

RLEC STATEMENT NO. 2

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

IN RE:	:	
COMPLAINT OF	:	
CONCORD TELEPHONE EXCHANGE, INC.,	:	
HUMPHREYS COUNTY TELEPHONE,	:	
COMPANY, TELlico TELEPHONE	:	DOCKET NO. 11-00108
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	:	

TESTIMONY OF LINDA N. ROBINSON

SUBMITTED: January 9, 2012

1 **Q. Please state your name, occupation and business address.**

2 A. My name is Linda N. Robinson. I hold the position of Manager – Carrier
3 Relations for TDS Telecom. My business address is 10025 Investment Drive, Suite 200
4 Knoxville, TN 37932.

6 **Q. Please state your relevant experience and education background.**

7 A. I have a Bachelor's degree in Accounting from Queens University in Charlotte,
8 NC and am a North Carolina Certified Public Accountant. I have been employed in the
9 telecommunications industry for 21 years, having begun my telecommunications career
10 with Alltel Service Corporation. While with Alltel, I held positions as an Analyst in the
11 Access Billing group, Supervisor in Revenue Accounting and Manager-Access and
12 Interconnection. In these roles I was responsible for access billing, accounting for access
13 revenues, negotiation of interconnection agreements, and development and advocacy of
14 company interconnection and access positions at state and federal levels. In 1997, I
15 joined TDS Telecom as Manager- Interconnection where I continued working on
16 interconnection negotiations and regulatory issues related to competition and inter-carrier
17 compensation. I was promoted to Manager- Carrier Relations in 2007 with responsibility
18 for interconnection contract negotiations and other inter-carrier issues for TDS Telecom's
19 incumbent LEC operations. I have extensive experience with access billing records,
20 tariffs and billing processes.

1 **Q. On whose behalf are you submitting testimony?**

2 A. I am testifying on behalf of Concord Telephone Exchange, Inc., Humphreys County
3 Telephone Company, Tellico Telephone Company, Tennessee Telephone Company,
4 (collectively referred to as “TDS Telecom” or “TDS Companies”); Crockett Telephone
5 Company, Inc., Peoples Telephone Company, West Tennessee Telephone Company, Inc.,
6 North Central Telephone Cooperative, Inc. and Highland Telephone Cooperative (all
7 collectively referred to as “RLECs” or “Complainants”).

8
9 **Q. Please explain how the RLECs receive traffic delivered by Halo.**

10 A. Each of the RLECs is interconnected with one or more of the AT&T Tandems using
11 jointly provided common trunks with AT&T. The AT&T Tandems serve as a means for
12 indirect interconnection between each of the RLECs and third party entities for the
13 transport and termination of traffic, including wireline long distance and local exchange
14 traffic as well as wireless interMTA and intraMTA traffic. Halo delivers the call to
15 AT&T with an RLEC number identified and AT&T forwards the call to the appropriate
16 RLEC for termination over a common trunk group maintained by the RLEC and AT&T.

17
18 **Q. How did Halo obtain access to AT&T’s tandems?**

19 A. Halo obtained access and connectivity to AT&T and, hence, indirectly to the
20 RLECs, by adoption of an interconnection agreement previously approved for T-Mobile,
21 which adoption was approved by the Tennessee Regulatory Authority (“Authority”) in
22 Docket No. 10-00063 on June 21, 2010.

1 Halo claimed status as a Commercial Mobile Radio Service (“CMRS”) provider
2 to obtain interconnection with AT&T. In filing the adoption of the AT&T/Halo
3 interconnection agreement, the parties asserted that approval of the Agreement would
4 facilitate “Halo’s provision of commercial mobile radio service (“CMRS”) to both
5 residential and business customers in the State of Tennessee.”
6

7 **Q. What does the agreement between AT&T and Halo provide regarding the delivery**
8 **of traffic?**

9 A. I understand from having reviewed the testimony filed in Docket 11-00119¹ that
10 there is a disagreement between Halo and AT&T, the actual parties to the interconnection
11 agreement, regarding the interpretation of that agreement and the amendment relative to
12 whether and what type of third party traffic is permitted. Nonetheless, as a factual matter,
13 I can confirm that the RLECs have received traffic for termination on their networks via
14 the interconnection established by the AT&T/Halo interconnection agreement which
15 definitively includes third party-originated traffic and is predominantly non-CMRS
16 carrier-originated traffic. None of the traffic that I have analyzed is Halo-originated.
17

18 **Q. When did the RLECs begin receiving Halo traffic via AT&T’s tandem?**

19 A. As early as December 2010, the RLECs began receiving voice traffic from Halo
20 for termination to RLEC end user customers via the common trunk groups they maintain
21 with AT&T Tennessee. As shown on RLEC Exhibit LR-1, Halo traffic delivered to the
22 RLECs for termination grew very rapidly through August 2011, after which it appears to

¹ Direct Testimony of Neinast for AT&T, p 5 Lines 9-22; Direct Testimony of McPhee for AT&T, pp 5-6; Direct Testimony of Wiseman for Halo, pp4-5.

1 have reached a steady state of 2 million minutes of use per month on average. Through
2 the end of 2011, the RLECs have terminated over 20 million minutes of use for Halo and
3 have received zero (\$0) compensation for this use of their networks.
4

5 **Q. How do you know that it is Halo's traffic being delivered to you by AT&T?**

6 A. AT&T's tandems have separate facilities that receive only Halo-delivered traffic,
7 so that it is not intermingled with any other carriers' traffic. In accordance with accepted
8 industry guidelines for the mutual provision of switched access service, the tandem
9 company, AT&T in this case, is responsible for recording and creating the required
10 Exchange Message Interface ("EMI") call detail records associated with access usage that
11 terminates to subtending companies. As the tandem company, AT&T records all traffic
12 passing through its access tandems. The access tandem company is uniquely positioned
13 in a call's path to perform this recording function for the subtending carriers because each
14 carrier delivering traffic to the access tandem maintains separate trunk groups for its
15 traffic. This allows the tandem company to identify the delivering carrier at a point in the
16 call stream before traffic becomes co-mingled with the traffic of other carriers.

17 Because the RLEC end offices subtend AT&T access tandems, the RLECs
18 receive industry standard EMI 110101 call detail records provided by AT&T in order to
19 bill terminating access charges to the appropriate originating carriers.

20 The EMI records for the traffic in question contain an OCN of "429F." The
21 Telcordia-maintained Local Exchange Routing Guide, an industry document that contains
22 information used for call routing, identifies OCN 429F as belonging to Halo. This

1 presence of Halo's OCN in the EMI records designates Halo as the financially
2 responsible party for intercarrier compensation due the RLECs on the traffic.

3
4 **Q. Did the RLECs begin billing Halo for terminating its traffic?**

5 A. Yes. The RLECs have issued invoices to Halo for the switched access services
6 provided to Halo by the RLECs. A summary of the invoices is included in this testimony
7 as RLEC Exhibit LR-2. The RLECs render invoices to Halo on a monthly basis in
8 compliance with their respective Interstate and Intrastate Access Tariffs on file with the
9 FCC and/or TRA.

10
11 **Q. Has Halo paid any of those bills rendered by the RLECs?**

12 A. No. Halo has not paid any of the invoices rendered by the RLECs, including
13 amounts invoiced for services provided in the bankruptcy post-petition period.

14 The RLEC Complainants, in aggregate, have billed \$1,017,997.67
15 to Halo as of December 2011. The outstanding balance due each RLEC continues to
16 grow each month. In total, the RLECs continue to lose in excess of \$100,000 per month
17 as a result of Halo's non-payment.

18
19 **Q. How did the RLECs prepare the access bills sent to Halo?**

20 A. Each month the RLECs use the EMI call detail records provided by AT&T to
21 prepare Carrier Access Billing System ("CABS") bills for access services rendered which
22 are mailed to the delivering carriers for payment. The AT&T EMI billing records are
23 used in daily course of business to rate and bill intercarrier compensation in the industry.
24 Utilizing carrier access billing programs, the RLECs process the EMI records received

1 from AT&T and render carrier access bills in accordance and with their respective access
2 rates and industry standard billing guidelines.
3

4 **Q. What is the role of telephone numbers in billing?**

5 A. Billing for the entire industry is determined on the basis of the originating and
6 terminating end points of the called and calling parties as determined by the telephone
7 numbers involved. Where the calling and called numbers are within the same local
8 calling area (including any extended calling areas), the call is rated as a local call for
9 intercarrier compensation purposes and not subject to access charges. The same is true
10 for a CMRS-originated call where the calling and called numbers are within the same
11 Major Trading Area ("MTA"). Conversely, where the calling and called numbers are in
12 different local calling areas, the call is considered a toll call and subject to access charges.
13 CMRS-originated calls between different MTAs is considered non-local (toll) and are
14 also subject to access charges.

15 Intrastate toll traffic is rated and billed to the delivering carrier in accordance with
16 industry standards based upon the RLECs' lawful rates, terms and conditions set forth in
17 the RLEC's respective intrastate access tariffs or otherwise approved rate schedules.
18 Applicable switched access charges (including, for example, transport, local switching,
19 and carrier common line rates) are applied to the minutes of use to determine the amount
20 due.
21

22 **Q. Please explain how telephone numbers are assigned.**

1 A. Each telephone number is obtained from the North American Numbering
2 Authority, Neustar, and formally assigned to a registered location. This is the rate center
3 (the physical location of a switch) into which the number is loaded. That telephone
4 number, usually a block of numbers, and associated rate center are then listed in the
5 official industry routing guide published by Telcordia (formerly Bellcore) known as the
6 Local Exchange Routing Guide ("LERG"). All carriers delivering and receiving traffic;
7 ILECs, CLECs, wireless and cable companies; obtain numbers and officially report a rate
8 center address for each number in their possession. They are the code holder for that
9 number.

10 The code holder, be it ILEC or CLEC wireline, wireless or cable voice, then
11 assigns a number to its customers. Whether the line provides traditional "dial tone
12 service" by a regulated LEC, an Internet protocol CLEC service, AT&T Wireless,
13 Comcast or any other service provider, this network address provides the ability to
14 connect the customer to the network and place a call. Every called number also has an
15 address in the LERG, and a call is routed and completed (i.e., the called phone rings)
16 according to its listed rate center.

17
18 **Q. How are telephone numbers used in inter-carrier billing?**

19 A. The RLECs' federal tariff (administered by the National Exchange Carriers
20 Association) states that:

21 Pursuant to Federal Communications Authority Order FCC 85-145
22 released April 16, 1985, interstate usage is to be developed as though
23 every call that enters a customer network at a point within the same state
24 as that in which the called station (as designated by the called station
25 telephone number) is situated is an intrastate communication and every
26 call for which the point of entry is a state other than that where the called

1 station (as designated by the called station telephone number) is situated is
2 an interstate communication.²

3
4 The foundation of call rating and billing by the RLECs is the FCC's 1986 post-
5 divestiture principle that the origin and destination points of a call, as measured at the
6 telephone number locations, determine whether the call is interstate or intrastate for
7 purposes of assessing switched access charges.³

8 The FCC next directed, in 1996, that this same methodology be used for wireless
9 traffic where it explained that the initial cell site or perhaps the mobile switching center
10 could be used to determine the location of the wireless customer call origination.⁴ In the
11 *First Competition Report and Order*, the FCC determined that the Metropolitan Trading
12 Area ("MTA") would define the local calling area for traffic originating on a CMRS
13 network.⁵ Next the FCC ruled that within that area calls would be subject to local calling
14 compensation ("reciprocal compensation"), but outside that area access charges would
15 apply.⁶ As to determining the originating points of a wireless call, since the end user

² NECA Tariff No. 5, Rule 2.3.22(c).

³ *MCI Telecommunications Corporation; Determination of Interstate and Intrastate Usage of Feature Group A and Feature Group B Access Service*, FCC 85-145, 1985 FCC LEXIS 3500 (1985); *recon. denied*, FCC 85-595, 1985 FCC LEXIS 2320 (1985) ("*EES Order*"). In cases where the origin is not readily available, the FCC has directed that carriers must utilize an auditable methodology that enables them to determine such jurisdiction with relative accuracy based, for example upon a traffic study.

⁴ *Implementation of the Local Competition Provisions of the Communications Act of 1996*, First Report and Order, 11 FCC Rcd 15499, 16017 (1996) ("*First Local Competition Order*").

⁵ *First Local Competition Order* at ¶ 1036 ("...in light of this Commission's exclusive authority to define the authorized license areas of wireless carriers, we will define the local service area for calls to or from a CMRS network for the purposes of applying reciprocal compensation obligations under section 251(b)(5). Different types of wireless carriers have different FCC-authorized licensed territories, the largest of which is the "Major Trading Area" (MTA). Because wireless licensed territories are federally authorized, and vary in size, we conclude that the largest FCC-authorized wireless license territory (*i.e.*, MTA) serves as the most appropriate definition for local service area for CMRS traffic for purposes of reciprocal compensation under section 251(b)(5) as it avoids creating artificial distinctions between CMRS providers.").

⁶ *First Local Competition Order* at ¶ 1036 ("Accordingly, traffic to or from a CMRS network that originates and terminates within the same MTA is subject to transport and termination rates under section 251(b)(5), rather than interstate and intrastate access charges.").

1 customer is mobile,⁷ the FCC directed that "... [f]or administrative convenience, the
2 location of the initial cell site when a call begins shall be used as the determinant of the
3 geographic location of the mobile customer. As an alternative, LECs and CMRS
4 providers can use the point of interconnection between the two carriers at the beginning
5 of the call to determine the location of the mobile caller or called party."⁸

6 Thus, the rules applicable to billing, including as to CMRS carriers are well
7 defined and are the same rules used by the RLECs for billing Halo here.

8
9 **Q. As Mr. McCabe describes, Halo protested payment of the RLECs' CABs bills on the**
10 **ground that all of the traffic is CMRS-originated and intraMTA. Did TDS Telecom**
11 **investigate the traffic delivered by Halo?**

12 A. Yes. The TDS Companies undertook usage analyses to gather additional
13 information about the traffic to determine whether the traffic being sent to the TDS
14 Telecom Companies by Halo via the AT&T tandems is, in fact, CMRS-originated
15 intraMTA traffic which would be subject to local compensation as Halo claims, or, in the
16 alternative, is wireline long distance and wireless interMTA traffic that would be subject
17 to non-local or access charges.

18 TDS undertook this usage analyses for the month of March for Concord,
19 Tennessee Telephone and Tellico to determine the type of traffic (i.e., wireline versus
20 wireless) and jurisdiction of the traffic (i.e., interMTA versus intraMTA; interstate versus
21 intrastate).. We also reviewed calling detail for Humphreys County for the week of July

⁷ *First Local Competition Order* at ¶ 1044 ("CMRS customers may travel from location to location during the course of a single call, which could make it difficult to determine the applicable transport and termination rate or access charge.")

⁸ *First Local Competition Order* at ¶ 1044.

1996, CC Docket Nos. 96-98 and 95-185, 1044, 11 FCC Rcd 15499 ("*Local Competition Order*")

1 17-23, 2011. Each of the four TDS Companies usage analysis is summarized in RLEC
2 Exhibit LR-3. The underlying data supporting these results will be made available to the
3 parties upon request and subject to appropriate confidentiality treatment to protect
4 customer network related information (Customer Proprietary Network Information or
5 "CPNI").
6

7 **Q. Describe the usage analyses undertaken by the TDS Companies.**

8 A. Carriers involved in call origination, transport and termination use Common
9 Channel Signaling System 7 ("SS7") signaling to establish the "call path" (routing and
10 delivery) available on each carrier's network. This same call detail is routinely used to
11 perform traffic studies.

12 The SS7 information that is used to establish a call path between the originating
13 end office and the terminating end office for the respective end users also contains the
14 originating number (calling party) as inserted by the originating carrier. Of course, the
15 terminating number (the TDS called customer) is also included in this data. Population
16 of these fields is automated and standard industry practice. All intercarrier routing uses
17 this information.

18 Upon request by TDS, AT&T provided the underlying SS7 call data contained in
19 the traffic received from Halo and switched through AT&T's access tandems to the TDS
20 Companies for termination.
21

22 **Q. What data base did you use to identify the originating location and carrier?**

1 A. Each originating number was looked up in the standard industry data base, the
2 LERG, to identify the originating call location used for billing purposes and the
3 originating service provider. To account for the possibility that the originating telephone
4 number had been ported, a query of the originating telephone number was performed in
5 the Number Portability Administration Center ("NPAC") database to determine the local
6 exchange carrier serving the telephone numbers associated with the originating telephone
7 number on the call records.

8
9 **Q. Are the usage analyses you undertook accurate?**

10 A. Yes, the analyses are accurate. They were performed in accordance with standard
11 industry tools using reliable, standard industry data bases (i.e., SS7, LERG, NPAC).

12
13 **Q. What did the usage analyses show?**

14 A. The analyses demonstrate several things:

15 First, there is no evidence whatsoever of any Halo originated traffic being
16 delivered by Halo for termination to TDS. None of the traffic in any of the sample data
17 originated from telephone numbers assigned to or served by Halo.

18 Second, the vast majority of the traffic delivered by Halo originated from
19 traditional wireline carriers and not CMRS providers at all. The majority of the traffic in
20 each of the studies, upwards of 70%, was wireline company originated including both
21 incumbent and competitive local exchange carriers. See RLEC Exhibits LR-3 and 4.

22 Third, of the traffic delivered by Halo, only 7-29% was wireless-originated (and
23 not by Halo). See RLEC Exhibit LR-3.

1 Fourth, only a very limited amount was, in fact, wireless intraMTA traffic. See
2 RLEC Exhibit LR-3. Where the from number was served by a CMRS carrier, further
3 review was done using the LERG to determine if the originating and terminating
4 telephone numbers were within the same MTA. Of the traffic that was CMRS-
5 originated, the amount of traffic that was intraMTA ranged between 1-5% of the total
6 traffic. See RLEC Exhibit LR-3. Access charges do not apply to CMRS-originated
7 intraMTA traffic, so none was included in the TDS access bills to Halo. The access bills
8 that TDS Telecom rendered to Halo only included access charges for non-local (toll) calls
9 and inter-MTA CMRS originated calls. Minutes for local and intra-MTA CMRS calls,
10 while shown on the bill, were zero rated.

11
12 **Q. What conclusions do you draw from this exercise?**

13 A. The usage analyses show Halo's claims to be completely false. The traffic is
14 actually originated exclusively by other companies (not Halo) and most of it is wireline-
15 originated (not wireless-originated). As to the wireless portion, we found that most of the
16 calls are interMTA (not intraMTA). Analysis of the SS7 call data shows a variety of
17 wireline "From" NPA/NXXs, which are not within the basic local exchange or mandated
18 expanded local exchange areas on file with the Commission. Where these numbers are
19 served by a wireline carrier, this "to" and "from" number analysis indicates that the calls
20 are toll calls which are subject to interstate or intrastate tariffed access charges. Where
21 the numbers are served by CMRS carriers, the calls were not intraMTA in the majority of
22 cases. CMRS-originated interMTA traffic is also subject to tariffed access charges.

1 Q. Can you provide any specific examples using call data that demonstrate Halo's
2 claim that the traffic is all intraMTA CMRS to be false?

3 A. Yes. Exhibit 5 provides example call signaling information for traffic delivered by Halo
4 for termination at our TDS Telecom-Humphrey County Telephone Company. This
5 information clearly shows the originating number, the terminating company, the
6 terminating telephone number, and other information such as LATA, call duration, etc.
7 As I mentioned before, the originating company was determined by querying the number
8 portability database to determine the originating company serving the originating
9 telephone number.

10 For example, line 8 is a call placed on 7/23/11 from telephone number 423-638-
11 5XXX terminating to a TDS Humphrey County end user with the telephone number 931-
12 535-2XXX. Based on information returned from the number portability database,
13 populated in columns B and C of the Exhibit, we know that number is assigned to a
14 CenturyLink⁹ end user. The call originates and terminates within Tennessee but is
15 outside the local calling area of TDS Humphrey County which would indicate that the
16 call is a toll call for which TDS Telecom would bill access charges.

17 Line 7 shows a similar call originated from an end user of Frontier
18 Communications of Tennessee.¹⁰ While this call originates and terminates within the
19 same LATA in Tennessee, the call is still outside local calling area and thus is an
20 intrastate toll call to which access charges apply. Line 4 is another example of an
21 incumbent telephone company originated call to which access charges would also apply.

⁹⁹ CenturyLink is an incumbent LEC operating in Tennessee.

¹⁰ Frontier Communications of Tennessee is also an incumbent LEC operating in Tennessee.

1 Lines 5 and 6 both provide call detail for a calls originated by customers of
2 CMRS carriers. However, contrary to Halo's assertions, both of the calls originated
3 outside of Tennessee, in Maryland and Kansas respectively, and are clearly interMTA
4 calls to which interstate access charges would apply. As I have stated previously, none of
5 the call information reviewed showed any calls originated by customers of Halo.

6 These examples illustrate the types of calls contained in the information reviewed
7 by TDS Telecom for all of its Tennessee companies.

8
9 **Q. What is the proper intercarrier compensation for such traffic?**

10 A. Interstate and Intrastate access rates as specified in the TDS Companies federal
11 and state access tariffs as approved by the FCC and the TRA, which is what we have
12 billed.

13
14 **Q. Have you reviewed the results of AT&T's traffic analyses as filed in Docket 11-**
15 **00119?**

16 A. Yes. I have reviewed the Direct Testimony of AT&T witness Mark Neinast filed on
17 December 19, 2011. The steps described in the testimony of the AT&T witness¹¹ are the
18 same as I undertook in completion of the TDS analysis of Halo traffic data and use the
19 same signaling records, databases and methodology for determining call jurisdiction and
20 traffic type. This is not surprising as these are the steps that are commonly used within
21 the industry. AT&T's reported results¹² do not differ materially from the results that I
22 have described for the TDS Companies.

¹¹ Neinast Direct testimony, pg 10, lines 3-19.

¹² Id. Attachment MN-2.

1

2 **Q. Have you performed usage analyses in other states of Halo-delivered traffic?**

3 A: Yes. TDS Telecom has performed similar studies of Halo traffic terminating to TDS
4 Telecom operating subsidiaries in other states. In each case, while the exact split
5 between interstate and intrastate varies across the companies, the results are very similar
6 in the percentage of traffic that would be access billable. Moreover, the call origination
7 is similar and, consistently, there were no Halo-originated calls found in any of the
8 studies.

9

10 **Q. Does that conclude your direct testimony?**

11 A. Yes, thank you. I reserve the right to supplement my testimony as this proceeding
12 progresses.

TN	Year													
	Month	2010	2011											
	12	12	1	2	3	4	5	6	7	8	9	10	11	12 Total
CONCORD TELEPHONE EXCHANGE INC		28,442	67,684	148,395	177,459	185,996	131,245	225,388	206,017	202,425	249,930	218,262	242,641	2,341,604
TENNESSEE TELEPHONE COMPANY			28,313	97,023	209,144	325,994	320,826	493,782	525,061	564,333	399,887	319,191	385,408	4,031,643
TELLICO TELEPHONE COMPANY			48,825	103,199	89,607	157,005	118,359	235,097	273,839	221,124	211,005	197,629	264,966	2,071,106
HUMPHREYS COUNTY TELEPHONE CO				1,062	9,819	11,202	11,466	19,866	21,924	28,244	15,972	16,700	29,267	192,576
NORTH CENTRAL TELEPHONE COOP*														
HIGHLAND TELEPHONE COOP*							826,844	530,979	528,425	555,828	562,322	475,398	427,980	4,388,300
CROCKETT TELEPHONE COMPANY, INC.*							1,617,451	365,893	407,622	515,201	442,287	485,228	468,102	4,755,250
PEOPLES TELEPHONE COMPANY*							189,113	60,371	81,910	61,756	54,634	54,903	54,913	82,774
WEST TENNESSEE TELEPHONE COMPANY, INC.*							197,394	110,084	131,770	91,297	126,501	84,840	90,201	938,884
							226,365	73,476	93,499	73,577	62,857	58,493	58,864	732,879
Total RLECs		28,442	144,822	349,699	486,029	680,197	3,639,043	2,114,937	2,269,088	2,313,786	2,125,396	1,920,643	2,022,353	2,000,161
														20,094,616

* Usage is presented in billed month and May 2011 contains minutes of use for prior months

Carroll Telephone Exchange, Inc.
HALO Wireless CABS Invoices Summary

Bill Date	Usage Dates	Revenue
04/26/11	02/27/11-04/20/11	\$ 6,428.58
06/29/11	11/21/10-06/20/11	\$ 19,139.62
06/29/11	04/27/11-06/20/11	\$ 7,790.15
07/29/11	05/27/11-07/29/11	\$ 7,102.17
08/29/11	06/27/11-08/08/11	\$ 5,095.72
09/29/11	07/27/11-09/09/11	\$ 1,616.57
Total		\$ 47,262.81
08/29/11	08/09/11-09/20/11	\$ 2,477.89
09/29/11	08/29/11-09/20/11	\$ 7,942.14
10/29/11	09/09/11-10/20/11	\$ 7,942.74
11/29/11	09/27/11-11/20/11	\$ 8,778.75
12/29/11	10/27/11-12/20/11	\$ 9,295.50
Total		\$ 35,406.01
Total Pre and Post Petition		\$ 82,668.82

HIGHLAND TELEPHONE CO-OPERATIVE
HALO Wireless CABS Invoices Summary

Bill Date	Revenue
05-01-2011	05/05/11-04/29/11-10/30/11
06-01-2011	05/05/11-04/29/11-10/30/11
07-01-2011	05/05/11-04/29/11-10/30/11
08-01-2011	05/05/11-04/29/11-10/30/11
09-01-2011	05/05/11-04/29/11-10/30/11
Total	\$ 237,418.93
09/01/11	05/05/11-04/29/11-10/30/11
10/01/11	05/05/11-04/29/11-10/30/11
11/01/11	05/05/11-04/29/11-10/30/11
12/01/11	05/05/11-04/29/11-10/30/11
Total	\$ 138,538.24
Total Pre and Post Petition	\$ 375,957.17

Total Billed and REC's	\$ 641,223.48
Pre-Petition	\$ 376,774.19
Post-Petition	\$ 1,017,997.67
Total	\$ 1,017,997.67
Avg Run-rate NonRec	\$ 103,489.11

Humphreys County Telephone Company
HALO Wireless CABS Invoices Summary

Bill Date	Usage Dates	Revenue
03/07/11	01/07/11-03/07/11	\$ 4,303.62
03/07/11	03/07/11-03/07/11	\$ 285.54
Total		\$ 4,589.16
09/07/11	08/09/11-09/07/11	\$ 403.35
10/07/11	09/09/11-09/20/11	\$ 720.02
11/07/11	10/07/11-10/20/11	\$ 1,262.22
12/07/11	11/07/11-11/20/11	\$ 1,159.73
Total		\$ 3,552.32
Total		\$ 8,159.48

North Central Telephone Cooperative
HALO Wireless CABS Invoices Summary

Bill Date	Usage Dates	Revenue
05/01/11	1/11-4/18/11	\$ 39,070.65
06/01/11	4/19/11-5/18/11	\$ 21,986.87
07/01/11	5/19/11-6/18/11	\$ 21,582.47
08/01/11	6/19/11-7/18/11	\$ 22,601.59
09/01/11	7/19/11-8/18/11	\$ 23,541.99
Total		\$ 120,552.80
09/01/11	8/09-8/18/11	\$ 7,655.84
10/01/11	8/19-8/18/11	\$ 19,416.60
11/01/11	8/19-10/18/11	\$ 17,479.75
12/01/11	10/19-11/18/11	\$ 19,666.80
Total		\$ 64,219.20
Total		\$ 184,572.06

Tellico Telephone Company, Inc.
HALO Wireless CABS Invoices Summary

Bill Date	Usage Dates	Revenue
05/16/11	12/12/10-05/11/11	\$ 16,916.46
06/16/11	05/12/11-06/11/11	\$ 4,931.67
07/16/11	06/12/11-07/11/11	\$ 5,814.89
08/16/11	07/12/11-08/09/11	\$ 4,680.79
09/16/11	08/12/11-09/09/11	\$ 1,503.47
Total		\$ 27,744.71
09/16/11	09/09/11-09/16/11	\$ 470.41
10/16/11	09/17/11-10/11/11	\$ 3,303.32
11/16/11	10/12/11-11/11/11	\$ 4,513.36
12/16/11	11/12/11-12/11/11	\$ 6,036.76
Total		\$ 17,756.56
Total		\$ 45,471.29

Crockett Telephone Company, Inc.
HALO Wireless CABS Invoices Summary

Bill Month	Invoice Number	Revenue
06/11/11	14809	\$ 7,677.47
06/11/11	14862	\$ 2,460.85
07/11/11	14875	\$ 15,110.38
Total		\$ 25,238.71
Sep-11	15951	\$ 2,557.48
Oct-11	15981	\$ 4,168.79
Nov-11	15112	\$ 4,168.34
Dec-11	15163	\$ 6,335.44
Total		\$ 17,226.05
Total		\$ 42,464.76

Tennessee Telephone Company
HALO Wireless CABS Invoices Summary

Bill Date	Usage Dates	Revenue
05/16/11	12/12/10-05/11/11	\$ 44,931.72
06/16/11	05/12/11-06/11/11	\$ 20,128.03
07/16/11	06/12/11-07/11/11	\$ 21,587.05
08/16/11	07/12/11-08/09/11	\$ 21,533.10
09/16/11	08/12/11-09/09/11	\$ 6,917.22
Total		\$ 115,097.12
09/16/11	09/09/11-09/11/11	\$ 1,813.61
10/16/11	09/12/11-10/11/11	\$ 9,954.76
11/16/11	10/12/11-11/11/11	\$ 13,424.08
12/16/11	11/12/11-12/11/11	\$ 16,094.72
Total		\$ 15,374.01
Total		\$ 56,398.16
Total		\$ 171,475.28

Peoples Telephone Company
HALO Wireless CABS Invoices Summary

Bill Month	Invoice Number	Revenue
May-11	15036	\$ 6,013.69
Jun-11	15086	\$ 4,469.15
Jul-11	15136	\$ 22,470.62
Total		\$ 34,953.46
Sep-11	15273	\$ 5,713.73
Oct-11	15281	\$ 6,683.17
Nov-11	15329	\$ 7,133.21
Dec-11	15379	\$ 9,492.00
Total		\$ 27,992.11
Total		\$ 62,945.57

West Tennessee Telephone Company, Inc.
HALO Wireless CABS Invoices Summary

Bill Month	Invoice Number	Revenue
May-11	14748	\$ 9,189.75
Jun-11	14794	\$ 2,982.91
Jul-11	14838	\$ 16,425.04
Total		\$ 28,597.70
Sep-11	14931	\$ 2,331.87
Oct-11	14976	\$ 4,237.53
Nov-11	15023	\$ 4,230.22
Dec-11	15072	\$ 8,263.30
Total		\$ 17,691.52
Total		\$ 46,289.22

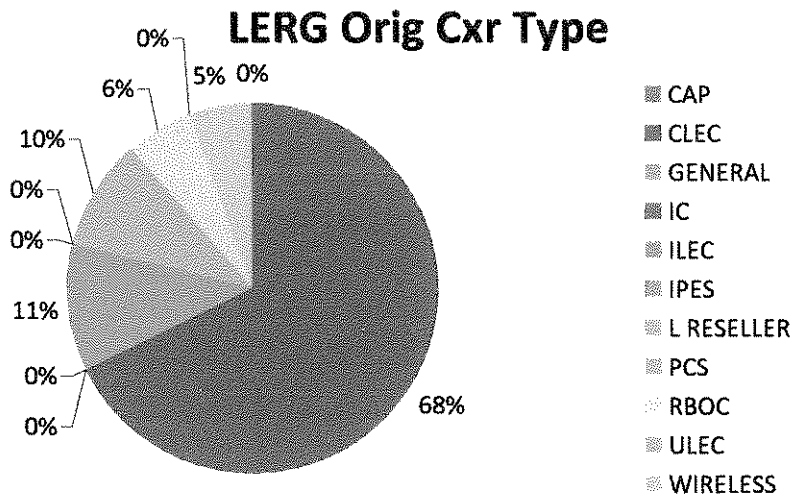
RLEC Exhibit LR-3

Summary Results from SS7 Studies
TDS- TN Companies

	Concord-TN	Tellico-TN	TennesseeTel- Lata 468	TennesseeTel- Lata 470	TennesseeTel- Lata 474	Humphreys Cty- TN
Sample MOUs	165,947	124,236	110,211	181,933	18,661	4,864
Sample period	3/1-31/2011	3/1-31/2011	3/1-31/2011	3/1-31/2011	3/1-31/2011	7/17-23/2011
% CMRS originated	9.32%	24.36%	13.72%	15.14%	6.91%	28.82%
Interstate	55.67%	79.32%	28.71%	34.96%	18.24%	72.33%
Intrastate	32.59%	15.23%	69.26%	52.64%	77.12%	25.07%
Local/CMRS IntramTA	11.74%	5.46%	2.03%	12.40%	4.64%	2.60%
% CMRS intramTA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	3.74%	4.63%	1.51%	1.88%	0.97%	1.21%
Halo Originated	NONE	NONE	NONE	NONE	NONE	NONE

RLEC Exhibit LR-4

LERG Orig CXR Type	Minutes	Percent
CAP	17.1	0.00%
CLEC	411154.6	67.86%
GENERAL	72.6	0.01%
IC	0.5	0.00%
ILEC	67505	11.14%
IPES	11.5	0.00%
L RESELLER	12.3	0.00%
PCS	57778.8	9.54%
RBOC	35971.6	5.94%
ULEC	22.4	0.00%
WIRELESS	33304.9	5.50%
Grand Total	605851.3	100.00%



No Histo Originated cells

[illegible]