January 17, 2003

Via Hand-Delivery
Ms. Sara Kyle, Chairman
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243

> **Re:** *Complaint of Michael Van Wies Against CenturyTel of Ooltewah-Collegedale, Inc., TRA Docket No. 02-00058*

Dear Chairman Kyle:

Pursuant to the January 9, 2003 Order Establishing Revised Procedural Schedule, enclosed are the original and 13 copies of the following documents for filing in the above-referenced docket:

1. Direct Testimony of Wanda Nipper;

2. Direct Testimony of Martin Hale; and

3. Direct Testimony of Terry Crutchfield.

Also enclosed are additional copies of each document, which I would appreciate your stamping as "filed," and returning to me by way of our courier.

Please note that two of the enclosed exhibits (Hale Exhibits 1 and 2) contain confidential proprietary information. These exhibits have been marked "Confidential." **We request that these exhibits be safeguarded, treated as confidential documents, and not posted on your web site.** We have not provided copies of these two confidential exhibits to Mr. Van Wies, pending the entry of a protective order.

Should you have any questions with respect to these filings, please do not hesitate to contact me.

Very truly yours,

R. Dale Grimes

cc: Jonathan Wike, Esq.
     Mr. Michael Van Wies

2350854.1

BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

IN RE:)
)
COMPLAINT OF MICHAEL VAN WIES   )   **Docket No. 02-00058**
AGAINST CENTURYTEL OF   )
OOLTEWAH-COLLEGEDALE, INC.   )

DIRECT TESTIMONY

OF

TERRY CRUTCHFIELD

on behalf of

CenturyTel of Ooltewah-Collegedale, Inc.

Direct Testimony of Terry Crutchfield

1.   **Q.**   **Please state your full name and business address.**

         A: Terry Crutchfield
                   P.O. Box 782
                   Ooltewah, TN 37363

2.   **Q.**   **What position do you hold with CenturyTel?**

         A: I currently serve as the Area Manager in CenturyTel's Ooltewah Central office.

3.   **Q.**   **Please describe your professional education and experience.**

         A: I have been in the telecommunications industry for over 33 years. I have worked in my present position with CenturyTel since 1992. My training and education has included: attended Northwestern Technical College from 1971-72 completing drafting and blueprint reading coursework; attended Chattanooga State Technical Community College from 1983-85 completing electrical engineering coursework; completed CenturyTel Operations training in 1/1992; attended REA Telephone Borrowers Workshop in 4/1992; SS7 training in 12/1992; CenturyTel Management Training seminar in 1/1993; Nortel Telecom DMS Switch training in 1/1993; CenturyTel Centrex training in 3/1993; CenturyTel Hazardous Communications Program training in 12/1993; CenturyTel Capital Budget training in 3/1994; CenturyTel Internet training in 7/1995; and DSL training in 9/2001. My training helps CenturyTel provide the technology and services our customers desire.

4.   **Q.**   **Please summarize your duties as Area Manager.**

         A.   Manage all supervisory personnel, service center personnel and administrative functions assigned to the Area. Implement and monitor a safety program. Ensure the maintenance and installation of telephone equipment is in accordance with corporate and region standards and objectives. Responsible for actively supporting sales and marketing efforts in my area of responsibility. Submit and maintain approved operating budget within established guidelines. Maintain a preventative maintenance program for buildings, vehicles, equipment, and telephone plant in accordance with Company standards. Maintain good relations with the public, public officials and the Tennessee Regulatory Authority. Provide timely and relevant data to Network Design Engineering to ensure facilities are available when required.

5.   **Q.**   **How many access lines does CenturyTel of Ooltewah-Collegedale, Inc. have?**

     A.   CenturyTel of Ooltewah-Collegedale, Inc. has approximately 9100 access lines.

6.   **Q.**   **Please describe the trunk groups between Ooltewah and Chattanooga.**

     A.   CenturyTel and BellSouth maintain four jointly provided two-way message trunk groups connecting BellSouth's network in Chattanooga and CenturyTel's network in Ooltewah. These four groups are arranged with two groups to the local tandem and two trunk groups to the access tandem. The Local and Access Tandem groups are each comprised of one primary high group and one Alternate final group. BellSouth and CenturyTel program the primary high group to overflow to the respective alternative final group.

7.   **Q.**   **Please describe the capacity of these trunk groups to handle calls.**

     A.   For example, local calls from Ooltelwah to Chattanooga first go to the primary local tandem group. This group contains 504 trunks. Each trunk can handle one call at a time. When all 504 trunks on the primary local trunk group are busy, the 505th call is blocked from completion on the primary trunk group and so it (and subsequent calls) are then re-routed, or "overflowed", to the alternate local trunk group. The alternate local trunk group has 408 trunks. When a call is overflowed from one trunk group to another, the caller is unaware that his or her call has been re-routed to an open trunk in the alternate trunk group since this process occurs automatically and almost instantaneously. Since the primary and alternate local trunk groups together have 912 trunks, the Chattanooga local trunk groups can handle 912 calls simultaneously. If a 913th call were received while 912 other calls were still on-going, the 913th call would result in the call not being completed, an occurrence termed a "call blockage", since no other trunks or trunk groups would be available.

       The same process used for the local trunk groups is also used for the access trunk groups.

8.   **Q.**   **Describe how you know when the Chattanooga trunk groups are experiencing call blockages?**

     A.   I supervise Martin "Marty" Hale and Joey Chadwick, both of whom are Communications Technicians in CenturyTel's Central office in Ooltewah. Their duties include monitoring the Chattanooga trunk group for call blockages. Marty bears primary responsibility for this duty, but Joey assumes this duty when Marty is out of the office. The Chattanooga trunk groups are continuously electronically monitored by both CenturyTel and BellSouth for call blockages. CenturyTel's

electronic surveillance equipment collects all trunk activity and generates data reports. Every weekday morning, Marty or Joey review those reports to see if any call blockages have occurred in the prior twenty-four to seventy-two hours (if over a weekend). Either Marty or Joey report to me if any trunk blockage problems are detected or indicated by the data reports. I also will periodically spot-check the activity reports. Prior to October 2001, activity reports were printed in hard copy at a printer. A one to seven page activity report would be generated every hour for every trunk group plus a daily report would be generated for each twenty-four hour period. Additionally, numerous other reports were generated by the DMS 100 switch. However, beginning in October 2001 CenturyTel began receiving all its activity reports via computer. As a result, since that time the activity reports can be accessed by computer.

9. Q. **In 2001 and 2002, how many reports of trunk blockages on the Chattanooga local trunk groups did you receive from Marty or Joey?**

    A. Only one and that was on April 9, 2002 when we had an equipment failure that resulted in 346 blocked calls. Even with this minor incident, CenturyTel's average call completion rate for April was 99.999%, which would be reported as 100%. This same incident resulted in 24 blocked calls on the access trunk groups, with a similarly negligible effect on the overall monthly call completion rate.

10. Q. **What is the average month call completion objective established by the TRA for access trunk groups?**

    A. 98%

11. Q. **What is the average monthly call completion objective established by the TRA for local trunk groups?**

    A. 97%

12. Q. **What average call completion standards are the Chattanooga trunk groups engineered to provide?**

    A. The Access trunk groups are engineered to have a call blockage rate of less than .5%. The local trunk groups are engineered to have a call blockage rate of less than 1%. In other words, the access and local trunk groups are designed to achieve monthly call completion averages for both BellSouth and CenturyTel that meet or exceed, 99.5% and 99%, respectively.

13. Q. **What was CenturyTel's lowest average monthly call completion over the Chattanooga local trunk groups in 2001 and 2002?**

A. 99.999% (which would be reported to the TRA as 100%).

14. Q. **What was CenturyTel's lowest average monthly call completion average over the Chattanooga access trunk groups in 2001 and 2002?**

A. 99%.

15. Q. **Other than CenturyTel, who else monitors the Chattanooga trunk groups for call blockages?**

A. BellSouth. Since the Chattanooga trunk groups are two-way groups between CenturyTel and BellSouth, both companies monitor for trunk blockages.

16. Q. **How do you know that CenturyTel achieved a call completion rate on the Chattanooga trunk groups of at least 99% in 2001 and 2002?**

A. First, if there had been a call blockage problem during that time period, it would have been reported to me. Aside from the single, isolated incident of call blockages that occurred on April 9, 2002 due to equipment failure, I received no reports of call blockages.

Second, CenturyTel's computer system tracks the number of customer trouble reports that are made each month for any reason. Many trouble reports are made that are unrelated to CenturyTel's phone service, such as when a customer's phone is broken or when a customer plugs his satellite TV feed into his phone line by accident. Nonetheless, CenturyTel tracks trouble reports so that trends can be detected. CenturyTel also reports the number of trouble reports per 100 lines to the TRA every quarter. The TRA's objective for a telephone company the size of CenturyTel of Ooltewah-Collegedale, Inc., which has approximately 9,100 lines, is 8.5 trouble reports or less per 100 lines. Throughout 2001 and 2002, CenturyTel's trouble report rate always far exceeded the TRA objective. During the third quarter of 2001, CenturyTel's trouble report rates per 100 lines for Ooltewah was 1.87 for July, 2.68 for August, and 1.49 for September – all far below the TRA objective of 8.5. If the Chattanooga tandem had been experiencing call blockage problems, the rate of trouble reports would be expected to increase.

Third, in addition to the hourly and daily switch maintenance reports, the DMS100 also generated an overall switch maintenance report for CenturyTel's Engineering and Traffic Departments for a specified one-week period of each month. This report is also referred to as a Peg County Report. A copy of this

report for the periods July 7, 2001 through July 13, 2001, August 3, 2001 through August 9, 2001, and September 7, 2001 through September 14, 2001 is attached to the Direct Testimony of Martin J. Hale as Hale Exhibit 2. This report monitors the overall performance and call completion information for the switch, and is not truck specific. These reports all indicate zero (0) blockages during the specified periods.

17. **Q.** **Aside from Mr. Van Wies, how many complaints did CenturyTel receive about trunk blockages on the Chattanooga trunk groups in 2001 or 2002?**

A. Zero that I am aware of. Based on CenturyTel's review of complaints during that period, Mr. Van Wies is the only person who has complained to CenturyTel of trunk blockages or call failures on the Chattanooga trunk groups.

18. **Q.** **What reasons, if any, other than trunk blockages on the Chattanooga trunk groups, could cause a call made through the Chattanooga trunk group to fail?**

A. There are numerous reasons other than a trunk blockage or problem on CenturyTel's end that a call made through the Chattanooga trunk groups might not be successfully completed. For example, the caller could dial a telephone number that is not operational. The caller could telephone into a trunk group outside of CenturyTel's system that is experiencing trunk blockages. The caller could telephone into a home that had faulty or defective equipment or lines. The caller could telephone into a system outside CenturyTel's that is experiencing problems due to equipment failure, repairs or weather (such as ice, winds or thunderstorms). The caller could telephone into a private network or system, such as that of a company, that can only handle so many calls at once. The caller could be telephoning a toll call or 900 number for which he failed to properly enter his calling card or credit card number. There are many reasons unrelated to CenturyTel's trunk groups or systems why a caller might not have his or her call successfully completed. Just because a call that must pass through the Chattanooga trunk groups is not successfully completed does not mean that the Chattanooga trunk groups are experiencing call blockages.

19. **Q.** **What was CenturyTel's practice regarding the retention of the printed trunk group activity reports before all the reports were stored electronically?**

A. CenturyTel would typically maintain all printed activity reports for about three months. After they were about 3 months old, which is when CenturyTel would use them to prepare its quarterly TRA Reports, the printed activity reports would be discarded along with other dated materials produced by the DMS 100 switch, unless an activity report contained data regarding a call blockage pattern or other

problem. Those reports would be retained. Materials that showed no problems were usually automatically discarded after approximately three months.

20. **Q.** **Where are CenturyTel's printed activity reports from the Third Quarter of 2001?**

    A. They no longer exist. The printed activity reports and data that were used to compile the Quarterly TRA for the Third Quarter of 2001 were generated before CenturyTel's new computer system was brought fully on-line in October 2001. The pre-October 2001 printed data generated by the DMS-100 switch were routinely discarded after approximately three months unless it contained information that reflected problems. Since the third quarter 2001 data reflected no problems and was the subject of no specific dispute, it was discarded by January 2002.

21. **Q.** **Why didn't CenturyTel maintain the printed activity reports for more than 3 months or so?**

    A. The data printed out by the DMS-100 switch was voluminous. Every day a minimum of one page of data was produced for every trunk group every hour. Plus additional pages were generated at the end of every 24 hour period for every trunk group. Additionally, numerous other log and line reports were generated. The monthly and daily reports were not separated from all the other data generated by the switch. All the switch maintenance data, including activity reports, were stored together on shelves in the Ooltewah Central office. Since the shelves could only contain so many reams of paper, material that was normal and approximately 3 months old was automatically discarded to make room for new reports. There was no reason to maintain raw data such as normal reports, particularly since summaries of the raw data were filed with the TRA quarterly.

        Furthermore, in the event switch maintenance data was ever needed after the printed reports were discarded, that data could also be downloaded from the front-end processor. The front-end processor has a media storage device that automatically retains data from the DMS 100 switch. Printed reports were routinely purged since the information could also be accessed from the front end processor even after we had discarded the printed copies of the same information, if necessary.

22. **Q.** **Is the DMS-100 switch data from the Third Quarter of 2001 available in the front end processor?**

    A. No. On January 31, 2002 the hard drive for CenturyTel's front end processor failed. As a result, all the data on the hard drive, including all the DMS100 switch data, was lost. On February 19, 2002, we completed installation of a new

external storage device on the processor so a copy of DMS switch data has been stored on the external storage device since February 19, 2002.

23. Q. **How has switch data been stored since CenturyTel replaced the failed front end processor storage device?**

A. Since the switch data and reports are now stored electronically, space for printed data is no longer an issue. As a result, raw switch data is now retained electronically in several places. For example, after reviewing the data reports each day, the data is saved to a computer hard drive. The reports are then saved onto disks for indefinite storage and retention. Additionally, the data continues to be saved automatically in the external storage device of the front-end processor.

24. Q. **Since you have been Area Director, has CenturyTel's call completion rates on any trunk group ever fallen below the average monthly objectives set by the TRA?**

A. No. During the entire time I have been an areas manager, CenturyTel's call completion standards have always far exceeded the TRA objectives. In fact, to my knowledge, CenturyTel has met or exceeded every service standard set by the TRA.

25. Q. **Are you aware of any requirement to maintain these switch maintenance reports?**

A. No. The only requirement that I am aware of concerning record retention is a TRA rule which requires billing records to be maintained for 2 years. CenturyTel does maintain customer bill records for at least 2 years as required.

26. Q. **Does this conclude your testimony?**

A. Yes.

2350756.3

BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

IN RE:	)	
	)	
COMPLAINT OF MICHAEL VAN WIES	)	Docket No. 02-00058
AGAINST CENTURYTEL OF	)	
OOLTEWAH-COLLEGEDALE, INC.	)	

DIRECT TESTIMONY

OF

WANDA NIPPER

on behalf of

CenturyTel of Ooltewah-Collegedale, Inc.

Direct Testimony of Wanda Nipper

1. **Q.** **Please state your full name and business address.**

A: Wanda Nipper
333 Commerce Street
Nashville, Tennessee

2. **Q.** **What is your occupation?**

A: I serve as a Circuit Capacity Manager for BellSouth Telecommunications, Inc. in Nashville, Tennessee.

3. **Q.** **Please describe your professional education and experience.**

A: I have worked for BellSouth Telecommunications in various capacities for 33 years and have been in my present position for 2 years. Prior to my current assignment, I was a systems designer for BellSouth independent company account teams. Overall, I have 27 years experience in working with independent companies in various capacities, primarily related to network operations.

4. **Q.** **Please summarize your duties as a Circuit Capacity Manager.**

A. In this position, I was responsible for the interoffice trunking network in the Chattanooga LATA. Specifically, my responsibilities included monitoring usage on the trunk groups connecting BellSouth central offices to each other and with other entities in this LATA, including independent companies and Competitive Local Exchange Carriers (CLECs). I also planned additions to these trunk groups to ensure sufficient capacity to handle projected traffic demand.

5. **Q.** **Please describe the trunk groups between Ooltewah and Chattanooga.**

A. BellSouth shares four two-way message trunk groups with CenturyTel. These trunk groups connect Chattanooga and Ooltewah. These four groups are arranged with two trunk groups to the local tandem and two trunk groups to the access tandem. The Local and Access Tandem groups are each comprised of one Primary High Usage group and one Alternate Final group. These trunk groups are designed so that when the Primary High Usage group trunks are all busy, calls to Ooltewah are automatically routed to the trunks in the respective Alternative Final group.

7. **Q.** **How does BellSouth know whether the Chattanooga trunk groups are experiencing a call blockage problem?**

A. The Chattanooga trunk groups are continuously electronically monitored by BellSouth for call blockage problems and equipment failures. Data from the network is collected and analyzed by a mechanized system that alerts me when a blockage occurs that requires investigation. I investigate these situations to determine the cause of the blocking and what, if any, corrective action is required. In addition, I regularly review data from this system to determine when additional trunks are required to meet projected traffic demand.

8. **Q.** **Please identify the documents collectively marked Nipper Exhibit 1.**

A: Page 1 of Nipper Exhibit 1 is a diagram that depicts the Chattanooga trunk groups. This diagram shows the Primary High Usage and Alternate Final trunk groups between the Ooltewah switch owned by CenturyTel and the Access Tandem and Local Tandem switches in Chattanooga owned by BellSouth. As I mentioned earlier, these trunk groups are designed so that when the Primary High Usage group trunks are all busy, calls to Ooltewah are automatically routed to the trunks in the respective Alternative Final group.

Pages 2 through 3 are charts that show the average results of BellSouth surveillance of the Chattanooga trunk groups during the peak busy hour over a twelve-month time period from June 25, 2001 to June 24, 2002. As you can see, these surveillance results show zero instances of calls originating from BellSouth experience trunk blockage on the Chattanooga trunk groups during this time period.

9. **Q.** **How many BellSouth customers complained of call blockages on the Chattanooga trunk groups in 2001 and 2002?**

A. I would only be aware of customer complaints of this type if another group alerted me to such complaints and requested my help in investigating a blocking situation. However, during 2001 and 2002, I did not receive any such alerts from other groups regarding complaints of blocking on these trunk groups.

10. **Q.** **What is the average monthly call completion objective established by the TRA for access trunk groups?**

A. 98%

11. Q. **What is the average monthly call completion objective established by the TRA for local trunk groups?**

   A. 97%

12. Q. **What average call completion standards are the Chattanooga trunk groups engineered to provide?**

   A. The Access trunk groups are engineered to have a call blockage rate of less than .5%. The local trunk groups are engineered to have a call blockage rate of less than 1%. In other words, the access and local trunk groups are designed to achieve monthly call completion averages that meet or exceed, 99.5% and 99%, respectively.

13. Q. **What was BellSouth's lowest average monthly call completion average over the Chattanooga trunk groups in 2001 and 2002?**

   A. Based on the information I have, BellSouth's lowest monthly call completion average over the two trunk groups between Chattanooga and Ooltewah from June 25, 2001 to June 24, 2002 was 100%.

11. Q. **What does BellSouth's data show concerning the adequacy of the Chattanooga trunk groups to ensure that call completion rates on these trunk groups meet or exceed TRA objectives?**

   A. BellSouth has no data suggesting that the Chattanooga trunk groups have call blockage problems. On the contrary, all of BellSouth's data shows that the Chattanooga trunk groups are functioning well above all TRA standards. BellSouth's monthly call completion average on these trunk groups is 100%.

12. Q. **Does this conclude your testimony?**

   A. Yes.

Access
CHTGTNNS84T

Local
CHTGTNNS90T

Ooltewah
OLTWTNXADS1
Host

Apison

Collegedale

PH

Overflow

AF

PH

AF

EXHIBIT

Nipper 1

BellSouth to Century Telephone of Ooltewah, TN

Monthly Busy Hour Data
TGSN: AF146253 CHTGTNNS90T/77/OLTWTNXADS1 AF45OGCNAKE
ACNA:　Forecast Resp Cd: TF30　Report Flag:　Time Shift:
Prev Mo Busy Hr: 21:30　Adj Ofrd Load: 4251
CLO:　Due Date:　Pending Adds:　Pending Disconnects:
TIS Switch: N/A　TIS Tlrks: 408
Date range of 6/1/2001 to 6/1/2002

[Monthly Busy Hour Averages]　FINAL LOCAL TANDEM GROUP

Date	Time	TIS	Valid Days	Usage Avg	Maint Avg	PC In Avg	PC Out Avg	OvFl Avg	% OvFl Avg	Hold Time Avg	NMB Avg	Flag	Calc Trnk Req Thrtcl	Calc Trnk Req Actl	Mth Pk Adj Ofrd Ld	Mth Pk Adj OvFl Ld	Yr Pk Adj Ofrd Ld	Yr Pk Adj OvFl Ld	A Pc In Avg	A PC Out Avg	A OvFl Avg	Z PC In Avg	Z PC Out Avg	Z PC OvFl Avg	Adj Ofrd Load Avg
200206	22:00	408	9	2152	0	441	83	0	0	411	0	0	144	118	2859	0	7007	0	441	83	0	0	0	0	2173
200205	22:00	408	11	4680	0	865	220	0	0	431	0	0	216	225	6444	0	8004	0	865	220	0	0	0	0	5179
200204	21:30	408	18	5821	0	1458	264	0	0	338	0	0	221	248	8679	0	8944	0	1458	264	0	0	0	0	5882
200203	21:30	408	13	6651	0	1104	355	0	0	456	0	0	249	285	8811	0	9808	0	1104	355	0	0	0	0	6635
200202	21:00	408	19	6894	0	1064	320	0	0	498	0	0	219	278	8821	0	9914	471	1064	320	0	0	0	0	6922
200201	21:00	408	20	6224	0	875	284	0	0	537	0	0	236	267	7942	0	9914	471	875	284	0	0	0	0	6136
200112	21:30	408	11	5512	0	806	232	0	0	531	0	0	228	244	7368	0	9914	471	806	232	0	0	0	0	5576
200111	21:30	408	19	5834	0	801	253	0	0	554	0	0	233	258	7512	0	9914	471	801	253	0	0	0	0	5826
200110	21:30	408	19	6495	0	936	291	0	0	529	0	0	237	277	8344	0	9914	471	936	291	0	0	0	0	6621
200109	21:30	408	17	6913	0	1120	350	0	0	470	0	0	223	266	8999	0	9914	471	1120	350	0	0	0	0	7007
200108	22:00	408	16	6493	0	844	228	0	0	606	0	0	212	245	7688	0	9914	471	844	228	0	0	0	0	5789
200107	22:00	408	17	5004	0	825	211	0	0	483	0	0	199	211	6334	0	9914	471	825	211	0	0	0	0	5021
200106	22:00	408	14	5979	0	951	260	0	0	494	0	0	238	261	7843	0	9914	471	951	260	0	0	0	0	6200

Monthly Busy Hour Data

TGSN: AF146315 CHTGTNNS84T77/OLTWTNXADS1 AF45DTCNAKE

ACNA: Forecast Resp Cd: TF30   Report Flag: C   Time Shift:

Prev Mo Busy Hr: 06:00   Adj Ofrd Load: 3

CLO: Due Date: Pending Adds: Pending Disconnects:

TIS Switch: N/A   TIS Tirks: 72

Date range of 6/1/2001 to 6/1/2002

[Monthly Busy Hour Averages]

FINAL ACCESS TANDEM GROUP

Date	Time	TIS	Valid Days	Usage Avg	Maint Avg	PC In Avg	PC Out Avg	OvFl Avg	% OvFl Avg	Hold Time Avg	NMB Avg	Flag	Calc Trnk Req Thrtcl	Calc Trnk Req Actl	Mth Pk Adj Ofrd Ld	Mth Pk Adj OvFl Ld	Yr Pk Adj Ofrd Ld	Yr Pk Adj OvFl Ld	A Pc In Avg	A PC Out Avg	A OvFl Avg	Z PC In Avg	Z PC Out Avg	Z PC OvFl Avg	Adj Ofrd Load Avg
200206	14:30	72	1	76	0	133	0	0	0	57	0	0	22	0	76	0	78	0	133	0	0	0	0	0	0
200205	19:00	72	1	2	0	0	9	0	0	22	0	0	22	0	2	0	78	0	0	9	0	0	0	0	0
200204	1:00	72	1	8	0	1	3	0	0	200	0	0	0	0	8	0	78	0	1	3	0	0	0	0	0
200203	12:30	72	8	4	0	2	0	0	0	200	0	0	22	18	8	0	78	0	2	0	0	0	0	0	0
200202	21:30	72	4	10	0	3	0	0	0	333	0	0	28	20	16	0	78	0	3	0	0	0	0	0	6
200201	9:00	72	6	14	0	6	1	0	0	200	0	0	21	16	21	0	78	0	6	1	0	0	0	0	34
200112	15:00	72	10	15	0	5	2	0	0	214	0	0	25	18	22	0	78	0	5	2	0	0	0	0	12
200111	9:00	72	13	14	0	6	0	0	0	233	0	0	18	15	23	0	78	0	6	0	0	0	0	0	16
200110	18:00	72	7	23	0	5	0	0	0	460	0	0	22	16	36	0	78	0	5	0	0	0	0	0	7
200109	18:30	72	12	11	0	4	0	0	0	275	0	0	21	16	30	0	78	0	4	0	0	0	0	0	18
200108	21:30	72	2	16	0	6	2	0	0	200	0	0	29	0	19	0	78	0	6	2	0	0	0	0	13
200107	10:30	72	4	15	0	10	15	0	0	60	0	0	21	15	21	0	78	0	10	15	0	0	0	0	0
200106	11:30	72	5	42	0	8	0	0	0	525	0	0	22	16	114	0	43	0	8	0	0	0	0	0	14

BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

IN RE:	)	
	)	
COMPLAINT OF MICHAEL VAN WIES	)	Docket No. 02-00058
AGAINST CENTURYTEL OF	)	
OOLTEWAH-COLLEGEDALE, INC.	)	

DIRECT TESTIMONY

OF

MARTIN J. HALE

on behalf of

CenturyTel of Ooltewah-Collegedale, Inc.

Direct Testimony of Martin J. Hale

1.   **Q.**   **Please state your full name and business address.**

       A: Martin J. Hale
               5616 Main Street
               Ooltewah, TN 37363

2.   **Q.**   **What position do you hold with CenturyTel?**

       A: I serve as a Communications Technician I/C in CenturyTel's Central office in Ooltewah, Tennessee.

3.   **Q.**   **Please describe your professional education and experience.**

       A: I have been in the telecommunications industry for over 24 years. I have worked in my present position with CenturyTel since July 1996. During that time I have attended many seminars, workshops and other forms of telecommunications training to keep me abreast of the ever-changing industry. My certifications include: DMS-100 Supernode Maintenance, DMS-100 Sytem Translations, DMS-100 Meridian Centrex Translations, DMS-100 Enhanced Network Maintenance, and DMS-100 Advanced Hardware Maintenance.

4.   **Q.**   **Please summarize your duties as a Communications Technician I/C.**

       A.   I am responsible for general DMS 100 switch maintenance and repair and for monitoring all CenturyTel trunk groups. My duties include: DLC maintenance, repair and turn up; fiber equipment maintenance and repair; special circuit installations, maintenance and repair; power equipment and battery maintenance; generator maintenance; and, supervising subordinate employees in my department.

5.   **Q.**   **Please describe the trunk groups between Ooltewah and Chattanooga.**

       A.   CenturyTel and BellSouth maintain four jointly provided two-way trunk groups connecting BellSouth's network in Chattanooga and CenturyTel's network in Ooltewah. These four groups are arranged with two groups to the local tandem and two trunk groups to the access tandem. The Local and Access Tandem groups are each comprised of one primary high group and one Alternate final group. BellSouth and CenturyTel program the primary high group to overflow to the respective alternative final group.

6.   **Q.**   **Please describe how a call is "overflowed" from one trunk group to another.**

A.   For example, local calls from Ooltelwah to Chattanooga first go to the primary local tandem group. This group contains 504 trunks. Each trunk can handle one call at a time. When all 504 trunks on the primary local trunk group are busy, the 505th call is blocked from completion on the primary trunk group and so it (and subsequent calls) are then re-routed, or "overflowed", to the alternate local trunk group. The alternate local trunk group has 408 trunks. When a call is overflowed from one trunk group to another, the caller is unaware that his or her call has been re-routed to an open trunk in the alternate trunk group since this process occurs automatically and almost instantaneously. Since the primary and alternate local trunk groups together have 912 trunks, the Chattanooga local trunk groups can handle 912 calls simultaneously. If a 913th call were received while 912 other calls were still on-going, the 913th call would result in the call not being completed, an occurrence termed a "call blockage", since no other trunks or trunk groups would be available.

The same process used for the local trunk groups is also used for the access trunk groups.

7.   **Q.**   **Describe how you monitor the Chattanooga trunk groups for call blockages?**

A.   Since beginning my current position in July 1996, part of my duties have included monitoring the Chattanooga trunk group for call blockages. The Chattanooga trunk groups are continuously electronically monitored by both CenturyTel and BellSouth for call blockages. CenturyTel's DMS100 equipment monitors and collects all trunk activity and generates data reports also referred to as switch maintenance data. Every weekday morning, I review those reports to see if any call blockages have occurred in the prior twenty-four to seventy-two hours (if over a weekend). On days that I am not at work, the reports are reviewed by Joey Chadwick. If the activity reports reveal any problems I report this information to my supervisor, Terry Crutchfield. In addition, I brief Joey Chadwick so that he is aware of any problems that occured while I was on duty. Likewise, Joey briefs me on any problems revealed by the activity reports during time periods when I am not personally reviewing the reports.

8.   **Q.**   **What form are the activity reports in and when do you review them?**

A: Prior to October 2001, the activity reports were printed in hard copy of a printer. A one to seven page activity report would be generated every hour for every trunk group plus a daily report would be generated for each twenty-four hour period. I used to review these paper reports daily. In addition to other maintenance reports, reports for ninety-two (92) different truck groups are generated hourly and daily by the DMS 100 equipment. However, beginning in October 2001 CenturyTel

began receiving all its activity reports for review electronically via computer. As a result, since that time I have checked the activity reports on my computer terminal.

9. Q. **In 2001 and 2002, how many call blockages did CenturyTel experience on the local Chattanooga trunk groups?**

    A. From October 2001 to the present, CenturyTel has experienced zero call blockages during every twenty-four day except for April 9, 2002. From January to October 2001, I believe that CenturyTel also experienced zero call blockages. If there were any call blockages at all in the first three quarters of 2001, they would have been so few that I am confident our average monthly call completion rate would not have been affected.

10. Q. **How many call blockages occurred on the Chattanooga local trunk groups on April 9, 2002**

    A: An equipment failure in the Ooltewah central office resulted in 346 call blockages on the Chattanooga local trunk groups during a few non-peak hours (7-11 AM) on April 9, 2002. From March 23, 2002 to April 22, 2002, 825,240 calls were attempted on these trunk groups. Aside from the 346 blocked calls, none of the other attempted calls was blocked in the Chattanooga local trunk groups. In other words, on April 9, 2002, the equipment failure caused CenturyTel's average call completion rate for the April 2002 reporting period to decrease from 100% to approximately 99.99959%. This same incident blocked 36 calls on the access trunk groups having an equally negligible effect on the April call completion average for those trunk groups.

11. Q. **Between 2001 and 2002, what was CenturyTel's lowest percentage of call completion on any of the Chattanooga trunk groups?**

    A. 99%.

12. Q. **Please identify and describe Hale Exhibit 1.**

    A. Hale Exhibit 1 contains monthly switch maintenance data reports from the Chattanooga trunk groups from October 1, 2001 through December 31, 2002. These reports reveal that aside from the April 9, 2002 calls discussed above, there were zero instances of call blockage on these trunk groups.

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13.   Q. Other than CenturyTel, who else monitors the Chattanooga trunk groups for call blockages?

A. BellSouth. Since the Chattanooga trunk groups are two-way groups between CenturyTel and BellSouth, both companies monitor for trunk blockages.

14.   Q. How do you know that CenturyTel had no call blocking problems on the Chattanooga trunk groups in 2001 and 2002?

A. First, if there had been a call blockage problem during that time period, I would have seen evidence of it in the activity reports which I regularly reviewed as part of my duties. Aside from the single, isolated incident of call blockages that occurred on April 9, 2002 due to the temporary equipment failure, the activity reports never indicated any call blockages. Because even a single blocked call is such a rare incident on the Chattanooga trunk groups, I am confident that I would remember any other call blockage problem if one had occurred.

Second, I have reviewed the switch maintenance data from October 2001 through all of 2002 and it confirms that the only call blockages that occurred on the Chattanooga trunk groups during this time period occurred on April 9, 2002, as previously discussed.

Third, in addition to the hourly and daily switch maintenance reports, the DMS100 also generated an overall switch maintenance report for CenturyTel's Engineering and Traffic Departments for a specified one-week period of each month. This report is also referred to as a Peg Count Report. A copy of this report for the periods July 7, 2001 through July 13, 2001, August 3, 2001 through August 9, 2001, and September 7, 2001 through September 14, 2001 is attached hereto as Hale Exhibit 2. This report monitors the overall performance and call completion information for the switch, and is not trunk specific.

For all of these reasons, I know that the Chattanooga trunk groups had at least a 99% call completion rate in 2001 and 2002.

15.   Q. What do the reports marked Hale Exhibit 2 show?

A: These Peg Count reports, from the third quarter of 2001, show that none of CenturyTel's trunk groups was experiencing any call blockage or equipment problems during the test periods.

16.   Q. Are there any reasons, other than trunk blockages on the Chattanooga trunk groups, that could cause a call made through the Chattanooga trunk group to fail?

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A. Yes, there are numerous reasons other than a trunk blockage or problem on CenturyTel's end that a call made through the Chattanooga trunk groups might not be successfully completed. For example, the caller could dial a telephone number that is not operational. The caller could telephone into a trunk group outside of CenturyTel's system that is experiencing trunk blockages. The caller could telephone into a home that had faulty or defective equipment or lines. The caller could telephone into a system outside CenturyTel's that is experiencing problems due to equipment failure, repairs or weather (such as ice, winds or thunderstorms). The caller could telephone into a private network or system, such as that of a company, that can only handle so many calls at once. The caller could be telephoning a toll call or 900 number for which he failed to properly enter his calling card or credit card number. There are many reasons unrelated to CenturyTel's trunk groups or systems why a caller might not have his or her call successfully completed. Just because a call that must pass through the Chattanooga trunk groups is not successfully completed does not mean that the Chattanooga trunk groups are experiencing call blockages.

17. Q. **What was CenturyTel's practice regarding the retention of the printed trunk group activity reports before all the reports were stored electronically?**

A. CenturyTel would typically maintain all printed activity reports for about three months. After they were 3 months old, the reports would be discarded unless a report contained data regarding a call blockage pattern or other problem. Those reports would be retained. Activity reports that showed no problems were discarded after approximately three months.

18. Q. **Where are the printed activity reports that were used to compile CenturyTel's Quarterly Report to the TRA for the Third Quarter of 2001?**

A. They no longer exist. The activity reports and data that were used to compile the Quarterly TRA for the Third Quarter of 2001 were generated before CenturyTel's new computer system was brought fully on-line in October 2001. The pre-October 2001 printed data generated by the DMS-100 switch were routinely discarded after approximately three months unless it contained information that reflected problems. Since the third quarter 2001 data reflected no problems and was the subject of no specific dispute, it was discarded by January 2002.

19. Q. **Why didn't CenturyTel maintain the printed activity reports for more than 3 months or so?**

A. The data printed out by the DMS-100 switch was voluminous. Every day a minimum of one page of data was produced for every trunk group every hour. Plus additional pages were generated at the end of every 24 hour period for every

trunk group. Additionally, numerous other log and line reports were generated. The monthly and daily reports were not separated from all the other data generated by the switch. All the switch maintenance data, including activity reports, were stored together on shelves in the Ooltewah Central office. Since the shelves could only contain so many reams of paper, printed material that was normal and approximately 3 months old was automatically discarded to make room for new reports. There was no reason to maintain raw data such as normal reports, particularly since summaries of the raw data were filed with the TRA quarterly.

Furthermore, in the event switch maintenance data was ever needed after the printed reports were discarded, that data could also be downloaded from the front-end processor. The front-end processor has a media storage device that automatically retains this and other switch maintenance and alarm data from the DMS 100 switch. Printed reports were routinely purged since the information could also be accessed from the front end processor even after we had discarded the printed copies of the same information, if necessary.

20. Q. **Is the DMS-100 switch data from the Third Quarter of 2001 available in the front end processor?**

A. No. On January 31, 2002 the hard drive for CenturyTel's front end processor failed. As a result, all the data on the hard drive, including all the DMS100 switch maintenance data, was lost. On February 19, 2002, we completed installation of a new external storage device on the processor so everything has been up and running again since February 19, 2002. Because the hard drive failed on the front end processor, the information stored was not retrievable.

21. Q. **How has switch data been stored since CenturyTel replaced the failed front end processor?**

A. Since the switch data and reports are now reviewed and stored electronically, space for printed data is no longer an issue. As a result, switch maintenance data and alarm information is now retained electronically in several places. For example, after reviewing the data reports each day, the data is saved to a computer hard drive. The reports are then saved onto disks for indefinite storage and retention. Additionally, the data continues to be saved automatically in the new external storage device of the front-end processor.

22. Q. **Does this conclude your testimony?**

A. Yes.