

Exhibit No.:
Issue: Traffic Studies
Witness: Joye B. Anderson
Sponsoring Party: CenturyTel of Missouri, LLC &
Spectra Communications
Group, LLC d/b/a CenturyTel
Type of Exhibit: Rebuttal Testimony
Case No.: TC-2007-0341
Date Testimony Prepared: May 22, 2007

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

REBUTTAL TESTIMONY

OF

JOYE B. ANDERSON

CASE NO. TC-2007-0341

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

Socket Telecom, LLC,
Complainant,

v.

CenturyTel of Missouri, LLC and
Spectra Communications Group, LLC
d/b/a CenturyTel,
Respondents.

Case No. TC-2007-0341

AFFIDAVIT OF JOYE B. ANDERSON

STATE OF LOUISIANA

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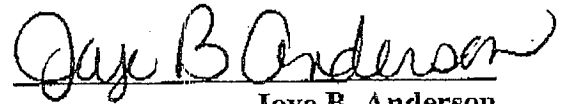
)

I, **Joye B. Anderson**, of lawful age and being duly sworn, state as follows:

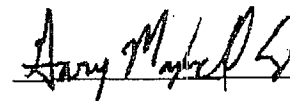
1. My name is Joye B. Anderson. I am presently a Manager in Network Support Centers for CenturyTel Service Group, LLC.

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.


Joye B. Anderson

Subscribed and sworn to before me this 22nd day of May, 2007.


Notary Public

My Commission expires: At death
(SEAL)

Gary Maxwell Cox
Louisiana Bar Roll No. 27419
Notary Public, Ouachita Parish, Louisiana
My Commission is for Life

REBUTTAL TESTIMONY

OF

JOYE B. ANDERSON

CASE NO. TC-2007-0341

IDENTIFICATION OF WITNESS

Q. Please state your name and business address.

A. My name is Joye B. Anderson. My business address is 100 CenturyTel Drive, Monroe, Louisiana 71203.

Q. Please state your current employment and on whose behalf are you testifying in this proceeding?

A. I am a Manager in Network Support Centers for CenturyTel Service Group, LLC and I am testifying on behalf of CenturyTel of Missouri, LLC and Spectra Communications Group, LLC d/b/a CenturyTel (referred to collectively as “CenturyTel”) in this proceeding.

Q. Please describe your educational background and business/regulatory experience.

A. I attended Louisiana Tech University, and I have been a CenturyTel employee since August 1990. For the first 10 years, I was in the Carrier Access Billing group, serving in three different roles there. My initial role there was as a Specialist III, where responsibilities included validating Incumbent Local Exchange Carrier ("ILEC") customer bills, preparing and entering adjustments or other charges and credits to bills, validating traffic patterns for ILECs, etc. Also, I served in the role of Assistant to the Director of Revenues. The last three years were as Supervisor, Switched Access Billing.

1 Since joining the Network Service Center ("NSC") I have attended various training
2 courses, including: (1) Network Traffic Concepts, (2) Internetworking Routers and
3 Switches, (3) VoIP Fundamentals, (4) TCP/IP Networking, (5) Voice Over IP
4 Foundations, and (6) Networking Fundamentals.

5 **Q. What are your responsibilities as Manager of Network Support Centers for**
6 **CenturyTel Support Group, LLC?**

7 A. In July 2000, I joined the Network Support Center ("NSC") as a Manager, and I am
8 responsible for the team that performs traffic studies for CenturyTel affiliates. This
9 involves traffic studies for the switched voice and data networks, coordinating efforts
10 with Engineering and various vendors to determine what network elements should be
11 studied, etc. Other responsibilities have included Manager over the Surveillance team,
12 which is responsible for monitoring alarms for all networks; and I also have managed the
13 team that is responsible for the NSC systems – systems that aggregate alarms into the fault
14 management system. Other responsibilities include managing the development and upkeep
15 of various applications that are utilized by the NSC as well as other CenturyTel departments.

16 **PURPOSE OF TESTIMONY**

17 **Q. What is the purpose of your testimony?**

18 A. The purpose of my testimony is to provide an understanding of how traffic studies are
19 performed for the CenturyTel Switched Voice Network; to demonstrate the grade of
20 service used for all switched voice studies; and to explain how CenturyTel's traffic
21 studies are calculated. Finally, I will verify that the traffic study for Willow Springs,
22 Missouri is accurate.

23 **Q. How does CenturyTel perform its traffic studies?**

1 A. CenturyTel performs engineering studies for the switched voice network by polling
2 switches at periodic intervals. This traffic data is polled daily, and files are then
3 transferred to our reporting system. Daily data is compiled into seven days of data,
4 Monday through Sunday, and scheduled reports ran. These reports demonstrate the
5 number of trunks required to handle the load of traffic encountered during this study time
6 frame. The procedures I describe are how CenturyTel performs all of its engineering
7 traffic studies to determine our network engineering needs.

8 **Q. How do you use this data in your traffic study calculations?**

9 A. Of this seven days worth of data, the reports are calculated based upon an average of the
10 five highest Busy Hour CCS (Centum Call Seconds) for that week, omitting the lowest
11 two hours, and comparing these to the Erlang B Trunk Capacity Grade of Service of .001.
12 For more specifics on how the reports are calculated, see Schedule JBA #1 (Summary
13 Busy Hour Trunk and Link Performance Report Description.), and Schedule JBA #2
14 (Table F – Erlang B).

15 **Q. Can you explain what the “Erlang B Trunk Capacity Grade of Service of .001”**
16 **means?**

17 A. The Erlang B Trunk Capacity Grade of Service of .001 refers to the probability of 1 in
18 every 1000 calls on a specific trunk group being blocked. CenturyTel maintains a
19 conservative blocking percentage in an effort to ensure that adequate network facilities
20 are available to handle calls with minimal blockage. The Erlang B table is hard-coded in
21 the system we are now using.

22 **Q. Has CenturyTel used other calculation tables in the past?**

1 A. The system CenturyTel used prior to the Erlang B tables utilized the Poisson tables. The
2 Poisson tables used a Capacity Grade of Service tables used of .01; or the probability that
3 1 in 100 calls would be blocked. During the conversion to the new system, with Erlang
4 B, the .001 call blocking probability tracked most closely to the .01 call blocking
5 probability that was previously utilized in the Poisson table. Therefore, the .001 call
6 blocking probability has been utilized exclusively for CenturyTel's engineering (trunk
7 capacity) studies.

8 **Q. How does the Willow Springs Traffic Study relate to the process outlined above?**

9 A. The Willow Springs traffic study in question was generated from data that was polled for
10 Monday 1/29/07 through Sunday 2/4/07, using the method outlined above for report
11 generation. The traffic data for this time period has been validated to confirm accurate
12 data was polled and reported.

13 **Q. How did you confirm the accuracy of the traffic data pulled?**

14 A. Traffic data is polled periodically and stored in a traffic collection device in the field. To
15 validate that the data is accurate, data was secured from this device for the applicable
16 timeframe. The PEG (Calls) and the USE (Usage in CCS) were totaled for OGP#
17 (Outgoing) and IGP# (Incoming). These numbers tied to what was processed on the
18 report, thus validating the data that is reported.

19 **Q. What were the findings of the Willow Springs Traffic Study?**

20 A. The two trunk groups that were being reviewed were Trunk Group 107, the Internet
21 Service Provider ("ISP") trunk group, and Trunk Group 104, which is the common trunk
22 group. Trunk Group 104 currently has 96 trunks. This is not enough trunks to carry all of
23 the traffic that it would have to carry if the traffic associated with Trunk Group 107 is

1 moved onto Trunk Group 104. Based upon this study, Trunk Group 104 would require
2 178 trunks to carry the traffic from both trunk groups.

3 **Q. Does that conclude your testimony?**

4 **A.** Yes, it does.

Summary Busy Hour Trunk and Link Performance Report Description

Busy Hour Values for Each Day of the Week						
Trunk Id. or Link Id.	Trunk Name	Peg Count	CCS	Ovfl		
Trunk Group or Link # from Raw Switch Data	Trunk Group Name (Available if Identified by Central Office) (not available for Links)	# of Calls (occurrences) related to the same hour of the Busy Hour CCS Value for the Day -->	CCS Value for the Busiest Hour of the Day (usage in 100 Second Scans)	# of Busy Hour Overflows Related to the Same Hour of the Busy Hour CCS Value <-- for the Day		
Busy Day	Hour (BH)	High CCS	Avg. BH CCS	Avg. 5 BH CCS	Trunks Equipped (not used for Links)	Trunks Working (not used for Links)
Day Related to Highest Busy Hour CCS Value of the Week ----->	Busiest Hour Related to Highest CCS Value of the Week ----->	Highest Busy Hour CCS Value for the Week	Average of Busy Hour CCS Values of all Days in the Week	Average of the 5 Day Highest Busy Hour CCS Values for the Week (Determines Trunks or Links Required)	# of Equipped Members	# of Working Members
					# of Circuits Required to Handle the Load of Traffic Encountered During this Study Based on the Avg. 5 BH CCS Column, Using Erlang B Trunk Capacity Table at a .001 GOS (grade of service of 1/1000 is the probability of 1 in 1000 calls being blocked)	Number of Trunks Over or -Under -Under Represents the # of Additional Circuits Needed

One CCS (Centum Call Seconds) is equivalent to 100 seconds.
Take the CCS usage and multiply by 100 to get the usage in seconds.

To calculate MOU (minutes of use):
CCS Multiplied by 100, divided by 60 = MOU
Or
CCS divided by .6 = MOU

To calculate the Avg. Holding Time:
MOU divided by Pegs = Avg HT

ERLANG TABLES

TABLE F - ERLANG B

	P.0001	P.0002	P.0003	P.0005	P.001	P.002	P.003	P.005	P.01	P.02	P.03	P.05	P.10
1	0.001	0.002	0.003	0.005	0.01	0.02	0.03	0.05	0.1	0.2	0.3	0.5	1
2	0.015	0.021	0.025	0.033	0.046	0.066	0.081	0.106	0.153	0.224	0.282	0.382	2
3	0.087	0.111	0.127	0.152	0.194	0.249	0.289	0.349	0.456	0.603	0.716	0.900	3
4	0.235	0.283	0.316	0.363	0.440	0.536	0.602	0.702	0.870	1.093	1.259	1.525	4
5	0.452	0.527	0.578	0.649	0.763	0.900	0.995	1.12	1.361	1.658	1.876	2.19	5
6	0.729	0.832	0.900	0.996	1.146	1.326	1.447	1.622	1.909	2.276	2.543	2.961	6
7	1.055	1.186	1.273	1.393	1.579	1.799	1.947	2.158	2.507	2.936	3.250	3.738	7
8	1.422	1.582	1.686	1.830	2.052	2.311	2.484	2.730	3.128	3.627	3.987	4.543	8
9	1.826	2.014	2.135	2.302	2.558	2.855	3.053	3.333	3.783	4.345	4.748	5.371	9
10	2.261	2.495	2.644	2.833	3.083	3.427	3.648	3.961	4.462	5.084	5.530	6.216	10
11	2.722	2.963	3.118	3.330	3.652	4.022	4.267	4.611	5.160	5.842	6.378	7.077	11
12	3.207	3.475	3.646	3.879	4.232	4.637	4.904	5.279	5.878	6.615	7.141	7.950	12
13	3.714	4.006	4.193	4.447	4.831	5.271	5.559	5.964	6.608	7.402	7.967	8.835	13
14	4.239	4.556	4.758	5.033	5.447	5.920	6.229	6.664	7.352	8.201	8.804	9.730	14
15	4.782	5.123	5.340	5.654	6.078	6.583	6.913	7.378	8.085	9.010	9.650	10.630	15
16	5.339	5.704	5.936	6.250	6.772	7.259	7.610	8.100	8.875	9.829	10.510	11.540	16
17	5.911	6.300	6.546	6.879	7.379	7.946	8.317	8.834	9.652	10.660	11.370	12.460	17
18	6.496	6.907	7.167	7.519	8.046	8.644	9.034	9.578	10.440	11.490	12.240	13.390	18
19	7.093	7.526	7.800	8.170	8.724	9.352	9.761	10.330	11.230	12.330	13.120	14.320	19
20	7.701	8.159	8.440	8.810	9.378	10.000	10.400	10.980	11.890	13.000	13.780	15.000	20
21	8.319	8.795	9.096	9.502	10.110	10.790	11.240	11.860	12.840	14.040	14.890	16.190	21
22	8.947	9.444	9.758	10.180	10.810	11.530	11.990	12.640	13.650	14.900	15.780	17.130	22
23	9.583	10.100	10.430	10.890	11.530	12.270	12.750	13.420	14.470	15.760	16.680	18.080	23
24	10.230	10.770	11.110	11.560	12.240	13.010	13.510	14.200	15.300	16.630	17.580	19.030	24
25	10.887	11.440	11.790	12.260	12.970	13.750	14.230	14.940	16.060	17.390	18.380	20.000	25
26	11.540	12.120	12.480	12.970	13.700	14.520	15.060	15.800	16.960	18.380	19.390	21.190	26
27	12.210	12.810	13.180	13.690	14.440	15.290	15.840	16.600	17.800	19.270	20.310	22.200	27
28	12.880	13.500	13.890	14.410	15.180	16.060	16.620	17.410	18.640	20.150	21.220	23.170	28
29	13.560	14.200	14.600	15.130	15.930	16.830	17.410	18.220	19.490	21.040	22.140	24.160	29
30	14.250	14.900	15.300	15.840	16.660	17.580	18.170	19.000	20.300	21.930	23.060	25.150	30
31	14.940	15.610	16.030	16.600	17.440	18.390	18.980	19.850	21.190	22.830	23.990	26.150	31
32	15.630	16.330	16.760	17.340	18.210	19.180	19.810	20.680	22.050	23.730	24.920	27.150	32
33	16.340	17.040	17.490	18.090	18.970	19.970	20.610	21.510	22.910	24.630	25.850	28.150	33
34	17.040	17.770	18.220	18.840	19.740	20.760	21.420	22.340	23.770	25.530	26.780	29.150	34
35	17.750	18.500	18.960	19.590	20.500	21.540	22.210	23.150	24.600	26.400	27.680	30.100	35
36	18.470	19.230	19.710	20.350	21.300	22.360	23.050	24.010	25.510	27.340	28.650	31.100	36
37	19.190	19.970	20.450	21.110	22.080	23.170	23.870	24.850	26.380	28.250	29.590	32.100	37
38	19.910	20.710	21.210	21.870	22.860	23.970	24.690	25.690	27.250	29.170	30.530	33.000	38
39	20.640	21.450	21.960	22.640	23.650	24.790	25.520	26.530	28.130	30.080	31.470	33.900	39
40	21.370	22.200	22.720	23.410	24.440	25.600	26.350	27.380	29.010	30.990	32.410	34.850	40
41	22.110	22.950	23.480	24.190	25.240	26.420	27.180	28.230	29.890	31.920	33.360	35.800	41
42	22.850	23.710	24.250	24.970	26.040	27.240	28.010	29.090	30.770	32.840	34.310	36.750	42
43	23.590	24.460	25.010	25.750	26.840	28.060	28.850	29.940	31.660	33.760	35.250	37.700	43
44	24.330	25.230	25.780	26.530	27.640	28.880	29.690	30.800	32.540	34.680	36.200	38.660	44
45	25.080	25.990	26.550	27.310	28.440	29.680	30.500	31.630	33.400	35.600	37.150	39.650	45
46	25.830	26.760	27.330	28.110	29.250	30.500	31.370	32.520	34.320	36.530	38.110	40.540	46
47	26.590	27.530	28.110	28.900	30.060	31.370	32.210	33.380	35.210	37.460	39.060	41.540	47
48	27.340	28.300	28.900	29.690	30.880	32.200	33.060	34.240	36.110	38.390	40.020	42.540	48
49	28.100	29.070	29.680	30.490	31.690	33.040	33.910	35.110	37.000	39.320	40.970	43.530	49
50	28.870	29.850	30.470	31.290	32.500	33.800	34.680	35.890	37.800	40.150	41.950	44.530	50

TABLE F - ERLANG B

ERLANG TABLES

	P.0001	P.0002	P.0003	P.0005	P.001	P.002	P.003	P.005	P.01	P.02	P.03	P.05	P.1
51	29.630	30.630	31.260	32.090	33.330	34.720	35.610	36.850	38.800	41.190	42.890	45.530	51
52	30.400	31.410	32.050	32.900	34.150	35.560	36.460	37.720	39.700	42.120	43.850	46.530	52
53	31.170	32.200	32.840	33.700	34.980	36.400	37.320	38.600	40.600	43.060	44.810	47.530	53
54	31.940	32.990	33.640	34.510	35.800	37.250	38.180	39.470	41.500	44.000	45.770	48.540	54
55	32.720	33.770	34.420	35.320	36.630	38.090	39.040	40.330	42.410	44.930	46.740	49.540	55
56	33.490	34.570	35.240	36.130	37.460	38.940	39.900	41.230	43.310	45.870	47.700	50.540	56
57	34.270	35.360	36.040	36.950	38.290	39.790	40.760	42.110	44.220	46.820	48.670	51.550	57
58	35.050	36.150	36.840	37.760	39.120	40.640	41.630	42.990	45.130	47.760	49.630	52.550	58
59	35.840	36.950	37.650	38.580	39.960	41.500	42.490	43.870	46.040	48.700	50.600	53.560	59
60	36.620	37.750	38.460	39.400	40.790	42.350	43.360	44.760	46.950	49.640	51.570	54.560	60
61	37.410	38.550	39.270	40.220	41.630	43.210	44.230	45.640	47.860	50.590	52.540	55.570	61
62	38.200	39.360	40.080	41.040	42.470	44.070	45.100	46.530	48.770	51.530	53.510	56.580	62
63	38.990	40.160	40.890	41.870	43.310	44.930	45.970	47.410	49.690	52.480	54.480	57.590	63
64	39.780	40.970	41.710	42.690	44.150	45.790	46.840	48.300	50.600	53.430	55.450	58.600	64
65	40.580	41.780	42.520	43.500	45.000	46.650	47.720	49.180	51.520	54.380	56.420	59.610	65
66	41.370	42.590	43.340	44.350	45.840	47.510	48.590	50.090	52.430	55.320	57.390	60.620	66
67	42.170	43.400	44.160	45.180	46.690	48.380	49.470	50.980	53.350	56.270	58.370	61.630	67
68	42.970	44.210	44.980	46.010	47.540	49.240	50.340	51.870	54.270	57.220	59.340	62.640	68
69	43.770	45.020	45.800	46.850	48.390	50.110	51.220	52.770	55.190	58.180	60.320	63.650	69
70	44.580	45.840	46.630	47.680	49.240	50.980	52.100	53.660	56.110	59.130	61.290	64.620	70
71	45.380	46.660	47.450	48.520	50.090	51.850	52.980	54.560	57.030	60.080	62.270	65.680	71
72	46.190	47.480	48.280	49.360	50.940	52.720	53.860	55.450	57.950	61.030	63.240	66.690	72
73	46.990	48.300	49.110	50.190	51.800	53.590	54.750	56.350	58.880	61.990	64.220	67.710	73
74	47.800	49.120	49.940	51.030	52.650	54.460	55.630	57.250	60.800	63.940	66.200	69.720	74
75	48.610	49.940	50.770	51.870	53.500	55.340	56.520	58.150	60.730	63.900	66.180	69.720	75
76	49.430	50.770	51.600	52.720	54.370	56.210	57.400	59.050	61.650	64.860	67.160	70.750	76
77	50.240	51.590	52.430	53.560	55.230	57.090	58.290	59.960	62.580	65.810	68.130	71.770	77
78	51.050	52.420	53.270	54.410	56.090	57.960	59.180	60.860	63.510	66.770	69.110	72.780	78
79	51.870	53.250	54.110	55.250	56.950	58.840	60.060	61.760	64.430	67.730	70.100	73.800	79
80	52.680	54.080	54.940	56.100	57.810	59.720	60.950	62.670	65.360	68.690	71.080	74.820	80
81	53.500	54.910	55.780	56.950	58.670	60.600	61.840	63.570	66.290	69.650	72.060	75.840	81
82	54.320	55.750	56.620	57.800	59.540	61.480	62.740	64.480	67.220	70.610	73.040	76.850	82
83	55.140	56.570	57.460	58.650	60.400	62.360	63.630	65.390	68.150	71.570	74.020	77.870	83
84	55.970	57.400	58.300	59.500	61.270	63.240	64.520	66.290	69.080	72.530	75.010	78.890	84
85	56.790	58.240	59.140	60.350	62.130	64.100	65.380	67.150	70.000	73.490	75.990	79.900	85
86	57.610	59.080	59.990	61.200	63.000	65.010	66.310	68.110	70.950	74.450	76.970	80.930	86
87	58.440	59.910	60.830	62.060	63.870	65.900	67.200	69.020	71.880	75.410	77.960	81.950	87
88	59.270	60.750	61.680	62.910	64.740	66.780	68.100	69.930	72.810	76.380	78.940	82.970	88
89	60.090	61.590	62.520	63.770	65.610	67.670	69.000	70.840	73.750	77.340	79.930	83.990	89
90	60.900	62.420	63.350	64.600	66.480	68.550	69.890	71.750	74.680	78.310	80.910	84.010	90
91	61.750	63.270	64.220	65.490	67.350	69.440	70.790	72.670	75.620	79.270	81.900	86.030	91
92	62.580	64.110	65.070	66.340	68.230	70.330	71.690	73.580	76.550	80.230	82.890	87.060	92
93	63.410	64.960	65.920	67.200	69.100	71.220	72.590	74.490	77.490	81.200	83.870	88.080	93
94	64.250	65.800	66.770	68.070	69.980	72.110	73.490	75.410	78.430	82.170	84.860	89.100	94
95	65.080	66.650	67.620	68.930	70.850	72.980	74.360	76.300	79.350	83.130	85.850	90.000	95
96	65.920	67.490	68.480	69.790	71.730	73.890	75.300	77.240	80.300	84.100	86.840	91.150	96
97	66.750	68.340	69.330	70.650	72.610	74.790	76.200	78.160	81.240	85.070	87.830	92.170	97
98	67.590	69.190	70.190	71.520	73.480	75.680	77.100	79.070	82.180	86.030	88.810	93.190	98
99	68.430	70.040	71.040	72.380	74.360	76.570	78.000	79.990	83.120	87.000	89.800	94.220	99
100	69.280	70.890	71.890	73.250	75.250	77.470	78.900	80.910	84.060	87.970	90.790	95.250	100

TABLE F - ERLANG B

ERLANG TABLES

	P.0001	P.0002	P.0003	P.0005	P.001	P.002	P.003	P.005	P.01	P.02	P.03	P.05	TRK
101	70.100	71.240	72.380	74.110	76.120	78.360	80.810	83.630	85.000	88.940	91.780	95.260	101
102	70.940	72.590	73.610	74.980	77.000	79.260	80.720	82.750	85.950	89.910	92.970	97.290	102
103	71.780	73.440	74.470	75.850	77.880	80.160	81.630	83.670	86.890	90.880	93.760	98.310	103
104	72.630	74.290	75.330	76.720	78.770	81.050	82.530	84.590	87.830	91.850	94.750	99.340	104
105	73.470	75.130	76.190	77.590	79.680	81.910	83.400	85.510	88.770	92.820	95.750	100.400	105
106	74.310	76.000	77.050	78.460	80.530	82.850	84.350	86.430	89.720	93.790	96.740	101.400	106
107	75.160	76.860	77.910	79.330	81.420	83.750	85.260	87.350	90.660	94.760	97.730	102.400	107
108	76.000	77.710	78.780	80.200	82.300	84.650	86.170	88.270	91.600	95.730	98.720	103.400	108
109	76.850	78.570	79.640	81.070	83.190	85.550	87.070	89.200	92.550	96.710	99.710	104.500	109
110	77.690	79.430	80.500	81.940	84.070	86.450	87.980	90.120	93.490	97.660	100.700	105.500	110
111	78.540	80.280	81.370	82.820	84.960	87.350	88.900	91.040	94.440	98.650	101.700	106.500	111
112	79.390	81.140	82.230	83.690	85.850	88.250	89.810	91.970	95.380	99.620	102.700	107.500	112
113	80.240	82.000	83.100	84.570	86.730	89.150	90.720	92.890	96.330	100.600	103.700	108.600	113
114	81.090	82.860	83.970	85.440	87.620	90.060	91.630	93.820	97.280	101.600	104.700	109.600	114
115	81.940	83.720	84.840	86.320	88.500	90.960	92.540	94.740	98.220	102.500	105.700	110.600	115
116	82.790	84.590	85.700	87.200	89.400	91.860	93.460	95.670	99.170	103.500	106.700	111.700	116
117	83.640	85.450	86.570	88.070	90.290	92.770	94.370	96.600	100.100	104.500	107.700	112.700	117
118	84.500	86.310	87.440	88.950	91.180	93.670	95.280	97.530	101.000	105.500	108.700	113.700	118
119	85.350	87.170	88.310	89.830	92.070	94.580	96.200	98.450	102.000	106.400	109.700	114.700	119
120	86.200	88.030	89.180	90.710	92.960	95.480	97.100	99.380	103.000	107.400	110.600	115.600	120
121	87.060	88.900	90.050	91.590	93.860	96.390	98.030	100.300	103.900	108.400	111.600	116.800	121
122	87.910	89.770	90.930	92.470	94.750	97.300	98.950	101.200	104.900	109.400	112.600	117.800	122
123	88.770	90.640	91.800	93.350	95.640	98.200	99.860	102.200	105.800	110.300	113.600	118.900	123
124	89.630	91.500	92.670	94.230	96.540	99.110	100.800	103.100	106.800	111.300	114.600	119.900	124
125	90.490	92.370	93.540	95.100	97.420	100.000	101.700	104.000	107.700	112.200	115.600	120.900	125
126	91.340	93.240	94.420	96.000	98.310	100.900	102.600	105.000	108.700	113.300	116.600	121.900	126
127	92.200	94.110	95.290	96.880	99.220	101.800	103.500	105.900	109.600	114.300	117.600	123.000	127
128	93.060	94.970	96.170	97.760	100.100	102.700	104.500	106.800	110.600	115.200	118.600	124.000	128
129	93.920	95.840	97.040	98.650	101.000	103.700	105.400	107.800	111.500	116.200	119.600	125.000	129
130	94.780	96.710	97.920	99.540	101.900	104.600	106.300	108.700	112.500	117.200	120.600	126.000	130
131	95.640	97.590	98.800	100.400	102.800	105.500	107.200	109.600	113.400	118.200	121.600	127.100	131
132	96.500	98.460	99.680	101.300	103.700	106.400	108.100	110.500	114.400	119.100	122.600	128.100	132
133	97.360	99.330	100.600	102.200	104.600	107.300	109.100	111.500	115.300	120.100	123.600	129.200	133
134	98.230	100.200	101.400	103.100	105.500	108.200	110.000	112.400	116.300	121.100	124.600	130.200	134
135	99.090	101.070	102.280	104.000	106.400	109.100	110.900	113.300	117.200	122.000	125.500	131.200	135
136	99.950	101.940	103.200	104.900	107.300	110.000	111.800	114.300	118.200	123.100	126.600	132.300	136
137	100.800	102.800	104.100	105.700	108.200	111.000	112.700	115.200	119.100	124.000	127.500	133.300	137
138	101.700	103.700	105.000	106.600	109.100	111.900	113.700	116.200	120.100	125.000	128.500	134.300	138
139	102.500	104.600	105.800	107.500	110.000	112.800	114.600	117.100	121.100	126.000	129.500	135.300	139
140	103.400	105.400	106.700	108.400	110.900	113.700	115.500	118.000	122.000	127.000	130.500	136.300	140
141	104.300	106.300	107.600	109.300	111.800	114.600	116.400	119.000	123.000	128.000	131.500	137.400	141
142	105.100	107.200	108.500	110.200	112.700	115.500	117.400	119.900	123.900	128.900	132.400	138.400	142
143	106.000	108.100	109.400	111.100	113.600	116.400	118.300	120.800	124.900	129.900	133.400	139.500	143
144	106.900	109.000	110.200	112.000	114.500	117.400	119.200	121.800	125.800	130.900	134.400	140.500	144
145	107.800	109.900	111.100	112.900	115.400	118.300	120.100	122.700	126.700	131.800	135.300	141.500	145
146	108.600	110.700	112.000	113.800	116.300	119.200	121.100	123.600	127.700	132.800	136.300	142.600	146
147	109.500	111.600	112.900	114.600	117.200	120.100	122.000	124.600	128.700	133.900	137.400	143.600	147
148	110.400	112.500	113.800	115.500	118.100	121.000	122.900	125.500	129.700	134.800	138.300	144.600	148
149	111.200	113.300	114.700	116.400	119.000	121.900	123.800	126.500	130.600	135.800	139.300	145.700	149

TABLE F - ERLANG B

ERLANG TABLES

THC	P.0001	P.0002	P.0003	P.0005	P.0010	P.0020	P.0050	P.0100	P.0200	P.0500	P.1000	P.2000	P.5000	P.10000
151	113.000	116.100	117.300	118.700	120.800	123.800	126.700	129.300	133.500	138.800	142.600	148.800	152	
152	113.800	116.000	117.300	119.100	121.800	124.700	126.600	127.500	130.200	134.400	139.800	143.600	149.800	153
153	114.700	116.900	118.200	120.000	122.700	125.600	127.500	130.200	134.400	140.700	144.600	150.800	154	
154	115.600	117.800	119.100	120.900	123.600	126.500	128.500	131.200	135.400	141.700	145.600	151.900	155	
155	116.500	118.600	120.000	121.800	124.500	127.500	129.400	132.100	136.400	142.700	146.600	152.900	156	
156	117.300	119.500	120.900	122.700	125.400	128.400	130.300	133.000	137.300	143.700	147.600	153.900	157	
157	118.200	120.400	121.800	123.600	126.300	129.300	131.300	134.000	138.300	144.700	148.600	155.000	158	
158	119.100	121.300	122.700	124.500	127.200	130.200	132.200	134.900	139.200	144.700	149.600	156.000	159	
159	120.000	122.200	123.500	125.400	128.100	131.100	133.100	135.900	140.200	145.700	149.600	156.000		160
160	120.800	123.100	124.400	126.300	129.000	132.000	134.000	136.800	141.200	146.600	150.600	157.000	161	
161	121.700	123.900	125.300	127.200	129.900	133.000	135.000	137.700	142.100	147.600	151.600	158.100	162	
162	122.600	124.800	126.200	128.100	130.800	133.900	135.900	138.700	143.100	148.600	152.700	159.100	163	
163	123.500	125.700	127.100	129.000	131.700	134.800	136.800	139.600	144.000	149.600	153.700	160.100	164	
164	124.300	126.600	128.000	129.900	132.700	135.800	137.800	140.600	145.000	150.600	154.700	161.200	165	
165	125.200	127.500	128.900	130.800	133.600	136.700	138.700	141.500	145.900	151.600	155.700	162.200	166	
166	126.100	128.400	129.800	131.700	134.500	137.600	139.600	142.400	146.900	152.600	156.700	163.300	167	
167	127.000	129.300	130.700	132.600	135.400	138.500	140.600	143.400	147.900	153.500	157.700	164.300	168	
168	127.900	130.100	131.600	133.500	136.300	139.400	141.500	144.300	148.900	154.500	158.700	165.300	169	
169	128.700	131.000	132.500	134.400	137.200	140.400	142.400	145.300	149.800	155.500	159.700	166.400	170	
170	129.600	131.900	133.400	135.300	138.100	141.300	143.400	146.200	150.800	156.500	160.700	167.400	171	
171	130.500	132.800	134.300	136.200	139.000	142.200	144.300	147.200	151.700	157.500	161.700	168.400	172	
172	131.400	133.700	135.200	137.100	139.900	143.100	145.200	148.100	152.700	158.500	162.700	169.500	173	
173	132.300	134.600	136.000	138.000	140.900	144.100	146.200	149.100	153.700	159.500	163.700	170.500	174	
174	133.100	135.500	136.900	138.900	141.800	145.000	147.100	150.000	154.600	160.400	164.700	171.500		175
175	134.000	136.400	137.800	139.800	142.700	145.900	148.000	150.900	155.500	161.300	165.700	172.500		176