actually originate on wireless devices using IP-based services like GoogleVoice and Skype. As I discussed in my direct testimony, that contention goes nowhere, because it is inconsistent with current industry standards for identifying the origins of traffic and, even if it were correct, all that would mean is that a bit less of the traffic Halo is sending to AT&T

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[4] *See* Mr. Wiseman's testimony from the parallel Wisconsin proceeding, **Exhibit MN-9**, at 30, lines 5-6, and from the parallel Georgia proceeding, **Exhibit MN-10**, at 7, lines 15-17.

[5] Just as Transcom changed its website when it realized the admissions there were undercutting its litigation position (as Mr. McPhee discusses in his Rebuttal Testimony) Mr. Wiseman dropped his statement that the industry should stop relying on CPN after AT&T pointed out in other states that that statement was an acknowledgement that the industry still does rely on CPN. Mr. Wiseman cannot "unsay" his admission, however.

[6] *E.g., id.* at 4, lines 5-6.

Kentucky is landline-originated than the approximately 67% to 89% that our initial numbers showed.[7]

III. HALO IS DELIVERING LANDLINE-ORIGINATED TRAFFIC TO AT&T KENTUCKY

Q. YOU SAID IN YOUR INTRODUCTORY COMMENTS THAT EVEN THOUGH THE ICA REQUIRES HALO TO SEND ONLY WIRELESS-ORIGINATED TRAFFIC TO AT&T KENTUCKY, HALO DOES NOT DENY THAT IT IS SENDING AT&T TRAFFIC THAT ORIGINATES AS LANDLINE TRAFFIC. WHAT DO YOU BASE THAT ON?

A. It is not just that Halo does not deny that it is sending us landline-originated traffic; Mr. Wiseman actually admits it. He states, "[m]ost of the calls probably did start on other networks before they came to Transcom for processing. It would not surprise me if some of them started on the PSTN."[8] The PSTN is the public switched telephone network – the landline network. So, even though Mr. Wiseman purposefully understated what he was saying, he is still admitting that Halo is sending to AT&T Kentucky traffic that started as landline traffic.[9]

This clearly is landline-originated traffic, and sending landline-originated traffic to AT&T Kentucky (as Halo admittedly does) violates Halo's contractual commitment to send *only* "wireless-originated" traffic to AT&T Kentucky.

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[7] Direct Testimony of Mark Neinast on Behalf of AT&T Kentucky ("Neinast Direct") at 17, lines 11-20.

[8] Wiseman Testimony at 32, lines 5-6.

[9] At a recent hearing, Halo's attorney noted an FCC definition of "PSTN" that included wireless networks as well as landline networks, and thus implied that when Mr. Wiseman acknowledged that Halo sends AT&T calls that originated on the PSTN, he was not acknowledging that Halo sends AT&T calls that originated on a landline network. That struck me as incredible. There is no reason to believe that Mr. Wiseman had that FCC definition in mind when he wrote his testimony. Furthermore, the general understanding within the industry is that the PSTN is the traditional Bell operating company network, and the context of Mr. Wiseman's acknowledgment makes clear that that is what he intended.

Q. WHY DO YOU SAY MR. WISEMAN UNDERSTATED WHAT HE WAS SAYING?

A. In the first place, it is not "most" of the calls that started on other networks; it is *all* of them. Transcom has no end user customers.[10] Consequently, 100% of the calls that Transcom hands off to Halo "start on other networks." Second, Mr. Wiseman's statement that it "would not surprise [him] if some of them started on the PSTN" is as much an understatement as "it would not surprise me if the sun rose tomorrow." As Mr. Wiseman admits, "Halo is not in a position to determine where or on what network the call started, and we have not asked our customer."[11] In other words, Halo is doing nothing to try to avoid receiving landline-originated calls and delivering them to AT&T Kentucky, and Mr. Wiseman knows, and effectively admits, that of the millions of minutes of traffic Halo is delivering to AT&T Kentucky every month, a substantial portion necessarily originates on the PSTN.

Q. WHY IS HALO'S ADMISSION IMPORTANT?

A. Because it confirms that Halo's critiques of AT&T Kentucky's call studies that showed that Halo is sending landline-originated traffic to AT&T Kentucky are without merit. At the end of the day, all Halo's critiques amount to is nit-picking about whether the percentage of Halo traffic that is landline-originated is as AT&T Kentucky's call studies showed, or is something less than they showed. For purposes of this case, though, the exact percentages are beside the point; all that matters is that Halo is breaching its contract by sending to AT&T Kentucky

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[10] *See, e.g.*, Pre-filed Testimony of Robert Johnson ("Johnson Testimony") at 8, lines 1-3.

[11] Wiseman Testimony at 32, lines 9-10.

substantial amounts of traffic that originates on landline equipment. The *only* defense left to Halo is its untenable argument that all the calls it is delivering to AT&T Kentucky are actually wireless calls originated by Transcom's equipment in Kentucky, including all the calls that start out as regular landline calls in other states.

Q. WITH THAT UNDERSTANDING, WILL YOU NONETHELESS ADDRESS SOME OF MR. WISEMAN'S CRITIQUES OF AT&T KENTUCKY'S CALL STUDIES?

A. I will, briefly, but bear in mind that even if some or all of Mr. Wiseman's critiques were well-founded, that would have no effect on the ultimate result in this proceeding. Halo is sending large amounts of landline-originated traffic to AT&T Kentucky in breach of the ICA, and AT&T Kentucky's call studies follow industry practices in establishing this fact. Also bear in mind that Halo has offered no traffic study of its own to dispute the results of AT&T Kentucky's traffic analysis – even though Halo has access to all the supporting data for AT&T Kentucky's analysis.

Q. MR. WISEMAN ARGUES THAT AT&T KENTUCKY'S CALL STUDY IMPROPERLY RELIED ON CALLING PARTY NUMBERS ("CPN") TO DETERMINE THE ORIGINATING CARRIER FOR CALLS. IS THAT A VALID CRITICISM?

A. No.

Q. WHY NOT?

A. Mr. Wiseman relies primarily on advanced services like a T-Mobile service that allows "wireless users to originate calls using wireless base stations connected to wired broadband networks," and like Verizon Wireless' Home Phone Connect

service, which "allows VZW customers to port their home numbers to VZW and use traditional landline phones to make calls over their wireless network."[12] His position is that AT&T Kentucky's call analysis would have (or might have) miscategorized calls made using such services. And to the extent that AT&T Kentucky's analysis counts such calls as landline-originated when they are actually originated with mobile equipment, Mr. Wiseman argues, we have overstated the percentage of landline-originated calls.

My direct testimony addressed these points and explained why Mr. Wiseman is wrong. The simple fact of the matter is that under current industry standards, the determinant of whether a carrier is landline or wireless is the Local Exchange Routing Guide ("LERG"). When our analysis treated a call as landline-originated, that meant that the carrier who holds the originating NPA-NXX for that call identified the NPA-NXX as landline. Thus, our analysis complied with industry standards, and properly treated as landline-originated a call that originated on wireless equipment only when the holder of the NPA-NXX for that call identified the NPA-NXX as landline.[13]

To be sure, the NPA-NXX does not in each and every instance accurately reflect actual geographic location. Nonetheless, NPA-NXX is the most reliable indicator we have in the telecommunications industry; it is accurate for the vast majority of calls; and, as the Tennessee Regulatory Authority specifically found in

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12 Wiseman Testimony at 28, lines 11-21.

13 Neinast Direct at 17, lines 14-21.

the parallel case there, it is standard, accepted practice in the industry to use NPA-NXX as a proxy for geographic location for landline calls.[14]

Furthermore, Mr. Wiseman makes no attempt to quantify the traffic that Halo delivers to AT&T Kentucky that is originated with such advanced services. At the end of the day, then, his testimony on this point establishes *at most* that AT&T Kentucky's numbers may be imprecise to some unascertainable (but not demonstrably significant) extent, which, again, makes no difference here.

Q. MR. WISEMAN CLAIMS THAT THE FCC SAID IN PARAGRAPHS 960 AND 962 OF ITS *CONNECT AMERICA FUND* ORDER THAT CPN IS AN UNRELIABLE INDICATOR OF WHERE CALLS ACTUALLY BEGAN.[15] DOES THIS CAST ANY DOUBT ON YOUR CALL ANALYSIS?

A. No, for several reasons. Let's look first at what the FCC actually said in the three paragraphs of *Connect America Fund* [16] that Mr. Wiseman cites. In that Order, the FCC, among other things, "adopt[ed] a prospective intercarrier compensation framework for VoIP traffic."[17] In its discussion of that new framework, the FCC said:

> [G]iven the recognized concerns with the use of telephone numbers and other call detail information to establish the geographic endpoints of a call, we *decline to mandate*, their use in that regard . . . . We do, however, recognize concerns regarding providers' ability to distinguish VoIP-PSTN traffic from other traffic, and . . . we

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[14] *See* the TRA's decision, Exhibit MN-1 to my Direct Testimony, at 17: "The Authority acknowledges that a certain degree of imprecision can occur when analyzing the origin to individual telephone calls, due to factors such as the advent of number portability and the growth of wireless and IP telephony. However, because of these technical issues, the industry has developed conventions and practices to evaluate calls for the purpose of intercarrier compensation. The Authority finds that the methodology used to collect the data and the interpretation of the data in the AT&T study are based upon common industry practices to classify whether traffic is originated on wireline or wireless networks."

[15] Wiseman Testimony at 41, lines 15-18.

[16] *Connect America Fund*, FCC 11-161, 2011 WL 5844975 (rel. Nov. 18, 2011).

[17] *Id.* at ¶ 933.

permit LECs to address this issue through their tariffs, much as they do with jurisdictional issues today.[18]

As it continued its discussion of the prospective intercarrier compensation framework for VoIP-PSTN traffic, the FCC repeated that point two more times, stating, "Because telephone numbers and other call detail information *do not always* reliably establish *the geographic endpoints of a call*, we do not mandate their use,"[19] and, "we *do not require* the use of particular call detail information to dispositively distinguish toll VoIP-PSTN traffic from other VoIP-PSTN traffic, given the recognized limitations of such information."[20]

This is hardly the condemnation of CPN that Mr. Wiseman claims to find in the FCC's Order. All the FCC actually said is that it was not *requiring* the use of CPN, in the context of its new, going-forward intercarrier compensation scheme for VoIP-PSTN traffic, because of concerns that CPN does *not always* reliably establish *the geographical endpoints of a call.* The FCC neither condemned nor prohibited the use of CPN, even for VoIP-PSTN traffic; it did not say anything at all about the reliability of CPN with respect to traffic (like much of Halo's traffic) that is *not* VoIP-PSTN traffic; and, most important, it did not say anything about the use of CPN to identify whether a call originated on a landline or wireless network (as opposed to identifying the geographic endpoints of a call).

Recall that the purpose of my call analysis was to confirm that Halo is sending AT&T Kentucky landline-originated traffic in breach of the parties' ICA. As I have explained, CPN is a very reliable tool for identifying the carrier that

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18 *Id.* at ¶ 934 (emphasis added).

19 *Id.* at ¶ 960 (emphasis added).

20 *Id.* ¶ 962 (emphasis added).

originated calls and thereby determining whether the call was landline-originated. Moreover, I already accounted for Mr. Wiseman's claim that some IP calls may appear to be landline when they actually are wireless. While I dispute that claim, the re-run of our analysis, discussed above, shows that even if Mr. Wiseman were correct, it would have very little impact on the final result, and certainly would not prove that Halo is not sending significant volumes of landline-originated traffic to AT&T Kentucky.

Q. IS IT TRUE, AS MR. WISEMAN STATES, THAT "AT&T WITNESSES HAVE ALSO ADMITTED THEY HAVE NO REAL WAY OF ACCURATELY IDENTIFYING WHETHER A PARTICULAR CALL ACTUALLY 'ORIGINATED' FROM A 'WIRELINE' CUSTOMER OF AN LEC USING A TRADITIONAL PHONE"[21]?

A. Absolutely not. All we have "admitted" – and I will quote my direct testimony on this – is that "the NPA-NXX does not in each and every instance accurately reflect actual geographical location."[22] I then went on to say: "Nonetheless, NPA-NXX is the most reliable indicator we have in the telecommunications industry; it is accurate for the vast majority of calls; and it is the standard, accepted practice in the industry to use NPA-NXX as a proxy for geographic location for landline calls."[23] Our study demonstrated beyond any doubt that a substantial portion of the calls Halo is delivering to AT&T Kentucky originated on landline equipment, in breach of the parties' interconnection agreement.

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21 Wiseman Testimony at 27, lines 3-5.

22 Neinast Direct at 19, lines 6-7.

23 *Id.* at 19, lines 7-10

Q. WHAT IS YOUR CONCLUSION CONCERNING THE QUESTION WHETHER HALO IS SENDING AT&T KENTUCKY TRAFFIC THAT ORIGINATES ON LANDLINE EQUIPMENT?

A. As I said at the outset, that is not really a question at all. Halo admits it is sending traffic to AT&T Kentucky that started out on the PSTN. Notwithstanding its contract obligation, Halo is doing nothing to avoid sending us such traffic; Halo admits it "is not in a position to determine where or on what network the call started," and that it has "not asked our customer."[24] Our call studies showed that much of the traffic is landline-originated. Giving Halo every benefit of the doubt, the percentage may be somewhat less than our studies showed, but for purposes of this case, that makes no difference, because AT&T Kentucky is not asking the Commission to determine the amount owed. That will be a task for the Bankruptcy Court in Halo's bankruptcy proceeding.

IV. TRANSCOM IS NOT AN ESP

Q. PLEASE RESTATE HOW THE QUESTION WHETHER TRANSCOM IS OR IS NOT AN ESP FITS INTO THE PARTIES' DISPUTE.

A. As I have explained, Halo is sending AT&T Kentucky a substantial amount of traffic that originates on landline networks. That means that Halo is breaching the parties' ICA unless Halo can somehow persuade the Commission that all of that traffic is "re-originated" when it hits Transcom. To establish that that is the case, Halo must first show that Transcom is an ESP, because Halo's whole "re-origination" theory rests on the proposition that Transcom is an ESP and therefore should be treated as an end user.

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[24] Wiseman Testimony at 32, lines 9-10.

In my direct testimony, I noted that in *Connect America Fund*, the FCC, while fully aware of Halo's contention that Transcom is an ESP, rejected precisely the argument that Halo is advancing here;[25] Mr. McPhee quoted the FCC's rejection of Halo's argument in full.[26]

I also explained that while the question whether Transcom is an ESP is ultimately a legal question, I had seen no evidence that Transcom provides enhanced services as I understand that term.[27] And I noted that the Tennessee Regulatory Authority ("TRA"), in the parties' identical dispute there, concluded that Transcom is not an Enhanced Service Provider, for reasons that track my own, to which I testified in Tennessee,[28] and that the Pennsylvania Public Utility Commission ("PPUC") likewise ruled that "Transcom's removal of background noise, the insertion of white noise, [and] the insertion of computer developed substitutes for missing content"– the same functionalities Halo relies on here – do not constitute "enhancements."[29]

Q. WHAT DOES HALO'S TESTIMONY SAY ABOUT THE TRA AND PPUC RULINGS THAT TRANSCOM IS NOT AN ESP?

A. Halo has no answer for the Tennessee decision or the Pennsylvania decision, so Mr. Wiseman and Mr. Johnson ignore them.[30]

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25 Neinast Direct at 23, lines 1-9.

26 McPhee Direct at 16, line 4 to page 17, line 24.

27 Neinast Direct at 24, line 9 to page 25, line 18.

28 *Id.* at 25, line 21 to page 27, line 5.

29 *Id.* at 27, lines 9-18

30 Neither Mr. Wiseman nor Mr. Johnson makes any mention of the PPUC decision. Their only mention of the TRA decision is Mr. Johnson's suggestion that the bankruptcy finding Halo relies on deserves at least as much "dignity" as the TRA decision – with no discussion of the merits of the TRA's

Instead of addressing those adverse rulings, Mr. Johnson discusses at great length what he calls Transcom's "enhanced service platform."[31] When all is said and done, Mr. Johnson spends many pages discussing his "very technical understanding"[32] of a very simple (and decidedly non-enhanced) aspect of Transcom's service.

Q. WHAT IS THAT ASPECT OF TRANSCOM'S SERVICE?

A. Transcom claims it improves the audio quality of voice transmissions.

Q. IS IMPROVING THE AUDIO QUALITY OF VOICE TRANSMISSIONS THE PROVISION OF ENHANCED SERVICES?

A. No. For the reasons I discussed in my direct testimony, and that the TRA and the PPUC found conclusive, that is not the provision of enhanced services.

Q. MR. WISEMAN STATES THAT YOUR ASSERTIONS, AND MR. MCPHEE'S, "ARE FOUNDED ON . . . A DISMISSAL OF FEDERAL DECISIONS REGARDING THE NATURE AND RIGHTS OF HALO'S HIGH VOLUME CUSTOMER."[33] DO YOU KNOW TO WHAT HE IS REFERRING?

A. I believe so. Halo likes to refer to Transcom, which is its one and only paying customer and which collaborates with Halo to pass off long distance, landline-originated traffic as local, wireless-originated traffic, as its "high volume customer." The "federal decisions" to which Mr. Wiseman is referring are the bankruptcy court decisions that ruled some years ago that Transcom was an

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decision. Johnson Testimony at 6, line 26 to page 7, line 2. Mr. McPhee explains why the TRA decision is entitled to greater weight than the bankruptcy court finding in his rebuttal testimony. Mr. Johnson also says the TRA decision is "misleading" because the TRA did not accept the claims in his testimony there. *Id.* at 29, line 24 to page 30, line 2. But all that means is the TRA did not find his testimony convincing, not that the TRA was wrong.

31 Johnson Testimony at 7, lines 13-17, line 8.

32 *Id.* at 17, line 9.

33 Wiseman Testimony at 26, lines 17-19.

ESP. Mr. Johnson discusses those decisions at some length, and Halo relies on them heavily.

Q. WHAT IS THE SIGNIFICANCE OF THE BANKRUPTCY RULINGS?

A. That is a question for the lawyers, but I will provide my general understanding of AT&T's position: Just as this Commission is not bound by the TRA's recent decision that Transcom is not an ESP, or the PPUC decision to the same effect, it also is not bound by the considerably older bankruptcy court decisions. Instead, the Commission should attach weight to the various decisions to the extent that it finds they are entitled to weight based on the considerations Mr. McPhee identifies and on the persuasiveness of their reasoning. This Commission is better equipped than a bankruptcy court, which seldom sees telecommunications issues or deals with FCC Rules, to decide whether Transcom is an ESP – and so were the TRA and the PPUC when they did not adopt the bankruptcy court conclusion and ruled that Transcom is not an ESP. This point seems evident to me as a layman, and was confirmed for me by the decision of the bankruptcy judge presiding over Halo's own bankruptcy to allow this Commission and other state commissions to determine the merits of these issues in the first instance. AT&T Kentucky believes this Commission will find the reasoning of the two state commissions, especially the TRA, persuasive.

Halo has suggested that AT&T Kentucky is legally bound by the bankruptcy court decisions, under a doctrine called "collateral estoppel." That is a legal issue that I cannot address, but AT&T Kentucky will show in its legal

briefs why that is incorrect, and that if anyone were legally bound here, it would be Halo, by the TRA decision on precisely the issues presented here.

Q. ARE THE ISSUES REGARDING THE ICA AT ISSUE IN THIS CASE THE SAME ISSUES REGARDING THE ICA THAT WAS AT ISSUE IN THE TRA DECISION YOU REFERENCE AND IN THE RECENT DECISION IN SOUTH CAROLINA?

A. Yes. The terms and conditions in the ICA that the TRA ruled Halo breached are the same terms and conditions in the ICA being reviewed in this docket. The South Carolina Public Service Commission recently reviewed the same ICA and reached the same result, finding Halo in breach.[34] Thus, AT&T's claim that Halo breached the ICA has already been sustained.

V. EVEN IF TRANSCOM WERE AN ESP, THAT DOES NOT MEAN IT RE-ORIGINATES EVERY CALL IT TOUCHES

Q. HAS HALO'S TESTIMONY PERSUADED YOU THAT THE LANDLINE-ORIGINATED CALLS THAT HALO DELIVERS TO AT&T KENTUCKY ARE RE-ORIGINATED AS WIRELESS CALLS WHEN THEY PASS THROUGH TRANSCOM'S EQUIPMENT?

A. Not in the slightest. As I explained in my direct testimony, a call is originated only once, by the person that actually starts the call – the girl in California in the illustration I gave.[35] Calls are analyzed on an end-to-end basis based on the originating caller's (the girl's) NPA-NXX and the called party's (the girl's grandmother in Baton Rouge) NPA-NXX. Just as the FCC found when it rejected Halo's position in *Connect America Fund,* Transcom's supposed "re-origination" of a call with wireless equipment "in the middle of the call path does not convert a

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[34] The South Carolina Commission's "Commission Directive" is attached as **Exhibit MN-11**. This Directive was issued on June 28, 2012; the South Carolina Commission should issue its full written decision in the near future.

[35] Neinast Direct at 21, line 2 to page 22, line 2.

wireline-originated call [*i.e.*, a landline-originated call] into a CMRS-originated call."[36]

Bear in mind that Halo is not claiming that Transcom is originating these calls in the usual sense of the word. Rather, Halo is claiming that because Transcom is an ESP, Transcom (i) is exempt from access charges; (ii) is thus treated as an end user; and (iii) is therefore a call originator. Once one decides, as the Commission should, that Transcom is not an ESP, that is the end of the discussion – there is nothing left of Halo's argument.[37]

Q. MR. WISEMAN OBJECTS TO THE TERM "RE-ORIGINATION." HE STATES THAT HALO IS NOT ARGUING THAT TRANSCOM "RE-ORIGINATES" CALLS, BUT RATHER THAT AS AN ESP, TRANSCOM "INITIATES A FURTHER COMMUNICATION."[38] DO YOU ACCEPT THE DISTINCTION HE IS MAKING?

A. Halo is free to use whatever words it wishes in making its own arguments. I would note, however, that the language in the ICA provides that Halo must send AT&T Kentucky only traffic that "***originates*** through wireless transmitting and receiving facilities."[39] So if Halo insists that what Transcom is doing is *not* an origination, that necessarily means that the origination happens at the start of the call – which AT&T Kentucky of course maintains is the one and only origination.

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[36] *See id.* at 23, lines 5-9, quoting *Connect America Order*.

[37] Halo also argues that Transcom must be treated as an end user – and deemed to originate every call that passes through it – even if it is not an ESP. *E.g.*, Johnson Testimony at 36, lines 2-9. That, however, is merely the same argument in different form, for it still relies on the proposition that if Transcom is deemed to be an end user, then it also must be deemed to originate every call that passes through it. As Mr. McPhee and I have discussed, that is simply not correct. Whatever Transcom may do, and whatever it may call itself, it does not actually originate any of the calls that it passes to Halo and that Halo then passes to AT&T Kentucky. Rather, those calls originate with someone else, usually on landline equipment.

[38] Wiseman Testimony at 66, line 15 to page 67, line 3.

[39] I refer to the ICA Amendment quoted in Mr. McPhee's direct testimony, at 12, lines 18-24.

Because that origination is not wireless for most of the calls Halo delivers to AT&T Kentucky, Halo is clearly breaching the ICA.

As Mr. Wiseman acknowledges, he insists on the phrase "initiates a further communication" because that is the phrase the D.C. Circuit used in the *Bell Atlantic* decision when it talked about dial-up internet traffic terminating at the Internet Service Provider ("ISP"), which then initiated a further communication to the World Wide Web.[40] As AT&T Kentucky will explain in its legal briefs, the *Bell Atlantic* decision does not help Halo here, because, among other reasons, there is a tremendous difference between the situation that case addressed and the situation presented here. For one thing, when an ISP's customer dials a seven-digit phone number to reach the ISP in order to go onto the Internet, the customer knows he is calling the ISP for that purpose. In contrast, when the girl in California calls her grandmother in Frankfort, the girl is not making a call to Transcom; she does not even know Transcom exists. AT&T Kentucky will explain the legal significance of this important factual distinction in its briefs.

All that said, I do not believe it makes any difference whether we call it a "re-origination," a "second origination" or the "initiation of a further communication," because whatever we call it, Transcom does not do it.

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[40] Wiseman Testimony at 66, lines 16-24.

Q. MR. WISEMAN STATES THAT HE IS ADVISED BY COUNSEL THAT THE "FCC APPARENTLY DISAGREES WITH THE D.C. CIRCUIT'S HOLDING THAT ESPS CONSTITUTE AN END POINT FOR RECIPROCAL COMPENSATION PURPOSES, AND WHEN AN ESP 'ORIGINATES A FURTHER COMMUNICATION' IT IS A SEPARATE COMMUNICATION."[41] DOES AT&T KENTUCKY SHARE THAT VIEW?

A. Mr. Wiseman is certainly correct that the FCC has ruled that ESPs do not constitute an end point, and that ESPs do not "originate" further communications, and that is fatal to Halo's position here. AT&T Kentucky does *not* agree, however, that that means the FCC disagrees with the D.C. Circuit's holding in *Bell Atlantic*. Having staked out the position that *Bell Atlantic* holds that ESPs are always call originators and call terminators, and having acknowledged that the FCC has concluded that ESPs are not call originators, Mr. Wiseman is forced to say that the FCC disagrees with *Bell Atlantic*. But the FCC certainly did not *say* it was disagreeing with the D.C. Circuit, and AT&T Kentucky does not believe it was. Rather, Halo was simply wrong when it read *Bell Atlantic* as supporting its position.

Q. WHAT IF THE COMMISSION WERE TO DECIDE THAT TRANSCOM IS AN ESP? WOULD IT FOLLOW THAT TRANSCOM IS ORIGINATING ALL THESE CALLS, AS HALO CLAIMS?

A. Not in my view, as I have explained.[42] That is in large part a legal question, however, which AT&T Kentucky will address in its briefs.

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41 *Id.* at 39, line 22 to page 40, line 1.

42 Neinast Direct at 29, lines 15-24.

Q. YOU SAY THAT THE FCC REJECTED HALO'S THEORY IN *CONNECT AMERICA FUND,* BUT STARTING AT PAGE 64 OF HIS TESTIMONY, MR. WISEMAN SEEMS TO SUGGEST THAT MAY NOT BE THE CASE. HOW DO YOU RESPOND?

A. From my perspective, the most important statement in Mr. Wiseman's testimony about the FCC's Order – and perhaps the most straightforward statement – is this: "We acknowledge that . . . apparently [the FCC] now believes ESPs are exchange access customers and *do not originate calls.*"[43] With this acknowledgment that the FCC believes ESPs do not originate calls, I do not see how Halo can maintain its position that the calls we are discussing are not landline-originated calls on the theory that Transcom originates them.

Q. BUT DOESN'T MR. WISEMAN QUALIFY HIS ACKNOWLEDGEMENT OF THE FCC'S BELIEF?

A. Yes. Mr. Wiseman, in the same sentence I just quoted, says that the FCC's belief that ESPs do not originate calls results from the fact that the FCC has "reversed course from prior precedent." He also states that the fact that the FCC believes ESPs do not originate calls "does not resolve the 'end user' question," and does not mean that ESPs are common carriers or provide telecommunications services.[44] As to the first point, AT&T Kentucky does not believe the FCC's rejection of Halo's position is a rejection of prior precedent; rather, it is an application of prior precedent, as AT&T Kentucky will show in its legal briefs. Scott McPhee discusses this in his rebuttal testimony.

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[43] Wiseman Testimony at 50, lines 15-16.

[44] *Id.* at 50, lines 15-17.

As for Mr. Wiseman's second point, this Commission does not need to resolve the "end user" question or decide whether Transcom is a common carrier or provides telecommunications services in order to decide that Halo has breached the parties' ICA by sending AT&T Kentucky landline-originated traffic. If Transcom is not originating calls, as Halo acknowledges the FCC found, then all those landline-originated calls, like the girl's call to her grandmother, remain landline-originated and were delivered in breach of the ICA.

Q. MR. JOHNSON CLAIMS THAT AT&T KENTUCKY'S WITNESSES AGREE THAT "UNDER THE FCC'S VIEW, END USERS USE CUSTOMER PREMISE EQUIPMENT (OR CPE) TO 'ORIGINATE' TELECOMMUNICATIONS TO TELECOMMUNICATIONS CARRIERS AND TELECOMMUNICATIONS CARRIERS 'TERMINATE' TELECOMMUNICATIONS TO END USERS' CPE."[45] IS THAT TRUE?

A. No. Neither Mr. McPhee nor I used the words Customer Premises Equipment or the term CPE in our direct testimony, and neither of us made any reference to any such equipment.[46] Furthermore, the FCC defines Customer Premises Equipment as "equipment employed on the premises of a person (other than a carrier) to originate, ***route***, or terminate telecommunications."[47] I take it that Mr. Johnson's point is that if Transcom's equipment is Customer Premises Equipment (and I express no view on whether it is), then Transcom necessarily terminates and originates all the telecommunications that pass through it. According to the FCC's definition, that is not the case. Assuming that Transcom

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[45] Johnson Testimony at 5, lines 9-12.

[46] I know that Mr. Johnson claimed to find these agreements "buried" in our testimony (Johnson Testimony at 4, line 21), but this one isn't even close.

[47] 47 C.F.R. § 6.3(c) (emphasis added).

does have Customer Premises Equipment, that equipment can be used to *route* calls.

Q. SINCE NEITHER YOU NOR MR. MCPHEE MADE ANY MENTION OF CPE IN YOUR DIRECT TESTIMONY, I TAKE IT THAT MR. JOHNSON IS ALSO WRONG WHEN HE STATES THAT YOU AGREED IN YOUR DIRECT TESTIMONY THAT "TRANSCOM'S WIRELESS TRANSMITTING AND RECEIVING FACILITIES ARE CPE"?[48]

A. Correct. We agreed to no such thing in our direct testimony. I am expressing no opinion on whether Transcom's equipment is CPE. As I just noted, however, I do not believe that Halo can get where it wants to get by engaging in a logic chain that says (i) Transcom's equipment is CPE, (ii) CPE terminates and originates communications, and, therefore, (iii) Transcom originates all the traffic that Halo delivers to AT&T Kentucky. The chain falls apart at step (ii) in light of the FCC's definition of CPE and because Transcom does not originate anything.

Q. MR. JOHNSON ALSO STATES THAT AT&T KENTUCKY'S WITNESSES AGREE THAT "TRANSCOM'S ENHANCED SERVICES CHANGE THE CONTENT OF THE COMMUNICATIONS IT RECEIVES FROM ITS CUSTOMERS."[49] IS THAT TRUE?

A. No. We have consistently maintained that Transcom does not provide enhanced services, so we certainly haven't agreed (even implicitly or "deeply buried," as Mr. Johnson put it) to anything about any such enhanced services. Nor have we agreed that Transcom changes content. On the contrary, the content of the communication remains unchanged.

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[48] Johnson Testimony at 5, line 12.

[49] *Id.* at 5, lines 1-2.

Q. WHAT ABOUT THE OTHER TWO THINGS THAT MR. JOHNSON CLAIMS YOU HAVE AGREED TO?[50]

A. We did not agree to either of those propositions, either.

Q. MR. WISEMAN ANALOGIZES THE HALO-TRANSCOM ARRANGEMENT TO A "LEAKY PBX."[51] **DOES THE ANALOGY SUPPORT HALO'S POSITION HERE?**

A. No. The so-called "leaky PBX" situation arises when someone using a work phone or home phone dials into her company's PBX and then, usually by dialing an access code or another number, has the PBX send the call to another company PBX via a private line connection between the PBXs. The second PBX then "leaks" the call into the local exchange for termination, and the call appears to be local (that is, it looks like it came from the local PBX), so the LEC does not know to apply access charges.[52] Mr. Wiseman's comparison to a leaky PBX is telling, because the FCC long ago recognized that leaky PBXs – just like Halo's and Transcom's current scheme – constituted a form of "access charge avoidance" that needed correction.[53] The FCC dealt with the leaky PBX situation by imposing a $25 per month surcharge on all jurisdictionally interstate special access lines that do not fall within specific exceptions.

In any event, the Halo/Transcom arrangement, though similar in purpose to the leaky PBX, is different in important ways. Most important, in the leaky PBX situation the person who originates the call knows she is using a company line

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50 *Id.* at 5, lines 3-8.

51 *E.g.*, Wiseman Testimony 40, lines 2-7, and at 50, lines 13-14.

52 *In the Matter of Amendment of Part 69 of the Commission's Rules Relating to Private Networks and Private Line Users of the Local Exchange*, 2 FCC Rcd. 7441, ¶ 15 (rel. Dec. 18, 1987); NEWTON'S TELECOM DICTIONARY at 426 (18th ed.) (definition of "Leaky PBX").

53 *MTS and WATS Market Structure*, 97 FCC Rcd. 682, ¶ 87 (1983).

and the company remains responsible to pay for the line and the call. With Halo and Transcom, by contrast, the party originating the call has no idea that Halo or Transcom will be involved in carrying the call and Halo and Transcom have no contractual or other relationship with that caller.

Q. MR. JOHNSON ARGUES AT LENGTH THAT TRANSCOM IS NOT A "TELECOMMUNICATIONS CARRIER."[54] DO YOU AGREE?

A. Whether Transcom is or is not a "telecommunications carrier" as that term is defined in the statute Mr. Johnson quotes is a legal question. Indeed, Mr. Johnson acknowledges that much of what he says on the subject is "on the advice of counsel." Mr. Johnson's argument that Transcom is not a carrier, however, is merely a round-about way of restating Halo's contention that Transcom is an ESP and, therefore, an end-user that originates communications. Assuming the Commission rejects that argument, as it should, the Commission will have no occasion to decide whether Transcom is a carrier. That said, inasmuch as Transcom is not, in my view, an ESP, I continue to believe that Transcom is a carrier.

VI. HALO PROVIDED INACCURATE CALL DETAIL

Q. IN YOUR DIRECT TESTIMONY, YOU SHOWED THAT HALO HAS INSERTED CHARGE NUMBER ("CN") DATA IN A MANNER THAT MAKES TOLL CALLS APPEAR TO BE LOCAL. DOES HALO ADMIT DOING THIS?

A. Yes. As I discussed, when used legitimately, a Charge Number ("CN") appears on a very small number of calls and is typically within the same NPA-NXX as the Calling Party's Number. Halo, however, inserted what it alleges is a Transcom

[54] Johnson Testimony at 20, line 15 to page 23, line 5.

CN on *all* of the calls it was sending to AT&T Kentucky, even though the calling party had not asked or arranged to have a CN inserted. Mr. Wiseman admits Halo did this, saying that Halo "populated Transcom's Billing Telephone Number ('BTN') in the SS7 Charge Number ('CN') address signal."[55] I am aware of no legitimate reason to insert CN in this manner. Halo has stated that it stopped inserting the Transcom CN as of December 29, 2011, but that does not remove Halo's prior, and significant, breach of the ICA.

Q. MR. WISEMAN, HOWEVER, STATES THAT HALO INSERTED THE TRANSCOM CN INTO THE CALL DETAIL "SO HALO COULD CORRECTLY BILL SERVICES, AND ASSOCIATE ITS CUSTOMER CALLS TO TERMINATING LECS, WHERE DIFFERENT TERMINATING CHARGES ARE IN EFFECT."[56] IS THAT A PERSUASIVE EXPLANATION?

A. I do not believe it is. I cannot imagine why Halo would need to insert a Transcom CN into the call detail in order for Halo to correctly bill Transcom, which is its only customer. And I have no idea what Mr. Wiseman means when he says Halo inserted the CN so Halo could "associate its customer [Transcom] calls to terminating LECs, where different terminating charges are in effect." That makes no sense to me.

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55 Wiseman Testimony at 52, lines 15-17.

56 *Id.* at 54, lines 4-6.

Q. YOU SAY THAT HALO WAS DISGUISING THE TRUE NATURE OF ITS TRAFFIC, BUT WASN'T AT&T KENTUCKY ABLE TO DISCERN THE TRUE NATURE OF THE TRAFFIC BY LOOKING AT THE ORIGINATING CPN AND USING THE PROCESS YOU AND MR. MENSINGER USED FOR YOUR CALL ANALYSES?

A. That isn't the point. As I explained in my direct testimony,[57] Halo was disguising the true nature of its traffic *from our billing systems*. That is where the breach of ICA and conflict with industry practices occurred. It was only through additional analysis obtained from the call studies that AT&T Kentucky could understand the nuance of Halo's CN insertion and its impacts.

Q. BUT MR. WISEMAN SAYS THAT AT&T'S BILLING SYSTEMS COULD NOT HAVE BEEN DECEIVED, BECAUSE AT&T KENTUCKY DOES NOT DO "CALL BY CALL" RATING.[58] HOW DO YOU RESPOND?

A. It is true that under the ICA AT&T Kentucky does not bill Halo for wireless calls (which is all the ICA is set up to address) by identifying each individual call as local or long distance and billing accordingly; rather, AT&T Kentucky bills carriers with CMRS ICAs, such as Halo, according to factors – in this instance, the 100% intraMTA factor that Halo gave AT&T Kentucky (*i.e.*, Halo's representation that all of Halo's traffic is intraMTA wireless traffic). What Mr. Wiseman overlooks, however, is that the ICA allows the factor to be adjusted from time to time to reflect real world traffic flows, and by inserting the Transcom CN into the call detail, Halo caused the billing records to give the inaccurate impression that all of Halo's traffic was indeed intraMTA traffic. That, under other circumstances, would have deterred AT&T Kentucky from seeking to adjust the billing factors. It

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57 Neinast Direct at 32, line 8 to page 39, line 2.

58 Wiseman Testimony at 53, lines 15-16.

was only because our suspicions were aroused and we checked the SS7 records (as opposed to the billing records) that we were able to confirm that Halo was in fact sending us a great deal of traffic that was not intraMTA.

Q. HAS THE FCC RECOGNIZED THAT INSERTING A CN INTO THE CALL RECORD, AS HALO DID, CAUSES PROBLEMS FOR TERMINATING CARRIERS?

A. Yes. In *Connect America Fund*, the FCC addressed the practice of manipulating CN that is sent to a terminating carrier. The FCC referred to this as "the problem of CN number substitution that disguises the characteristics of traffic to terminating carriers," and found that "CN substitution is a technique that leads to phantom traffic."[59] The FCC therefore stated that "the CN field may only be used to contain a calling party's charge number, and that it may not contain or be populated with a number associated with an intermediate switch, platform, or gateway, or other number that designates anything other than a calling party's charge number."[60] Yet that is precisely what Halo did.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

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59 *Connect America Fund*, ¶ 714.

60 *Id.*

PSC REF#:159682

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation into Practices of Halo Wireless, Inc. and Transcom Enhanced Services, Inc.	9594-TI-100

PRE-FILED REBUTTAL TESTIMONY OF RUSS WISEMAN ON BEHALF OF HALO WIRELESS, INC.

FEBRUARY 8, 2012

We acknowledge that the FCC has now thrown out all of the prior precedent and apparently the FCC now believes ESPs are exchange access customers and do not originate calls. I note that this still does not resolve the "end user" question: merely because ESPs now use exchange access does not mean they are common carriers or provide telecommunications service. The FCC has chosen to not expressly clarify the law on this interesting issue, but it did not change the definition of "end user" which basically says if an entity is not a carrier then it is an end user for access purposes.

But under the FCC's new rules, "origination" is only relevant to whether a CMRS provider's traffic is "intraMTA" and therefore bill and keep. CMRS can provide and support other traffic types. The task at hand is identify what the Halo traffic is under the new rules and then determining the appropriate compensation result.

Halo and Transcom are related companies. But Halo must still operate under the rules applicable to common carriers. We cannot interfere with or discriminate based on what our end user customer is doing on its side before our end user customer ***originates*** (further or otherwise) an end user call in an MTA.[21] We believe all that matters is whether our traffic comes to us from an end user employing a CMRS-based wireless facility in the same MTA.

Q: Putting aside the question of where calls originate, what is your reaction to AT&T's and TDS's assertions that calling party and called numbers are reliable ways to determine where calls actually began, and are appropriate parameters to determine call jurisdiction for call rating purposes?

A: The FCC order says that numbers are unreliable for this purpose and we agree. My reaction is that while the initial location of a call session initiation may be relevant to jurisdiction

[21] An ILEC that is selling a private line to the end user customer might have reason to inquire whether the user is employing a "leaky PBX" in order to determine if the "leaky PBX surcharge" applies, but we are not a LEC.

based on the "end-to-end" theory, we do not believe it is determinative to call rating for our CMRS traffic, with Transcom as an end user ESP customer. We established our business plan to operate according to the prior rules relating to CMRS carriers, where traffic is originated by end users (including ESPs) using wireless stations capable of movement at towers located in MTAs. We also do not believe that the industry can continue to rely on the "calling party number" as some indicator of where and on what network a call started. Numbers are not a reliable proxy for location, nor can you assume that a call from a station associated with a particular number actually started on the network of the exchange carrier that was allocated the number from NANPA. My examples above conclusively demonstrate the folly of doing so.

In Ms. Robinson testimony, she asserts that using telephone numbers are a reliable way to determine the geographic starting point for a call, the network the call originated on, the location of the caller when making the call or whether a call involves "wireless." This might have been true 30 years ago when there were no IP networks and other advanced communication applications that effectively disassociate telephone numbers from physical telephone lines, switches and even networks. But today, the industry knows full well that advanced communications technologies, both IP and wireless, are rendering it impossible to rely on CPN to determine where a call began or the network owner or type of network that was used to initiate the call. Allow me to provide a few more examples by elaborating on what I said earlier.

Carriers like T-Mobile offer services today that allow their wireless users to originate calls using wireless base stations connected to wired broadband networks. Are calls using these devices wireless or wireline orginated? Is this "non-access" traffic or is it "access reciprocal compensation"? Is it transit?

Verizon Wireless offers Home Phone Connect, a service that allows VZW customers to port their home numbers to VZW and use traditional landline phones to make calls over their wireless network. Is this a mobile wireless service? Fixed wireless? Wireline? Is this non-access" traffic or is it "access reciprocal compensation"? Is it transit? Would calls from a ported landline number be viewed by a terminating LEC as a wireless call or a wireline call? We suspect the latter as the CPN would be a landline telephone number. But these calls would all traverse the VZW wireless network.

A growing trend today with smart phones is that wireless users today can use Skype or GoogleVoice service as an application on a smart phone. Skype and GoogleVoice quite often obtain numbers from CLEC "numbering partners" such as Level 3 or Bandwidth.com. Let's assume the numbering partner is Bandwidth.com. An AT&T Wireless customer can originate a call while traveling in California using Skype on an AT&T-provided wireless smart phone. In this example, as before Skype has sub-assigned a number from Level 3 (603-373-6xxx) in the Milwaukee rate center to the AT&T Wireless user. The Skype user's outbound call, let's say to a PSTN user served by a local exchange carrier such as AT&T, probably will not go out over Level 3's network, even though Level 3's number will be signaled. It will be completed over AT&T Wireless's IP network and then go to Skype's network and then be routed to a Skype vendor to start the termination chain. The call, however, will appear to the AT&T LEC as a wireline originated call, since the Calling Party Number is a "wireline" number. The ILECs would claim this call started "on the PSTN" in Milwaukee, and Level 3 was the "originating LEC." However, those inferences would be incorrect. Since a smart phone was used, it would be "wireless." It started in California, not Wisconsin. Level 3 probably never touched the call at all in any way. Finally it would be an IP-originated call and did not "originate on the PSTN."

If the smart phone toting Skype user in California was calling someone in Wisconsin within MTA 20 and LATA 354 (which includes Madison), our ESP end user Transcom could very well receive it from one of its customers that have contracted with Skype. If so, Transcom would process the call and hand it to Halo via Transcom's wireless CPE that is communicating with our New Glarus, WI base station. Halo would hand the call off to AT&T at its MDSNWI1171T tandem. AT&T would then terminate or transit the call to the terminating carrier.

The ILECs would probably "rate" this as an intraMTA, interLATA call, because they would see it as a Milwaukee number calling a user within the same MTA, albeit different LATAs, but they would probably claim it is "wireline" PSTN originated and therefore Halo is not "authorized" to handle it, as the number is a wireline number. We previously would have argued it is intraMTA because we received it from our end user customer at our base station in MTA 20 and it terminated in MTA 20. We would have then and still do strongly disagree that it was "wireline" PSTN originated. Under the new rules is this "non-access" traffic? Is it "access reciprocal compensation"? Is it "transit"?

In the myopic world of the ILECs, these scenarios are fanciful, unlikely and irrelevant. However, their cellular counterparts know differently. The entire telecommunications industry knows differently. And most importantly, consumers know differently. Voice is now, and will ever more further become, an IP "application, where telephone numbers "move" seamlessly across devices and networks, just like music content in the "cloud" can be accessed on any device, anywhere, at any time. Voice is really no different.

Because of these convergence trends, the FCC has supported, and now requires, traffic factors to allocate between different traffic types precisely because of the fact that numbers have

been disassociated from networks and location and thus are not reliable.[22] I think it is worth noting that in proceedings in other states, notably Tennessee, Ms. Robinson admitted that the approach of determining call jurisdiction for billing purposes from telephone numbers is flawed, and does not result in a precise or accurate result. I think she described it as "the best we can do", or words to that effect. In her latest testimony she seems to "double down" on her commitment to this flawed thinking by asserting that CMRS calls are interMTA based on the rate center of the mobile telephone number of the calling party. Apparently roaming, and determining call jurisdiction for rating purposes based on the location of the base station where the call originated, are both unfamiliar concepts to Ms. Robinson.

Thus, TDS's claim to be able to be able to reliably determine the "jurisdiction" of Halo's traffic for billing purposes, whether it is "wireline" or "wireless," "intrastate" or "interstate," "intraMTA" or "interMTA," and as the sole basis for deriving estimates of access charges due, are unreliable at best, and likely skew the financial costs heavily in their favor. Ms. Robinson's approach is based on antiquated industry practices seasoned with healthy doses of self-serving assumptions. However, this did not stop them from deriving impressively precise damages figures based on these assumptions, or attempting to make adjustments to their figures based on actual statistics on caller locations or the actual network or base station locations where calls

[22] *See, e.g.* FCC Order ¶ 934 ("...In addition, given the recognized concerns with the use of telephone numbers and other call detail information to establish the geographic end-points of a call, we decline to mandate their use in that regard, as proposed by some commenters. ..."); ¶ 960 ("...Because telephone numbers and other call detail information do not always reliably establish the geographic end-points of a call, we do not mandate their use. ..."); ¶ 962 ("Contrary to some proposals, however, we do not require the use of particular call detail information to dispositively distinguish toll VoIP-PSTN traffic from other VoIP-PSTN traffic, given the recognized limitations of such information.For example, the Commission has recognized that telephone numbers do not always reflect the actual geographic end points of a call. Further, although our phantom traffic rules are designed to ensure the transmission of accurate information that can help enable proper billing of intercarrier compensation, standing alone, those rules do not ensure the transmission of sufficient information to determine the jurisdiction of calls in all instances. Rather, consistent with the tariffing regime for access charges discussed above, carriers today supplement call detail information as appropriate with the use of jurisdictional factors or the like when the jurisdiction of traffic cannot otherwise be determined. We find this approach appropriate here, as well.")

began. I note that many of their characterizations also suffer from the problem that they do not actually take all of the FCC's new rules into account.

From Halo's perspective, we designed our business plan to operate according to the rules of CMRS carriers, where traffic is originated by end users, using wireless stations capable of movement, at towers located in MTAs. We are prepared to operate under the FCC's new regime (for so long as it is in effect pending appellate review) but we must be given a chance to bring our arrangements and operations into compliance, and the full set of FCC rules must be implemented. The ILECs cannot be allowed to cherry pick the rules they like, and ignore or dismiss those they don't. .Ms. Robinson's assertion that "billing for the entire industry is determined on the basis of the originating and terminating end points of the called and calling parties" is not true for the CMRS industry, and it is quickly dissolving in the entire telecom space in the face of converged wireless-wireline and IP-based services. The "practice" is for carriers to traffic factors instead of call-by-call rating, since numbers-based rating is no longer feasible in today's advanced network and service environment where the starting and ending "locations" of calls is hard to consistently, accurately and efficiently determine and the "number" consistently yields an incorrect answer. The FCC's new regime calls for factors and we are willing to develop and supply them.[23]

Ms. Robinson's testimony makes it clear that the LECs are using the calling party number to identify the "originating network" as well, and using this same information to determine call jurisdiction for call rating, and for the amounts they claim they are due for access charges. She apparently does not accept that the presence of a number in the signaling does not mean the call originated on the network of the carrier that has been assigned that number. The

[23] I hope and trust that the PSC is also willing to implement the FCC's new rules because those rules also require the ILECs to negotiate in good faith to establish IP-based interconnection, and Halo is preparing to seek IP-based interconnection from AT&T and many of the ILECs involved in this proceeding.

inter-carrier compensation regime is not and cannot be founded on the assumption that you can definitively determine the starting point of a call, the type of call, or the initial network based on "the number." I would further observe that reliance on the number as the exclusive rating determinant is subject to the very outcomes the LECs want to avoid: gaming and arbitrage. It was not that long ago that state commissions all over the country had to resolve the inter-carrier compensation issues related to "arbitrage" using Virtual NXXs. The states largely adopted the ILEC position in those cases and ruled that the telephone numbers did not control rating. The ILECs insist on using numbers when it means they can claim access, but they have refused to use numbers when it meant they do not get access. The PSC cannot be so arbitrary.

If the LECs are using the calling party number to identify the "originating network" our position is this is not a reliable way to determine the starting location of a call, or the carrier network that the call started on. Consequently, it seems to me that any inter-carrier compensation regime founded on the assumption that you can definitively determine the starting point of a call is fundamentally flawed and subject to the very outcomes the LECs want to avoid: gaming and arbitrage. The fact of the matter is, wireline and wireless networks and services are converging, rapidly, and in ways that blur the traditional, once clear distinctions of wireless and wireline.

For a converged IP service provider such as Halo, the starting network or the type of number used simply does not matter. And even if it did, there is no way for us to definitively determine where a call started, for the same reasons as mentioned above. Trying to maintain this distinction is fighting a losing battle, and swimming against the strong tide of market, technical and regulatory evolution occurring in the telecommunications industry.

Q: If we assume that Judges Hale and Felsenthal were correct, and if all of the traffic that traverses interconnection is originated by an end user in the MTA, what is your

BEFORE THE PUBLIC SERVICE COMMISSION

STATE OF GEORGIA

IN RE: COMPLAINT OF TDS TELECOM ON BEHALF OF ITS SUBSIDIARIES BLUE RIDGE TELEPHONE COMPANY, CAMDEN TELEPHONE & TELEGRAPH COMPANY, INC., NELSON-BALL GROUND TELEPHONE COMPANY, AND QUINCY TELEPHONE COMPANY, AGAINST HALO WIRELESS, INC., TRANSCOM ENHANCED SERVICES, INC., AND OTHER AFFILIATES FOR FAILURE TO PAY TERMINATING INTRASTATE ACCESS CHARGES FOR TRAFFIC AND FOR EXPEDITED DECLARATORY RELIEF AND AUTHORITY TO CEASE TERMINATION OF TRAFFIC	)	DOCKET NO. 34219

PRE-FILED DIRECT TESTIMONY OF RUSS WISEMAN ON BEHALF OF HALO WIRELESS, INC.

MARCH 19, 2012

The ILECs, however, want to focus on what the High Volume customer does with the mobile service it receives. They contend that merely because the customer does not actually move the stations around, the service is somehow converted from "mobile" to "fixed." This argument inappropriately categorizes Halo's regulatory status based on whether the customer engages in the ILECs' subjective standard for "sufficient" mobility.

Q: What is your reaction to TDS's and AT&T's assertions that calling party and called numbers are reliable ways to determine where calls actually began, and are appropriate parameters to determine call jurisdiction for call rating purposes?

A: The FCC order says in ¶¶ 934, 960, and 962 that the FCC still believes numbers are unreliable for this purpose and we agree. My reaction is that while the initial location of a call session initiation may be relevant to jurisdiction based on the "end-to-end" theory, we do not believe it is determinative to call rating for our CMRS traffic, with Transcom as an end-user ESP customer. We established our business plan to operate according to the prior rules relating to CMRS carriers, where traffic is originated by end-users (including ESPs) using wireless stations capable of movement at towers located in MTAs. We also do not believe that the industry can continue to rely on the "calling party number" as some indicator of where and on what network a call started. Numbers are not a reliable proxy for location, nor can you assume that a call from a station associated with a particular number actually started on the network of the exchange carrier that was allocated the number from NANPA.

Today, the industry knows full well that advanced communications technologies, both IP and wireless, are rendering it impossible to rely on CPN to determine where a call began or the network owner or type of network that was used to initiate the call. Allow me to provide a few more examples by elaborating on what I said earlier.

Carriers like T-Mobile offer services today that allow their wireless users to originate calls using wireless base stations connected to wired broadband networks. Are calls using these devices wireless or wireline originated? Is this "non-access" traffic or is it "access reciprocal compensation"? Is it transit?

Verizon Wireless offers Home Phone Connect, a service that allows VZW customers to port their home numbers to VZW and use traditional landline phones to make calls over their wireless network. Is this a mobile wireless service? Fixed wireless? Wireline? Is this non-access" traffic or is it "access reciprocal compensation"? Is it transit? Would calls from a ported landline number be viewed by a terminating LEC as a wireless call or a wireline call? We suspect the latter as the CPN would be a landline telephone number. But these calls would all traverse the VZW wireless network.

WZW just introduced a wireless broadband product called "Home Fusion" that is "designed for use in rural and remote homes that can't get DSL or cable."[1] "The service requires the installation of a cylindrical antenna, about the size of a 5-gallon bucket, on an outside wall." "Verizon cites the same speeds for HomeFusion as for LTE data sticks: 5 to 12 megabits per second for downloads, and 2 to 5 megabits for uploads." This is similar in capability to Halo's consumer broadband product, except VZW's product is quite a bit more expensive. I am sure that users can connect some form of soft phone client and make interconnected VoIP calls – just like they can with Halo's product. Does AT&T intend to claim that VZW cannot use interconnection to originate or terminate calls to users employing this product? Is this a mobile wireless service? Fixed wireless? Wireline? Is this "non-access" traffic or is it "access reciprocal compensation"?

[1] *See "Verizon launches faster-than-wired wireless broadband for homes; starts at $60/mo,"* Washington Post Online, Taken from Associated Press, March 5, 2012, available at http://www.washingtonpost.com/national/verizon-launches-faster-than-wired-wireless-broadband-for-homes-starts-at-60mo/2012/03/06/gIQADvYvtR_story.html.

A growing trend today with smart phones is that wireless users today can use Skype or GoogleVoice service as an application on a smart phone. Skype and GoogleVoice quite often obtain numbers from CLEC "numbering partners" such as Level 3 or Bandwidth.com. Let's assume the numbering partner is Bandwidth.com. An AT&T Wireless customer can originate a call while traveling in California using Skype on an AT&T-provided wireless smart phone. In this example, Skype will have sub-assigned a number from Level 3 that is associated with some rate center to the AT&T Wireless user. The Skype user's outbound call, let's say to a PSTN user served by a local exchange carrier such as AT&T, probably will not go out over Level 3's network, even though Level 3's number will be signaled. It will be completed over AT&T Wireless's IP network and then go to Skype's network and then be routed to a Skype vendor to start the termination chain. The call, however, will appear to the AT&T LEC as a wireline originated call, since the Calling Party Number is a "wireline" number. The ILECs would claim this call started "on the PSTN" in the rate center to which the Skype user's "wireline" number is associated and that Level 3 was the "originating LEC." However, those inferences would be incorrect. Since a smart phone was used, it would be "wireless." It started wherever the Skype user happens to be at the moment. Level 3 probably never touched the call at all in any way. Finally it would be an IP-originated call and would not "originate on the PSTN."

If the smart phone toting Skype user was calling someone in Atlanta, Georgia within MTA 11, LATA 438, our ESP end-user Transcom could very well receive it from one of its customers that have contracted with Skype. If so, Transcom would process the call and hand it to Halo via Transcom's wireless CPE that is communicating with our Cartersville, GA base station. Halo would hand the call off to AT&T at its NRCRGAMA02T tandem. AT&T would then terminate or transit the call to the terminating carrier.

AT&T would want to "rate" this call based on the calling and called numbers and their associated rate centers and they would claim it is "wireline" PSTN originated and therefore Halo is not "authorized" to handle it, as the number is a wireline number. We previously would have argued it is intraMTA because we received it from our end-user customer at our base station in MTA 11 and it terminated in MTA 11. We would have then and still do strongly disagree that it was "wireline" PSTN originated. Under the new rules is this "non-access" traffic? Is it "access reciprocal compensation"? Is it "transit"?

In the myopic world of the ILECs, these scenarios are fanciful, unlikely and irrelevant. However, their cellular counterparts know differently. The entire telecommunications industry knows differently. And most importantly, consumers know differently. Voice is now, and will further become, an IP "application," where telephone numbers "move" seamlessly across devices and networks, just like music content in the "cloud" can be accessed on any device, anywhere, at any time. Voice is really no different.

Because of these convergence trends, the FCC has supported, and now requires, traffic factors to allocate between different traffic types precisely because of the fact that numbers have been disassociated from networks and location and thus are not reliable.[2]

[2] *See, e.g.* FCC Order ¶ 934 ("...In addition, given the recognized concerns with the use of telephone numbers and other call detail information to establish the geographic end-points of a call, we decline to mandate their use in that regard, as proposed by some commenters. ..."); ¶ 960 ("...Because telephone numbers and other call detail information do not always reliably establish the geographic end-points of a call, we do not mandate their use. ..."); ¶ 962 ("Contrary to some proposals, however, we do not require the use of particular call detail information to dispositively distinguish toll VoIP-PSTN traffic from other VoIP-PSTN traffic, given the recognized limitations of such information. For example, the Commission has recognized that telephone numbers do not always reflect the actual geographic end points of a call. Further, although our phantom traffic rules are designed to ensure the transmission of accurate information that can help enable proper billing of intercarrier compensation, standing alone, those rules do not ensure the transmission of sufficient information to determine the jurisdiction of calls in all instances. Rather, consistent with the tariffing regime for access charges discussed above, carriers today supplement call detail information as appropriate with the use of jurisdictional factors or the like when the jurisdiction of traffic cannot otherwise be determined. We find this approach appropriate here, as well.")

From Halo's perspective, we designed our business plan to operate according to the rules of CMRS carriers, where traffic is originated by end-users, using wireless stations capable of movement, at towers located in MTAs. We are prepared to operate under the FCC's new regime (for so long as it is in effect pending appellate review) but we must be given a chance to bring our arrangements and operations into compliance, and the full set of FCC rules must be implemented. The ILECs cannot be allowed to cherry pick the rules they like, and ignore or dismiss those they don't. The idea that billing for the entire industry is determined on the basis of the originating and terminating end points of the called and calling parties is not true for the CMRS industry, and it is quickly dissolving in the entire telecom space in the face of converged wireless-wireline and IP-based services. The "practice" is for carriers to traffic factors instead of call-by-call rating, since numbers-based rating is no longer feasible in today's advanced network and service environment where the starting and ending "locations" of calls is hard to consistently, accurately and efficiently determine and the "number" consistently yields an incorrect answer. The FCC's new regime calls for factors and we are willing to develop and supply them.[3]

The inter-carrier compensation regime is not and cannot be founded on the assumption that you can definitively determine the starting point of a call, the type of call, or the initial network based on "the number." I would further observe that reliance on the number as the exclusive rating determinant is subject to the very outcomes the LECs want to avoid: gaming and arbitrage. It was not that long ago that state commissions all over the country had to resolve the inter-carrier compensation issues related to "arbitrage" using Virtual NXXs. The states largely adopted the ILEC position in those cases and ruled that the telephone numbers did not control

[3] I hope and trust that the PSC is also willing to implement the FCC's new rules because those rules also require the ILECs to negotiate in good faith to establish IP-based interconnection, and Halo is preparing to seek IP-based interconnection from AT&T and many of the ILECs involved in this proceeding.

rating. The ILECs insist on using numbers when it means they can claim access, but they have refused to use numbers when it meant they do not get access. The PSC cannot be so arbitrary.

If the LECs are using the calling party number to identify the "originating network," our position is this is not a reliable way to determine the starting location of a call, or the carrier network that the call started on. Consequently, it seems to me that any inter-carrier compensation regime founded on the assumption that you can definitively determine the starting point of a call is fundamentally flawed and subject to the very outcomes the LECs want to avoid: gaming and arbitrage. The fact of the matter is, wireline and wireless networks and services are converging, rapidly, and in ways that blur the traditional, once clear distinctions of wireless and wireline.

For a converged IP service provider such as Halo, the starting network or the type of number used simply does not matter. And even if it did, there is no way for us to definitively determine where a call started, for the same reasons as mentioned above. Trying to maintain this distinction is fighting a losing battle, and swimming against the strong tide of market, technical and regulatory evolution occurring in the telecommunications industry.

The bottom line is that the ILECs' case rests on a host of completely unsupportable assumptions about the nature, type and jurisdiction of calls that are entirely drawn from merely looking at the calling and called telephone numbers. The assumptions they use to form conclusions on the characterization of the call, the type of call, the jurisdiction, the location of the end points, the networks involved and the actual services that are being provided are simply *wrong*. Yet they are asking this Commission to use their assumptions and conclusions to justify finding that Halo has acted inappropriately, owes access charges and as the basis for the amount of access charges due or "damages" they are incurring.

Q: Let's return to the CPE that Halo's customers use. Can you explain a bit more about the units Halo and its customers employ, and how that is changing?

A: Halo had intended to offer what some might see as a more traditional "mobile" CPE device than the devices in use today, but its wireless equipment vendor failed to deliver this CPE as promised at the time Halo was turning up its High Volume services. If it is somehow determined that the current wireless stations do not meet the FCC's test for "mobility" then Halo can now replace the devices presently in use with devices that conform to the rules, as these devices have become available since Halo's service launch.

Q: How do you respond to AT&T and TDS's claims that Halo is not originating wireless traffic, Transcom is not an ESP, and instead all of Halo's traffic is "originating" landline traffic subject to access charges?

A: Our argument regarding the period before the FCC's new rules rests on the status of Transcom as an Enhanced Service Provider. I am not a lawyer, but my layman's interpretation is that ESP status conveys four important attributes that are at the heart of classifying Halo's traffic: ESP's are "end-users", who purchase telephone exchange services, whose traffic is not access traffic, and are users that originate and terminate traffic. In other words, since ESPs are not carriers or IXCs, their traffic cannot be treated as if an IXC is involved. Further, when a company like Halo provides Telephone Exchange Service to an ESP it is not providing a "transit" service since Halo is not switching calls between two carriers.[4]

The ILECs say that Halo is arguing that Transcom's involvement creates a "re-origination." That is a mischaracterization. Our argument is that Transcom – like all ESPs – is a communications-intensive business end-user, that takes communications from Transcom's

[4] I will explain the impact of the FCC order and new rules below, by accepting the FCC's characterizations and applying them to our context.

Action Item 8

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COMMISSION DIRECTIVE

ADMINISTRATIVE MATTER	☐	DATE	**June 27, 2012**
MOTOR CARRIER MATTER	☐	DOCKET NO.	**2011-304-C**
UTILITIES MATTER	☑	ORDER NO.	

SUBJECT:

DOCKET NO. 2011-304-C - Complaint and Petition for Relief of BellSouth Telecommunications, LLC d/b/a AT&T Southeast d/b/a AT&T South Carolina v. Halo Wireless, Incorporated for Breach of the Parties' Interconnection Agreement – A Hearing was Held on April 18, 2012. This Matter is Ready for Final Disposition.

COMMISSION ACTION:

In this complaint matter, I move that we hold that Halo has materially breached the interconnection agreement with AT&T by sending landline-originated traffic to AT&T, inserting incorrect Charge Number (CN) information on calls, and failing to pay for facilities that it has ordered pursuant to the interconnection agreement. I further move that, as a result of these breaches, AT&T should be excused from further performance under the interconnection agreement and may stop accepting traffic from Halo. In addition, I move that we find that Halo is liable to AT&T for access charges on the interstate and interLATA access traffic it has sent to AT&T, although the precise amount should be left up to the bankruptcy court to determine, and that Halo is liable to AT&T for interconnection facilities charges that it has refused to pay to AT&T, although, again, the precise amount should be left up to the bankruptcy court to determine.

PRESIDING: Howard SESSION: Regular TIME: 2:00 p.m.

	MOTION	YES	NO	OTHER	
FLEMING	☐	☐	☐	Not Voting	Sick Leave the Day of the Hearing
HALL	☐	☑	☐		
HAMILTON	☐	☑	☐		
HOWARD	☐	☑	☐		
MITCHELL	☑	☑	☐		
WHITFIELD	☐	☑	☐		
WRIGHT	☐	☐	☐	Absent	Attending MACRUC Conference in Hershey, PA

(SEAL) RECORDED

BY: J. Schmieding


PUBLIC SERVICE COMMISSION
SOUTH CAROLINA