

BEFORE THE PUBLIC SERVICE
COMMISSION OF THE STATE OF UTAH

Additional Direct Testimony and Schedules of

Chad A. Duval

On behalf of

Gunnison Telephone Company
Manti Telephone Company
South Central Utah Telephone Association, Inc.
Uintah Basin Telecommunications Association, Inc.
UBET Telecommunications, Inc.

In the matter of the Petition of WWC Holding Co., Inc. for Arbitration of an
Interconnection Agreement

Docket No. 03-2403-02

January 5, 2004

1 **Q. What are your name, title, and business address?**

2 A. My name is Chad A. Duval. I am employed as a Senior Consultant for GVNW
3 Consulting, Inc. (GVNW). My business address is 2270 La Montana Way,
4 Colorado Springs, Colorado, 80918.

5
6 **Q. Are you the same Chad A. Duval that filed direct testimony in this**
7 **proceeding on September 5, 2003?**

8 A. Yes.

9
10 **Q. Have you read the rebuttal testimony of Brian Pitkin filed on behalf of WWC**
11 **Holding Co., Inc. (“WWC”) in Docket No. 03-2403-02?**

12 A. Yes.

13
14 **Q. What is the purpose of your testimony?**

15 A. The purpose of my testimony is to provide support for the forward-looking
16 economic cost based rates, as required by the Federal Communications
17 Commission (“FCC”), proposed by Gunnison Telephone Company (“Gunnison”),
18 Manti Telephone Company (“Manti”), South Central Utah Telephone
19 Association, Inc. (“SCUTA”), Uintah Basin Telecommunications Association,
20 Inc. (“UBTA”), and UBET Telecommunications (“UBET”), collectively as the
21 “Companies” or the “Utah ILECs”, in the above referenced proceeding. These
22 costs have been modified from those proposed in my direct testimony based on
23 agreement reached with all of the parties to this proceeding to utilize the HAI

1 Model 5.2a to develop costs. In addition, I will rebut some of the statements
2 made by Mr. Pitkin in his rebuttal testimony dated October 17, 2003.

3

4 **Q. Why have the Companies elected to change the forward-looking cost model**
5 **used to develop rates in this proceeding?**

6 A. We have held several discussions with all of the parties to this proceeding
7 regarding the appropriate forward-looking, economic cost model to utilize in this
8 proceeding. The Utah ILECs initially proposed to utilize the HAI Model 5.0a, as
9 the latest version of the model then available to them. The Utah Division of
10 Public Utilities (“Division”) proposed to utilize the HAI Model 5.2a (“HAI
11 5.2a”), which was the model utilized in a recent Qwest UNE proceeding and most
12 familiar to the Division Staff. WWC proposed to utilize the HAI Model 5.3,
13 which is a version of the model that has recently become available from HAI. All
14 of the parties came to an agreement that the HAI Model 5.2a, with certain minor
15 database modifications, was the most appropriate model to utilize in this
16 proceeding.

17

18 **Q. Can you briefly describe the overall design of the HAI 5.2a?**

19 A. Yes. The model is very similar to the HAI 5.0a that was utilized and described in
20 my direct testimony. The model developers have made some modifications from
21 version 5.0a to 5.2a relative to the costs of transport and termination. Some of
22 these modifications include:

23 1. Redefinition of surrogate locations of customers that are not
24 geocoded along roads rather than along cluster boundaries.

- 1 2. Development of the distribution network through a substantially
- 2 different methodology, called a minimum spanning tree.
- 3 3. Inclusion of an alternate methodology to calculate switching costs
- 4 on an amalgamated basis.
- 5 4. Changes in the Distance file to modify the development of the
- 6 tandem switching network.
- 7 5. Numerous changes to individual user adjustable input values.
- 8

9 **Q. Is there a description of the modifications that were made from 5.0a to 5.2a?**

10 A. Yes. The *HAI Model Release 5.2a Model Description* contains a four (4) page
11 description of the changes from 5.0a to 5.2a. In addition the *HAI Model Release*
12 *5.2a Inputs Portfolio* identifies each user adjustable input and support for each
13 input, some of which have changed somewhat from the 5.0a. I have not provided
14 copies of this documentation with this testimony, as the Division has already
15 provided all parties to this proceeding access to this information.

16

17 **Q. Although the parties have agreed to utilize the HAI Model 5.2a, do you have**
18 **any ongoing concerns about this model?**

19 A. Yes, I do. It appears to me that the HAI 5.2a is developing far too many
20 interoffice trunks for each of the companies, which artificially deflates the per
21 minute rates for dedicated transport. The calculation of the dedicated transport
22 rate divides the annual cost of the dedicated transport network elements by the
23 number of interoffice trunks developed by the model, divided by twelve (12),
24 yielding a monthly cost per trunk (annual cost / interoffice trunks / 12). This
25 monthly cost per trunk is then divided by a theoretical, maximum monthly trunk
26 utilization of 10,044 minutes, yielding a per minute of use rate that purportedly
27 recovers the Utah ILECs' cost of dedicated transport. By using a trunk count that

1 is inappropriately high for the Utah ILECs, the above calculation results in the
2 development of a dedicated transport rate that is artificially low in comparison to
3 actuals.

4

5 **Q. What support do you have for your contention that the HAI 5.2a is**
6 **developing too many interoffice transport trunks?**

7 A. There are two primary reasons why I believe that the HAI 5.2a is developing too
8 many interoffice transport trunks for each of the Utah ILECs. First, a review of
9 the “Inputs” tab in the output file shows the volume of interoffice minutes of use
10 that utilize dedicated transport and the trunking volume necessary to handle this
11 traffic. In comparing these trunk quantities to the dedicated transport trunk
12 quantities used in the development of the dedicated transport rate element in the
13 “Unit Costs” tab of the output file, I discovered that the trunks used in the
14 development of the dedicated transport rate in the “Unit Costs” tab are
15 significantly higher than the trunking volume in the “Inputs” tab.

16

17 Next, I asked a GVNW traffic consultant to develop a trunking study using
18 standard trunking tables (“abc of the Telephone, Traffic Series – Tables for
19 Traffic Management and Design”), and assuming a 99.99% call completion factor
20 to estimate the appropriate number of trunks required for a given level of traffic.
21 Given the dedicated interoffice traffic volumes developed by the HAI Model 5.2a,
22 and presented in the “Inputs” tab of the output file, the above factor would result
23 in the following interoffice trunking requirements for each of the Utah ILECs:

Utah ILEC	Model Dedicated Interoffice Traffic (MOU)	Trunks Per GVNW Analysis	Model Trunks Per Inputs Tab	Model Trunks Per Unit Costs Tab
Gunnison	15,000,000	153	119	478
Manti	13,000,000	134	108	62*
SCUTA	103,000,000	1,019	849	4,788
UBET	121,000,000	1,197	1,003	1,356
UBTA	24,000,000	238	198	771

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

* The trunks in the “Unit Costs” tab for Manti Telephone Company are impacted by the access line and special access line count adjustments discussed later in this testimony. It should be noted that prior to the adjustments made, the trunking variance for Manti was similar to the variance detailed above for the other Utah ILECs.

Based on the relative similarity of the counts produced in the GVNW trunking study and the trunking developed in the Model “Inputs” tab, it is clear to me that the trunk counts utilized in the Model development of the dedicated transport rates in the “Unit Costs” tab are overstated. Therefore, I believe that the dedicated transport rates are understated.

Q. Given these concerns, do you still support the use of the HAI 5.2a in this proceeding?

A. Yes. I believe that these concerns can be overcome through the recalculation of dedicated transport rates outside the model. This allows the Companies to utilize the forward-looking economic costs produced by the model, which meets the requirements of the FCC and the UPSC, while tempering the development of rates by using more realistic trunking quantities.

1 **Q. Have you made any additional modifications to the model from those that**
2 **were made with your initial filing?**

3 A. To the extent possible, I have attempted to recreate the same underlying databases
4 and inputs that I utilized in the Utah ILECs' initial filing. However, there are
5 some modifications in how the model works that limit my ability to make the
6 exact changes that were made previously. For example, there are some additional
7 inputs that I have elected to leave at their default values, and there are other
8 default values that have changed from the 5.0a, which I have elected to leave at
9 the revised default values. Other input and model changes have been made based
10 on discussions with other parties to this proceeding in the interest of limiting
11 contended issues in this proceeding. In addition, there was at least one glitch in
12 the model that required a database revision to fix.

13
14 **Q. Have you prepared an exhibit that summarizes the input changes that you**
15 **made for each of the Utah ILECs?**

16 A. Yes. Attached, as Schedule CAD-4 is a summary of the input changes that were
17 made for each of the Utah ILECs from the 5.0a to the 5.2a. This schedule only
18 includes input changes that were made from Schedule CAD-1, filed with my
19 direct testimony on September 5, 2003. Also attached, as Schedule CAD-5 is a
20 summary of all input changes that were made in the model. This is the same
21 output information that was provided as Schedule CAD-2 to my direct testimony.

22

1 **Q. Given these modifications, do you still support the costs produced by the HAI**
2 **5.2a?**

3 A. Yes, with the limited exceptions that I have discussed above and will discuss
4 below. No model will ever do a perfect job of projecting what a forward-looking
5 network will look like or cost, especially for rural telephone companies.
6 However, I believe that with the modifications I have made to the model
7 databases and inputs, and the limited adjustments that I recommend be made
8 outside the model, that the costs produced are better reflective of the forward-
9 looking costs that would be experienced by the Companies.

10

11 **Q. Could you describe the database glitch you mentioned above and the revision**
12 **that was required to fix it?**

13 A. The glitch that I discovered was that the access line count for Manti Telephone
14 Company was 49% lower than actual access lines. Because of this, the model was
15 not appropriately calculating the forward-looking costs of the Company. I raised
16 this issue with the Division of Public Utilities, who informed me that they had
17 previously worked with AT&T on a similar problem, and volunteered to work
18 with AT&T again to create a solution. The end result was that the Division of
19 Public Utilities provided a revised line count database, including special access
20 line counts, for Manti Telephone Company that more closely reflects the
21 Company's actual line count. In addition, the Division provided a revised
22 distance file that included revised special access line counts that relate to the
23 increased total access line counts.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Q. Do you have any concerns with the solution presented by the Division of Public Utilities?

A. Yes. While I believe that the solution presented by the Division of Public Utilities results in forward-looking costs that are more reflective of Manti's operations, I also believe that the approach utilized still understates the Company's costs. In essence, the Division of Public Utilities' solution was to spread the difference in access lines among the model developed clusters on a pro rata basis.

The reason that I do not agree with this approach is that the clusters in a given wire center are not developed within the model itself, they are hard coded inputs in the databases underlying the model that are based on a geocoding process performed by the model developers. To simply assign the difference in lines to the existing clusters does not recognize the fact that these additional customers would likely cause the development of additional clusters and the corresponding investment and expenses. It should also be noted that customers that are not identified in the geocoding process, because they are not listed in one of the databases used in the process, are more likely to live in rural areas where costs are greater. Because of this, the model developers utilize a methodology in the clustering process that places these customers along roads where people are more likely to live. However, the process utilized by the Division of Public Utilities, as proposed by AT&T, disproportionately locates customers in larger, in-town

1 clusters where costs are lower. Therefore, it appears that this process has
2 artificially deflated the costs of Manti Telephone Company.

3

4 **Q. How did the Division of Public Utilities allocate the revised special access line**
5 **counts across clusters?**

6 A. Initially, the Division proposed to allocate special access line counts in the same
7 pro rata fashion as discussed above. This resulted in a disproportionate spread of
8 special access lines by wire center in comparison to the actual special access line
9 counts provided by Manti. Through discussions with the Division, the Division
10 and I decided that a more appropriate approach would be to assign the wire center
11 specific line counts to each wire center. The only problem with this approach is
12 that it assigns all special access lines, and the associated costs, to the largest
13 cluster in the exchange. While the majority of special access lines are likely to
14 come from the in-town area covered by the largest cluster in the wire center, this
15 approach does not account for the costs associated with providing special access
16 circuits to more remote clusters.

17

18 **Q. Are you aware of a solution that would better reflect Manti's costs, given**
19 **your concerns above?**

20 A. Yes, however the solution that would best reflect Manti's costs is not possible
21 within the context of this proceedings. The best solution would be to go back to
22 the model developers and point out this inconsistency and have them rerun the
23 clustering process to appropriately reflect the correct number of access lines for

1 Manti. However, I understand that this is a difficult and costly process and is not
2 likely to be undertaken by the model developers to fix such a relatively small
3 problem in the context of the entire model. Therefore I reluctantly support the
4 solution that has been presented by the Division of Public Utilities as the best
5 available solution to the problem, given time and cost constraints.

6

7 **Q. Do you believe that these modifications should also be made for the other**
8 **Utah ILECs?**

9 A. No. For the reasons given above, I do not believe that these modifications are
10 appropriate for the other Utah ILECs. The access line counts for the other
11 companies are close enough to actuals that the costs produced by the model are
12 reflective of the forward-looking costs of these companies. This was simply not
13 the case for Manti and we had to find a solution to this problem.

14

15 **Q. Based on your analysis of, and modifications to, the HAI 5.2a for the Utah**
16 **ILECs, what rates are you now proposing in this proceeding?**

17 A. Attached as Exhibit CAD-6 is a summary of the rates that I am proposing for use
18 by the Utah ILECs and WWC for reciprocal compensation for transport and
19 termination. These proposed rates include two (2) calculations that have been
20 performed outside the model to better reflect company specific situations, and are
21 therefore not results of the HAI Model 5.2a. The first is the calculation of the
22 common transport rate element that I discussed in my direct testimony, where I
23 have utilized the actual minutes of use rather than theoretical minutes of use in the

1 development of the per minute rate. The problem here is that the model develops
2 the per minute of use rate based on theoretical trunk capacity, rather than on
3 actual minutes of use, which are used in the calculation of other rate elements in
4 the model. I have recalculated the per minute of use common transport rate by
5 dividing the model developed cost by the actual minutes of use provided in the
6 model. The second is the calculation of the dedicated transport rate element,
7 where I have utilized calculated trunk quantities based on GVNW Consulting's
8 traffic analysis rather than the artificially inflated, model developed trunk
9 quantities in the development of the per minute rate.

10

11 **Q. Are there any additional rate elements that you are proposing that were not**
12 **included with your direct testimony?**

13 A. Yes. The model calculates both a traffic sensitive local switching rate, which is
14 recovered on a per minute of use basis, and a non-traffic sensitive switching rate,
15 which is recovered on a per port basis. In my direct testimony, I did not include
16 the non-traffic sensitive, per port switching rate, which I am including at this time.
17 Doing so ensures that the Utah ILECs are able to recover 100% of their forward-
18 looking switching costs. These costs are split 70% traffic sensitive and 30% non-
19 traffic sensitive, which is accomplished through a user adjustable input. Exhibit
20 CAD-6 includes this per port charge, which is assessed on a per DS-0 equivalent
21 basis. Therefore, each DS-1 ordered would be assessed 24 port charges.

22

1 **Q. Why have you utilized a 70% traffic sensitive and 30% non-traffic sensitive**
2 **factor to split switching costs?**

3 A. There are several reasons why I have used a 70/30 ratio. First, this is the same
4 ratio utilized by the FCC for the allocation of switching costs for small, rural rate
5 of return ILECs. Part 69 of the FCC's rules require that rate of return carriers
6 allocate 30% of their switching revenue requirement to the carrier common line
7 revenue requirement, which is then recovered from end users on a non-traffic
8 sensitive basis through the assessment of the Federal Subscriber Line Charge and
9 Interstate Common Line Support. Interstate Common Line Support is a federal
10 universal service mechanism that is designed to keep end user charges at a
11 reasonable and comparable level. The remaining 70% is recovered from access
12 customers on a per minute of use basis.

13
14 Second, it is my understanding that the FCC's Part 69 rules are used in the
15 development of intrastate access rates in Utah. It is also my understanding that
16 there is no intrastate subscriber line charge and no carrier common line rate
17 element in Utah. Thus, the 30% of switching revenue requirement that is shifted
18 to carrier common line is recovered through local rates. Such an approach is very
19 similar to that utilized by the FCC and is further support that the Utah Public
20 Service Commission believes that 70% of switching costs should be recovered on
21 a traffic sensitive basis by rural ILECs. Any other approach would misalign cost
22 recovery principles and ensure that the Utah ILECs would not recover their total
23 costs of switching.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Third, in the development of default inputs for the Synthesis Model, the FCC adopted 70% as the traffic sensitive portion of local switching as the appropriate default value. The Synthesis Model is the FCC’s forward-looking, economic cost model that is based heavily upon the HAI and Benchmark Cost Proxy Models. While the FCC has modified this factor on an individual company basis, the approved default input in the Synthesis Model remains at 70% traffic sensitive.

Finally, the model developers do not provide any compelling justification for modifying this factor from the 5.0a default value of 70%. The support for this change provided in the *HAI Model Release 5.2a Inputs Portfolio* is, “This factor is based on the Direct Testimony of Mr. Gillan filed on March 18, 2002 in the Minnesota Cost Case, MPUC Docket No. P-421/CI-01-1375.” The particular case referenced deals with the switching costs of Qwest for the determination of unbundled network element platform (UNE-P) costs of switching. There is no justification for the broad application of this position to all providers, in all states, and in all markets. If this were the case, the model developers simply would have hard coded traffic sensitive switching costs at 0%. I believe that the default inputs approved by the FCC for use in the Synthesis Model certainly should carry more weight than Mr. Gillan’s testimony in a UNE-P case before the Minnesota Public Utilities Commission.

1 **Q. Should the Utah Public Service Commission’s recent decision in Qwest’s**
2 **UNE loop proceeding have any bearing on switching cost recovery in this**
3 **proceeding?**

4 A. In one respect yes, and in one respect no. First, it is important to understand from
5 the Qwest UNE loop proceeding that the Commission recognized that
6 interconnecting carriers must compensate each other for the utilization of their
7 switching. Both WWC and the Utah ILECs utilize each other’s switching in the
8 transport and termination of traffic and must accordingly compensate each other
9 for the cost of switching. Conversely, I do not believe that the Qwest UNE loop
10 proceeding should necessarily determine that switching costs should be recovered
11 on a flat rate basis. As I have discussed previously, Qwest’s costs and cost
12 structure is not reflective of the Utah ILECs at issue in this proceeding. To
13 simply utilize the approach that was designed around the specifics of Qwest’s
14 costs and markets for the Utah ILECs would blatantly ignore these fundamental
15 differences. It is also important to keep in mind that the decision in the Qwest
16 case determined the rates for UNE loops, and had nothing to do with the
17 development of rates for reciprocal compensation of transport and termination.

18
19 **Q. Does the manner in which switching costs are recovered, traffic or non-**
20 **traffic sensitive, affect the parties from which this cost should be recovered?**

21 A. No. Part 51 of the FCC’s rules states the following in regards to reciprocal
22 compensation:

23 “(e) *Reciprocal compensation.* For purposes of this subpart, a
24 reciprocal compensation arrangement between two carriers is one

1 in which each of the two carriers receives compensation from the
2 other carrier for the transport and termination on each carrier's
3 network facilities of telecommunications traffic that originates on
4 the network facilities of the other carrier."
5

6 I would like to reiterate the FCC's definition of termination in Part 51:

7 "(d) *Termination.* For purposes of this subpart, termination is the
8 switching of telecommunications traffic at the terminating carrier's
9 end office switch, or equivalent facility, and delivery of such
10 traffic to the called party's premises."
11

12 While the FCC's rules do not address the issue of flat rate ports versus per minute
13 of use charges, it is clear that the FCC intended for reciprocal compensation to
14 recover the cost of switching. The total cost of switching must be born by those
15 that utilize the switch and respective ports. It is plain to see that both WWC and
16 the Utah ILECs are terminating traffic on each other's networks. Pursuant to the
17 FCC's rules for reciprocal compensation, each party must compensate the other
18 for the transport and termination (switching) of traffic on the terminating carrier's
19 network.
20

21 **Q. Under your proposed rate structure, are all forward-looking switching costs**
22 **recovered?**

23 A. Yes. However, I do have ongoing concerns that some switching costs may not be
24 recovered in the situation where WWC has a direct interconnection at a host
25 central office. In this scenario, the model does not allow for the recovery of
26 tandem switching costs, as it does with an indirect interconnection. Under the
27 presumption that a host switch performs similar functions to a tandem, which I
28 discuss later in this testimony, and the fact that the model still develops a tandem

1 switching cost, it may be reasonable to assess the tandem switching rate on traffic
2 where the interconnection takes place at a host end office.

3

4 **Q. With these assumptions modified from the default values, how did you obtain**
5 **results for the Utah ILECs?**

6 A. The HAI Model was run for each of the Companies with company specific inputs.
7 Transport and termination rate results were obtained from one of the cost detail
8 worksheets included in the model output report file, an Excel spreadsheet. I then
9 modified these results as discussed above to develop rates for transport and
10 termination for each of the Utah ILECs.

11

12 **Q. Are the rates that you have proposed to be used for the reciprocal**
13 **compensation of terminating traffic in this proceeding those that were**
14 **developed by the HAI Model?**

15 A. In some cases yes, and in some cases no. As I described above, I have modified
16 the development of the common transport rate based on actual minutes of use
17 rather than the theoretical minutes of use used by the model. This is the same
18 adjustment that was discussed and made with my direct testimony. In addition, I
19 have modified the dedicated transport calculation to utilize the switched access
20 trunks developed in the GVNW Consulting traffic analysis, as discussed above. I
21 have utilized the network costs developed by the HAI Model 5.2a in the
22 calculation of rates.

23

1 **Q. In your direct testimony, you provided two separate rates for UBTA and**
2 **UBET, one was a combined rate for both companies and the other was a rate**
3 **solely for UBTA. Are you now proposing a change in this structure?**

4 A. Yes. The HAI Model 5.0a that I used in my direct testimony did not allow me to
5 run a separate study and develop costs for UBET Telecom. However, the HAI
6 Model 5.2a has separate study areas for UBTA and UBET, which allowed me to
7 develop costs for each study area. I am therefore proposing separate rates for
8 UBTA and UBET with this testimony.

9
10 **Q. Do you believe that the rates that you have proposed represent the forward-**
11 **looking, economic costs of the Utah ILECs?**

12 A. Yes. I believe that the development of the proposed rates are consistent with the
13 FCC's rules that require that interconnection rates be set in accordance with the
14 forward-looking, economic cost of the provider. In addition, I believe that the
15 input and database modifications to the HAI Model 5.2a are representative of the
16 forward-looking costs that would be incurred by the Utah ILECs. Therefore, I
17 also believe that the Utah Public Service Commission should adopt the rates
18 proposed by the Utah ILECs in this proceeding.

19
20 **Q. Are you providing any additional information, beyond the schedules**
21 **previously identified, with your testimony?**

22 A. Yes. Included with my testimony is an electronic copy of the revised databases
23 and distance file that were used with the HAI Model 5.2a in the development of

1 the proposed rates. In addition, I have included electronic copies of the model
2 output files for each of the Utah ILECs.

3

4 Rebuttal Testimony of Brian F. Pitkin on Behalf of WWC, Dated October 17, 2003

5 **Q. Mr. Pitkin states that, “there is absolutely no justification for compensating**
6 **the Utah LECs for a tandem switch that they do not own”. Do you agree**
7 **with this statement?**

8 A. No. The tandem switching costs developed by the model are clearly not designed
9 to recover the cost of a tandem switch. These costs are designed to recover the
10 Utah ILECs’ costs associated with connecting to Qwest’s tandem switch. The
11 Companies have specifically removed any tandem switches that the model would
12 have assumed as a default. In spite of this model change made by the Companies,
13 the model still produces a very small rate to recover the Utah ILECs’ cost of
14 connecting to the assigned Qwest tandem. However, because the rates at issue in
15 this proceeding are designed to represent a forward-looking network, there may
16 well be justification for the inclusion of tandem switches within the Utah ILECs’
17 networks and the development of a significantly higher tandem switching rate.

18

19 **Q. Why did Mr. Pitkin choose to ignore the fact that the Utah ILECs removed**
20 **tandem switches from their networks when the model designated that one**
21 **should exist?**

22 A. Mr. Pitkin chooses to utilize the forward-looking nature of the model when it is to
23 the benefit of WWC, yet he turns a blind eye when it would increase the costs of

1 the Utah ILECs. Mr. Pitkin accuses me of “picking and choosing” inputs to the
2 benefit of the Utah ILECs, yet he picks and chooses where the forward-looking
3 nature of the model should be applied to the benefit of WWC. Given the forward
4 looking nature of the model and Mr. Pitkin’s propensity to argue for default inputs
5 over company specific changes, I would think that Mr. Pitkin would argue that the
6 Utah ILECs should stick with the default assignment of tandem switches to their
7 study areas.

8

9 It should also be noted that the *Model Description* defines a tandem switch as
10 follows:

11

12

13

14

15

“Tandem switches interconnect end office switches via common
trunks, and may also provide connections to IXC POPs via
dedicated trunks.”

16

17

18

19

20

21

22

23

24

Q. As Mr. Pitkin states, are the switching cost used in the Utah ILECs’ cost studies “in violation of TELRIC costing principles”?

1 A. No they are not. Mr. Pitkin attempts to cloud the issue by simply stating that
2 embedded costs are prohibited in the development of forward-looking rates.
3 What Mr. Pitkin fails to recognize is that there are situations where embedded
4 costs are reflective of forward-looking costs, as I discussed in detail in my direct
5 testimony. The Utah ILECs' embedded costs of switching are representative of
6 the forward-looking costs of switching, and therefore embedded costs are
7 reflective of forward-looking costing principles. Not only is such an approach
8 within the FCC's rules, but also is prudent in tempering the inputs to forward-
9 looking cost models with the realities that rural ILEC's face.

10

11 **Q. Have you made any adjustments to the switching cost inputs to address Mr.**
12 **Pitkin's concerns?**

13 A. Yes. I solicited bids from Northern Telecom, the current switching vendor
14 utilized by each of the Utah ILECs, for the replacement of each company's
15 existing switching infrastructure. These bids were based on DMS-10 and DMS-
16 100 switching platforms with the appropriate remote switches for the appropriate
17 wire centers. Northern Telecom assumed the latest software generic with SS7,
18 CALEA, LNP and AMA capabilities, a standard percentage of CLASS
19 penetration, and 12% trunking. In addition, the cost includes estimated power and
20 main distribution frame costs. The revised rates that I am proposing with this
21 testimony were developed using the switching costs for each company from the
22 Northern Telecom bid.

23

1 **Q. Do you agree with Mr. Pitkin’s assertion that the structure sharing**
2 **assumptions utilized in the Qwest UNE proceeding should be used by the**
3 **Utah ILECs?**

4 A. No. Mr. Pitkin completely ignores the tremendous differences between Qwest
5 and the Utah ILECs in his assessment of structure sharing opportunities. The fact
6 that an ILEC that serves predominantly metropolitan areas has the opportunity to
7 share these facilities with other, similar providers is just not reflective of the very
8 rural areas served by the Utah ILECs. The population density of an area is
9 absolutely the issue here, as it is a strong determinant in the type of providers that
10 serve the area.

11
12 **Q. How do you respond to Mr. Pitkin’s concern that the traffic data that you**
13 **used in the study “shows dramatic swings from the HAI Model defaults”?**

14 A. The fact that he is so concerned with company specific data is perplexing to me,
15 as it is certainly more reflective of company specific situations than the default
16 assumptions provided in the model. It should be noted that the default values in
17 the model for these companies are based on per line estimates for ARMIS
18 reporting ILECs nationwide, which may or may not be more reflective of these
19 companies’ actual traffic patterns. However, in order to eliminate some of the
20 contention on this issue, I have changed the traffic data that I used for Gunnison,
21 Manti, and UBET Telecom. In these cases, where actual traffic data does not
22 exist, I have utilized the default traffic data.

23

1 **Q. How do you respond to Mr. Pitkin's assertion that adjustments to the**
2 **forward-looking network operations factor is inappropriate?**

3 A. The forward-looking network operations factor was included in the original
4 versions of the HAI Model, dating back to 1996. To the extent that these costs
5 have changed in the last seven (7) years, any cost savings have been incorporated
6 in the Utah ILECs' modifications to this factor. By utilizing end of year 2002
7 data, the Utah ILECs have ensured that any efficiencies that have taken place
8 have been incorporated into their costs.

9
10 **Q. Could you please summarize your testimony?**

11 A. Yes. Since the filing of my direct testimony on September 5, 2003, all of the
12 parties to this proceeding made a collective decision to utilize the HAI Model 5.2a
13 in the development of rates for the reciprocal compensation for the transport and
14 termination of traffic. This change in models and some of the underlying inputs
15 and databases has had a significant impact on the rate structure and rates
16 proposed. However, these changes have not had an impact on the parties that are
17 responsible for the payment of all rate elements. The Utah ILECs are proposing
18 to utilize the rates developed in Schedule CAD-6 for the reciprocal compensation
19 for transport and termination of traffic to and from WWC. I believe that these
20 rates are consistent with the FCC's rules, are reflective of the Companies'
21 forward-looking costs, and are the appropriate rates to be utilized in this arbitrated
22 proceeding.

23

1 Q. Does this conclude your testimony?

2 A. Yes.