

962-T-660

PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA  
1333 H STREET, N.W., SUITE 200, WEST TOWER  
WASHINGTON, DC 20005

ORDER

November 18, 2002

FORMAL CASE NO. 962, IN THE MATTER OF THE IMPLEMENTATION OF THE DISTRICT OF COLUMBIA TELECOMMUNICATIONS COMPETITION ACT OF 1996 AND IMPLEMENTATION OF THE TELECOMMUNICATIONS ACT OF 1996, Order No. 12601

**I. INTRODUCTION**

1. By this Order, the Public Service Commission of the District of Columbia ("Commission") directs Verizon Washington, D.C., Inc. ("Verizon DC") and AT&T Communications of Washington D.C., Inc. (AT&T) to rerun their recurring and non-recurring cost studies using certain prescribed inputs and cost assumptions that the Commission finds will better approximate efficient network design and operation. The parties must file the results of these runs by close of business, Tuesday, November 26, 2002. This information is crucial in determining final cost-based unbundled network element ("UNE") rates that are just, reasonable, and nondiscriminatory for the District of Columbia.

**II. BACKGROUND**

2. Section 251 of the Telecommunications Act of 1934, as amended,<sup>1</sup> (the "Act") requires incumbent local exchange carriers like Verizon DC to open their local telephone networks to competitive local exchange carriers ("CLECs"), in part, by allowing the CLECs to use portions of the network, usually referred to as unbundled network elements, for a fee. While the Act delegated to the states the responsibility for establishing UNE rates, it delegated to the Federal Communications Commission ("FCC") the responsibility for developing the methodology that the states must use to set the rates. The Act mandates, among other things, that all UNE rates must be "just, reasonable, and nondiscriminatory."<sup>2</sup>

3. The rate-setting methodology that the FCC developed is known as Total Element Long Run Incremental Cost ("TELRIC"). TELRIC specifies a forward-looking architecture *untied to the incumbent's investments*. Thus, instead of focusing on embedded plant and equipment, historical expenses, property evaluations, and rate of return, TELRIC requires states to consider factors like the network design, efficient plant

<sup>1</sup> 47 U.S.C. § 251 (2002).

<sup>2</sup> See 47 U.S.C. § 251 (c) (2-3).

utilization, multiplexing ratios, and then select inputs to include in a TELRIC-compliant model that will generate just, reasonable, and nondiscriminatory UNE rates. The inherent complexities in applying the TELRIC standard have led to years of litigation in commissions and courts throughout the country.

4. The FCC defines a TELRIC-compliant, efficient-network configuration as one that is based “on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC’s wire centers.”<sup>3</sup> Verizon DC and AT&T both used Verizon DC’s software, which estimate a set of TELRIC UNEs using an engineering process approach. An engineering process approach estimates costs by mimicking the forward-looking costs that would be incurred when designing, building, and operating a modern telecommunications network. The particular design standards used for the network’s characteristics consist of various inputs to the TELRIC model. Those inputs are used in conjunction with inputs for the costs of materials and labor as well as inputs for factors that estimate the expenses of operating and maintaining the network. The problem in this case, as in others throughout the country, is that the parties have used different inputs and assumptions to generate their respective cost studies.

5. Verizon DC’s software consists of seven cost models: (1) Verizon Cost (“Vcost”); (2) Loop Cost Analysis Model (“LCAM”); (3) Switching Cost Information System-Model Office (“SCIS-MO”); (4) Switching Cost Information System-Intelligent Network (“SCIS-IN”); (5) Common Channel Switching Cost Information System (“CCSCIS”); (6) Interoffice Transport Model (“IOF”); and (7) Excel Spreadsheet Macros. In order to generate UNE estimates, Vcost is run 37 times, LCAM is run six times, SCIS-MO is run 13 times, SCIS-IN is run 11 times, CCSCIS is run twice, IOF is run once, and Excel spreadsheet macros are run nine times. All 70 runs of the first six of the seven models, plus numerous runs of Excel, constitute one cost study.

6. Between July 16, 2001 and April 22, 2002, Verizon DC and AT&T each filed two cost studies reflecting differences between the parties as great as 2000 percent. In response, the Commission directed the parties to prepare eight sensitivity scenarios.<sup>4</sup> The purpose of the sensitivity runs was to provide the Commission with information that might isolate the various inputs and assumptions that were producing the wide disparity between the parties’ respective cost studies. They were not meant to constitute a final combination of TELRIC-compliant inputs and assumptions, nor can they be rationally used in that manner.

<sup>3</sup> 47 CFR § 51.505 (b)(1).

<sup>4</sup> *Formal Case No. 962, In the Matter of the Implementation of the District of Columbia Telecommunications Competition Act of 1996 and Implementation of the Telecommunications Act of 1996*, Order No. 12366, rel. March 29, 2002.

**III. DISCUSSION**

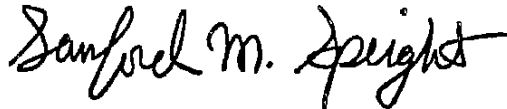
7. After carefully reviewing the record, including the data from the sensitivity runs, we find that all of the runs, to one degree or another, contain inputs and assumptions that are not TELRIC-compliant. In order to determine final UNE rates, the parties' inputs and assumptions must be adjusted. Thus, the parties will have to re-run the model according to the inputs and assumptions that are specified in Appendix A of this Order. The Commission finds that the running of the model with these inputs and assumptions will provide the Commission with the necessary information to establish final UNE rates for the District of Columbia.

**THEREFORE, IT IS ORDERED THAT:**

8. Verizon DC and AT&T shall re-run the model according to the instructions contained in Appendix A of this Order and file the results of those runs with the Commission by November 26, 2002.

A TRUE COPY

BY DIRECTION OF THE COMMISSION:



CHIEF CLERK

SANFORD M. SPEIGHT  
ACTING COMMISSION SECRETARY

## **APPENDIX A**

### **Instructions for Run**

The Commission has determined that the parties should perform a run to determine the final recurring and non-recurring UNE rates. The inputs and assumptions for the run are contained in Tables 1 and 2, attached. In addition to using the specified inputs, each party must modify its cost models as necessary to comply with the instructions set forth below.

#### **Recurring Cost Study**

Parties are to use the cost models used for Scenario 1 as the starting basis. Table 1 contains a comparison of scenario 1 to the inputs for the run. Specific changes are:

1. Fiber utilization is set to the value 1.00 rather than 0.80.
2. Fiber feeder fill factor is set to 1.00 rather than 0.80.
3. Sharing arrangement is set to 0.55 rather than 0.33.
4. Merger savings is set to 0.00% rather than 2.6%.
5. GAAP depreciation rates are used rather than FCC rates.
6. GR-303 for feeder technology is set to .5817 rather than 1.00.
7. Verizon DC's Forward-Looking-to-Current Factor is set equal to 1.00.
8. Verizon DC's Current-Cost-to-Book-Cost is set to the value used by AT&T in the scenarios.
9. Line Growth is set to zero.
10. AT&T's Cable Size Adjustment is included.
11. AT&T Cable Fill Factor is included.
12. SONET Architecture has 6 Nodes.
13. Digital Cross-Connect System remains bundled.
14. DS1 Fill Factor is set to 1.00.
15. Percentage IDLC is set to .5817.

16. Administrative Fill has to fill adjustments for switching, the second should be excluded and its value set to 1.00.
17. Non-Traffic Sensitive Costs included in minutes of use should be removed and assigned to ports.
18. The cost of capital uses the same capital structure as scenario 1, but uses a cost of debt of 7.55% rather than 7.86% and a cost of equity of 12% rather than the 10.4% used in scenario 1. The overall cost of capital is 10.46%.
19. The common cost factor is set at .0662 rather than .0495 used in scenario 1.
20. Operating Support Systems startup cost is recovered from both ILEC and CLEC customers on a per line basis.
21. Compute a weighted-average cost per line (ILEC and CLEC totaled) in Exhibit OSS-Part A pages 1 of 3 through 3 of 3 and Exhibit OSS-Part B page 1 of 1.

Only these changes and no other changes may be made to the model used for scenario 1 outputs.

## Non-Recurring Cost Study

The compliance run for the non-recurring UNE rates is based on AT&T's Non-Recurring Cost Model (NRCM) with AT&T's work-activity times and wage rates. Specific changes to assumptions and inputs are contained in Table 2. attached. Specific changes are:

1. Manual surcharges proposed by Verizon DC are levied for manually submitted orders. Electronically submitted orders are not levied any manual fees.
2. Database Maintenance Charges are excluded.
3. Line conditioning is charged a nominal \$20 fee per line.
4. Set the loop UNE rate for line sharing to \$0.00.
5. Set Option A for Administration and Support Costs to \$0.00. Set the UNE rate for Option C to Covad's rate with adjustments.
6. Per line and Order Related Costs are set to \$0.00.
7. Collect Disconnection Fees at the time of connection.
8. ISDN Electronics costs are set to \$0.00.
9. Set the Per-query rate for loop qualification information to the LIBD per query rate. A nominal charge of \$20 for manual qualification and engineering query should be levied.
10. Cooperative Testing rate is set to \$0.00.
11. Adopt the Cost of Capital (10.46%) and Common Cost factor (.0662) used in the recurring cost study.
12. Set dark fiber utilization and fill factors to 1.00.

**Table 1  
Inputs for Recurring Costs -  
Commission-ordered Filing**

Inputs	Input Values	Scenario 1
<b>Outside Plant and Equipment</b>		
<b>Utilization Rates</b>		
Copper Feeder Utilization	0.80	0.80
Copper Distribution	0.60	0.60
Conduit Utilization	0.75	0.75
Plug-In Utilization	0.90	0.90
Common Electronics	0.80	0.80
Fiber Utilization	1.00	0.80
RT Electronics	0.80	0.80
<b>Fill Factors</b>		
Dist. Cable Fill Factor	0.60	0.60
Copper Feeder Fill Factor	0.80	0.80
Fiber Feeder Fill Factor	1.00	0.80
<b>EF&amp;I</b>		
EF&I Transport	0.30	0.30
EF&I Loop	0.012	0.012
EF&I: DLC Plug-In	0.20	0.20
<b>Some Annual Cost Factor Issues</b>		
Repair & Maintenance	0.20	0.20
Sharing Arrangement	0.55	0.33
Merger Savings	0%	2.6%
Advertising Expenses	Excluded	Excluded
Y2K Expenses	Excluded	Excluded
Inflation Index	Turner PI	Turner PI
Depreciation Rates	GAAP	FCC Rates
GR-303 for Feeder Technology	5817	1.00
Concentration Ratio	4:1	4:1

**Inputs for Recurring Costs – Table 1 Continued  
Commission-ordered Filing**

Inputs	Input Value	Scenario 1
Forward-Looking-Current Factor	Exclude	Not Controlled
Current-Cost-To-Book-Cost Factor	Include	Not Controlled
Line Growth	Exclude	Excluded from Verizon DC's run Included in AT&T's run
AT&T's Cable Size Adjustment	Include	Not Controlled
AT&T's Cable Fill Factor	Include	Not Controlled
SONET Architecture: Number of Nodes	6 Nodes	Not Controlled
Digital Cross-Connect System	Bundled	Not Controlled
DS1 Fill Factor	1.00	Not Controlled
<b>Switching</b>		
Switch Discount for Switches and all Features	0.86157	0.86157
EF&I Switch	.245	.245
Percentage IDLC	.5817	Not Controlled
Administrative Fill	Set Second Fill Adjustment (Column H) to 1.00 <sup>2</sup>	Not Controlled
Non-Traffic Sensitive Costs Included in Minutes-of-Use.	Remove and assign to Ports. See Recommendations 16 and 17.	Not Controlled

<sup>1</sup> Do not apply the fill and utilization factors to the intercept term.

<sup>2</sup> Two files are contained in the file DCUNE.doc in Verizon DC's January 11, 2002 filing.

**Inputs for Recurring Costs – Table 1 Continued  
Commission-ordered Filing**

Inputs	Input Value	Scenario 1
<b>Cost of Capital</b>		
Capital Structure:		
Debt	34.5%	34.5%
Equity	65.5%	65.5%
Cost of Debt	7.55%	7.86%
Cost of Equity	12.00%	10.4%
Cost of Capital	10.46%	9.54%
ACF: Common Cost	.0662	.0495
Operating Support Systems	Recover from both ILEC and CLEC on per line basis	Not Controlled
Calculation of OSS Unit Costs	Compute a weighted- average cost for Exhibit OSS-Part A pages 1 through 3 and Exhibit OSS-Part B page 1	Not Controlled

**Table 2**  
**Inputs for Non-Recurring Costs -**  
**Commission-ordered Filing**

Inputs	Input Values
Manual Surcharges	Manually submitted orders should be levied Verizon DC's Manual Surcharge, Electronically submitted orders should not be levied manual fees.
Database Maintenance	Exclude
Line Conditioning	Nominal \$20 fee per line
Line Sharing	Set Loop UNE rate for line sharing to \$0.00
Administration and Support Costs	Exclude Option A Option C is Covad's rate with adjustments
Per Line and Order Related Costs	Exclude Verizon DC's rates for Line Sharing New and Line Sharing Additional
Connect and Disconnect Charges	Collect Disconnect Fee at time of connection
ISDN Electronics Costs	Recover in recurring rates
Loop Qualification	Per-Query rate for loop qualification information—use LIBD per query rate. A nominal charge of \$20 for manual qualification and engineering query
Cooperative Testing	Exclude
Dark Fiber	Set Utilization and Fill Factors to 1.00
<b>Cost of Capital</b>	
Capital Structure:	
Debt	34.5%
Equity	65.5%
Cost of Debt	7.55%
Cost of Equity	12.00%
Cost of Capital	10.46%
ACF: Common Cost	.0662