

Exhibit No.: _____

Issue: Rates, Terms, and Conditions for Reciprocal
Compensation Arrangements

Witness: Robert C. Schoonmaker

Type of Exhibit: Direct Testimony

Sponsoring Party: Petitioners

Case NoTO-2006-0147, et al. (consolidated)

Date: January 6, 2006

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

In the Matter of the Petition)	
for Arbitration of Unresolved)	
Issues in a Section 251(b)(5))	Case No. TO-2006-0147
Agreement with T-Mobile USA, Inc.)	

In the Matter of the Petition)	
For Arbitration of Unresolved)	
Issues Pertaining to a Section 251(b)(5))	Case No. TO-2006-0151
Agreement with Cingular Wireless)	

**DIRECT TESTIMONY
OF
ROBERT SCHOONMAKER**

Jefferson City, Missouri
January 6, 2006

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

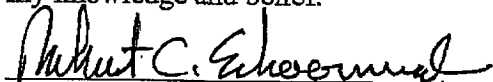
In the Matter of the Petition)	
for Arbitration of Unresolved)	
Issues in a Section 251(b)(5))	Case No. TO-2006-0147
Agreement with T-Mobile USA, Inc.)	

In the Matter of the Petition)	
For Arbitration of Unresolved)	
Issues Pertaining to a Section 251(b)(5))	Case No. TO-2006-0151
Agreement with Cingular Wireless)	


AFFIDAVIT OF ROBERT C. SCHOONMAKER

Robert C. Schoonmaker, of lawful age, being duly sworn, deposes and states as follows:

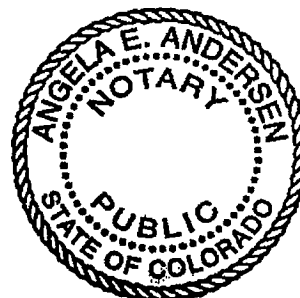
1. My name is Robert C. Schoonmaker. I am employed by GVNW Consulting, Inc. as President and Chief Executive Officer.
2. Attached hereto and made a part hereof for all purposes is my direct testimony with accompanying schedules.
3. I hereby affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief and that the information contained in the attached schedules is also true and correct to the best of my knowledge and belief.


Robert C. Schoonmaker

Subscribed and sworn to before me this 6th day of January, 2006.

 Notary Public

My Commission expires: 11/16/09



My Commission Expires 11/16/2009

1 DIRECT TESTIMONY OF ROBERT C. SCHOONMAKER

2
3 **Q. Please state your name and address.**

4 A. My name is Robert C. Schoonmaker. My business address is 2270 La Montana
5 Way, Colorado Springs, Colorado 80918.

6 **Q. By whom are you employed and in what capacity?**

7 A. I am President and CEO of GVNW Consulting, Inc., a consulting firm
8 specializing in working with small telephone companies.

9 **Q. Would you please outline your educational background and business**
10 **experience?**

11 A. I obtained my Masters of Accountancy degree from Brigham Young University in
12 1973 and joined GTE Corporation in June of that year. After serving in several
13 positions in the revenue and accounting areas of GTE Service Corporation and
14 General Telephone Company of Illinois, I was appointed Director of Revenue and
15 Earnings of General Telephone Company of Illinois in May, 1977 and continued
16 in that position until March, 1981. In September, 1980, I also assumed the same
17 responsibilities for General Telephone Company of Wisconsin. In March, 1981, I
18 was appointed Director of General Telephone Company of Michigan and in
19 August, 1981 was elected Controller of that company and General Telephone
20 Company of Indiana, Inc. In May, 1982, I was elected Vice President-Revenue
21 Requirements of General Telephone Company of the Midwest. In July, 1984, I
22 assumed the position of Regional Manager of GVNW Inc./Management (the
23 predecessor company to GVNW Consulting, Inc.) and was later promoted to the
24 position of Vice President. I served in that position until October 1, 2003 except

1 for the period between December 1988 and November, 1989 when I left GVNW
2 to serve as Vice President-Finance of Fidelity and Bourbeuse Telephone
3 Companies. I was elected to the position of President and Chief Executive
4 Officer effective October 1, 2003. In summary, I have had over 30 years of
5 experience in the telecommunications industry working with incumbent local
6 exchange carrier companies.

7 **Q. What are your responsibilities in your present position?**

8 A. In my current position I have overall responsibility for the management and
9 direction of GVNW Consulting, Inc. In addition, I consult with independent
10 telephone companies and provide financial analysis and management advice in
11 areas of concern to these companies. Specific activities which I perform for client
12 companies include regulatory analysis, consultation on regulatory policy,
13 financial analysis, business planning, rate design and tariff matters,
14 interconnection agreement analysis, and general management consulting.

15 **Q. Have you previously testified in regulatory proceedings?**

16 A. Yes, I have submitted testimony and/or testified on regulatory policy, local
17 competition, rate design, accounting, compensation, tariff, rate of return,
18 interconnection agreements, and separations related issues before the Illinois
19 Commerce Commission, the Public Service Commission of Wisconsin, the
20 Michigan Public Service Commission, the Iowa Utilities Board, the Tennessee
21 Public Service Commission, the New Mexico Public Regulation Commission, the
22 Public Utilities Commission of the state of South Dakota, the Public Service
23 Commission of West Virginia, the Public Utility Commission of Texas, and the

1 Missouri Public Service Commission. In addition, I have filed written comments
2 on behalf of our firm on a number of issues with the Federal Communications
3 Commission and have testified before the Federal-State Joint Board in CC Docket
4 #96-45 on Universal Service issues.

5 **Q. On whose behalf are you testifying in this case?**

6 A. I am testifying on behalf of the Petitioners in each of the cases. While many of
7 the Petitioners are the same in each of the consolidated cases, they are not
8 identical. Attached as Schedule RCS-1 to my testimony is a list of the Petitioners
9 in each of the individual cases.

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

11 A. My testimony will provide information on the following issues:

- 12 1. The forward-looking cost of switching and transport and termination which
13 supports Petitioners' proposed terminating rate of \$0.035 per minute
14
- 15 2. The Petitioners' obligation to pay reciprocal compensation for landline-to-mobile
16 calls that are carried by an interexchange carrier (IXC)
17
- 18 3. The appropriate ratio of mobile-to-land/land-to-mobile traffic (i.e., traffic ratio)
19
- 20 4. The appropriate percentages of interMTA traffic that are intrastate and interstate
21
- 22 5. Net billing of traffic by the Petitioners
23
- 24 6. The inclusion of provisions for direct interconnection
25
- 26 7. Local dialing of Extended Area Service (EAS) calls from Petitioners' customers
27 to Respondents' customers
28
- 29 8. Dialing parity for calls from Petitioners' customers to Respondents' customers
30 (a/k/a "Virtual NXX")
31
- 32 9. Minimum billing amount
33
- 34 10. Petitioners' rural exemption
35

1 11. The appropriate compensation for the transit function performed by Citizens
2 Telephone Company

3
4 12. The appropriate terms/conditions for termination of service

5
6 **1. THE FORWARD-LOOKING COST OF SWITCHING AND**
7 **TRANSPORT AND TERMINATION**
8

9 **Q. Can you describe the rate that the Petitioners propose to charge for**
10 **switching and transport and termination to the Respondents?**

11 A. Yes. The rate, as proposed, is a single rate per minute of \$0.035 to be charged to
12 each of the Respondents for terminating their traffic on an indirect connection
13 basis in the Petitioners' operating areas and reciprocally to be charged to the
14 Petitioners for traffic terminated by the Petitioners for which they are financially
15 responsible to the wireless carriers. This is the rate that was proposed for each of
16 the Petitioners.

17 **Q. Can you describe how the rate that was proposed was developed?**

18 A. Yes. The rate that is proposed is a rate that has been arrived at and agreed to via
19 negotiations between many of the Petitioners (and other small telephone
20 companies in Missouri) and several different wireless carriers. This rate is lower
21 than the rates approved by the Commission in the wireless terminating tariffs filed
22 by the Petitioners and is lower than the average, forward-looking cost for the
23 small Missouri companies in general. In the case of the Petitioners, it is also *less*
24 *than* the average forward-looking cost for the Petitioners in each individual case.

25 **Q. Did the Petitioners look at other alternatives before proposing this rate?**

26 A. Yes. Other alternatives were considered. In particular, rates based on a forward-
27 looking cost model were developed, reviewed, and considered before the final

1 rate proposal was made. This was done in recognition that the FCC rules
2 regarding pricing in arbitration proceedings require that forward-looking costs be
3 used. However, since the Petitioners had offered a rate of \$0.035 in negotiations
4 with the Respondents to try to reach a settlement, Petitioners decided to continue
5 to offer that rate in the context of this arbitration.

6 **Q. Are the costs that you have developed based on Total Element Long-Run**
7 **Incremental Cost (TELRIC)?**

8 A. Yes, they are. The HAI model which I have used in developing these costs has
9 been used in a number of states in developing the TELRIC, or forward-looking
10 costs of service, for incumbent local exchange carriers (ILECs).

11 **Q. Can you briefly summarize the reasons why you have chosen to develop the**
12 **economic costs presented in this case using the HAI Model?**

13 A. Yes. First, the model has been widely available throughout the industry and has
14 been carefully studied by industry participants, the FCC and many state
15 Commissions. Both its strengths and weaknesses are known and have been
16 evaluated. Second, the HAI Model produces results in formats that are readily
17 available to identify the cost of individual access cost elements (such as
18 switching, transport, etc.). Third, because the model includes default input values
19 necessary to produce cost results for each company, the cost of developing
20 appropriate, or at least acceptable, cost inputs to run the model are minimized.
21 Fourth, by reviewing and modifying a relatively small number of inputs, I felt we
22 could develop adequate estimates of forward-looking costs to meet the
23 requirements of the FCC rules.

1 **Q. Are there concerns about using the HAI Model to develop forward-looking**
2 **costs for small rural LECs, such as the Petitioners?**

3 A. Yes. However, I have recommended to the Petitioners that they use the HAI
4 Model as the most appropriate model available to develop forward-looking costs
5 for arbitration proceedings. Following are the concerns for rural LECs:

6 1) Because of the required time and resources to fully explore all the
7 proposed default inputs, testing of such items as the cost of cable and
8 digital loop carrier equipment against the forward-looking costs for small
9 companies in Missouri is generally not feasible. Therefore, HAI costs
10 may not reflect the economic costs of the Petitioners in all respects.

11 2) The use of broad inputs and generalized formulas for all
12 companies, rather than specific inputs for individual companies, tend to
13 mask unique circumstances of individual companies, which may cause
14 differences in the costs in the real world.

15 3) The model results for small companies from models like the HAI
16 Model may produce results which vary widely from comparable actual
17 data and in a manner inconsistent with forward-looking costs.

18 4) Results from the model may likely be less accurate for smaller
19 geographic areas, such as an individual exchange or small companies with
20 a few exchanges, than for large companies such as SBC or Verizon who
21 have hundreds of exchanges. This is due to both the technique used to
22 generate customer locations and the data in the model. Also a recognition
23 that the law of averages leads to offsetting impacts between individual

1 areas within a large group of exchanges that may not occur in a small
2 company or a single wire center. A review of the access lines developed
3 by the model compared to actual company lines, for example, shows
4 significant differences on an individual company level.

5 **Q. Do you still support the forward-looking costs that you have developed, even**
6 **with the concerns you have listed?**

7 A. Yes. Given the requirements in the FCC rules to develop forward-looking costs
8 and the current state of tools that are available to develop such cost results at a
9 reasonable cost to the companies, I believe the costs developed are the best
10 available forward-looking costs of these companies for meeting the requirements
11 of the FCC rules. While individual company results have been developed for
12 each of the Petitioners, I believe it is more appropriate to use an average of the
13 companies as a proxy for each of the individual companies rather than using the
14 individual company rates themselves. This average cost data would tend to be
15 comparable to results for large companies that have many exchanges.

16 **Q. In the development of forward-looking costs for small companies, what are**
17 **some of the factors that need to be considered in the development of such cost**
18 **studies?**

19 A. One critical factor is the FCC requirement mentioned above to base the rates on
20 forward-looking TELRIC studies. Thus, the cost studies need to fit within those
21 requirements. I believe that the FCC established this requirement based on
22 economic theory which indicates that such costs are the most appropriate for
23 forward decision making. The economic theory generally presumes that such

1 information is available at a reasonable cost relative to the decisions for which it
2 is being used. In the case of small companies, I believe this is not necessarily a
3 valid assumption.

4
5 That leads to the factor that must be considered in developing required cost
6 studies -- the cost of the study in relationship to the revenues associated with the
7 decision making process. In the case of many of the Petitioners, the revenues
8 generated from individual contracts with wireless carriers may only be a few
9 thousand dollars per year (in some cases less than a thousand dollars per year).
10 Thus, care must be taken to produce a reasonable study to meet the FCC
11 requirements, but at a reasonable cost in relationship to the revenues at stake. In
12 developing the costs for the individual companies using the HAI model, I have
13 tried to use methods that would accomplish this goal. More detailed and exacting
14 studies may have been possible, but at a considerably greater cost than was
15 incurred to arrive at the results used in these cases.

16 ***(a) OVERALL DESCRIPTION OF THE HAI MODEL***

17 **Q. Can you briefly describe the historical background of the HAI model?**

18 **A.** The HAI model was initially known as the Hatfield Model, developed by Hatfield
19 Associates, Inc., a consulting firm in Colorado, at the request of AT&T. The
20 model was developed with the intent of providing a tool to develop the forward-
21 looking cost of the telephone network throughout the United States as the cost
22 basis for universal service support and to develop the estimated cost of unbundled
23 network elements ("UNEs") for interconnection proceedings under Section 252 of

1 the Telecommunications Act of 1996. As the model faced scrutiny in various state
2 and federal proceedings, it underwent continued development and modification
3 through a series of versions over a several year period of time. Generally, the
4 later versions were more sophisticated in the cost development methods and
5 techniques than were earlier versions of the model. Version 5.0a of the model,
6 which has been used to develop the costs presented by the Petitioners in this
7 proceeding, was the latest version presented in formal comments to the FCC in
8 CC Docket #96-45, the federal Universal Service Fund (USF) proceeding.

9 **Q. Can you briefly describe the overall design of the model?**

10 A. Yes. The model is designed in several different modules that interact and are
11 interconnected to produce the overall model results. The modules develop the
12 costs for various network elements and for the overall cost of the firm. Modules
13 include a module to develop the cost of distribution and feeder plant, a module for
14 developing the cost of switching and interoffice plant, a capital cost module, and
15 an expense module. Results of all these modules are fed into a series of model
16 output reports. A much more complete description of the model design is
17 included in the Model Description Manual developed by the model developers
18 which was provided in conjunction with the filing of the Petitions in each of the
19 cases and is incorporated here by reference.

20 **Q. Can you briefly describe the default model inputs?**

21 A. Yes. The HAI model has well over a thousand different user changeable model
22 inputs, including physical equipment characteristics, cost relationships to
23 geographical factors, traffic characteristics, unit costs of telephone plant, costs of

1 installing telephone plant, depreciation factors, capital costs, and expense ratios.

2 To assist users in being able to use the models quickly, the developers have
3 populated the model with default values that, based on their research, judgment
4 and evaluation, represent appropriate values for each input element. These values
5 are known as the default input values. When running the model, the user can
6 either use these default values or individually change as many of the values as the
7 user believes are appropriate. The HAI Inputs Portfolio is a document developed
8 by the model developers that describes each individual input item, the default
9 value, and the model developers' rationale and support for adopting the particular
10 default value. This Portfolio was also provided at the time the Petitions were filed
11 in each of the cases and is incorporated here by reference.

12 **Q. Can you describe these inputs in somewhat greater detail?**

13 A. Yes. The inputs are divided into several different groups including:

14 1. Distribution Inputs - 250 inputs – These include a variety of inputs for
15 distribution cable sizes, cable costs, type of cable placement, terminal costs,
16 network interface devices, etc. with many inputs varying based on nine different
17 density areas.

18 2. Feeder Inputs – 177 inputs – These include a variety of inputs for feeder cables
19 including cable sizes, copper and fiber cable costs, type of cable placement,
20 terminals, etc. used in feeder cable.

21 3. Switching and Interoffice Inputs – 195 inputs – These inputs include costs for
22 end office switching, power, end office cabling, tandem switching, SS7

1 equipment, interoffice cable costs, etc. for the cost of switching and interoffice
2 facilities.

3 4. Expense Inputs – 134 inputs – These include specific factors for developing
4 ongoing expenses of various investments and include factors for developing
5 depreciation rates and the cost of capital. The structure sharing inputs are also
6 contained in this category.

7 5. Underground Excavation/Restoration – 126 inputs – These include detailed
8 factors and costs for performing various types of construction and in various
9 physical conditions for underground cable.

10 6. Buried Excavation/Restoration – 172 inputs – These include detailed factors
11 and costs for performing various types of construction in various physical
12 conditions for buried cable.

13 7. Surface Texture Table – 257 inputs – This is a table of various soil conditions
14 identified by the US Geological data with corresponding factors to adjust the cost
15 of construction for given soil conditions.

16 8. Labor Adjustment Factors – 6 inputs – These are factors for making
17 adjustments to the cost of labor in other inputs.

18 **Q. In developing the forward-looking costs for individual companies, would one**
19 **need to adjust all of these default factors?**

20 A. No. While some factors could be adjusted on an individual company basis,
21 particularly in studies of large companies, a large number of the factors are
22 industry factors that are applicable for all ILECs. For smaller companies, while
23 some of the factors could be based on recent individual company cost data, use of

1 such data might also be criticized as being too company specific and not
2 representative of forward-looking costs. Thus, in the use of these factors there
3 may be disagreement even among experts as to the appropriate factors to use.

4 **Q. Can you give examples of default inputs that would be appropriate for all**
5 **companies even when studied on an individual company basis?**

6 A. Yes. One example would be the Surface Texture Table inputs. These inputs
7 describe over 200 different soil types used in U.S. Geological Survey descriptions
8 of soils throughout the United States and relate those soil types to cost on
9 construction factors. Those factors are generalized factors to recognize the
10 differences in the cost of constructing primarily underground and buried
11 structures based on various soil types. In the input data bases used in the model,
12 actual soil types for the physical geography of the company have been included
13 for each cluster of lines that is input based on U.S. Geological Survey data for that
14 particular area. The individual company inputs for soil types have been included
15 in the data, and the cost study factors can be appropriately applied by the model.

16
17 A second example that I can readily think of is in the switching and interoffice
18 input area where a number of the factors are based on industry standard
19 engineering data for trunk capacity, switch capacity, etc. are input. There has
20 been general agreement on the appropriateness of many of these factors
21 throughout the industry and there is little need to reexamine them or change them
22 in a specific company study.

1 **(b) DESCRIPTION OF DEFAULT INPUT CHANGES**

2 **Q. In the cost studies you present in this testimony, have you used the default**
3 **values exclusively as the input values?**

4 A. No. While I have used the default values for a large portion of the inputs, I have
5 not used them exclusively. Based on prior experience in other states and at the
6 national level and based on testing individual inputs in conjunction with the cost
7 development for this case, I have modified a number of the default inputs. In
8 addition, I have modified the tandem assignment information for certain
9 companies who provide tandem functions for IXC's, but do not provide that
10 function for terminating wireless traffic.

11 **Q. Can you make some general observations with regard to why you modified**
12 **some of the default inputs?**

13 A. Yes. There were a variety of reasons for modifying various inputs, which I will
14 describe in detail later in this testimony. In some cases, inputs were modified to
15 reflect the operation of rural companies as compared to the large, urban Regional
16 Bell Operating Companies (RBOCs) whose operations are generally reflected in
17 the default inputs. In other cases, inputs were modified to reflect the specific
18 circumstances in Missouri rural areas as compared to the wide variety of
19 geographic conditions throughout the United States. In other cases, inputs were
20 modified to reflect judgmental differences with the HAI Model proponents
21 regarding the forward-looking cost characteristics of certain inputs.

22 **Q. Did all of the input changes you propose increase the reciprocal**
23 **compensation cost results?**

1 A. While many of them resulted in reciprocal compensation cost increases, others
2 resulted in reciprocal compensation cost decreases. In each case that changes
3 were made from the default inputs, they were made with the intent of better
4 reflecting the forward-looking costs of the Petitioners based on circumstances
5 within Missouri.

6 **Q. Have you prepared a description of the default inputs that you have**
7 **changed?**

8 A. Yes. Schedule RCS-2 is a document outlining the input items that I changed from
9 the default values in the development of the forward-looking costs for this case.
10 Schedule RCS-3 is an output report from the HAI Model showing the specific
11 model inputs changed and the specific values used for each of these inputs. In the
12 following section of my testimony, I will discuss in greater detail the reason for
13 each of the changes made in the default inputs. In total, I changed 185 of the
14 default input values.

15 **(c) HAI INPUT CHANGES**

16 **Q. Would you please describe the rationale for changing the plant type**
17 **assumptions as outlined in Item #1 of Schedule RCS-2.**

18 A. Yes. The HAI Model develops costs of distribution and feeder plant in nine
19 different density zones. One of the series of input items in these density zones are
20 inputs to designate the type of plant (aerial, buried or underground) that is used
21 for feeder and distribution plant. There is a similar input for the type of plant in
22 interoffice facilities, as well. The default inputs for these items vary between
23 density zones based on the model developers' estimates of the type of plant built

1 in these zones on a nationwide basis. Even in the most rural zones, the default
2 inputs assume that a substantial amount of aerial plant will be constructed. In
3 Missouri, based on a number of factors related to geography, weather and cost of
4 construction, it has been standard practice in the smaller companies in the state to
5 build primarily buried plant for distribution plant, feeder plant and interoffice
6 plant. As one travels through the rural areas of the state served by the small
7 ILECs, it is relatively rare to see aerial plant. In most areas, buried plant is used
8 exclusively, although there are some in-town areas where underground plant is
9 constructed in some circumstances and some areas of the state where some aerial
10 plant is used.

11
12 Based on these observations, the costs developed for the Petitioners reflected
13 changes in the model inputs in all appropriate places to reflect a larger percentage
14 of buried plant as the method of outside plant construction from that used in the
15 default assumptions. In the five lowest density zones and for interoffice plant,
16 buried plant has been assumed to be 95% of the plant constructed, with aerial
17 plant the remaining 5%. In the remaining zones, 85% buried, 5% aerial and 10%
18 underground plant has been assumed. I believe this is more reflective of Missouri
19 circumstances than are the national default inputs.

20 **Q. Why have you set the Fraction of Buried Plant Available for Shift**
21 **parameters to zero as discussed in Item #2 of Schedule RCS-2?**

22 **A.** These inputs are included in the model to allow the model to change the
23 assumption regarding the amount of buried plant that would be constructed, as

1 discussed in my previous answer, based on internal cost calculations made by the
2 model. The model would substitute aerial plant for buried, if based on model
3 calculations, aerial plant was less expensive. I am proposing that this value be set
4 at zero so the model reflects the buried plant construction types as discussed
5 above. Some of the factors that lead to the large proportion of buried plant
6 construction in Missouri may not be fully reflected in the default cost
7 assumptions; and without this change, the model might not construct the full level
8 of buried plant we believe is appropriate.

9 **Q. Item #3 of Schedule RCS-2 discusses changes made in the structure sharing**
10 **default assumptions. What is meant by "structure sharing"?**

11 A. In the HAI Model, the costs of the cable and its installation are separated from the
12 cost of the structures (poles for aerial cable, trenches and plastic tubing for buried
13 cable, and conduit for underground cable) built to "carry" the cable from one
14 location to another. The structure costs are developed using separate input
15 amounts and are calculated separately. The structure sharing assumptions are
16 built into the model to reflect circumstances where these structures may be able to
17 be used by a utility other than the telephone company; and the costs of the
18 structures may be borne by these other companies, thus reducing the effective cost
19 to the telephone company.

20 **Q. Can you give some real world examples where structures might be shared?**

21 A. Yes. The most common example is probably with the use of pole lines. In many
22 locations, particularly in-town locations, one utility builds a pole line and other
23 utilities rent space on the poles to place their own facilities. Where an aerial plant

1 is used by both electric and telephone utilities, they frequently share a single pole
2 line. In addition, in many in-town situations, a cable TV company may also place
3 its facility on some of the same pole lines.

4
5 In some new subdivision construction, trenches dug for utilities may be shared by
6 electric, telephone and cable TV companies. When electric facilities are involved
7 in sharing of trenching, there is typically a significantly increased cost to the cost
8 of the trench to meet safety code requirements for separation of electric cables
9 from telephone and cable TV facilities.

10
11 In urban locations, conduit facilities may be placed to service multiple utilities in
12 order to minimize the street disruption of placing additional facilities in the future
13 and to maximize the use of below street surface land space.

14
15 **Q. Can you, in general terms, describe the conceptual assumptions underlying**
16 **the HAI default structure sharing assumptions?**

17 A. Yes. There are several key conceptual assumptions that are inherent in the HAI
18 default assumptions regarding structure sharing. First, the modelers assume that
19 not only is the telephone network being hypothetically totally reconstructed but
20 the electric, cable TV and competitive telecommunications services networks are
21 being constructed at the same time so that structure sharing of trenches, conduit,
22 etc. can take place. Second, the modelers assume that, in the future, there will be
23 high motivations for these various utilities to share structures and build facilities

1 using the same kind of plant in the same areas. Third, the modelers assume that
2 the cost of structure construction will be unchanged from typical telephone plant
3 construction even with the addition of other utility facilities associated with the
4 structure. While this may be reasonably true for aerial construction, it is not true
5 for buried construction where safety code requirements for buried electric service
6 generally require significantly deeper construction for electric plant than for
7 telephone plant.

8 **Q. Can you describe the specific assumptions encompassed in the HAI Model**
9 **regarding structure sharing for buried plant?**

10 A. Yes. The HAI Model default assumptions assign 33% of the cost of the structure
11 to the telephone company for buried structures in the lower density bands. This
12 presupposes that in these density bands, buried telephone company plant will be
13 accompanied by a buried electric facility and a buried cable TV facility, with no
14 increase in the cost of the facility because of the presence of the other two
15 facilities.

16 **Q. Do you believe this assumption is at all realistic?**

17 A. No. My opinion is that it has little relationship to reality. To put this assumption
18 into perspective, let me first indicate for the four lowest density bands the size of
19 an average "lot" that would be inherent at the maximum level of the density band
20 assuming all households had equal size lots. They would be as follows:

21	Band 1	0-5 lines/sq. mile	128.0 acres
22	Band 2	6-100 lines/sq. mile	6.4 acres
23	Band 3	100-200 lines/sq. mile	3.2 acres
24	Band 4	200-650 lines/sq. mile	.98 acres

1 From my experience in talking with clients about their communities throughout
2 the mid-western and western parts of the country, there would be no cable TV
3 provider in at least the first two density bands; and the provision of cable TV
4 service in Band 3 areas would be spotty. There would probably be a cable TV
5 provider in many, though not all, of the Band 4 areas. However, in these areas, a
6 large portion of the cable TV is aerial and constructed using the electric poles.
7 The likelihood of the cable TV provider sharing buried structures with the
8 telephone company in any of these areas is remote.

9
10 As to the electric utilities, my experience in driving through rural areas is that
11 electric service is provided primarily by the use of aerial plant while the
12 telecommunications facilities use primarily buried facilities. My impression is
13 that there are strong economic reasons, as well as safety reasons, why electric
14 plant is generally aerial while the telephone plant is buried. I do not see any
15 evidence to suggest that in rural areas this difference in plant construction will
16 suddenly change in the electric industry. Thus, there is little reason to believe that
17 there will be any appreciable structure sharing with the electric industry.

18 **Q. Based on your observations, what assumptions have been made regarding**
19 **structure sharing?**

20 **A.** Based on my perception of the limited to non-existent likelihood of sharing buried
21 structures, I have assumed that the structure sharing for buried and underground
22 plant for all density zones and for interoffice plant should be set at 100% - - that is
23 the full cost of the buried structures are assigned to the telephone company. For
24 aerial cable, a 100% structure sharing assumption is assumed for the first three

1 zones, but a 50% assumption is used in Zone 4 and higher where telephone
2 company aerial cable, if built, frequently shares poles with the electric company.

3 **Q. Why are you proposing to change the end office switching investment input,**
4 **Item #4 on Schedule RCS-2?**

5 A. My analysis indicates that the default input value is not representative of the cost
6 of end office switching equipment for small companies and small switches. The
7 default switching input value that is used by the HAI modelers is based on an
8 analysis of switch costs for larger companies (Bell Operating Companies and
9 GTE) that were publicly available. The input value is used in a fairly straight line
10 formula based on number of lines. In viewing results of the default analysis, it is
11 clear that the input does not correctly estimate the cost of switching for small
12 offices.

13
14 I also did an analysis comparing the default model results with the actual
15 investments incurred by companies for COE switching in Missouri. With the
16 default inputs, the COE switching investments produced by the HAI Model were
17 about 45% less than the actual COE switching investments for the small Missouri
18 companies. I believe that is a strong indicator that the default input is generating
19 inappropriate results for these companies.

20 **Q. Are comparisons between model results and actual investments and expenses**
21 **always an appropriate test of the model results?**

22 A. No, not always. Since the model is developing a cost for a forward-looking
23 network, comparisons would not be valid if the network elements being
24 developed are of a different design than that actually being used. Since the model

1 is generating forward-looking costs, there may be differences between the model
2 and actual results because of differences in cost (either up or down) when actual
3 plant was purchased as compared to the forward-looking cost of the plant. There
4 may also be differences between costs developed by the model and actual costs
5 because the model does not develop costs for all of the functions that an actual
6 company may be performing. In making comparisons between model results and
7 actual results, all of these factors need to be taken into account.

8 **Q. What is your assessment of the validity of comparing the cost of central office**
9 **switching equipment from the model to actual costs?**

10 A. This is one area where I believe comparisons are relatively meaningful. If one
11 reviews the forward-looking technology for switching, one finds it includes
12 digital central office switches, both host and remote, that are generally equipped
13 with currently required functions and features, including SS7 signaling capability.
14 When one reviews the switching equipment actually in use in the small Missouri
15 companies, one finds digital central office switches, both host and remote, that are
16 equipped with these features and functions. These switches include such recently
17 required capabilities as interchangeable NXX codes, four-digit CIC code
18 capability, intraLATA presubscription, and in most cases, SS7 signaling and the
19 features required by the Communications Assistance for Law Enforcement Act
20 ("CALEA").

21
22 Many of the small companies in Missouri are using at least their second
23 generation of digital switching equipment. The equipment is relatively new and
24 has been upgraded since installation, as needed. While it is generally believed

1 that the cost of switching equipment has been falling over time, the falling costs
2 of hardware have been at least partially offset by increasing costs of switching
3 software. Overall, it is my belief that the model costs for forward-looking COE
4 switching equipment should be relatively close to, though possibly somewhat less
5 than, actual costs. In my mind, the approximately 45% difference between the
6 model and actual costs for this equipment indicates that the model costs do not
7 truly reflect the forward-looking costs of this equipment.

8
9 **Q. What are you proposing as the default input for central office switching**
10 **investment?**

11 A. The default input for this value is \$416.11 per line. Based on my review of this
12 factor in the past and the resulting investment to actual investments, I am
13 recommending that the value be increased to \$520.14 per line. Even at this level,
14 the HAI results for small Missouri companies are about 28% less than current
15 actual investments.

16 **Q. Can you please explain your rationale for changing the default assumption**
17 **related to Item #5 on Schedule RCS-2, the percent of Total Interoffice Traffic**
18 **Fraction?**

19 A. Yes. This factor estimates the total portion of the traffic originated in the central
20 office that has to be switched to a second switching site for termination of the
21 traffic and is a significant factor in developing the cost of interoffice facilities. It
22 is also used in conjunction with estimates of toll traffic to determine the portion of
23 local traffic that is switched on an interoffice basis and impacts the cost of local

1 service. For large urban companies, this may represent traffic that is switched
2 between multiple wire centers in a single exchange. For rural companies, it
3 would represent traffic that is commonly designated as Extended Area Service
4 ("EAS") traffic that is switched between exchanges. Using the default
5 assumptions, the model estimates that 48.69% of local traffic is interoffice traffic
6 and develops and assigns costs to the USF cost to account for this usage.

7
8 Based on my knowledge of the limited availability of Extended Area Service in
9 Missouri, I have reduced the total interoffice input percent from the default of
10 65% to 40%. This produces a revised local interoffice traffic percentage of
11 12.03%, a value much more representative of small Missouri companies than the
12 nearly 50% calculated using the default input.

13 **Q. Do you agree with the default assumptions that develop the cost of capital as**
14 **indicated in Item #6 of Schedule RCS-2?**

15 A. No. I believe the cost of capital assumptions in the default scenario are not
16 appropriate. The default assumptions assume a 55% equity/45% debt ratio with a
17 cost of debt and equity generating an overall cost of capital of 10.01%. This cost
18 of capital is not reflective of a forward-looking cost of capital in today's
19 environment. I believe the cost of capital used by the FCC at the interstate level
20 of 11.25% is more reflective of a forward-looking cost of capital. Accordingly, I
21 have modified the cost of capital assumptions using those used by the FCC in its
22 Synthesis Model for USF purposes.

1 **Q. Item #7 on Schedule RCS-2 discusses changing the default factor for**
2 **Network Operations Expense. Would you discuss why you are proposing a**
3 **change in this item?**

4 **A.** Yes. Network Operations Expense encompasses the following accounts in the
5 Uniform System of Accounts:

6	Network Operations Expense	6530
7	Power Expense	6531
8	Network Administration Expense	6532
9	Testing Expense	6533
10	Plant Operations Administration Expense	6534
11	Engineering Expense	6535

12
13 Expenditures in these areas for small companies differ significantly from larger
14 companies. For example, the plant administration expense account includes the
15 cost of overall supervision of plant operations, including overall planning,
16 developing methods and procedures, developing plant training and coordinating
17 safety programs. The account excludes immediate or first level supervision which
18 is included in the plant specific accounts. In most small companies, the second
19 level of supervision is the company manager; consequently, most small
20 companies have very little plant administration expense. Engineering expense is
21 generally less in small companies since most engineering is on a specific project
22 basis rather than of a general nature. Network administration activities in small
23 companies do not include extensive network control facilities because their
24 networks are limited.

25

26 In the HAI Model, Network Operations Expense is generated based on a
27 composite level of expenses for the ARMIS reporting companies on a per line

1 basis. The model then multiplies this expense level by the Network Operations
2 Expense factor to arrive at a final estimate of Network Operations Expense. The
3 HAI modelers in the default assumptions have assigned this factor a 50% value,
4 essentially indicating that forward-looking Network Operations Expenses
5 would/should be half of the current level. Their rationale for doing this is
6 summarized as follows:

7 "....these costs are artificially high because they reflect antiquated systems
8 and practices that are more costly than the modern equipment and
9 practices that the HAI Model assumes will be installed on a forward-
10 looking basis. Furthermore, today's costs do not reflect much of the
11 substantial savings opportunities posed by new technologies, such as new
12 management network standards, intranets, and the like."
13

14 Because small companies have very different circumstances and do not have
15 many of the systems typical in large companies, it is my belief that the types of
16 forward-looking savings the modelers are anticipating for large companies will
17 not, and cannot, be achieved in small companies. In addition, the default
18 assumption used by the HAI modelers was a subjective judgment of the model
19 developers and not based on any factual data. I am, therefore, proposing that the
20 Network Operations Expense factor be set at 100% rather than 50%.

21 **Q. Item #8, Schedule RCS-2, describes changes in the Billing and Bill Inquiry**
22 **input. Would you please describe this input in great detail and your**
23 **rationale for changing it?**

24 **A.** Yes. This input is intended to capture the customer operations costs of providing
25 local service billing, collecting, bill inquiry, and other inquiries regarding the
26 provision of service. The provision of these services differ in a number of

1 respects between large and small companies. Many of the customer contact
2 functions for large companies are performed in centralized centers by relatively
3 large work groups. With these work group sizes, there may be opportunities to
4 adjust the work group to fluctuating workloads on an hourly or daily basis.
5 Billing functions are typically spread throughout the month with multiple billing
6 cycles. Typically, the data processing and bill processing functions are performed
7 with in-house computer assets and in-house personnel.

8
9 In small companies, these functions are generally performed by only a few
10 individuals with staffing required during the normal business hours to provide
11 service availability to customers. There are relatively few opportunities to adjust
12 work group levels to variations in the customer contact workload. Billing is
13 typically performed once a month so there are greater variations in the work flow
14 than in larger companies. Oftentimes, service bureaus are used by small
15 telephone companies, at a minimum, to provide software support or to provide
16 full bill processing functions using investments made by the service bureau.
17 Thus, the expense and investment levels of small companies may vary
18 significantly from larger companies.

19
20 After comparing the results of the default assumptions for customer service
21 expense with actual data (including taking into account customer service
22 functions that are toll related), I have adjusted this input to \$2.30 per line. I
23 believe this result is more representative of the cost of these functions in small
24 Missouri companies and have thus incorporated this estimate in the forward-

1 looking cost studies we have performed. The revised input is still considerably
2 less than the \$3.62 per line used by the FCC in its inputs for non-rural companies.

3 **Q. Item #9, Schedule RCS-2, describes changes in the model inputs for central**
4 **office switching expense. Please describe the derivation of the default input**
5 **value and the value that you have used in the development of forward-**
6 **looking costs.**

7 A. In developing expenses for most of the plant-specific expense categories, the HAI
8 Model uses recent ARMIS data from around the country to develop ratios
9 between current expenses and investments as a basis for developing projected
10 forward-looking expense levels. However, in the case of central office switching
11 expense, this data is overridden by an alternative expense ratio. The input levels
12 for these items are based on a 1993 incremental cost study performed by New
13 England Telephone Company in New Hampshire and are considerably lower than
14 current levels experienced even by the Bell Operating Companies.

15
16 The inputs I have used are developed based on recent ratios of expenses to
17 investment for these expense/investment categories for the small Missouri
18 telephone companies. Since the type of investment included in these accounts is
19 generally reflective of forward-looking technology, it is reasonable to expect that
20 the ratios currently experienced by the Missouri companies are reflective of the
21 forward-looking costs they can expect to experience.

22 **Q. Please describe the changes you made in economic lives for development of**
23 **depreciation rates as described in Item #9 on Schedule RCS-2?**

1 A. For several years the MPSC Staff has made available a schedule of economic
2 lives and depreciation rates developed on a generic basis for use by small
3 telephone companies within the state. The economic lives in the HAI model have
4 been modified to reflect the economic lives contained in the Staff's generic
5 depreciation rate schedule.

6 **Q. Can you describe in greater detail why changes were made in the tandem**
7 **locations for some small companies?**

8 A. Yes. Some of the Petitioners have established tandem switching locations to
9 serve their wire centers. Under access tariff requirements, interexchange carriers
10 (IXCs) are required to deliver their traffic to the tandem locations for termination
11 in the end office(s) subtending the tandem switch. The files developed for use by
12 the HAI model in developing interoffice transport costs reflect this type of
13 network configuration. However, wireless companies are not under these same
14 obligations and almost exclusively deliver their terminating traffic destined for the
15 Petitioners to a SBC, Sprint, or CenturyTel tandem. SBC, Sprint, or CenturyTel
16 then transmits the traffic over their common trunk groups, intermingled with other
17 types of traffic, to the Petitioners' end offices. The network design for this traffic
18 is different; thus, the forward-looking cost of transport will differ.

19 **Q. How were these changes reflected in the HAI model?**

20 A. Information regarding the tandem assignment and distances to reach the
21 interoffice network for each wire center in the state is contained in an Excel
22 spreadsheet file used by the model. I have changed the tandem assignments and
23 the distances to reach the interoffice network for certain of the Petitioners who

1 have tandems for IXC services to reflect the modified network configuration
2 associated with wireless traffic. The mileages used conform to the assumptions
3 used by the model developers for other wire centers as detailed in the HAI
4 documentation manuals.

5 **Q. Can you briefly describe the reasons for the changes made as described in**
6 **Item #12?**

7 A. Yes. In the model there are two inputs that reflect the percent of intraLATA and
8 interLATA traffic respectively that are switched through a tandem switch rather
9 than being direct trunked to an end office. The default inputs for these items is
10 20% for each of them, reflecting estimated amounts of RBOC traffic that is routed
11 through a tandem switch rather than being direct trunked to the appropriate
12 carrier. While these factors may be reflective of RBOC traffic, they are not
13 reflective of small ILEC traffic. In general, this traffic is routed on common trunk
14 groups to a tandem switch and is not put on direct trunks to the interexchange
15 carrier. I have therefore changed the input for this item to reflect an assumption
16 of 100% of the intraLATA and interLATA toll traffic being routed to a tandem
17 switch.

18 **Q. With these assumptions modified from the default values, how did you obtain**
19 **results for the Petitioners?**

20 A. The HAI model was run for each of the Petitioners. Rates for access elements
21 were obtained from one of the cost detail worksheets included in the model output
22 report file, an Excel spreadsheet with the exception of the Common Transport
23 rate. In the case of this rate, the costs and billing units presented on this output

1 sheet were used to develop the appropriate rate. The result presented in the model
2 itself uses the costs presented, but divides that based on an assumed number of
3 minutes per trunk, a result which is not normally achieved in small company
4 situations, and which is higher than the actual minutes used in the model. The
5 rate presented is thus, lower, sometimes considerably, than a rate calculated using
6 the actual costs and minutes presented in the schedule. These rates were then
7 summarized for each of the companies and combined into a weighted average for
8 the companies. Schedules RCS-4 and 5 show the actual forward-looking costs for
9 each of the companies and a summary of the costs for the companies included in
10 the T-Mobile and Cingular cases respectively.

11 **Q. What were the results of making the comparisons shown on Schedule RCS-4**
12 **and 5?**

13 A. In reviewing the costs as shown in Schedules RCS-4 and 5, there are differences
14 in the costs developed using the forward-looking cost model from the \$0.035 rate
15 per minute proposed by the Petitioners. The comparisons show that for the
16 Petitioners the HAI developed costs on an individual company basis are generally
17 higher than the proposed rates. For the Petitioners, a numeric average of the
18 forward-looking HAI costs results in an average cost of \$0.0871 for T-Mobile and
19 \$0.0843 for Cingular.

20 **Q. In developing these costs, you have included both a dedicated transport**
21 **element and a common transport element. Can you explain why you have**
22 **included both these cost elements?**

1 A. Yes. In general industry usage, dedicated transport and common transport are
2 considered separate and distinct transport facilities and generally only one is used
3 for any type of traffic. However, in the development of costs in the HAI model, a
4 different analysis is used in deriving the costs of transport facilities. First, the
5 total cost of the facility is developed based on the mileages between offices and
6 the cost of fiber and terminals for the facility. This total cost is then allocated to
7 various types of transport facilities, such as special access, local interoffice,
8 operator service, common trunks, and dedicated trunks, based on the number of
9 trunks for each service. In the studies for the Petitioners, the default assumptions
10 are changed to assume that all the traffic will be transported via common trunks
11 so one would expect there would be no dedicated trunks. However, the model
12 logic assumes that there will be one dedicated trunk for each common trunk and
13 thus allocates a substantial part of the cost of the facility to dedicated trunks
14 which should be treated as the cost of common trunks. I have corrected for this
15 allocation of costs to dedicated transport by adding the dedicated cost element to
16 the cost of transport.

17 **Q. Are these costs a reasonable estimate of the forward-looking cost of the**
18 **Petitioners?**

19 A. I believe they are on an overall basis. While the transport rates developed are
20 considerably higher than those for large companies such as SBC Missouri, these
21 differences reflect the different unit costs of operating in rural areas with long
22 transport distance and relatively small amounts of traffic.

1 **Q. How did these results impact the decision that was made by the Companies**
2 **to propose rates for arbitration based on the rates that have been agreed to**
3 **with other wireless providers?**

4 A. In this case, the cost results, since they are higher than the proposed rate, had
5 relatively little impact on the decision. The Petitioners offered the \$0.035 rate,
6 which they and other small ILECs in the state have agreed to with other wireless
7 companies, in the course of negotiations with the Respondents in the hopes that it
8 would lead to a settlement of issues and avoid the need for arbitration. Since the
9 model results were higher than the rates agreed to with other wireless providers, it
10 was believed that they would be less acceptable to the Respondents than would
11 the proposed \$0.035 rate.

12 **Q. How does this proposal fit with the FCC's rules regarding the development**
13 **of rates in an arbitration proceeding?**

14 A. The FCC's rules, contained in §51.705(a) require that such rates be based upon
15 the forward-looking cost of such services. The rate that is proposed is not
16 specifically equivalent to the forward-looking cost, but is substantially *less than*
17 the forward-looking costs indicate. Because the rate is less, we believe that it
18 would be acceptable for the Commission to adopt that rate.

19 **Q. If the Commission determines that it must adopt a rate based on forward-**
20 **looking cost, what evidence have you presented regarding those forward-**
21 **looking costs?**

22 A. As indicated earlier, Schedules RCS-4 and 5 show the composite average
23 forward-looking cost for the Petitioners for each Respondent. The Petitioners

1 recommend the use of this average for the rate for each company as more
2 appropriate than forward-looking rates developed on an individual company basis
3 because of the concerns about the use of forward-looking models for limited
4 geographic areas. However, if the Commission feels that rates set on the
5 individual company forward-looking costs are more appropriate, those costs are
6 shown on Schedules RCS-4 and 5.

7
8 **2. THE PETITIONERS OBLIGATION TO PAY RECIPROCAL**
9 **COMPENSATION FOR LANDLINE-TO-MOBILE CALLS THAT**
10 **ARE CARRIED BY AN IXC**
11

12 **Q. What is the nature of the dispute between Petitioners and Respondents on**
13 **this issue?**

14 A. Petitioners acknowledge that they have an obligation to pay reciprocal
15 compensation on local (or intraMTA) traffic they deliver to Respondents.
16 However, Petitioners do not believe they are responsible for paying reciprocal
17 compensation on intraMTA calls that landline customers make to Respondents'
18 customers where those calls are carried by the landline customer's presubscribed
19 toll carrier or IXC. In those cases of IXC carried traffic, it is the responsibility of
20 the IXC to pay terminating compensation to the Respondents. In order to

21 understand this issue, it is first necessary to understand the development of local
22 calling areas, toll calling and network design.

23 **Q. Could you describe the development of local calling areas, toll calling, and**
24 **the basic features of the network that distinguish between local and toll calls?**

1 A. Yes. Throughout the past decades, state commissions have had the responsibility
2 for establishing local calling areas and distinguishing calls within those areas
3 from calls which went outside those areas. Those calls that left the local calling
4 areas were known as toll calls. With the advent of direct distance dialing several
5 decades ago, the 1+ prefix was used to distinguish toll calls from local calls and to
6 provide a "signal" to the end user that they were dialing a toll call which would
7 bear a toll charge. In Missouri, local calling areas have been established by each
8 company and specified in their filed tariffs. Calls outside those areas have been
9 treated as toll calls.

10

11 At the time of the AT&T divestiture, the business relationships related to toll
12 calling were modified to reflect the exchange access business relationship where
13 local exchange carriers (LECs) sold the use of their exchange access facilities to
14 IXC's who provided toll service. These IXC's charged end users for the provision
15 of toll service and compensated the originating and terminating LECs for the use
16 of their exchange access facilities pursuant to both interstate and intrastate access
17 tariffs approved by the Federal Communications Commission and the Missouri
18 Public Service Commission, respectively. Under these arrangements the IXC's
19 provided toll service to end users.

20 **Q. When the LEC is selling its services under the provisions of its access tariffs,**
21 **is it providing a retail service to an end user customer?**

22 A. No, it is not. The service provided under these access tariffs is to provide
23 facilities to IXC's who use those facilities to transmit messages for their end user

1 customers. The LECs are not responsible for the transmission of messages under
2 their access tariffs. Section 2.1.1(A) of both the National Exchange Carrier
3 Association (NECA) interstate access tariff and the Oregon Farmers intrastate
4 access tariff, with which the Petitioners concur, states specifically that, "The
5 Telephone Company does not undertake to transmit messages under this tariff."

6 **Q. When wireless providers began providing service, how did calls to wireless**
7 **customers fit into the local and toll calling patterns?**

8 When wireless providers began providing service, they sought and received
9 central office codes (NPA-NXX codes) or purchased the use of telephone
10 numbers in telephone company central office codes for their wireless customers
11 and associated those codes with telephone company local exchange areas. Calls
12 to those wireless customers from within the telephone company local calling area
13 were, and are, treated as local calls. Calls to wireless customers with NPA-NXX
14 codes outside the local calling area were, and are, treated as toll calls. Local
15 switching systems are programmed pursuant to approved tariffs to complete toll
16 calls using a 1+ prefix.

17
18 Pursuant initially to AT&T divestiture requirements and associated FCC orders,
19 and more recently to the Telecommunications Act of 1996 (the Act), dialing
20 parity and presubscription procedures have been established so that end user
21 customers can direct all 1+ calls to the IXC(s) of their choice. Pursuant to these
22 legal and regulatory requirements, LECs direct 1+ dialed calls to their end user
23 customer's presubscribed carrier who provides the toll call for the customer. The

1 IXC's continue to use the LEC's exchange access facilities in order to provision the
2 service to their end user customers.

3 **Q. Prior to the passage of the Act, were calls to CMRS end user customers**
4 **treated as toll calls for dialing and carrier responsibility purposes based on**
5 **the local calling areas established by the state commissions?**

6 A. Yes they were, as I described in my previous answer. For example, a call from an
7 end user in Grand River Mutual Telephone Company who called a wireless
8 customer with a Kansas City NPA-NXX code would dial that call using the 1+
9 prefix and that customer's IXC would be responsible for carrying the call. If
10 Sprint is the IXC that provisions and completes the call, then Sprint would be
11 responsible for carrying the call and charging the end user customer. Sprint would
12 pay Grand River its originating access charges, and it would also compensate the
13 terminating wireless carrier based on the business relationships established with
14 the terminating wireless carrier.

15 **Q. Would such a call be a call between a local exchange carrier and a wireless**
16 **carrier?**

17 A. No, it would not. From a carrier standpoint the call is between Sprint (the IXC)
18 and the wireless carrier. In this situation, the end user is Sprint's end user, not the
19 LEC's end user.

20 **Q. Has this dialing arrangement changed since the passage of the Act?**

21 A. No, it has not. It certainly hasn't changed in Missouri either in regard to the
22 Petitioners or to the other companies in the state. I am not aware that these
23 dialing arrangements have been changed anywhere in the country to treat calls

1 from a customer responsibility and dialing standpoint to CMRS providers
2 differently from before the Act.

3 **Q. Can you briefly summarize the business relations that exist between end**
4 **users, LECs, and IXC's in relation to a presubscribed 1+ toll call?**

5 A. Yes. The end user chooses a presubscribed IXC to carry its 1+ calls and
6 establishes a business relationship with that IXC. The IXC, through the
7 purchasing of access services from the LEC's access tariff, arranges to use the
8 LEC's facilities to "access" its end user to provide toll services to that end user.
9 When an end user makes a call by dialing 1+, the IXC, using the LEC facilities
10 which it has purchased, and its own facilities, fulfills its obligation to the end user
11 to complete the toll call, possibly to a CMRS provider within the MTA. It then
12 charges the end user for the provision of that toll service.

13 **Q. In this relationship, is the call the end user makes a call "between a LEC and**
14 **a CMRS provider"?**

15 A. It is not. The call is between the IXC and the CMRS provider. The LECs
16 involvement is that of a wholesaler of facilities to the IXC so that the IXC can
17 complete its obligation to its end user. The fact that the IXC's end user is also the
18 LECs end user for the provision of local service is irrelevant in regard to the
19 specific toll call between the IXC and the CMRS provider.

20 **Q. Are you aware of any discussion in the FCC's Report and Order in CC**
21 **Docket No. 96-98 (the Interconnection Order) that discussed any changes in**
22 **carrier responsibilities or customer dialing procedures related to the**
23 **implementation of the Act?**

1 A. No. I have reviewed relevant portions of that order and saw no such discussion.

2 **Q. Are there statements in that Order that suggest that the FCC did not intend**
3 **to change such arrangements?**

4 A. Yes. Paragraph 1043 of the FCC interconnection order states as follows:

5 Based on our authority under section 251(g) to preserve the current
6 interstate access charge regime, we conclude that the new transport
7 and termination rules should be applied to LECs and CMRS
8 providers so that CMRS providers continue not to pay interstate
9 access charges for traffic that currently is not subject to such
10 charges, and are assessed such charges for traffic that is currently
11 subject to interstate access charges.
12

13 This indicates to me that the FCC intended that calls to CMRS providers that were
14 currently being carried by IXCs and for which access charges applied would
15 continue to be given the same treatment.

16 **Q. Are there subsequent rulings by the FCC indicating that calls carried by**
17 **IXCs would continue to be subject to access charges?**

18 A. Yes. In a decision issued in 2000 related to a compensation complaint between a
19 paging carrier and an ILEC, the FCC made the following statement:

20 Pursuant to Section 51.703(b), a LEC may not charge CMRS providers for
21 facilities used to deliver LEC-originated traffic that originates and terminates
22 within the same MTA, as this constitutes local traffic under our rules. Such
23 traffic falls under the reciprocal compensation rules if carried by the
24 incumbent LEC, and under our access charge rules if carried by an
25 interexchange carrier.¹
26

27 **Q. Before exploring the issues related to implementation of the Act could you**
28 **briefly describe the context in which the FCC implemented rules related to**
29 **the Act?**

¹ *TSR Wireless, LLC v. US West Communications, Inc.*, Memorandum Opinion and Order, Released June 21, 2000 FCC 00-194 ("TSR Wireless Order"), paragraph 31. [emphasis added]

1 A. Yes. The Act became law on February 8, 1996. Pursuant to requirements of the
2 Act, the FCC had six months in which to develop and implement rules on a host
3 of technical, financial, and policy issues related to the new requirements of the
4 Act providing for local interconnection, reciprocal compensation, dialing parity,
5 and the pricing for such services. The FCC had a total of fifteen months to
6 address and implement rules regarding universal service issues. These time
7 frames put tremendous pressure on the FCC and its staff to review thousands of
8 pages of comments on a large number of issues and to develop policies,
9 procedures, and rules to implement the Act. The two Orders in CC Docket 96-98
10 issued on August 6, 1996, (dealing with interconnection issues) amounted to a
11 total of 833 pages and incorporated some 70 pages of new rules. Given this time
12 frame and the overwhelming number of issues that had to be dealt with, the
13 FCC's focus was primarily on implementation as it related to the RBOCs and the
14 large metropolitan areas of the country since they comprised both the vast
15 majority of the LEC customers and particularly the areas where competition was
16 expected first. Thus, in establishing rules and implementing text, it is not always
17 clear how the rules apply in the case of small companies, whose operations are
18 often different than the RBOCs. I believe that it is important that this
19 Commission keep that in mind as it reviews the FCC's discussion and rules
20 related to LECs and CMRS providers.

21 **Q. What particular rules and Orders are relevant to the discussion of the extent**
22 **that reciprocal compensation is applicable in the core situation that you**
23 **described?**

1 A. The FCC's First Report and Order, discussed earlier, is the Order that addressed
2 the implementation of the Act in regard to these issues. Particularly relevant to
3 this issue is the discussion in paragraphs 1033 to 1045. In the FCC rules, the
4 pertinent section is Section 51.701, particularly 51.701(b), in which the FCC
5 defines telecommunications traffic for reciprocal compensation purposes.

6 **Q. Are there places in the paragraphs you mentioned above that indicate that**
7 **the FCC was focusing primarily on RBOC circumstances, rather than small**
8 **company circumstances, when it addressed these issues?**

9 A. Yes. In the middle of paragraph 1043 the FCC states, "Under our existing
10 practice, most traffic between LECs and CMRS providers is not subject to
11 interstate access charges unless it is carried by an IXC..." This statement was
12 likely true for the RBOCs where calls between the BOC and CMRS providers
13 were primarily either in large metropolitan areas with large local calling areas, or
14 intraLATA toll calling areas where the BOC provided virtually all intraLATA toll
15 calling at the time. For small companies, such as the Petitioners, there was very
16 little existing LEC to CMRS traffic that was not subject to access charges.

17
18 In paragraph 1034, the FCC contrasts the access charge regime where the
19 originating LEC, terminating LEC, and an IXC are involved in a call with the
20 intended use of reciprocal compensation which, according to the FCC is intended
21 for, "...the situation in which two carriers collaborate to complete a local call."
22 For the Petitioners, hardly any calls between CMRS providers and the Petitioners
23 fall in this description of the intended use of reciprocal compensation, while most

1 fall under the access charge regime for landline-originated calls. For wireless-
2 originated calls, very few involve only two carriers to complete the calls to the
3 Petitioners, with most calls involving a third carrier, often a large LEC, to transit
4 the call to the terminating small LEC.

5 **Q. Upon what basis in this Order do you believe the Respondents derives their**
6 **opinion that the Petitioners are responsible for compensation to CMRS**
7 **providers for traffic terminated within the MTA, even if it is carried by an**
8 **IXC?**

9 A. I would presume that they base their position upon Paragraph 1036 of the FCC's
10 First Report and Order. The FCC begins this paragraph by stating that it is
11 defining, "...local service areas for calls to or from a CMRS network for the
12 purposes of applying reciprocal compensation obligations under section
13 251(b)(5)². After discussing varying types of wireless service areas and
14 indicating that it will choose the largest of these areas, the paragraph is concluded
15 with the following statement: "Accordingly, traffic to or from a CMRS network
16 that originates and terminates within the same MTA is subject to transport and
17 termination rates under section 251(b)(5), rather than interstate and intrastate
18 access charges."

19 **Q. Can these statements be properly understood without putting them in the**
20 **broader context of the remainder of the FCC's decision on this subject?**

21 A. No. Taken on their face and out of context from the remainder of the First Report
22 and the rules adopted in that order, these sentences seem to say that all calls to a
23 wireless carrier within the MTA are not subject to access charges. However, the

² The First Report, para. 1036. [emphasis added]

1 rules adopted by the FCC are more specific and limiting than this paragraph.
2 They do not talk about all calls with the MTA, but a more limited set of calls. In
3 §51.701(a) (adopted in the First Report) the FCC defines the scope of the rules for
4 reciprocal compensation for the transport and termination of local
5 telecommunications traffic as follows:

6 (a) The provisions of this subpart apply to reciprocal compensation for
7 transport and termination of local telecommunications traffic between LECs
8 and other telecommunications carriers.

9
10 This clearly limits the application of the subpart to calls between LECs and other
11 telecommunications carriers and not to calls between IXCs and such carriers.
12 This distinction from Paragraph 1036 is also made clear in the specific FCC
13 definition of telecommunications traffic, found in §51.701(b) of the FCC's rules
14 which states:

15 (b) *Telecommunications traffic*. For purposes of this subpart, telecommunications
16 traffic means:

17
18 (1) Telecommunications traffic exchanged between a LEC and a
19 telecommunications carrier other than a CMRS provider, except for
20 telecommunications traffic that is interstate or intrastate exchange access, information
21 access, or exchange services for such access (*see* FCC 01-131, paras. 34, 36, 39, 42-
22 43); or

23
24 (2) Telecommunications traffic between a LEC and a CMRS provider that, at
25 the beginning of the call, originates and terminates within the same Major Trading
26 Area, as defined in § 24.202(a) of this chapter.

27
28 In regard to traffic where a CMRS provider is involved, the rule refers specifically
29 and only to telecommunications traffic "between a LEC and a CMRS provider".
30 Thus, traffic, for example, between an IXC and a CMRS provider is not local
31 telecommunications traffic under the FCC's rules.

32 **Q. Is this distinction further clarified in another paragraph of the First Report?**

1 A. Yes. Between paragraphs 1036 and 1043 of the First Report and Order there is
2 clarification. In Paragraph 1043 the FCC states:

3 We reiterate that traffic between an incumbent LEC and a CMRS network that
4 originates and terminates within the same MTA...is subject to transport and
5 termination rates under section 251(b)(5), rather than interstate or intrastate
6 access charges. [emphasis added]
7

8 The FCC states here that they are reiterating a previous statement. If one reviews
9 the intervening paragraphs, it is clear that this reference can only be to Paragraph
10 1036 where it spoke on this subject. In that Paragraph, however, it was not as
11 specific in its reference to "...calls between an incumbent LEC and a CMRS
12 network." This is emphasized by the following sentences where the FCC
13 recognizes that most traffic between LECs and CMRS providers are not subject to
14 access charges, unless they are carried by an IXC. The paragraph concludes with
15 the following statement:

16 Based on our authority under section 251(g) to preserve the current
17 interstate access charge regime, we conclude that the new transport and
18 termination rules should be applied to LECs and CMRS providers so that
19 CMRS providers continue not to pay interstate access charges for traffic that
20 currently is not subject to such charges, and are assessed such charges for
21 traffic that is currently subject to interstate access charges.
22

23 This statement indicates the FCC's intent to preserve the interstate access regime
24 for such calls to CMRS providers.

25 **Q. In the discussion in this part of the First Report and in the rules that the**
26 **FCC adopted, is there any indication that these rules applied for any purpose**
27 **beyond the determination of compensation?**

28 A. No, there is not. The discussion throughout this section discusses compensation
29 for calls between LECs and CMRS providers. Section 51.701(A) cited above

1 specifically indicates that it applies to compensation for those calls. There is
2 nothing, either in the rules or in the discussion in the Order, that indicates any
3 intent to require changes in network arrangements or dialing patterns. For
4 example, there is no discussion of removing IXCs from carrying calls within the
5 MTA by eliminating 1+ dialing on calls to wireless carriers within the MTA. It
6 appears to me that the FCC was very careful to establish this relationship for
7 reciprocal compensation purposes while not disturbing existing network calling
8 patterns and existing network relationships.

9 **Q. Are there other parts of the FCC's discussion in these paragraphs that**
10 **highlight the differences between reciprocal compensation and access charge**
11 **compensation?**

12 A. Yes. In Paragraph 1033, the FCC specifically notes that, "The Act preserves the
13 legal distinctions between charges for transport and termination of local traffic
14 and interstate and intrastate charges for terminating long-distance traffic." In
15 Paragraph 1034 the FCC states:

16 ...reciprocal compensation for transport and termination of calls is intended for a
17 situation in which two carriers collaborate to complete a local call. In this case,
18 the local caller pays charges to the originating carrier, and the originating carrier
19 must compensate the terminating carrier for completing the call. [emphasis added]
20

21 Further in Paragraph 1034 the FCC states:

22 We note that our conclusion that long distance traffic is not subject to the
23 transport and termination provisions of section 251 does not in any way disrupt
24 the ability of IXCs to terminate their interstate long-distance traffic on LEC
25 networks... We find that the reciprocal compensation provisions of section
26 251(b)(5) for transport and termination of traffic do not apply to the transport or
27 termination of interstate or intrastate interexchange traffic.
28

1 These three statements indicate the intent of the FCC to maintain the access
2 regime and to apply reciprocal compensation rules only in situations where two
3 carriers exchange local calls without the involvement of an IXC. They also
4 confirm that reciprocal compensation and access are two separate and mutually
5 exclusive compensation systems.

6 **Q. Can you summarize why you believe that the Petitioners have no local traffic**
7 **that they are exchanging with CMRS providers?**

8 A. Yes. The majority of traffic leaving the Petitioners' exchanges for CMRS
9 providers is traffic between an IXC and a CMRS provider, not traffic between the
10 LEC and the CMRS provider. The LEC has no responsibility, financial or
11 otherwise, for that traffic and, under the FCC's definition, that traffic is not
12 telecommunications traffic subject to reciprocal compensation rules.

13 **Q. So what is the fundamental conflict between Petitioners' position and that of**
14 **the Respondents?**

15 A. In spite of the fact that the IXC contracts through an access tariff to use the LECs'
16 facilities to originate a toll call and pay the LECs for the facilities; in spite of the
17 fact that the end users, through their presubscription choices, choose a specific
18 IXC to provide toll service; in spite of the fact that the IXC contracts with an end
19 user through its toll tariffs or pricing contracts to complete that call and receives
20 revenue from the end user for doing so; in spite of the fact that the IXC carries the
21 call on its own network to the terminating end without expecting compensation
22 from the originating LEC; and in spite of the fact that the IXC takes responsibility
23 for paying whatever terminating charges are due the CMRS provider, the

1 Respondents argue that the LEC who provides local service to the end user is
2 responsible to pay the terminating CMRS provider for the call.

3 **Q. How do Respondents attempt to justify this?**

4 A. From my viewpoint they do several things. One, they ignore the limitations
5 placed on the LECs by the certificates they are issued by the Missouri Public
6 Service Commission. These certificates generally provide that Petitioners are
7 only authorized to provide telephone service to the public within the areas in the
8 State of Missouri depicted by their exchange boundary maps. In other words,
9 Petitioners are not authorized to provide (nor do they hold themselves to provide)
10 telephone service beyond their local exchange boundaries. Respondents' position
11 would require Petitioners to carry and complete calls to wireless customers
12 outside of Petitioners' local exchange boundaries. Two, Respondents ignore the
13 requirements placed on a LEC by its Commission approved local tariffs to
14 distinguish between local and toll calls. Three, Respondents ignore all of the
15 contractual relationships established by local and toll tariffs and somehow try to
16 construe that because a call originates from an IXC end user, which is also a LEC
17 end user for local service, that the call originates from the LEC itself.

18 **Q. The Respondents seem to take the position that it does not matter whether an**
19 **IXC is involved in a call, but only where the beginning and ending points of**
20 **the call are located. Is this statement consistent with the FCC's definition of**
21 **telecommunications traffic?**

22 A. No. First of all, in the situations I have described where the IXC is the carrier, it
23 is not just the intermediate carrier, but the originating carrier as well. Secondly,

1 the FCC's definition that I quoted above was specific to LECs and CMRS
2 providers only and did not state that traffic between an IXC and a CMRS provider
3 was telecommunications traffic subject to reciprocal compensation.

4 **Q. Are the wireless carriers consistent in their position that traffic between**
5 **wireless carriers and LECs is solely the responsibility of those carriers**
6 **regardless of whether an interexchange carrier handles the call?**

7 A. No, they are not. While the Respondents claim that the originating LEC should
8 pay the wireless carrier for intraMTA traffic carried by an IXC to the wireless
9 carrier, when the direction of the traffic is reversed, the wireless carriers have a
10 different perception. Frequently, wireless carriers use IXCs to terminate their
11 intraMTA traffic to LECs, rather than using SBC's or another LEC's transiting
12 service. In that case, the Respondents do not expect to pay terminating reciprocal
13 compensation to the LECs for IXC-carried calls.

14 **Q. If the Commission included such IXC traffic within the scope of the Traffic**
15 **Termination Agreements in this arbitration, what revenues would the**
16 **Respondents be entitled to receive for these calls?**

17 A. As a CMRS providers, the Respondents would be entitled to revenues from its
18 end user customers that receive these calls. CMRS providers typically charge
19 end users both to originate and terminate calls. Second, the Respondents would
20 be entitled to terminating compensation from the IXC based on their existing
21 arrangements. Third, Respondents would be entitled to receive reciprocal
22 compensation from Petitioners.

1 **Q. So would the Respondents be entitled to possibly receive three different**
2 **forms of terminating compensation for the same call?**

3 A. Yes, depending on their compensation arrangements with the IXC, the
4 Respondents could be entitled to terminating compensation from their end users,
5 the IXC, and the ILEC.

6 **Q. Has the Commission had occasions to address this issue in other**
7 **proceedings?**

8 A. Yes, there have been several Commission decisions suggesting that the rural
9 ILEC Petitioners here are not responsible for this traffic.

10 **Q. Could you briefly review these decisions?**

11 A. Yes, Missouri small rural ILECs, including Petitioners, filed wireless termination
12 service tariffs which were opposed by wireless carriers. This was the Mark Twain
13 Wireless Tariff Case (No. TT-2001-139). The wireless carriers opposed the tariff
14 partly on the claim that the tariffs did not recognize or credit the wireless carriers
15 with reciprocal compensation for landline-to-mobile IXC carried traffic. In its
16 Order the Commission stated:

17
18 "At present, with the termination of the PTC Plan, it is the norm that traffic
19 between the small LECs and CMRS carriers is one-way traffic. This is because
20 traffic to CMRS subscribers from the small LECs' subscribers is transported by
21 IXCs and treated as toll traffic. ... [I]f the traffic is being carried by an IXC, the
22 IXC must compensate the CMRS carrier for the termination of the call."
23 (emphasis added)

24
25

26 **Q. Did the Commission enter a similar order in approving the wireless**
27 **termination tariff of a CLEC?**

1 A. Yes. In MO PSC Case No. TT-2001-646 the Commission reached the same
2 decision when it approved a wireless tariff for a CLEC:

3 "All of Mark Twain's traffic that is destined for the NXXs of wireless carriers
4 operating in Missouri, including AT&T Wireless and Sprint PCS, is currently
5 dialed: (a) on a 1+ basis and carried by Mark Twain's customers' presubscribed
6 interexchange carrier ("IXC"); or (b) on a 101XXX basis and carried by an IXC."
7

8 **Q. Are there any other Commission decisions which you believe are instructive?**

9 A. A complaint Case (TC-2002-1077) was brought by rural ILECs against T-Mobile.
10 T-Mobile claimed it did not owe compensation to the Complainants under their
11 wireless termination tariffs because the landline to mobile IXC traffic was
12 "equivalent in volume" to wireless to landline traffic. The Commission stated:

13 "The Wireless Respondents maintain that the intraMTA traffic that they exchange
14 with the Complainants is symmetrical, that is, that equivalent volumes flow in
15 both directions. ... The record shows, and the Commission finds, that the
16 Complainants routed all traffic originating on their networks and intended for
17 subscribers of the Wireless Respondents through an IXC."
18

19 **Q. Are you aware that in a recent arbitration case the Commission arrived at a
20 different conclusion?**

21 A. Yes. I am aware that in a recent arbitration case, MO PSC Case No. 10-2005-
22 0468, involving several small Missouri companies and T-Mobile (the Alma
23 Arbitration), the Commission reached a different conclusion. The Commission,
24 in a 3 to 2 decision, reversed its earlier understanding of the business relationships
25 between end users, ILECs, IXCs, and CMRS providers. In my opinion, the
26 Commission's decision in that case is incorrect insofar as it requires ILECs to pay
27 CMRS providers for terminating intraMTA calls for which the ILECs have no
28 authority to carry, as well as no relationship with the end user and collect no
29 revenues for providing.

1
2 **3. THE APPROPRIATE RATIO OF MOBILE-TO-LAND AND LAND-**
3 **T0-MOBILE TRAFFIC (I.E., TRAFFIC RATIO)**
4

5 **Q. In the previously mentioned Alma arbitration case, the Commission also**
6 **adopted a ratio representing mobile-to-land/land-to-mobile traffic to use in**
7 **developing the charges between ILECs and CMRS providers. Have the**
8 **Petitioners developed data regarding such ratios on the chance that the**
9 **Commission might impose such ratios in this proceeding?**

10 **A.** Yes, they have. These ratios have been developed under the assumption that the
11 Commission might continue to conclude that ILECs and CMRS providers should
12 compensate each other for intraMTA traffic carried by IXC.
13

14 **Q. Can you describe the studies done to arrive at these ratios?**

15 **A.** Yes. Traffic studies were performed by several of the Petitioners. The results of
16 the studies are contained in Schedule RCS-6. Eight of the Petitioners measured
17 traffic to and from T-Mobile and eleven of the Petitioners measured traffic to and
18 from Cingular. The traffic measured included traffic to and from NXXs in the
19 entire Major Trading Area (MTA) (as more fully discussed in Issue 4) that are
20 assigned to the Respondents. The wireless-originated traffic from the
21 Respondents' NXXs included traffic terminated to the participating Petitioners,
22 whether via transiting arrangements with SBC or carried by an IXC. For landline-
23 originated traffic terminating to the Respondents, only calls carried by IXCs were
24 included because, as discussed in Issue 2, all calls from customers in the
25 Petitioners' service areas are carried by IXCs.

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Q What is the Petitioners’ proposal on mobile to land traffic and why is it appropriate?

A. The Petitioners propose, for every Petitioner, that the mobile-to-land factor be 84/16 for T-Mobile and 83/17 for Cingular because those are the averages from the traffic studies as shown in Schedule RCS-6. The Petitioners think their proposal is appropriate because it is based on actual traffic studies that contained an apples-to-apples comparison of traffic between the Parties. The Petitioners believe an average number is appropriate, as opposed to use of a different factor for each Petitioner, because: 1) the number of Petitioners that performed the studies comprise a large enough sample; 2) the sample is geographically diverse as it contains rural LECs in each region of the state; 3) the sample is relevant by size of carrier because the Petitioners that participated in the study included companies that adequately represent the sizes (as measured by access lines and MOU) of all of the Petitioners; and 4) the results are relatively constant around the 80%-85% mobile-to-land range. For these reasons, the Petitioners recommend that the Commission adopt the Petitioners’ average mobile-to-land/land-to-mobile traffic factors for all Petitioners.

4. THE APPROPRIATE PERCENTAGES OF INTERMTA TRAFFIC THAT ARE INTRASTATE AND INTERSTATE

Q. Could you briefly describe an “MTA” and the distinctions between intraMTA and interMTA traffic?

1 A. Yes. MTA is an acronym for Major Trading Area. These areas are areas defined
2 by Rand McNally Corporation as large commercial trading areas and were
3 adopted and used by the FCC in Part 24.202(a) of its rules to define the largest
4 license areas for providers of Commercial Mobile Radio Service (CMRS).
5 Schedule RCS-7 is a map of Missouri that shows the MTA boundaries within the
6 state. As can be seen from this schedule, Missouri is primarily divided into two
7 MTA's from north to south with the MTA boundary moving toward the west as it
8 descends through the state. These MTA's also extend into other states with the
9 St. Louis MTA extending to the east into Illinois and the Kansas City MTA
10 extending to the west into Kansas and south into one county in northern
11 Oklahoma. In the far southeastern corner of Missouri, Pemiscot County is
12 separate from these two MTA's and is included in the Memphis MTA, while in
13 the northeastern corner of the state, Clark County is included in the Des Moines
14 MTA.

15
16 In developing rules for traffic subject to reciprocal compensation, the FCC, in Part
17 51.701(a)(2) of its rules, used these MTA boundaries as the defining line of
18 Telecommunications Traffic between LECs and CMRS providers. Traffic
19 between LECS and CMRS providers that originates and terminates within the
20 same MTA is intraMTA and is subject to reciprocal compensation rules. Traffic
21 between LECs and CMRS providers that cross the MTA boundaries, is interMTA
22 traffic, and is subject to access rules and tariffs.

1 Once traffic has been identified as interMTA, it is then necessary to determine
2 what amount of the interMTA traffic is interstate, in which case interstate access
3 charges apply, and what amount of the interMTA MTA traffic is intrastate, in
4 which case intrastate access charges apply.

5
6 **Q. With that background, let's turn to the specifics of the outstanding**
7 **interMTA factor issue. Can you please describe the nature of the dispute?**

8 A. Yes. The ratio (or percentage) of interMTA traffic to intraMTA traffic has been
9 resolved between Petitioners and both Cingular and T-Mobile. In addition, the
10 percentages of interMTA traffic that shall deemed interstate and intrastate has
11 also been resolved between Petitioners and Cingular (i.e., 80% intrastate and 20%
12 interstate). However, Petitioners and T-Mobile have been unable to resolve the
13 percentages of interMTA traffic that shall be deemed interstate and intrastate.
14 Accordingly, that limited issue with respect to interMTA traffic is the issue that
15 Petitioners are asking the Commissioners to resolve.

16
17 **Q. Can you please explain the Parties position on this issue and why Petitioners**
18 **are proposing the ratios they are recommending that the Commission adopt?**

19 A. Yes. The Petitioners are proposing the same ratio of 80% intrastate and 20%
20 interstate that the Petitioners (and other rural LEC in Missouri) have agreed to
21 with Cingular (and other CMRS carriers). T-Mobile is proposing a ratio of 0%
22 intrastate and 100% interstate.

1 **Q. Why is Petitioners' position more appropriate than T-Mobile's?**

2 A. First, it is simply inconceivable that some amount of the interMTA traffic is not
3 intrastate. Yet that is T-Mobile's position. For example, T-Mobile would have
4 this Commission believe that no wireless customer in the Kansas City, Missouri
5 MTA is placing a call to a landline customer located in the St. Louis, Missouri
6 MTA. While the two Petitioners who have a significant amount of InterMTA
7 traffic (i.e., Mark Twain and BPS) have not completed a detailed traffic study of
8 their interMTA traffic, a quick review of calling data reveals that a significant
9 amount of interMTA traffic is coming from wireless NPA NXXs rate centered in
10 the State of Missouri. In addition, wireless carriers have stated in the past that
11 they typically route interstate calls to IXCs for termination to ILECs, so that the
12 preponderance of calls routed over the transit facilities of SBC would be
13 intrastate. Thus, to the extent there is interMTA traffic transited over SBC's
14 facilities, it stands to reason that it is mostly intrastate traffic. Finally, T-Mobile's
15 position is belied by the fact that it has agreements with other small Missouri
16 LECs where the intrastate/interstate split of interMTA traffic is 80/20 (see e.g., T-
17 Mobile Traffic Termination Agreement with Chariton Valley Telephone
18 Corporation, Case No. TK-2006-0168).

19

20 **5. NET BILLING OF TRAFFIC BY THE PETITIONERS**

21 **Q. Can you please describe the nature of the dispute on net billing of traffic and**
22 **the Petitioners' rationale for their proposal?**

1 A. Yes. The Petitioners have come to a general agreement (with one exception
2 discussed below) with both T-Mobile and Cingular on how billing would be
3 handled by the Petitioners in the event that the Commission disagrees with the
4 Petitioners' position on compensation for calls carried by IXCs.

5
6 **Q. Can you please explain what you meant when you said there is one exception**
7 **to the agreement between the Petitioners and T-Mobile on net billing?**

8 A. Yes. T-Mobile is proposing that formulas used in the development of the net bill
9 be based on traffic terminated to the Petitioners from T-Mobile, as determined
10 from the tandem company's (i.e., SBC's) transiting usage records, as well as
11 traffic for which T-Mobile has contracted with an IXC to carry the traffic but that
12 is not identified on the transiting usage records. The Petitioners are proposing
13 that the formulas apply simply to the traffic contained in the transiting usage
14 reports because there is no economically feasible way for the Petitioners to
15 determine what traffic from IXCs is associated with T-Mobile's customers. Some
16 of the companies were able to make such calculations on an isolated basis, at
17 significant time and expense, for purposes of applying the Petitioners' proposed
18 mobile-to-land/land-to-mobile traffic factor previously discussed in relation to
19 Issue 2. But to do so every month would be extremely burdensome, especially for
20 the level of revenue at issue as a result of this proceeding. Furthermore, the
21 Petitioners' proposal to issue net bills based solely on the traffic contained in the
22 transit usage records is being made despite the fact that the expected net bills
23 under T-Mobile's proposal could theoretically result in more revenue to the rural

1 LECs. Nevertheless, it is simply not practical for the LECs to incur the expenses
2 necessary to determine which IXC-terminated MOU were originated by T-Mobile
3 customers even when accounting for the additional revenue that could be received
4 from issuing net bills based on such calculations. In order to reduce billing
5 administration costs, the Petitioners request that the Commission order that net
6 bills be issued by ILECs based solely on the tandem company's transiting usage
7 reports.

8
9 **6. INCLUSION OF PROVISIONS FOR DIRECT**
10 **INTERCONNECTION**

11 **Q. Can you please explain the issue of dispute on direct interconnection?**

12 A. Yes. Cingular is proposing language to allow for direct interconnection in the
13 event that the Parties may, some day, seek to interconnect directly (as opposed to
14 the indirect method by which they interconnect today). Similarly, for purposes of
15 this issue, Cingular is opposed to the Petitioners' proposed language in Section
16 1.1 that limits the agreement to the indirect methodology in place today between
17 the Parties.

18
19 **Q. Can you please explain why the Petitioners are opposed to the inclusion of**
20 **direct interconnection provisions in the contract?**

21 A. Yes. First, direct interconnection is covered under the provisions of Section
22 251(c) of the Act and the Petitioners currently have rural exemptions from such
23 obligations pursuant to Section 251(f) of the Act. If Cingular wants direct

1 interconnection, it needs to issue a bona fide request for termination of the
2 Petitioners' rural exemptions pursuant to Section 251(f) of the Act. The
3 Commission must then affirmatively find such request is not unduly economically
4 burdensome, is technically feasible, and is consistent with Section 254 (Universal
5 Service).

6
7 Second, this arbitration is the result of a request of the Petitioners for negotiations
8 with Cingular to establish compensation for existing indirect interconnect
9 arrangements. The Petitioners did not, and do not request or need direct
10 interconnection with Cingular. Apparently, Cingular does not really want or need
11 direct interconnection with any of the Petitioners at this time as well, since they
12 have indicated no specific instance where they currently desire such
13 interconnection.

14
15 Third, direct interconnection is a very complicated process. Several of the
16 Petitioners have established direct interconnection with wireless carriers and, as a
17 result of those negotiations, they know that the provisions proposed by Cingular
18 are not adequate enough to cover all of the issues associated with direct
19 interconnection that would need to be addressed between the Parties in the event
20 that one of the Parties chooses to directly interconnect. In other words, if the
21 Parties choose to directly interconnect at some point in the future, the generic
22 language proposed by Cingular would need to either be amended or replaced
23 anyway, especially when one sees the voluminous interconnection agreements

1 that non-rural carriers have with CMRS carriers. Rather than expending resources
2 attempting to address hypothetical issues associated with direct interconnection,
3 which may never occur, the Petitioners believe it is a better use of the
4 Commission's and the Parties' resources to defer those issues to a time when a
5 specific request is made and all of the many issues can be addressed in a real
6 sense and not in the abstract.

7
8 For these reasons, the Petitioners propose that the Commission reject Cingular's
9 direct interconnection proposals.

10
11 **7. LOCAL DIALING OF EXTENDED AREA SERVICE (EAS) CALLS**
12 **FROM PETITIONERS' CUSTOMERS TO RESPONDENTS'**
13 **CUSTOMERS**
14

15 **Q. Can you please describe the nature of the dispute regarding EAS calling?**

16 A. Cingular wants Petitioners' customers to be able to dial Cingular's customers on a
17 locally dialed basis in an extended service area (EAS) arrangement or an
18 expanded local calling plan (like the MCA), just as Petitioners' customers are able
19 to locally dial landline customers in those EAS or MCA exchanges. For example,
20 Kingdom Telephone Company customers in Tebbetts, Missouri, have EAS to
21 Jefferson City that allows them to call Jefferson City customers on a locally
22 dialed (non-toll) basis. If Cingular obtains telephone numbers (NPA NXXs) for
23 its customers that are rated in the Jefferson City wire center or exchange, Cingular
24 wants those Tebbetts customers to be able to dial Cingular's customers with
25 Jefferson City numbers on a locally dialed basis as well.

1

2 **Q. What is Petitioners' position on this issue?**

3 A. Petitioners are willing to implement local dialing for their customers to call
4 Cingular customers with telephone numbers rated in the wire center or exchange
5 with which Petitioners have EAS or other expanded local calling plans; provided
6 Cingular is also locally interconnected in the wire center or exchange to which
7 Petitioners have EAS or expanded calling plans.

8

9 **Q. Why should the Commission accept the Petitioners' position on this issue?**

10 A. The Commission should accept the Petitioners' position because it is consistent
11 with the decision of the Commission in an arbitration between SBC and Mid-
12 Missouri Cellular (MO PSC Case No. TO-99-279). In the Mid-Missouri Cellular
13 arbitration case, Mid-Missouri Cellular wanted SBC customers to be able to call
14 Mid-Missouri Cellular customers on a locally dialed basis. The Commission
15 found as follows:

16 The Commission agrees with SWBT that a call from a SWBT landline
17 customer to a MMC Cellular subscriber is properly rated as a local call
18 only where: (1) the landline and cellular exchanges are locally
19 interconnected; and (2) the V&H coordinates of the cellular exchange (i.e.,
20 within the local calling area of the landline exchange).

21

22 Petitioners' believe the Commission's decision in the Mid-Missouri Cellular
23 arbitration case is controlling here, and Cingular should not only have NPA
24 NXXs that are rate centered in the EAS exchange but Cingular should also be
25 locally interconnected with the EAS exchange. Furthermore, without the
26 Petitioners' proposed provision, the Petitioners would be responsible to route the

1 calls outside of their EAS areas. Such routing would be economically
2 burdensome to the Petitioners for reasons similar to the issues addressed in recent
3 local number portability (LNP) suspensions and modifications issued by the
4 Commission, as more fully discussed in relation to Issue 8. Since lack of
5 inclusion of such language would be inconsistent with a previous arbitration
6 decision by the Commission and would be unduly economically burdensome to
7 the Petitioners, the Petitioners recommend that the Commission accept the
8 Petitioners' position on this issue.

9
10 **8. DIALING PARITY FOR CALLS FROM PETITIONERS'**
11 **CUSTOMERS TO RESPONDENTS' CUSTOMERS (A/K/A/**
12 **"VIRTUAL NXX")**
13

14 **Q. Can you please describe the nature of the dispute between the Parties on the**
15 **dialing parity issue?**

16 A. Yes. The Petitioners are opposed to Cingular's proposed Section 20, which
17 would require the Petitioners to rate, as local, all calls to Cingular NPA/NXXs
18 assigned to the Petitioners' rate centers even if they are routed to a distant
19 location. This issue is often referred to in the industry as the "Virtual NXX"
20 issue.

21
22 **Q. Why are the Petitioners opposed to Cingular's proposed dialing parity**
23 **language?**

24 A. The Petitioners oppose Cingular's proposed language because it would require the
25 Petitioners to transport calls outside of their service areas; an outcome that would

1 be unduly economically burdensome. As previously discussed in Issue 2, calls by
2 customers in the Petitioners' service areas to Cingular are currently carried by
3 IXC's. In order to change that methodology to a local calling scenario, as
4 proposed by Cingular, the Petitioners would need to route the calls to Cingular
5 outside of the Petitioners' service area because Cingular does not have facilities
6 within the Petitioners' exchanges. The Petitioners currently do not have facilities
7 outside of their service areas nor do they have the certificate or tariff authority to
8 carry traffic beyond their exchanges. Therefore, the Petitioners would need to
9 expend additional costs - negotiating interconnection agreements and paying
10 facility usage fees - to the tandem provider, or another third party carrier, in order
11 to transport calls to Cingular. When faced with a similar proposal by Western
12 Wireless in intermodal (i.e., wireline-to-wireless) LNP waiver proceedings, the
13 Commission determined that it would be economically burdensome for rural
14 LECs to transport calls outside of their service areas in consideration of the costs
15 for them to secure facilities, arrangements, and regulatory approval. (See, for
16 example, the Commissions decisions in MO PSC Case Nos. TO-2004-0504 and
17 TO-2004-0401). It would be just as economically burdensome for the Petitioners
18 to transport calls to NXXs for which Cingular does not have facilities because the
19 Petitioners expect they would incur the same level of costs assumed by the rural
20 LECs in those LNP proceedings to transport calls outside of the Petitioners'
21 service areas. In addition, the virtual NXX issues at hand under the Cingular's
22 dialing parity proposal have been before the FCC for a number of years³, and the

³ On May 9, 2002, Sprint PCS filed a Petition for Declaratory Ruling Regarding the Routing and Rating of Traffic by ILECs with the FCC in CC Docket No. 01-92, DA 02-1740. Two rounds of comments on the

1 FCC has yet to issue a ruling similar to that recommended by Cingular in this
2 proceeding, presumably, because of concerns about the burden on ILECs.
3 Finally, as discussed previously, the ILEC's position is consistent with the
4 Commission's decision in the Mid-Missouri cellular arbitration case, that there
5 must be local inter connection of the wireless facilities before a call can be routed
6 as local (MO PSC Case No. TO-99-279). For these reasons, the Petitioners
7 recommend that the Commission reject Cingular's proposed Section 20.
8

9 **9. MINIMUM BILLING AMOUNT**

10 **Q. Can you please describe the nature of the dispute between the Parties on the**
11 **minimum billing amount?**

12 **A.** The language proposed by the Petitioners and Cingular is contained in Section 4.5
13 and relates to lower traffic volumes. The Petitioners propose that, instead of
14 billing every month for low traffic volumes, the Petitioners would wait until a
15 minimum billing threshold of 5,000 minutes is reached before issuing bills to
16 Cingular, with the exception that a bill would be issued at least every quarter,
17 regardless of the amount. Cingular proposes that, instead of issuing bills at the
18 rates determined by the Commission, the Parties would revert to a bill-and-keep
19 arrangement (essentially a rate of zero) in the event that the traffic exchanged
20 between the parties is less than 5,000 minutes per month.
21

1 **Q. Can you please explain why Cingular's proposal is inappropriate and why**
2 **the Commission should instead accept the Petitioners' proposal?**

3 A. Yes. Cingular's proposal is inappropriate because it would allow Cingular to
4 terminate calls for free to some of the Petitioners. All of Petitioners' other
5 customers pay for the service they use. For example, Petitioners issue access bills
6 to IXC's for all minutes of use (MOUs), regardless of the amount. While 5000
7 minutes may not be a large amount of traffic for a large, national carrier like
8 Cingular, it can be a material amount for small ILEC's. In addition, because
9 Petitioners remain rate base, rate of return regulated, any amount of their cost of
10 service that is not recovered from Cingular would have to be recovered from other
11 customers. Therefore, it is not fair or reasonable for those other customers to be
12 required to pay for costs caused by Cingular. The Petitioners' proposal, on the
13 other hand, would reduce each Party's billing administration costs for low traffic
14 volumes, by having bills issued every quarter instead of every month, while
15 maintaining the fundamental tenet of the Act's compensation requirements that
16 the originating carrier compensate the terminating carrier. Under FCC rules, state
17 commissions can only impose bill-and-keep if the traffic is roughly equal (47
18 C.F.R. 51.713(c)), which clearly is not the case as shown in the traffic studies
19 previously discussed in relation to Issue 3. There is no rule that says state
20 commissions can impose bill-and-keep for low traffic volumes. Rather, if the
21 traffic is out of balance, as it is, Cingular should be required to pay the Petitioners
22 for traffic Cingular terminates. Since the Petitioners' proposal reduces billing
23 administration costs while maintaining the compensation obligations of the Act

1 and the FCC rules, the Petitioners recommend that the Commission accept the
2 Petitioners' proposed Section 4.5.

3
4 **10. PETITIONERS' RURAL EXEMPTION**

5 **Q. Can you please describe the nature of the dispute on the rural exemption**
6 **issue?**

7 A. Yes. Cingular opposes the Petitioners' proposed Section 21.1 which states that
8 the agreement is entered into under the reciprocal compensation provisions of
9 Section 251(b)(5) of the Act and that the Petitioners do not waive the rural
10 exemption they may be entitled to under Section 251(f) of the Act for services
11 required to be provided by some ILECs under Section 251(c) of the Act.

12
13 **Q. Why do you believe that the Commission should accept the Petitioner's**
14 **proposed language?**

15 A. The compensation-related issues that need to be addressed by the Commission for
16 the traffic currently exchanged between the Parties are covered by the provisions
17 of Section 251(b)(5) of the Act, whereas ILEC Section 251(c) service
18 requirements are for unbundled elements, resale, collocation, and direct
19 interconnection. Cingular is not asking for direct interconnection (or unbundled
20 network elements, resale or collocation). So, the agreement is clearly not a
21 Section 251(c) agreement for any of those services. In addition, as previously
22 stated, the arbitrated agreement should not contain provisions for direct
23 interconnection because Cingular must follow the requirements of the Act and

1 issue a bona fide request if it wants the Commission to terminate the Petitioners'
2 rural exemptions with respect to direct interconnection. Since the only services
3 that will be provisioned by the ILECs in the immediate future relate to Section
4 251(b) compensation issues, the arbitrated agreement should not contain any
5 Section 251(c) services and it is therefore appropriate for the agreement to
6 explicitly state that a rural exemption for such services, as allowed by Section
7 251(f), still applies. Therefore, the Petitioners request that the Commission accept
8 the Petitioner's proposed Section 21.1.

9
10 **11. THE APPROPRIATE COMPENSATION FOR THE TRANSIT**
11 **FUNCTION PERFORMED BY CITIZENS TELEPHONE**
12 **COMPANY**
13

14 **Q. Can you please describe the nature of the dispute on the transiting service**
15 **performed by Citizens?**

16 **A.** Yes, Citizens is the only Petitioner that performs transiting for another carrier,
17 specifically, Alma Telephone Company. Accordingly, Citizens believes it is
18 appropriate for it to receive a reasonable level of compensation for the transiting
19 functions it performs on T-Mobile's behalf for calls from T-Mobile to Alma.
20 Citizens proposes a \$0.01 per minute rate for this transit function.

21
22 **Q. Why do you believe Citizens proposed \$0.01 rate is appropriate?**

23 **A.** The rate proposed by Citizens has been agreed to by a number of CMRS carriers,
24 including most recently U.S. Cellular and Cingular. In addition, at least two other
25 wireless carriers have agreed to a higher rate (Verizon Wireless and Sprint PCS).

1 So, the rate proposed is consistent with the prevailing market rate for the
2 transiting service performed by Citizens. I would also point out that the volume
3 of traffic that Citizen's transits on behalf of Alma Telephone Company is quite
4 small and the revenue associated with this element at the proposed rate is very
5 minimal. Therefore, I propose that the Commission accept Citizen's proposed
6 rate as a reasonable approximation of Citizen's cost of providing this transiting
7 service.

8
9 **12. THE APPROPRIATE TERMS AND CONDITIONS FOR**
10 **TERMINATION OF SERVICE**
11

12 **Q. Please explain the nature of the dispute on the termination of service issue?**

13 A. The Petitioners' proposed language in Section 19 would allow a party to terminate
14 service to another party where that party fails to pay undisputed charges. T-
15 Mobile opposes the Petitioners language and, instead proposes that the Party
16 seeking to terminate service for nonpayment must first obtain prior approval from
17 federal and/or state agencies before disconnecting service.

18
19 **Q. Please explain why the Commission should accept the petitioners' proposed**
20 **language on this issue?**

21 A. It is standard industry practice for utilities to be able to terminate service to a
22 customer for failure to pay undisputed amounts, simply upon prior written notice
23 to the customer. This provision is in all of the agreements Petitioners have
24 negotiated with other wireless carriers. Moreover, given the history of litigation
25 between some of the Petitioners and T-Mobile, requiring Petitioners to obtain

1 Commission approval prior to disconnecting service for nonpayment of a bill
2 could delay the process significantly and, if Petitioners are correct, deny them
3 timely recovery of appropriate charges. Finally, the Commission has recently
4 recognized the right of a terminating carrier to block service to an originating
5 carrier (in an indirect interconnection situation) where the originating carrier has
6 failed to pay undisputed charges. In the Commission's Enhanced Record
7 Exchange rule, 4 CSR 240-29.130, terminating carriers are allowed to begin the
8 disconnect/blocking process on thirty (30) days written notice to the originating
9 carrier, the transiting carrier and the manager of the Commission's
10 Telecommunications Department. If the originating carrier objects to the
11 proposed termination of service, they must file a complaint with the Commission
12 and the disconnect process will be stayed pending a decision by the Commission.
13 Petitioners are willing to incorporate language in the agreement consistent with
14 the Commission's Enhanced Record Exchange rule as an alternative to their
15 proposed language, but Petitioners remain opposed to a requirement that they first
16 obtain Commission approval prior to disconnection/blocking of service.

17 **Q. Does this conclude your direct testimony?**

18 **A. Yes.**