Exhibit No.:	
Issue:	*Traffic Study Methodology*
Witness:	*Jennifer Powell*
Sponsoring Party:	*CenturyTel of Missouri, LLC & Spectra Communications Group, LLC d/b/a CenturyTel*
Type of Exhibit:	*Rebuttal Testimony*
Case No.:	*TC-2008-0225*
Date Testimony Prepared	*December 19, 2008*

CENTURYTEL OF MISSOURI, LLC
and
SPECTRA COMMUNICATIONS GROUP, LLC
d/b/a CENTURYTEL

REBUTTAL TESTIMONY

OF

JENNIFER POWELL

CASE NO. TC-2008-0225

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

Socket Telecom, LLC, Complainant,	)	
v.	)	
	)	**Case No. TC-2008-0225**
CenturyTel of Missouri, LLC and Spectra Communications Group, LLC d/b/a CenturyTel, Respondents.	)	

AFFIDAVIT OF JENNIFER POWELL

STATE OF LOUISIANA)
) SS.
PARISH OF OUACHITA)

I, **Jennifer Powell**, of lawful age and being duly sworn, state as follows:

1. My name is Jennifer Powell. I am presently employed with CenturyTel Service Group, LLC as Manager of SS7 Data Management .

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony in the above-referenced case.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge, information and belief.

Jennifer Powell
Jennifer Powell

Subscribed and sworn to before me this 18th day of December, 2008.

Notary Public

My Commission expires: perpetual
(SEAL)

REBUTTAL TESTIMONY

OF

JENNIFER POWELL

CASE NO. TC-2008-0225

I. INTRODUCTION

Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A: My name is Jennifer Powell. My business address is 100 CenturyTel Drive, Monroe, LA 71203.

Q: BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A: I am employed with CenturyTel Service Group, LLC as Manager of SS7 Data Management.

Q: PLEASE DESCRIBE YOUR EDUCATION BACKGROUND AND WORK RELATED TRAINING AND EXPERIENCE.

A: I hold a Bachelor of Business Administration degree from University of Louisiana in Monroe, and I have attended TRA's "Understanding SS7 for IN, Wireless, and VoIP," and CTIA's critical issues forum on Wireless LNP. I began my telecommunications career in 1989 in CenturyTel Wireless Accounting. Since that time I have held various positions and have had responsibilities in Engineering as Facilities Coordinator-Wireless (responsible for polling and producing Wireless Traffic Studies, ordering facilities to meet traffic demand, and processing vendor facility bills for payment); as SS7 Engineer (concerning LNP implementation and Number Pooling within CenturyTel and providing SS7

signaling requirements and options for the Wireless, CLEC, and Long Distance affiliates of CenturyTel); Project Lead and Network Cost Manager (including responsibility for Contract negotiations for all of CenturyTel bandwidth requirements). In 2007, I became Manager of SS7 Data Management, where we are responsible for analyzing, investigating, and resolving issues and events identified by the process of converting SS7 message units to CDRs (Call Detail Records) and for creating formal, trending, and usage reports, as well as ad hoc reporting to support specific initiatives.

Q: HAVE YOU PREVIOUSLY TESTIFIED OR FILED TESTIMONY BEFORE A PUBLIC UTILITY OR PUBLIC SERVICE COMMISSION?

A: No, I have not.

Q. ON WHOSE BEHALF ARE YOU SUBMITTING REBUTTAL TESTIMONY?

A. I am submitting rebuttal testimony on behalf of CenturyTel of Missouri, LLC and Spectra Communications Group, LLC d/b/a CenturyTel (referred to collectively as CenturyTel as a matter of convenience).

II. PURPOSE OF TESTIMONY

Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the methodology that CenturyTel uses to calculate the total traffic between Socket Telecom, LLC's ("Socket") network and individual CenturyTel exchanges and to determine the interconnection trunk requirements, in accordance with Article V of the parties' Interconnection

Agreements regarding the thresholds for establishing additional points of interconnection ("POIs").

Q. WHAT IS THE SOURCE CENTURYTEL IS USING TO CALCULATE THE TOTAL TRAFFIC AND HOW IS THE TRAFFIC CALCULATED?

A. CenturyTel utilizes SS7 detail call records as the source of data from which it calculates total traffic. For traffic originating from a CenturyTel exchange to Socket's network during a given month, we aggregate successful calls where the called party number (CdPN) consists of a Socket assigned NPA-NXX-X. The CdPN will be an actual Socket number or the Local Routing Number (LRN) in the case of a ported number. We exclude any traffic that was exchanged over the direct interconnection trunks to Socket's St. Louis switch.

To identify the traffic terminating at individual CenturyTel exchanges from Socket's network, a call detail records report is pulled on Socket terminating traffic to CenturyTel for a given month to aggregate calls where the Calling Party Number (CgPN) consists of a Socket assigned NPA-NXX-X. Traffic exchanged directly with Socket's St. Louis switch is excluded.

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE PROCESS USED TO CONVERT THESE CALL RECORDS INTO TRAFFIC DATA.

A. The timetag or End date and time of the last event in the call of the resulting SS7 detailed call record is then separated into Date, Hour and Time. We enrich the SS7 call detail record with Locality, Name and State for the CgPN and CdPN using the Local Exchange Routing Guide LERG 6 (NPA-NXX Block assignment maintained by Telecordia). The SS7 data is then split by the direction of the calls

outgoing and incoming. We delete any traffic carried by an IXC, and we delete traffic associated with CenturyTel tandems that it did not Host. This is to prevent duplicate reporting. We are reporting from the End Office perspective to be sure we pick up all traffic originating from a CenturyTel exchange no matter which tandem it went through to get to Socket. The records are further filtered for local calls only using the local calling guide based on direction. The resulting records are then sorted and aggregated in this specific order: Timetag Date, Timetag Hour, Locality name, Trunk Group Number, number of calls, and Minutes of Use (MOU). MOU is the sum of Ring time, Conversation time, and Release time. The aggregated summary file is sent to an outfile as tab delimited to be used in Excel.

Q. HOW ARE THE RESULTS OF THE SS7 CALL DETAIL EXTRACTION USED TO DETERMINE THE TOTAL TRAFFIC AT PEAK?

A. We have used Excel to create a pivot table from the summary file and for each Locality Name (CenturyTel Exchange) summarizing total traffic by date and hour. The pivot table is a template organized with each Exchange as a page, a column for each day of the month (*e.g.*, 28 to 31 columns depending on the month), and 24 rows numbered 00 to 23 for each hour of day. The Sum of the MOUs are populated as data based on date and hour of the call.

Q. HOW ARE THE HOURLY DATA FOR EACH DAY USED IN TRUNK CALCULATIONS?

A. The peak or busiest hour for each day is selected from the 24 hour segments with the following Excel formula (=IF(B29 > 0, LARGE(B5:B28,1),"")). The formula

takes the largest entry for the day that is greater than 0 to determine the peak of the day. The peak MOU is automatically entered below the total daily traffic on the pivot table. The top 5 Peak hours with the highest MOU for the month are then averaged using the formula: (=(LARGE(B30:AE30,1) + (=(LARGE(B30:AE30,2)+(LARGE(B30:AE30,3) + (=(LARGE(B30:AE30,4) + (=(LARGE(B30:AE30,5))/5) This formula looks at all the peak MOU for each day and sums the first through the fifth highest peak MOU, then divides that total by 5 to get the average peak MOU for the month. The monthly average MOU is then converted into Erlangs by dividing MOU by 60. The calculated Erlangs are linked to the Erlang B calculation table for a B.01 Grade of Service to determine the number of trunks required to handle the peak traffic for the month. The Erlang B calculation table is a function built in Excel. The number of trunks required is then converted into equivalent DS1s by dividing trunks required by 24.

Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes it does.