## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Application of Competitive Carriers of the South, Inc. for a Declaratory Order Affirming that the Interconnection Regimes under KRS 278.530 and 47 U.S.C. § 251 are Technology Neutral

Case No. 2015-00283

## TESTIMONY OF JOSEPH GILLAN ON BEHALF OF COMPSOUTH

1	Q.	Please state your name, business address and occupation.
2		
3	А.	My name is Joseph Gillan. My business address is P. O. Box 540386, Merritt
4		Island, Florida 32954. I am an economist with a consulting practice specializing
5		in telecommunications.
6		
7	Q.	On whose behalf are you testifying?
8		
9	Α.	I am testifying on behalf of the Competitive Carriers of the South, Inc.
10		("CompSouth"). <sup>1</sup> CompSouth members provide voice services to end-user
11		customers in Kentucky and elsewhere using Internet Protocol ("IP") format or
12		which can be and are converted to IP format for purposes of transport.

<sup>&</sup>lt;sup>1</sup> CompSouth member Global Capacity is not participating in this docket and EarthLink is no longer a member of CompSouth.

1		
2	Q.	Please briefly outline your educational background and related experience.
3		
4	Α.	I am a graduate of the University of Wyoming where I received B.A. and M.A.
5		degrees in economics. From 1980 to 1985, I was on the staff of the Illinois
6		Commerce Commission where I was responsible for the analysis of issues created
7		by the emergence of competition in regulated markets, in particular the
8		telecommunications industry. While at the Commission, I served on the staff
9		subcommittee for the National Association of Regulatory Utility Commissioners
10		("NARUC") Communications Committee and was appointed to the Research
11		Advisory Council overseeing the National Regulatory Research Institute
12		("NRRI").
13		
14		In 1985, I left the Commission to join U.S. Switch, a venture firm organized to
15		develop interexchange access networks in partnership with independent local
16		telephone companies. During my tenure at US Switch I was responsible for
17		regulatory strategies and compliance, contract negotiation with independent
18		telephone companies, and project oversight for its (anticipated) pilot network,
19		Indiana Switch. At the end of 1986, I resigned my position of Vice
20		President-Marketing/Strategic Planning to begin a consulting practice.
21		
22		Over the past thirty years I have testified over 300 times before more than 40 state
23		commissions, a number of state legislatures, the Commerce Committee of the

1		United States Senate, the Federal/State Joint Board on Separations Reform, the
2		Finance Ministry of the Cayman Islands and before the Canadian Radio-
3		Telecommunications Commission. In addition, I serve on the Advisory Council
4		to New Mexico State University's Center for Public Utilities and lecture annually
5		at Michigan State University's Regulatory Studies Program ("Camp NARUC"). I
6		have also lectured at the School of Laws at the University of London (England),
7		the School of Law at Northwestern University (Chicago), and with Dr. Mark
8		Jamison (of the Public Utility Research Center at the University of Florida) before
9		the Office of the Communications Authority, Hong Kong, China.
10		
11		Finally, I serve on the Board of Directors for the Universal Service
12		Administrative Company ("USAC"), the corporate entity responsible for
13		implementing the federal universal service system, as the representative for
14		competitive local exchange carriers ("CLECs"). A complete listing of my
15		qualifications, testimony and publications is provided in Exhibit JPG-1 (attached).
16		
17	Q.	What is the purpose of your testimony?
18		
19	A.	The purpose of my testimony is to support CompSouth's request for a declaratory
20		order affirming that – regardless of underlying technology, transmission media, or
21		protocol that may be used for the exchange of voice traffic – a requesting carrier
22		may file a petition with the Kentucky Public Service Commission ("PSC")
23		requesting an Order prescribing the rates, terms, and conditions of the proposed

.

1		interconnection with an incumbent local exchange carrier in accordance with the
2		interconnection regimes of 47 U.S.C. §§ 251-252 and KRS 278.530. As
3		CompSouth noted in its Application, <sup>2</sup> the requested declaration will formalize the
4		advisory PSC Staff Opinion 2013-015 (dated 10/24/13) as a binding decision of
5		the PSC.
6		
7		At the outset I note that the question raised is fundamentally a legal issue and I am
8		not an attorney. As such, my testimony is not intended to reproduce the legal
9		arguments that have already been briefed by CompSouth. <sup>3</sup> Rather, the purpose of
10		my testimony is to explain why it is important for the Commission to eliminate the
11		ambiguity as to whether interconnection arrangements for traditional voice calls –
12		e.g., voice calls commonly originated/terminated using conventional handsets
13		plugged into the common RJ-11 jack seen in most homes, with routing based on
14		the conventional NPA-NNX assignments – are subject to regimes set forth in 47
15		U.S.C. §§ 251-252 and KRS 278.530.
16		
17	Q.	Has the Federal Communications Commission ("FCC") definitely addressed
18		the applicability of §§ 251-252?
19		

<sup>&</sup>lt;sup>2</sup> Application of Competitive Carriers of the South, Inc. for a Declaratory Order, August 14, 2015 ("*CompSouth Application*").

<sup>&</sup>lt;sup>3</sup> See *CompSouth Application* and Reply by Applicant Competitive Carriers of the South, Inc., November 2, 2015 ("*CompSouth Reply*").

1	Α.	The FCC deferred the issue in the Transformation Order that reformed the
2		intercarrier compensation rules and universal service programs. <sup>4</sup> Although the
3		FCC claimed to be leaving the issue for another day, it is frankly impossible to
4		find a rational argument that would explain why that same Order did not
5		effectively foreclose any finding other than sections 251/252 of the Act apply.
6		Specifically, the Transformation Order found that all Voice Over Internet
7		Protocol ("VoIP") calls were subject to section $251(b)(5)$ – and thus sections
8		251/252 – when exchanged in Time Division Multiplexing ("TDM"): <sup>5</sup>
9 10 11 12		Although the Commission has not classified interconnected VoIP services or similar one-way services as "telecommunications services" or "information services," VoIP-PSTN traffic nevertheless can be encompassed by section 251(b)(5). <sup>6</sup>
13		The critical importance of this finding is that the retail service is covered by the
14		Act, irrespective as to whether the call is VoIP or TDM. Because the format used
15		at the point of exchange between the networks (be it IP or TDM) is transparent to
16		the customer, how can a call exchanged in IP be legally different than a call
17		exchanged in TDM? To state the obvious, there is simply no rational basis to
18		distinguish between the use of technologies at the point of traffic exchange when
19		the FCC has already found that the retail services are indistinguishable under

<sup>&</sup>lt;sup>4</sup> In the Matter of Connect America Fund, WC Dkt. No. 10-90, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 (rel. Nov. 18, 2011) ("Transformation Order") ¶s 1335-1399.

<sup>&</sup>lt;sup>5</sup> Time Division Multiplexing is the method used in circuit-switched architectures to dedicate a transmission path to each individual call. By assigning each call a specific time assignment, multiple calls can share the same physical facility (such as a fiber) because, at any *specific* point-in-time, the facility is actually carrying only one call. In the next instant, however, the facility is carrying a different call. Because the human ear cannot detect the timing gap between these uses, TDM technology has been able to provide reliable, quality telephone service.

1		section 251(b)(5). If nothing material happens at the point of exchange – again,
2		the format used should be transparent to the customer – it is impossible to
3		conclude anything other than both IP and TDM traffic exchange are covered by
4		the Act. <sup>7</sup>
5		
6	Q.	Why should the Commission be concerned that Interconnection Agreements
7		for voice traffic continue to be subject to sections 251/252?
8		
9	Α.	There is nothing more fundamental to the Act than the provisions of Section 252
10		that require the filing of interconnection agreements for the exchange of voice
11		traffic be filed for approval. The public filing of interconnection agreements is
12		absolutely essential to achieving the Act's core requirement that such agreements
13		be nondiscriminatory and in the public interest. Moreover, most competitors use
14		the opt-in provisions of Section 252 to both fully review all available contracts
15		and then choose which best meets their needs. This system does not work if some
16		agreements are secret and competitors cannot get (or, just as importantly, cannot
17		be assured they have received) the same terms, conditions and prices as other
18		competitors. CompSouth previously filed a white paper addressing these points
19		and I incorporate the white paper herein by reference. <sup>8</sup>

<sup>&</sup>lt;sup>7</sup> Later in my testimony I provide a Multi-State IP Interconnection Agreement that Verizon has reached with a competitor to demonstrate that such agreements cover topics identical to those addressed by traditional Interconnection Agreements.

<sup>&</sup>lt;sup>8</sup> See "The Importance of Section 252 to Competition and the Public Interest: The Continuing State Role in the Age of IP Networks" (October 2015). Attached to CompSouth Reply.

1	Q.	Do you have any examples of IP Interconnection Agreements that
2		demonstrate that they do not differ in a material way from traditional
3		Interconnection Agreements for the exchange of voice traffic?
4		
5	Α.	Yes. As part of its review of proposed transfer of Verizon-California to Frontier
6		Communications, the California Commission ordered that Verizon file the IP
7		Voice Interconnection Agreements that it has reached, <sup>9</sup> and which Verizon touts
8		in its Response filed in this proceeding. <sup>10</sup> Although Verizon is not an incumbent
9		local exchange carrier in Kentucky, reviewing Verizon's "experience" with IP
10		Voice Interconnection is useful to establish two points.
11		
12		First, as I explain in more detail below, its agreements provide a useful example
13		of an IP Voice Interconnection Agreement, and demonstrates how such
14		agreements address the same ongoing obligations as a conventional
15		interconnection agreement for the exchange of voice traffic.
16		
17		Second, the Verizon experience illustrates the gap that can sometimes arise
18		between truth and advocacy when the rigor of a Commission proceeding is not
19		available to discern the facts. Verizon would have the Commission believe that
20		negotiations have been successful because of the number and diversity of

Verizon Response to CompSouth Application for Declaratory Order, Oct. 12, 2015 at 2.

<sup>&</sup>lt;sup>9</sup> Decision Granting Application Subject to Conditions and Approving Related Settlements, Public Utilities Commission of the State of California, Application 15-03-005, Decision 15-12-005 December 3, 2015 at 80.

1		agreements it has reached. Significantly, Verizon lists the same universe of
2		agreements that it claimed existed in California. However, once it was required to
3		disclose and file these agreements, it was forced to acknowledge that over half of
4		the agreements $-six$ of eleven $-had$ never been implemented. <sup>11</sup>
5		
6		The Verizon experience is not proof that its system of secret agreements is
7		working - the real question is what would be the experience if every carrier could
8		obtain the same terms, conditions and prices as any other carrier and, with
9		confidence that there is no better deal in hiding, simply opt-into the agreement
10		that best meets its needs? <sup>12</sup>
11		
12	Q.	You indicated that the Verizon IP voice interconnection agreements covered
13		the same "ongoing obligations" as traditional ( <i>i.e.</i> , TDM) interconnection
14		agreements for the exchange of voice traffic. Please explain.
15		
16	A.	The FCC has previously defined as a section 251/252 Interconnection Agreement
17		any ILEC agreement that:

<sup>&</sup>lt;sup>11</sup> The counterparties with dormant agreements are 365 Wireless LLC; Brightlink Communications LLC; InterMetro Communications, Inc.; Millicorp and Verizon Wireless. Further, one of these companies is responsible for two of the agreements. *See* Verizon-California Advice Letter No. 12725, U 1002 C, February 26, 2016 ("*February 26<sup>th</sup> Advice Letter*") at 2 and 4 and Verizon-California Advice Letter No. 12725A, U 1002 C, March 8, 2016 ("*March 6<sup>th</sup> Advice Letter*"). In addition, there appears to be confusion as to whether "Brightlink" (which Verizon identifies as having a dormant agreement) is actually "Brighthouse," which Verizon had identified as a customer.

<sup>&</sup>lt;sup>12</sup> There are differences in the compensation provisions among the filed contracts. As such, it is not at all clear whether even those "agreements" that have been signed are the agreements that each competitor would have chosen if it had been offered any of the agreements that existed.

1 2 3 4 5	creates an <i>ongoing</i> obligation pertaining to resale, number portability, dialing parity, access to rights-of-way, reciprocal compensation, interconnection, unbundled network elements, or collocation is an interconnection agreement that must be filed pursuant to section $252(a)(1)$ . <sup>13</sup>
6	I have attached Multistate IP Interconnection Agreement #2 to show that it covers
7	(as would any IP Voice Interconnection Agreement) many of these ongoing
8	obligations. <sup>14</sup> For instance, Section 3 of the Multistate Interconnection
9	Agreement #2 identifies the traffic that is permitted under the agreement:
10 11 12 13 14 15 16 17	<ul> <li>3.1 Permitted Traffic Types. The Parties agree to exchange certain types of Voice Calls originated by their respective Customers ("Permitted Traffic") under this Agreement only where the Called Telephone Number:</li> <li>3.1.1 is a ten-digit telephone number in NANP format;</li> <li>3.1.2 is associated with a Rate Center within the United States;</li> <li>3.1.3 is assigned to or associated with a Customer</li> </ul>
18 19 20 21	of the terminating Party; and 3.1.4 is routable under the terminating Party's SIP Routing Table (as described in Section 4.2 of this Attachment).
22	Moreover, Appendix B establishes "Target Service Quality Standards for the
23	Exchange of Voice Calls," using metrics (such as the "Mean Opinion Score or
24	MOS") that are directly drawn from the Public Switched Telephone Network

<sup>&</sup>lt;sup>13</sup> In the Matter of Qwest Communications International Inc. Petition for Declaratory Ruling on the Scope of the Duty to File and Obtain Prior Approval of Negotiated Contractual Arrangements under Section 252(a)(1), WC Docket No. 02-89, Memorandum Opinion and Order, FCC 02-276, (Rel. October 4, 2002) ("Qwest Declaratory Ruling") at ¶ 8. Italics in the original; underlined emphasis added.

<sup>&</sup>lt;sup>14</sup> Multistate IP Interconnection Agreement #2 is labeled in this way because the other party's name is redacted and the contract can only be identified by how it was attached to Verizon's filing. Multistate IP Interconnection Agreement #2 is the second contract (in the series) filed with the California Commission. The basic structure of the eleven Multistate Interconnection Agreements filed in California is similar and Multistate IP Interconnection Agreement #2 is attached as an example.

1	("PSTN"). <sup>15</sup> In fact, the International Telecommunication Union ("ITU")
2	technical document referenced in Appendix B describes the MOS approach as
3	"assessing the combined effects of variations in several transmission parameters
4	that affect the conversational quality of 3.1 kHz handset telephony." <sup>16</sup>
5	
6	The critical point is that these agreements address traditional phone services, even
7	if provided over a new technology. Ironically, Verizon contractually retains the
8	right to upgrade its network with new technology, recognizing (implicitly) the
9	independence between the service layer and the technology used to support it:
10 11 12 13 14	Notwithstanding any other provision of this Agreement, Verizon shall have the right to deploy, upgrade, migrate and maintain its network at its sole discretion. Nothing in this Agreement shall limit Verizon's ability to modify its network through the incorporation of new equipment or software or otherwise. <sup>17</sup>
15	As to the other standards enumerated in the Qwest Declaratory Ruling, the IP
16	Interconnection Agreement addresses Interconnection, <sup>18</sup> transport and termination
17	(i.e., reciprocal compensation) for both local and non-local traffic, <sup>19</sup> as well as
18	number portability. <sup>20</sup>
19	

<sup>&</sup>lt;sup>15</sup> Multistate IP Interconnection Agreement #2 at PDF page 45.

<sup>&</sup>lt;sup>16</sup> ITU-T G.107 at 1. Emphasis added.

<sup>&</sup>lt;sup>17</sup> Multistate IP Interconnection Agreement #2 at PDF page 23.

<sup>&</sup>lt;sup>18</sup> See "Section 2. Points of Interconnections (POIs) and SIP Interconnection Facilities," Multistate IP Interconnection Agreement #2 at PDF page 32.

<sup>&</sup>lt;sup>19</sup> See "Section 9. Compensation Arrangements," Multistate IP Interconnection Agreement #2 at PDF page 40 and "Pricing Attachment," at PDF pages 42-43.

<sup>&</sup>lt;sup>20</sup> See "Section 12. Local Number Portability (LNP)" at PDF page 40.

- 1 Q. Does AT&T have any unfiled IP Voice Interconnection Agreements?
- 2

3 AT&T testified to the South Carolina Commission that it has signed "a number of A. 4 voice IP-to-IP interconnection agreements," but has not filed any to my knowledge.<sup>21</sup> AT&T's statement, however, demonstrates that the issue before the 5 6 Commission is not theoretical – the future of quality, reliable and competitively 7 priced telephone services in Kentucky will depend upon the ability of carriers to 8 interconnect their networks for the exchange of voice traffic regardless of the 9 underlying technology. 10 Q. 11 Does this conclude your direct testimony? 12

13 A. Yes.

<sup>&</sup>lt;sup>21</sup> See Presentation of Frank Simone, Vice President/Federal Regulatory, AT&T, before the South Carolina Public Service Commission, Ex Parte Briefing ND-2015-31-C, January 12, 2016 at Tr. 42.

## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

APPLICATION OF COMPETITIVE CARRIERS OF)THE SOUTH, INC. FOR A DECLARATORY ORDER)AFFIRMING THAT THE INTERCONNECTION)REGIMES UNDER KRS 278.530 AND 47 U.S.C. § 251)ARE TECHNOLOGICALLY NEUTRAL)

CASE NO. 2015-00283

## **VERIFICATION OF JOSEPH GILLAN**

STATE OF FLORIDA

COUNTY OF BREVARD

Joseph Gillan, owner/economist with Gillan Associates, being duly sworn, states that he has read the foregoing prepared direct testimony and that he would respond in the same manner to the questions if so asked upon taking the stand, and that the matters and things set forth therein are true and correct to the best of his knowledge, information and belief.

Joseph Gillar

The foregoing Verification was signed, acknowledged and sworn to before me this 3 day of August, 2016, by Joseph Gillan.

Crystal Phoutavong Notary Public State of Florida My Commission Expires 6/3/19 Commission No. FF 237254

PUBLIC, Notary # Commission expiration: (