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AT&T In-State Connection Fee | > Pennsylvania Home | Pennsylvania FAQs



AT&T in-state connection fee

IN-STATE CONNECTION FEE FOR PENNSYLVANIA

AT&T is charged by your local telephone company in Pennsylvania to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T will begin to include in your monthly bill a \$1.95 In-State Connection Fee. The fee applies to Customers subscribed to AT&T for residential long distance or local toll service. The fee does not apply to customers of AT&T Pennsylvania Local Service, or the AT&T Long Distance Lifeline Program, where applicable.

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VERIZON EX. J

8/26/03 Hbg-xx

AT&T COMMUNICATIONS
OF PENNSYLVANIA, LLC

MESSAGE TELECOMMUNICATIONS SERVICE

1.3. TWO-POINT SERVICE (Cont'd)

1.3.14. State Cost Recovery Charge (In-State Connection Fee)

A monthly service charge will be applied to each AT&T long distance residential customer's account. This monthly charge is applied if a customer has \$1.00 or more of AT&T billable charges and credits on their bill, including, but not limited, to, monthly recurring charges, minimum usage, or Single Bill Fee charges. This charge does not contribute towards any applicable minimum monthly charge.

Customers in AT&T's Lifeline Program and Federal Price Protection Plan are exempt from this service charge. Customers who have AT&T Local Phone Service are also excluded from this charge.

Billing of this charge will commence on March 1, 2003, and applies on a per-account basis.

Monthly Charge: \$1.95

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AT&T in-state connection fee

IN-STATE CONNECTION FEE FOR MASSACHUSETTS

AT&T is charged by your local telephone company in Massachusetts to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$.50 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Local Service or AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR FLORIDA

AT&T is charged by your local telephone company in Florida to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.88 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR NEW JERSEY

AT&T is charged by your local telephone company in New Jersey to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.35 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Local Service or the AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR ARKANSAS

AT&T is charged by your local telephone company in Arkansas to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.40 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR COLORADO

AT&T is charged by your local telephone company in Colorado to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.25 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR IDAHO

AT&T is charged by your local telephone company in Idaho to carry your AT&T in-state long distance calls over its lines. In order to help recover these costs, AT&T will begin to include in your monthly bill a \$1.15 In-State Connection Fee, starting October 1, 2003. The fee applies to Customers subscribed to AT&T for residential long distance service. The fee also does not apply to customers of AT&T Local Service, where available, or the AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR IOWA

AT&T is charged by your local telephone company in Iowa to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.95 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of the AT&T Long Distance Lifeline Program, where applicable.

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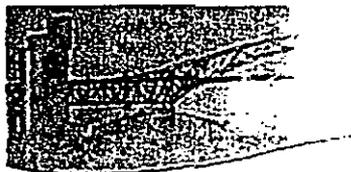
IN-STATE CONNECTION FEE FOR KENTUCKY

AT&T is charged by your local telephone company in Kentucky to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$.66 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of the AT&T Long Distance Lifeline Program, where applicable.

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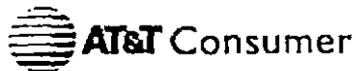
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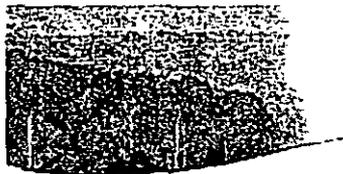
IN-STATE CONNECTION FEE FOR MINNESOTA

AT&T is charged by your local telephone company in Minnesota to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.95 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Local Service or AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR MISSOURI

AT&T is charged by your local telephone company in Missouri to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.95 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of the AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR NEBRASKA

AT&T is charged by your local telephone company in Nebraska to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T will begin to include in your monthly bill a \$1.30 In-State Connection Fee, starting October 1, 2003. The fee applies to Customers subscribed to AT&T for residential long distance or local toll service. The fee also does not apply to customers of AT&T Local Service, where available, or the AT&T Long Distance Lifeline Program, where applicable.

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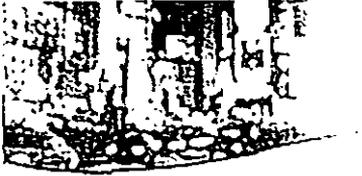
IN-STATE CONNECTION FEE FOR NEW MEXICO

AT&T is charged by your local telephone company in New Mexico to carry your AT&T in-state long distance calls over its lines. In order to help recover these costs, AT&T will begin to include in your monthly bill a \$1.95 In-State Connection Fee, starting October 1, 2003. The fee applies to Customers subscribed to AT&T for residential long distance service. The fee also does not apply to customers of AT&T Local Service, where available, or the AT&T Long Distance Lifeline Program, where applicable.

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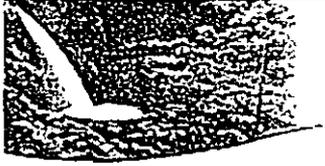
IN-STATE CONNECTION FEE FOR NEW YORK

AT&T is charged by your local telephone company in New York to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.75 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Local Service or AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR OREGON

AT&T is charged by your local telephone company in Oregon to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.32 In-State Connection Fee. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of the AT&T Long Distance Lifeline Program, where applicable.

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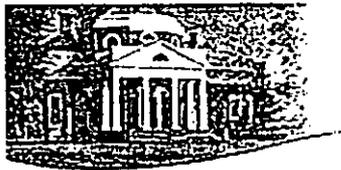
IN-STATE CONNECTION FEE FOR TEXAS

AT&T is charged by your local telephone company in Texas to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T includes in your monthly bill a \$1.95 In-State Connection Fee, starting September 15, 2001. The fee applies to Customers with AT&T residential local toll or long distance service. The fee does not apply to customers of AT&T Local Service or the AT&T Long Distance Lifeline Program, where applicable.

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IN-STATE CONNECTION FEE FOR VIRGINIA

AT&T is charged by your local telephone company in Virginia to carry your AT&T in-state long distance and local toll calls over its lines. In order to help recover these costs, AT&T will begin to include in your monthly bill a \$1.95 In-State Connection Fee, starting September 1, 2003. The fee applies to Customers subscribed to AT&T for residential long distance or local toll service. The fee does not apply to customers of AT&T Local Service, where available, or the AT&T Long Distance Lifeline Program, where applicable.

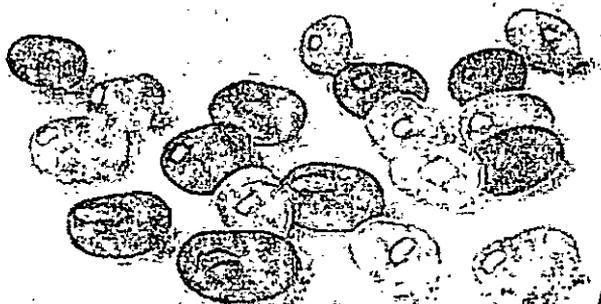
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THE Neighborhood
built by mci

Where local and long distance come together.

HOME FEATURES & BENEFITS CHECK PRICING & SIGN UP SPREAD THE WORD HELP & FAQ YOUR ACCOUNT

Unlimited local & long distance.
What a sweet deal.



Your number (215) 963-6068 is part of The Neighborhood.

Now find the plan that's right for you:

If the phone number above is not the number you entered, [click here](#) to go back and re-enter your phone number.

NEIGHBORHOOD COMPLETE \$49.99 PER MONTH

Perfect for people who want unlimited local and long distance calling and 5 features for one low monthly price on one bill.

See list below for full details.

- Unlimited long distance calls
- Unlimited local toll calls
- Unlimited local calls
- One company, one bill
- Call Waiting, Caller ID, Call Waiting ID, Speed Dial 8 and Three-Way Calling at no extra charge
- Personal Voicemail & Message Center
- Add unlimited calls to Canada
- Low rate calling card
- Customize your service with the latest features
- Additional phone lines

† For new customers only. 50% off applies to monthly fee for primary line only.

Unlimited calling is for residential voice service only. [Click here](#) for details.

Additional taxes and surcharges apply. [Click here](#) for details.

JOIN NOW with Neighborhood Complete

See a full list of Neighborhood Complete details

NEIGHBORHOOD HISPEED \$84.99 PER MONTH

Perfect for: people who want unlimited local, long distance calling and high speed Internet access, plus 5 features — for one low monthly price on one bill.

See list below for full details.

- Unlimited long distance calls
- Unlimited local toll calls
- Unlimited local calls
- One company, one bill
- Call Waiting, Caller ID, Call Waiting ID, Speed Dial 8 and Three-Way Calling at no extra charge

Over 2000000 have joined. How about you?
For more information call 1-877-777-6271

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- Personal Voicemail & Message Center
- Add unlimited calls to Canada
- Low rate calling card
- Customize your service with the latest features
- Additional phone lines
- Unlimited DSL Internet access (where available)

DSL service requires one year service agreement. Early termination charge applies if equipment is not returned in good working order within 30 days of cancellation. You will receive your DSL self-installation kit within 2 weeks after your Neighborhood local and long distance service is active. [Click here](#) for complete terms and conditions.

† For new customers only. 50% off applies to monthly fee for primary line only.

Unlimited calling is for residential voice service only. [Click here](#) for details.

Additional taxes and surcharges apply. [Click here](#) for details.

for Neighborhood HiSpeed

▷ [See a full list of Neighborhood HiSpeed details](#)



Perfect for: people who want unlimited local calling but don't need as much long distance calling.

See list below for full details.

- Unlimited local calls
- 200 minutes of long distance calls
- One company, one bill
- Call Waiting, Caller ID, Call Waiting ID and Three-Way Calling at no extra charge
- Low rate calling card
- Customize your service with the most popular features
- Additional phone lines

Unlimited calling is for residential voice service only. [Click here](#) for details.

Additional taxes and surcharges apply. [Click here](#) for details.

with Neighborhood Advantage 200

▷ [See a full list of Neighborhood Advantage 200 details](#)

Note: If you are a Lifeline customer with your current local provider, please call 1-888-MCI-LOCAL (1-888-624-5622) and a Neighborhood representative will be happy to assist you with your application needs.

† For new customers only. 50% off applies to monthly fee for primary line only.

[Privacy Policy](#) | [Legal Notices](#) | [Service Agreement & Rate Schedule](#)

Monday, August 11, 2003



Learn ▶

Purchase ▶

Manage ▶

Troubleshoot ▶

Z-LineHOME®

for Pennsylvania

Unlimited Plan

- ▶ Unlimited local calling
- ▶ Unlimited long distance calling
- ▶ Personal Voice Assistant (PVA)
- ▶ All popular calling features

\$49.99

Select Plan

- ▶ Unlimited local calling
- ▶ 50 long distance minutes
- ▶ Member-to-Member™ long distance FREE
- ▶ Select calling features

\$29.99

Note: packages and prices vary, if this is not the state you want [click here](#)

Z-LineHOME Unlimited for Pennsylvania



\$49.99

per month

Z-LineHOME is the first complete home phone service. It's everything you need in one package, for less than other phone companies would charge you for a similar package.

Feature Descriptions:

- [Local/Long Distance](#)
- [Enhanced Phone Features](#)
- [Web Enabled Features](#)
- [Find Me](#)
- [Voicemail](#)
- [Notify Me](#)
- [One Bill](#)
- [Z-LineHOME Access Card](#)

Package Includes:

- Unlimited Local Calling
- Unlimited Domestic Long Distance
- Personal Voice Assistant
- Call Waiting
- Caller ID
- 3-Way Calling
- Speed Calling
- Enhanced Voice Mail
- Find Me Call Forwarding
- Notify Me
- Z-LineHOME Access Card

Web Based Features:

- Listen To Voicemail on the Web
- Set up Notify Me Options
- Set up Find Me Options
- Access Live Customer Service
- Make Payments Online

There was a time when you had to pick separate companies for your local and long distance phone service. And they made you pick and pay for each individual feature you wanted, too. Z-Tel put an end to all that with Z-LineHOME, the Smart Choice for home phone service.

Z-LineHOME gives you local and long distance calling, popular calling features like Voicemail, Call Waiting and more, plus unlimited Member-to-Member long distance, all from one company, on one bill, for one price every month. There's no cost to switch, and you can even keep your current phone number! And you can pick the plan that best suits you.

~ Z-LineHOME Unlimited is intended for Person to Person, Residential Voice Service Only.

VERIZON EX. 5

Configure Your Service:

To convert your existing phone number(s) to Z-Tel service, enter the number(s) in the fields below and choose a corresponding Z-Tel product, then click the Buy Now button below.

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Please Note: If you have Multiple Lines, DSL, or Distinctive Ring here is some important information you will want to review before proceeding.

Your Primary Line: 215 - 963 - 6068 Z-LineHOME Unlimited (\$49.99/mo) -

Your Second Line: - - -

Your Third Line: - - -

Additional Voicemail costs \$4.95 for 1 to 4. Additional Voicemail Boxes 5 to 8 costs \$4.95. How many Voicemail Boxes would you like?

No Additional Voicemail Boxes -

Z-Tel offers an Inside Wire Maintenance plan which will cover the cost to repair or replace your phone wiring, between the network interface point (which is usually a gray box attached to the outside of your residence) up to and including the jacks inside your house, if damage is caused by normal wear and tear. The cost of this plan is only \$4.95 per month.



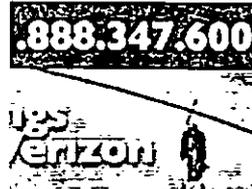
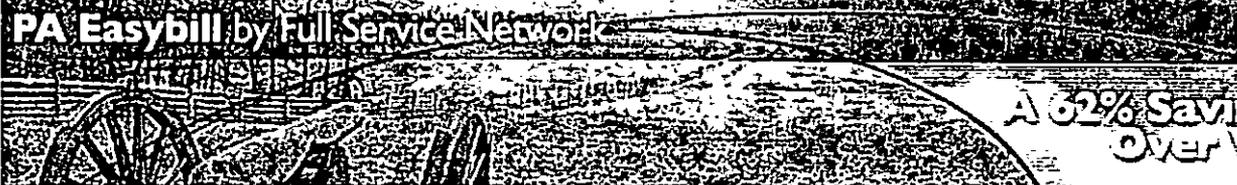
Long Distance Rates	Z-LineHOME Access Card (800 Access)
State-to-State	20 cents per minute
In-State	20 cents per minute

Not the right plan for you? Try our **Select Plan.**

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One-Rate Plans

- FREE FEATURES
- ONE-RATE PLANS
- LOCAL CALLING AREAS
- LONG DISTANCE
- COMPARE TO VERIZON
- JOIN THE PROGRAM
- CONTACT US

1-Rate from Full Service Network gives you the features you want, all for one low price! You can choose any or all of the features listed below. One size doesn't fit everyone so there are four great packages to choose from.

Plans shown are generally available in Verizon's Pennsylvania serving areas. Rates and availability may vary. For specific availability in your area select Local Calling Areas and enter your phone number.

Pick the Plan that's right for you!

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Includes each of the following:

- ✓ Unlimited Local Voice Calling
- ✓ Dial Tone
- ✓ Caller ID
- ✓ Call Waiting
- ✓ Unlimited *69
- ✓ Three Way Calling
- ✓ One Touch Dialing
- ✓ Call Block
- ✓ Busy Ring Back
- ✓ Call Forwarding
- ✓ Peace of Mind
- ✓ Integrated Messaging

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✓ Includes everything above plus Unlimited Metropolitan Voice Calling!

39⁹⁵

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✓ Includes everything above plus Unlimited Voice Calling anywhere in the USA!

49⁹⁵

5 for \$5

✓ Add 5 metro / regional exchanges of your choice to your \$24.95 or \$39.95 voice plan for \$5.00.

Call 1-888-347-6000 to start saving!

Or join online and start saving now with our QuickStart enrollment.

Prices shown are monthly rates. See disclaimer and check availability. Other charges and taxes apply. Call for details.

C-70027195

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Corporate Customers: Please visit [Full Service Network](#)

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Super Fast Internet
DSL only \$25!
FREE Modem!

Residential Services / Pennsylvania

Order Process / Step 1

Please select the link below to check whether you are in our service area:

[verify service availability](#)

Order Process / Step 2

Great, now that you have confirmed that we offer our service in your area please fill out the following order form

Switchover to Cavalier Telephone may take up to 15-20 business days.

All Cavalier Telephone packages include these features:

- Call Waiting (or Talking Call Waiting)
- Caller ID
- Voice Mail
- Three-Way Calling
- Unlimited *-69
- Call Forwarding
- Remote Call Forwarding
- Speed Dialing
- Anonymous Call Rejection
- Call Block
- Repeat Dialing (*66)
- 900 Toll Block
- Unlimited Metro Philadelphia Local Calling Area

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[Customers Benefit From Lower Costs and Increased Network Capacity: Cavalier Telephone Completes Network Expansion »](#)

[Cavalier Telephone Announces 30% EBITDA Growth in 2Q 2003 »](#)

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[Vea nuestros precios para servicios residenciales en Español](#)

Choose a Feature Package:

Feature Package	Cost*
<input checked="" type="radio"/> Flex Basic: <ul style="list-style-type: none"> • Unlimited Local Calling • \$0.05 per minute domestic long distance 	\$24.95
<input type="radio"/> Flex Dial-Up: <ul style="list-style-type: none"> • Unlimited Local Calling • Unlimited 56K Dial-Up • 3 E-mail Accounts • 3 MB Webspace • Internet Caller ID • \$0.05 per minute domestic long distance 	\$34.95
<input type="radio"/> Flex 2-Line Dial-Up: <ul style="list-style-type: none"> • Unlimited Local Calling • Second Line for dedicated data use • Unlimited 56K Dial-Up • 3 E-mail Accounts • 3 MB Webspace • Internet Caller ID • \$0.05 per minute domestic long distance 	\$44.95
<input type="radio"/> Flex DSL: <ul style="list-style-type: none"> • Unlimited Local Calling • DSL up to 960K/960K 	\$49.95

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Repair Chat

click here to chat with a live repair tech to report a service issue

Pay your bill online!

- \$0.05 per minute domestic long distance
- 3 E-mail Accounts
- 3 MB Webspace
- Internet Caller ID

- Unlimited Basic:** \$49.95
 - Unlimited Local Calling
 - Unlimited Domestic Long Distance
- Unlimited Dialup:** \$59.95
 - Unlimited Local Calling
 - Unlimited Domestic Long Distance
 - Unlimited 56K Dial-Up
 - 3 E-mail Accounts
 - 3 MB Webspace
 - Internet Caller ID
- Unlimited DSL:** \$74.95
 - Unlimited Local Calling
 - Unlimited Domestic Long Distance
 - DSL up to 960K / 960K
 - 3 E-mail Accounts
 - 3 MB Webspace
 - Internet Caller ID
- Unlimited LD and 2 Line Dial Up:** \$69.95
 - Unlimited Local Calling
 - 2nd Line For Dedicated Data Use
 - Unlimited Domestic Long Distance
 - Unlimited 56K Dial-Up
 - 3 E-mail Accounts
 - 3 MB Webspace
 - Internet Caller ID

* Taxes and fees not included in above pricing

To Add Individual Features:

Individual Feature	Cost
<input type="checkbox"/> Cell-Home Connect	2.00
<input type="checkbox"/> Distinctive Ring	4.25
<input type="checkbox"/> Telemarketer Blocking	4.00

Registration Form

First Name

Last Name

SSN

E-mail

A Valid Email address is required to confirm your order.
For Example: john@myisp.com

Date of Birth

Street Number

Street Dir.

Street Name

Thoroughfare

Building #

Floor #

Unit TypeUnit # City

State PA

Zip - **Current Phone Provider**Service Phone Number

If you do not currently have phone service enter "new" here and a Cavalier representative will contact you shortly, or call Cavalier Telephone at 267-803-4000.

Best number to call me **Where did you hear about Cavalier****Additional Info**

--

Please specify anything else that may be important to your order such as if you wish to order additional phone lines, we might need to call you to confirm the order.

Installation charge may apply to ported telephone numbers based on credit risk. Installation charge will apply to all new loop (new phone number) customers. By submitting this order form, I give Cavalier Telephone permission to check my credit. Installation is \$35.95 or waived on the first month's bill upon credit approval.

Some restrictions and other terms and conditions may apply. Contact Cavalier Telephone or an Authorized Agent for more details. Pricing information is based upon the state or area code and telephone number you provide. Long distance rate valid for calls terminating in the 48 contiguous U.S. states. Long distance rate for Flex Packages is \$0.05 per minute. DSL service is a best effort service and Cavalier Telephone cannot guarantee the availability of DSL service until your order is completed. DSL service is not available in all areas or on all telephone lines and is subject to circuit availability. Actual speeds may vary. Speed and uninterrupted use of service are not guaranteed. The speed of your DSL service may vary due to the specific loop length and quality. Minor changes on the physical condition of the loop, including but not limited to inclement weather and loop re-engineering by an incumbent local exchange provider (i.e., Verizon) could affect the stability of your DSL service. Offer for residential customers ordering new DSL service only. DSL service requires a modem from Cavalier Telephone. The DSL modem fee is \$12 per month or \$99 one time charge if paid in full at time of activation. DSL service requires a one-year commitment. If DSL service is terminated prior to twelve (12) consecutive months of service, a \$149 equipment fee will be assessed. Service activation subject to credit check and approval. Offer subject to change without notice.

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ACCESS SERVICES AND NETWORK INTERCONNECTION SERVICES

1. GENERAL

This section contains the rates applicable to the Access Services and Network Interconnection Services offered in this tariff. The regulations applicable to these services are found in other sections of this tariff as follows:

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Rate Section	Service	Regulations Located In
3	(Reserved For Future Use)	
4	(Reserved For Future Use)	
5	Access/Interconnection Ordering	Section 5
6	(Reserved For Future Use)	
7	(Reserved For Future Use)	
8	(Reserved For Future Use)	
9	(Reserved For Future Use)	
10	Network Interconnection Services	Section 10
11	(Reserved For Future Use)	
12	(Reserved For Future Use)	
13	Additional Engineering, Labor and Miscellaneous Services	Section 13
14	(Reserved For Future Use)	
15	AT&T Access Service	Section 15

For a more detailed listing of the contents of any of the sections listed above refer to the Table of Contents located in the front of the tariff.

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AT&T COMMUNICATIONS
OF PENNSYLVANIA, LLC

Pa. P.U.C.-No. 17
Canceling Pa. P.U.C.-No. 2
PRICE LIST
ORIGINAL SHEET 2

ACCESS SERVICES AND NETWORK INTERCONNECTION SERVICES

2. PAYMENT OF RATES AND CHARGES; RECIPROCAL PRICING

The regulations regarding the payment of rates and charges are set forth in Section 2.4. (Payment Arrangements and Credit Allowances).

Notwithstanding any other provision of this tariff, with respect to any Customer that, on its own or through an Affiliate, provides services comparable to the services provided under this tariff to the Company within Pennsylvania, during any billing period, in the event that any of the applicable rates and charges set forth in this Section 17 are lower than comparable rates and charges in effect as of the last day prior to such billing period ("Customer Prices") offered or charged by the Customer or such Affiliate to the Company anywhere within Pennsylvania for services comparable to the services provided under this tariff, then, for such Customer, such rates and charges in this Section 17 may be increased by the Company to an amount equal to such Customer Prices.

ACCESS SERVICES AND NETWORK INTERCONNECTION SERVICES

15. DIGITAL LINK ACCESS SERVICE RATES

15.1. Tandem-Switched Transport

	<u>Monthly Rate</u>	<u>Per MOU</u>	
A. Tandem-Switched Transport Termination			
Per Access Minute		\$0.000195	
B. Tandem-Switched Transport Facility			
Per Access Minute per mile		\$0.000045	
15.2. Switching Charge			
A. Originating Switching Charge			
Per Access Minute		\$0.016686	(D)
B. Terminating Switching Charge			
Per Access Minute		\$0.016686	(D)

Access Services

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5. SWITCHED ACCESS SERVICE

5.1 General

Switched Access Service, which is available to Customers for their use in furnishing their services to End Users, provides a two-point communications path between a Customer's Premises and an End User's Premises. It provides for the use of common terminating, switching and transport facilities. Switched Access Service provides the ability to originate calls from an End User's Premises to a Customer's Premises, and to terminate calls from a Customer's Premises location to an End User's Premises.

Rates and charges are set forth in Section 7.4. The application of rates for Switched Access Service is described in Section 7.2.

Provision and Description of Switched Access Service Arrangements

Switched Access Service is provided in the following service type:

5.2.1 Feature Group D (FGD) Access

FGD Access, which is available to all Customers, is provisioned at the DS1 level and provides trunk-side access to Company Local Switching Center switches, with an associated uniform 10XXX Access Code for the Customer's use in originating and terminating communications. Basic FGD service will be provided with Multi-Frequency In Band Signaling (SS7 is also available as a Common Switching Option for Feature Group D). In addition, Conventional Signaling for Direct Carrier Trunk Groups is available at the Customer's option. End Users of the Customer's service may also originate calls to certain FGD Access Customers without dialing the 10XXX Access Code if the End User is presubscribed, as described herein.

The Access Code for FGD switching is a uniform Access Code of the form 10XXX. A single Access Code will be the assigned number of all FGD access provided to the Customer by the Company. No Access Code is required for calls to a customer over FGD Switched Access Service if the End User's telephone exchange service is arranged for Presubscription to that Customer, as set forth herein.

Where no Access Code is required, the number dialed by the Customer's End User shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP), except for 00- dialed calls which are routed to the pre-designated Customer. For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the Customer's End User is NXX_XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and when the local Switching Center is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC +NN.

When the 10XXX Access Code is used, FGD switching also provides for dialing the digit 0 for access to the Customer's operator, 911 for access to the Company's emergency service, or the end-of-dialing digit (#) for cut-through access to the Customer's Premises.

In addition, End Users may originate calls by dialing the 950-XXXX Access Code specific to a particular Interexchange Carrier, provided that the Interexchange Carrier has subscribed to the Company's Feature Group D with 950 Access Common Switching Optional Feature. If the End User is presubscribed to that Interexchange Carrier, no Access Code is necessary.

5.2.2 Manner of Provision

Trunks used for Switched Access Service may be configured for one-way (either originating only or terminating only) or for two-way directionality. It is the Customer's responsibility to order a sufficient number of trunks of each type in order to meet its desired grade of service objective. At the Customer's request, the Company will assist the Customer in sizing Switched Access Trunk groups.

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Access Services

5. SWITCHED Access Services (Cont.)

5.2 Provision and Description of Switched Access Service Arrangements (Cont.)

5.2.3 Rate Categories

The following rate categories apply to Switched Access Service:

- A. Direct Connect
- B. Tandem Connect
- C. 800 Data Base Access Service
- D. Optional Features

5.2.3.1 Except as stated as follows, Tandem Connect Service is provided in conjunction with the tandem provider serving the area. Charges are computed in accordance with Section 2.5.2.8 preceding (Ordering, Rating, and Billing of Access Services Where More Than One Exchange Telephone Company is Involved).

5.2.3.1.1 Direct Connect: The Company will provide Direct Connect between the Customer's Premises and the Company's Local Switching Center switch(es). This transmission path is dedicated to the use of a single Customer. DS1 and DS3 facilities are available for Direct Connect Service. A DS1 facility is capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to 24 voice frequency transmission paths. A DS3 facility is capable of transmitting electrical signals at a nominal 44.736 Mbps, with the capability to channelize up to 672 voice-frequency transmission paths. For DS3 facilities, if the Company is required to install additional fiber optic equipment for the benefit of the Customer, then the Customer has the option to choose either an optical or electrical interface.

The Customer must order Direct Connect under one of two rate options:

Option 1: This Direct Connect rate category is comprised of a monthly facilities charge and a per minute of use charge.

Option 2: This Direct Connect rate category is comprised of three rate elements: 1) Termination Charge; 2) Network Charge; and 3) Local Switching Center Charge. In addition, where applicable, a monthly facilities charge will apply.

Termination Charge: Provides for the electronics in the building and any inside wiring and/or multiplexing.

Network Charge: Provides for the use of the Company's Network.

Local Switching Center Charge: Provides for the use of Company switching equipment to complete the transmission of Switched Access Service communications to and from the End Users served by the Company's Local Switching Center.

Access Services

5. SWITCHED Access Services (Cont.)

5.2 Provision and Description of Switched Access Service Arrangements (Cont.)

5.2.3 Rate Categories (Cont.)

5.2.3.1.2 Tandem Connect: Tandem Connect consists of circuits from the Customer's tandem provider to the Company's Local Switching Center.

The Customer must order Tandem Connect under one of two rate options:

Option 1: This Tandem Connect rate category is comprised of a Minutes of Use (MOU) based charge.

Option 2: This Tandem Connect rate category is comprised of three rate elements: 1) Termination Charge; 2) Network Charge; and 3) Local Switching Center Charge, as described in Section 5.2.3.1.1, above.

5.2.3.1.3 800 Data Base Access Service

800 Data Base Access Service is a service offering utilizing originating Trunk side Switched Access Service. When an 8XX + NXX + XXXX call is originated by an End User, the Company will perform Customer identification based on screening of the full ten-digits of the 8XX number to determine the Customer location to which the call is to be routed.

The 800 Data Base charge, which consists of a single, fixed rate element, applies on a per query basis.

5.2.3.1.4 Switched Access Service Optional Features

5.2.3.1.4.1 Nonchargeable Optional Features: Where transmission facilities permit, the Company will, at the option of the Customer, provide the following nonchargeable optional feature, as described in Section 5.5.1, in association with Switched Access Service.

(a) Supervisory Signaling

5.2.3.1.4.2 Chargeable Optional Features: Where transmission facilities permit, the Company will, at the option of the Customer, provide the following chargeable optional features, as described in Section 5.5.2, in association with Switched Access Service.

(a) 800 Data Base Access Service Basic Query

(b) Signaling Transfer Point Access

5.2.3.1.4.3 Feature Group D Optional Features

Following are the various optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Optional features are provided as Common Switching Optional Features as described in Section 5.5.3.1.

Access Services

7. SWITCHED ACCESS RATES

This section contains the specific regulations governing the rates and charges that apply for Switched Access Services:

- 7.1 There are three types of rates and charges that apply to Switched Access Service. These are monthly Recurring Charges, usage rates and Non-Recurring Charges.
- 7.1.1 Monthly Recurring Charges: Monthly Recurring Charges are flat rates for facilities that apply each month or fraction thereof that a specific rate element is provided.
- 7.1.2 Usage Rates: Usage rates are rates that are applied on a per access minute or per query basis. Usage rates are accumulated over a monthly period.
- 7.1.3 Non-Recurring Charges: Non-Recurring charges are one time charges that apply for a specific work activity (i.e., installation of new service or change to an existing service).
- 7.1.3.1 Installation of Service: Non-Recurring charges apply to each Switched Access Service installed. The charge is applied per line or Trunk.
- 7.2 Application of Rates
- 7.2.1 Direct Connect: The Direct Connect Option 1 rate is assessed based on the total of the monthly facilities charge and the monthly usage charge. The monthly facilities charge consists of a fixed rate based on the type of the facilities, i.e., DS1 or DS3, and a per mile rate. The monthly facilities charge will not apply when the Customer's Point-of-Presence is On-Net. The fixed rate and the per mile rate for Off-Net Customer's will be calculated on an Individual Case Basis.
- The Direct Connect Option 2 rate is assessed based on the total of the Termination Charge, Network Charge and the Local Switching Center Charge in addition to any applicable monthly facility charge. Except for the facility charge, each of these components is based on a per minute rate structure.
- The Tandem Overflow rates will apply, based on the option chosen, for all Direct Connect usage which overflows to the Access Tandem.
- Rates and charges for Direct Connect are set forth in Section 7.4.4.1. Rates and charges for Tandem Overflow are set forth in Section 7.4.4.1.1.
- 7.2.2 Tandem Connect: The Tandem Connect Option 1 rate is assessed on a per minute of use basis and is applicable to all tandem routed Switched Access Service minutes of use. The rate will vary based on whether the traffic is originating or terminating.
- The Tandem Connect Option 2 rate is assessed based on the total of the Termination Charge, Network Charge and Local Switching Center Charge. Each of these components is based on a per minute rate structure.
- Rates and charges for Tandem Connect are set forth in Section 7.4.4.2.
- 7.2.3 8XX Number Translation Charge: The 8XX Number Translation Charge applies for the translation of a specific 8XX number to a ten digit telephone number on a per query basis.

Access Services

7. SWITCHED ACCESS RATES (Cont.)

7.3 Billing of Access Minutes: When recording originating calls over FGD with multifrequency address signaling, usage measurement begins when the first wink supervisory signal is forwarded from the Customer's facilities. The measurement of originating call usage over FGD ends when the originating FGD entry switch receives disconnect supervision from either the originating End User's Local Switching Center (indicating that the originating End User has disconnected), or the Customer's facilities, whichever is recognized first by the entry switch.

For terminating calls over FGD with multifrequency address signaling, the measurement of access minutes begins when a seizure signal is received from the Carrier's Trunk group at the Point of Presence within the LATA. The measurement of terminating call usage over FGD ends when a disconnect signal is received, indicating that either the originating or terminating user has disconnected.

When recording originating calls over FGD with SS7 signaling, usage measurement begins with the transmission of the initial address message by the switch for direct Trunk groups and with the receipt of an exit message by the switch for tandem Trunk groups. The measurement of originating FGD usage ends when the entry switch receives or sends a release message, whichever occurs first.

For terminating calls over FGD with SS7 signaling, the measurement of access minutes begins when the terminating recording switch receives the initial address message from the terminating End User. On directly routed Trunk groups or on tandem routed Trunk groups, the Company switch receives the initial address message and sends the indication to the Customer in the form of an answer message. The measurement of terminating FGD call usage ends when the entry switch receives or sends a release message, whichever occurs first.

Access Services

7. SWITCHED ACCESS RATES (Cont.)

7.4 Rates and Charges

7.4.1 Service Implementation

A. Installation Charge (Per End)

DS-1

DS-3

On-Net

N/A

N/A

Off-Net

ICB

ICB

7.4.2 Change Charges (per order)

Per Occurrence

- A. Service Date \$ 0.00
- B. Design Changes \$ 0.00
- C. Expedite Charge \$215.00

7.4.3 Cancellation Charges (Per Order)

\$ 0.00

Access Services

7. SWITCHED ACCESS RATES (Cont.)

7.4 Rates and Charges (Cont.)

7.4.4 Switched Access

7.4.4.1 Direct Connect Charges:

Option 1:

Facility Charge:

Per DS1

On-Net N/A
Off-Net Charges for DS1 are determined on an Individual Case Basis.

Per DS3

On-Net N/A
Off-Net Charges for DS3 are determined on an Individual Case Basis.

Per Minute Charge:

	<u>Per Access Minute of Originating Use</u>	<u>Per Access Minute of Terminating Use</u>
On-Net	\$0.038962	\$0.038962
Off-Net	\$0.038962	\$0.038962

Option 2: In addition to the charges listed below, for Off-Net Customers, the Direct Connect facility charge specified in Section 7.4.4.1 will also apply:

Per Access Minute of Originating Use:

	<u>Termination Charge</u>	<u>Network Charge</u>	<u>Local Switching Center Charge</u>
On-Net	\$0.000531	\$0.014413	\$0.024018
Off-Net	\$0.000531	\$0.014413	\$0.024018

Per Access Minute of Terminating Use:

	<u>Termination Charge</u>	<u>Network Charge</u>	<u>Local Switching Center Charge</u>
On-Net	\$0.000531	\$0.014413	\$0.024018
Off-Net	\$0.000531	\$0.014413	\$0.024018

Access Services

7. SWITCHED ACCESS RATES (Cont.)

7.4 Rates and Charges (Cont.)

7.4.4.1.1 Tandem Overflow

Option 1:

	Per Access Minute of Originating Use	Per Access Minute of Terminating Use
On-Net	\$0.038962	\$0.038962
Off-Net	\$0.038962	\$0.038962

Option 2:

	Per Access Minute of Originating Use:		
	Termination Charge	Network Charge	Local Switching Center Charge
On-Net	\$0.000531	\$0.014413	\$0.024018
Off-Net	\$0.000531	\$0.014413	\$0.024018

Option 2:

	Per Access Minute of Terminating Use:		
	Termination Charge	Network Charge	Local Switching Center Charge
On-Net	\$0.000531	\$0.014413	\$0.024018
Off-Net	\$0.000531	\$0.014413	\$0.024018

7.4.4.2 Tandem Connect Charges

Option 1:

	Per Access Minute of Originating Use	Per Access Minute of Terminating Use
On-Net	\$0.038962	\$0.038962
Off-Net	\$0.038962	\$0.038962

Option 2:

	Per Access Minute of Originating Use:		
	Termination Charge	Network Charge	Local Switching Center Charge
On-Net	\$0.000531	\$0.014413	\$0.024018
Off-Net	\$0.000531	\$0.014413	\$0.024018

Per Access Minute of Terminating Use:

	Termination Charge	Network Charge	Local Switching Center Charge
On-Net	\$0.000531	\$0.014413	\$0.024018
Off-Net	\$0.000531	\$0.014413	\$0.024018

Access Services

7. SWITCHED ACCESS RATES (Cont.)

7.4 Rates and Charges (Cont.)

7.4.5 Chargeable Optional Features

7.4.5.1 800 Data Base Access Service Basic Query

Per Query
\$0.003089

7.4.5.2 Signaling Transfer Point Access

<u>Monthly</u>	<u>Non-Recurring</u>	<u>Via Third</u>
<u>Per Mile</u>	<u>Per Port</u>	<u>Party</u>
ICB	ICB	ICB

7.4.6 Nonchargeable Optional Features

Supervisory Signaling	\$0.00
-----------------------	--------

7.4.7 Feature Group D Optional Features

7.4.7.1 Common Switching Optional Features

Alternate Traffic Routing	\$0.00
Automatic Number Identification	0.00
Cut-Through	0.00
Service Class Routing	0.00
Feature Group D with 950 Access	0.00
Signaling System Seven (SS7)	0.00
Basic Initial Address Message Delivery	0.00
Called Directory Number Delivery	0.00
Flexible Automatic Number Identification Delivery	0.00

PUC LATE-FILED EXHIBITS

Docket No. ~~1-00990033~~ C-20027195
Hearing Date 8/26/03
Judge Fordham
Hearing held in Hbg
Exhibit No. Vergon C. E. 10
Reporter John A. Kelly

1. Above exhibit to be supplied to reporter by:

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SECRETARY'S BUREAU

2. Above exhibit to be filed directly with PUC by:

Additional Comments:

Please add to exhibit file.



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OFFICE OF SMALL BUSINESS ADVOCATE

Suite 1102, Commerce Building
300 North Second Street
Harrisburg, Pennsylvania 17101

Bernard A. Ryan, Jr.
Small Business Advocate

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February 15, 1996

(717) 783-2525
(717) 783-2831(FAX)

Hon. Louis G. Cocheres
Administrative Law Judge
Pa. Public Utility Commission
P. O. Box 3265
Harrisburg, PA 17120

DOCKETED
SEP 09 2003

Re: Formal Investigation to Examine and Establish
Updated Universal Service Principles and Policies
for Telecommunications Services in the Commonwealth
and Notice of Proposed Rulemaking to Establish a
Universal Service Funding Mechanism
Docket Nos. I-00940035

Dear Judge Cocheres:

Enclosed please find two copies of the rebuttal testimony of
Stanford L. Levin, Ph.D. submitted on behalf of the Office of Small
Business Advocate. As evidenced by the attached certificate of
service, all parties have been served as indicated.

By copy of this letter, a certificate of service is being
filed this date with the Secretary of the Public Utility
Commission, pursuant to 52 Pa. Code §5.412(f).

Sincerely,

Michael L. Swindler
Assistant Small Business Advocate

cc: John G. Alford, Secretary
w/Certificate of Service only

Parties of Record (w/encl.)

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12/27/03
C-20027195
8/26/03

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

FORMAL INVESTIGATION TO EXAMINE :
AND ESTABLISH UPDATED UNIVERSAL :
SERVICE PRINCIPLES AND POLICIES : DOCKET NO. I-00940035
FOR TELECOMMUNICATIONS SERVICES :
IN THE COMMONWEALTH :

Rebuttal Testimony of
STANFORD L. LEVIN, Ph.D.

On Behalf of the
Office of Small Business Advocate

Date Served: February 15, 1996

Date Submitted for the Record: _____

Rebuttal Testimony of Stanford L. Levin, Ph. D.

1 Q. Please state your name and business address.

2 A. My name is Stanford L. Levin. My business address is Department of Economics,
3 Southern Illinois University at Edwardsville, Edwardsville, Illinois.

4 Q. What is your occupation and current position?

5 A. I am an economist and Professor of Economics at Southern Illinois University at
6 Edwardsville, where I have been teaching since 1972. I was Chairman of the
7 Department of Economics from 1986-1994. I am also president of The Resource
8 Group, Inc., an economic consulting firm in St. Louis, Missouri.

9 Q. Please state your educational qualifications and professional experience relevant to
10 public utility regulation and the issues in this proceeding.

11 A. I received a B. A. in economics from Grinnell College and a M. A. and Ph. D. in
12 economics from the University of Michigan. My specialization in graduate school
13 was the field of industrial organization, which includes the study of regulated
14 industries in the economy. My teaching assignments include graduate and
15 undergraduate courses in industrial organization, public utility regulation, and
16 microeconomic theory. I regularly attend seminars on industrial organization and
17 regulation and have previously submitted testimony before state and federal
18 regulatory commissions in the U. S. and Canada.

1 In the summer of 1970 I worked as an Industry Economist in the Office of
2 Economics at the Federal Power Commission. My duties involved work on natural
3 gas and electricity cases before that Commission as well as an analysis of issues
4 relevant to regulation.

5 From December, 1977, through August, 1978, I was on sabbatical leave from
6 Southern Illinois University at Edwardsville. During this time I worked at Data
7 Resources, Inc., in Washington, D. C., managing a project for the Department of
8 Natural Resources of the State of Maryland. From 1979 to 1983, I was a consulting
9 economist at the Chicago Regional Office of the Federal Trade Commission, dealing
10 primarily with antitrust cases.

11 In November, 1984, I was appointed Commissioner of the Illinois Commerce
12 Commission, the public utility regulatory body in Illinois, by Governor James R.
13 Thompson. I served on the Commission until March, 1986, at which time I returned
14 to Southern Illinois University at Edwardsville. While on the Illinois Commerce
15 Commission, I was Chairman of the Commission's Telecommunications Policy
16 Committee and a member of the Commission's Electric Policy Committee.

17 These and other professional activities, papers, and publications are detailed in my
18 vita, attached to my rebuttal testimony as Appendix A.

1 Q. For whom are you testifying in this case?

2 A. I am testifying for the Pennsylvania Office of Small Business Advocate.

3 Q. What is the purpose of your rebuttal testimony?

4 A. I have been asked by the Office of Small Business Advocate to review the evidence
5 that has been submitted in this case and to comment on certain issues that are of
6 particular importance to small businesses. I will respond to some of the proposals
7 for providing and funding universal service, although it is not my intention to make
8 a comprehensive response to all of the issues and proposals in this case. In
9 particular, I will not comment in detail on the cost studies that have been submitted,
10 nor on quantifying the cost of the universal service or carrier of last resort
11 obligations.

12 Q. Please summarize your rebuttal testimony?

13 A. My rebuttal testimony makes the following points in response to the evidence that
14 has been submitted in this case.

15 • Some of the proposals put forth in the case may have the effect of increasing
16 the cost of providing universal service. Small business customers have a major
17 interest in holding down the cost of providing universal service, as they are
18 contributors to the cost of providing universal service.

19 • Some of the proposals put forth in this case may allow some customers to
20 avoid paying for the cost of providing universal service, while other similarly

1 situated customers are required to pay. Any universal service plan should
2 have an equitable plan for determining which customers contribute to the cost
3 of providing universal service. As competition develops, small business
4 customers have a risk of being required to pay a disproportionate portion of
5 the cost of providing universal service.

6 • I agree with those witnesses who have testified as to the importance of a
7 sustainable mechanism to pay for the cost of providing universal service. In
8 a more competitive telecommunications environment, including a more
9 competitive local exchange environment, it is crucial to put in place a
10 sustainable mechanism for the funding of universal service.

11 Q. Why do small business customers have an interest in the universal service proposals
12 that have been put forth in the case?

13 A. All business customers, and, in particular, small business customers, of
14 telecommunications service have a significant interest in universal service. This is
15 because there is generally a cost to providing universal service, and business
16 customers are typically called upon to pay a disproportionate share of these costs.
17 In addition, the introduction of competition into local telecommunications markets
18 will have a further affect on the payment of subsidies for universal service. As has
19 happened in the long distance market, and as happens in most markets, new
20 competitors first search for the highest margin customers (those for whom price
21 exceeds incremental cost by the greatest amount) as they enter a market, extending

1 their competition to other customers later. In local telecommunications, for instance,
2 if entry follows this pattern, as it appears to be doing, competition will initially
3 surface for services purchased by business customers. As competition occurs, prices
4 for these services will fall, and these services will not generate their historical support
5 for universal service support.

6 This initial local exchange competition is likely to be directed at larger business
7 customers. Depending on how a particular plan maintains funding for the provision
8 of universal service, small business customers will be asked to continue to pay, or
9 even to increase, their support for universal service. If, as a result of a particular
10 plan, small businesses pay a disproportionate share of the cost of providing universal
11 service, this will put small business customers at a financial disadvantage in the
12 market place, but not a financial disadvantage due to any of their own higher costs
13 but rather a financial disadvantage due to an outside requirement to cover the costs
14 of providing universal service. Consequently, it is important to small business
15 customers to have the opportunity to respond to the universal service plans which
16 have been submitted in this case.

17 Q. In commenting on the universal service plans which have been suggested, what
18 specific aspects of these plans are important for small businesses?

19 A. First, the total cost of providing universal service will affect small businesses.
20 Second, how the costs of universal service are recovered from those customers

1 contributing to the universal service subsidy -- the equity issue -- will also affect small
2 businesses. Third, it will be important to small businesses to develop a sustainable
3 method of collecting any needed subsidy for universal service.

4 Q. Do you agree with those witnesses who have stated the need to provide universal
5 service?

6 A. In general, all parties are in agreement as to the importance of providing universal
7 service. I agree with this objective as well, but it is important to those paying for
8 universal service to achieve this objective at the lowest possible cost.

9 Universal service requires extending local telecommunications service to all or to
10 nearly all potential customers. When those customers can not or will not pay the
11 cost of this service, or when society determines that they should not be required to
12 pay the full cost of their local telephone service, then support must come from other
13 sources. Typically, this support for universal service has been paid by other
14 customers, most often toll customers, customers of optional services such as custom
15 calling, and business local exchange customers. In these cases, customers pay prices
16 which significantly exceed incremental cost to provide a subsidy to those customers
17 who pay prices less than incremental cost.

18 I have previously testified about this subject, and some other, closely related subjects,
19 before this Commission in the Application of MFS Intelenet of Pennsylvania, Inc.

1 for Approval to Operate as a Local Exchange Telecommunications Company, Docket
2 No. A-310203F0002, December 16, 1994. For convenience and for completeness
3 (some of the topics are explained in more detail than in this testimony), and to avoid
4 duplication, I have attached the relevant excerpts from this testimony as Appendix B.

5 Q. How might some of the proposals put forward in this case increase the total cost of
6 providing universal service?

7 A. To understand the answer to this question, we need to recognize that the incumbent
8 carrier has already put in place a network designed to reach all or nearly all potential
9 customers, even when parts of that network have required a subsidy. Because these
10 networks were constructed under a rate-of-return regulation regime and because the
11 extension of these networks and the provision of service was at regulated (and
12 sometimes below-cost) rates, all customers are obligated to pay for the cost of these
13 networks. This is certainly true for past costs, and it will be true for on-going costs
14 as well if these obligations remain on the incumbent carrier.

15 Some of the proposals put forward in the case [for example, GTE witness Williams,
16 Testimony, page 11, line 19, through page 12, line 14 and page 29, lines 8-16; Sprint
17 witness Jamison, Direct Testimony, page 10, lines 23-26; MCI witness Bryant, Direct
18 Testimony, page 8, lines 9-11, and page 8, line 21, through page 9, line 4; AT&T
19 witness Mayo, Direct Testimony, page 33; and AT&T witness Darrah, Direct
20 Testimony, page 13] require that subsidies be extended to a second or to multiple

1 carriers. Leaving aside the inherent contradiction in having more than one carrier
2 of last resort, the result of these proposals will be the construction of two or more
3 networks, each of which requires a subsidy to be profitable. Rather than providing
4 service to all customers for whom a subsidy is required from one network, efficiently,
5 these proposals would increase the total cost of providing universal service by
6 subsidizing the construction of additional networks which would not otherwise cover
7 their costs. This cannot be in the interests of customers, in general, nor, in
8 particular, can it be in the interests of those customers who will now be required to
9 pay an increased subsidy to achieve the worthy objective of universal service. Such
10 a policy, which would increase costs to society, cannot be in the public interest.

11 Q. What about the "play or pay" proposal that has been put forth by Bell Atlantic
12 [Emmerson, Statement No. 3.1 (Supplemental Direct Testimony), page 3, lines 10-18;
13 Mitchell, Statement No. 4.0 (Direct Testimony), page 5, lines 15-20, and page 8, line
14 20, through page 9, line 9; and Eichenlaub, Statement No. 5.0 (Direct Testimony),
15 page 6, lines 8-22 and pages 12-19] ?

16 A. This proposal suffers from the same two shortcomings as the other plans. First, it
17 may increase the cost of providing universal service as universal service subsidies are
18 extended to multiple carriers. Second, the incumbent's past costs for providing
19 universal service, to the extent that they have not yet been recovered, will only be
20 paid for by the incumbent's customers rather than by all customers.

1 Q. GTE has argued that universal service should be restricted to residential customers,
2 while recognizing that "some parties may have a reasonable basis from which to
3 argue that US support is required for basic single-line business . . . , " and outlines
4 how to do this [GTE witness Williams, Testimony, pages 17-20]. Bell Atlantic has
5 similarly argued that universal service should be limited to residential customers [Bell
6 Atlantic witness Sanford, Statement No. 1.0 (Direct Testimony), page 6, lines 1-2].

7 Do you agree with GTE and ^{Bell Atlantic} ~~AT&T~~ on this issue?

8 A. I do not agree entirely with GTE and ^{Bell Atlantic} ~~AT&T~~. Today, most business customers,
9 including small business customers, pay rates which are greater than cost and
10 therefore contribute to universal service support, but there may be some small
11 business customers in very high cost areas who, if aggressive rate rebalancing were
12 pursued, could require universal service support. For these customers, it may be
13 necessary to cap the access rate at some level and to provide universal service
14 support for the difference between this capped rate and the cost.

15 Q. You have previously criticized extending universal service subsidies to second or
16 multiple carriers, and you have criticized Bell Atlantic's "play or pay" proposal for
17 providing universal service. Your criticisms could be taken to suggest that you are
18 not in favor of competition. Shouldn't all customers benefit from competition?

19 A. In general, I am a strong supporter of competition and I believe that all customers
20 should have the choice, lower prices, and improved service which I expect will result
21 from competition. In this case, however, there are two qualifications. First, a

1 competitive market should not rely on subsidies. As long as prices are held below
2 cost for some customers, subsidies will be required and, effectively, these customers
3 will not be able to have all of the advantages of a competitive market. Second,
4 competition should reduce costs and prices, not increase them. By allowing multiple
5 subsidized networks, which must all be paid for, the results are contradictory to a
6 competitive market.

7 Q. Many witnesses in this case have called for rate rebalancing. Do you agree with the
8 necessity for rate rebalancing?

9 A. I believe that rate rebalancing must play an important role as competition is
10 introduced into the local exchange market, and it is rate rebalancing which will allow
11 the benefits of competition to be extended to more customers. There have been
12 several calls for rate rebalancing [for example, GTE witness Williams, Testimony,
13 page 7, lines 15, through page 8, line 11; GTE witness Wilkinson, Testimony, page
14 2, line 19, through page 3, line 4; Bell Atlantic witness Mitchell, Statement No. 4.0
15 (Direct Testimony), page 6, line 3, through page 7, line 4; Bell Atlantic witness
16 Eichenlaub, Statement No. 5.0 (Direct Testimony), page 7, line 10, through page 8,
17 line 2; and AT&T witness Darrah, Direct Testimony, page 40]. While I am not
18 endorsing any specific rate rebalancing proposal at this time, it is clear that there are
19 significant benefits to be derived from rate rebalancing.

1 First, as prices are increased to compensatory levels, or even closer to these levels
2 if the incumbent telephone company's costs are relatively high, then there will be
3 the possibility of competition for more customers as additional segments of the
4 market will look attractive to new entrants. This means that rate rebalancing can be
5 implemented in advance of competition, and, indeed, it may need to be implemented
6 in advance of competition if competition is to be feasible. In this way, true
7 competition, and all of its attendant benefits, will be available to more customers.
8 Within the limits of alternative regulation schemes, such as Bell Atlantic -
9 Pennsylvania's price regulation, which contains a freeze on protected services, I
10 support rate rebalancing designed to bring prices closer to cost as long as there is no
11 significant impact on universal service. My experience, and United States experience
12 and research, in general, suggests that substantial rate rebalancing can occur without
13 jeopardizing universal service.

14 Second, rate rebalancing, in addition to yielding the well-known benefits of increased
15 economic efficiency, will lower the cost of providing universal service, as fewer prices
16 will be as far below cost. This will make the collection of the universal service
17 subsidy less difficult, and it will impose fewer burdens on business customers, and,
18 in particular, small business customers, who will be required to pay this subsidy.

19 ~~Third, rate rebalancing will reduce the cost of providing universal service.~~ As
20 telecommunications becomes more competitive, this will be an important benefit, as

1 collecting a universal service subsidy will become increasingly difficult. This
2 competitive trend will certainly be accelerated by the recent federal
3 telecommunications legislation, providing an additional impetus for rate rebalancing.

4 Q. The OCA has argued that the provision of universal service requires little, if any,
5 subsidy if the costs of local service are measured properly [OCA witness Johnson,
6 Direct Testimony, January 10, 1996, page 8, lines 6-16]. Doesn't this solve the
7 problem of funding universal service?

8 A. No, it does not. First, there is little support for the OCA's exclusion of some or all
9 loop costs from the cost of local service [OCA witness Johnson, Direct Testimony,
10 December 19, 1995, page 17, line 2, through page 18, line 22]. This has been
11 discussed in detail by others [for example, GTE witness Panzar, page 10, line 24,
12 through page 11, line 25; Bell Atlantic witness Sanford, Statement No. 1.0 (Direct
13 Testimony), page 12, lines 5-14; Bell Atlantic witness Kahn, Statement No. 2.0
14 (Direct Testimony), page 4, line 15, through page 5, line 9; Bell Atlantic witness
15 Emmerson, Statement 3.0 (Direct Testimony), page 9, line 26, through page 10, line
16 4; MCI witness Bryant, Direct Testimony, page 4, line 10, through page 5, line 12;
17 and AT&T witness Darrah, Direct Testimony, page 35], and I would just like to
18 agree that all of the loop can only be considered part of the cost of providing local
19 service, although the recovery of these costs is a separate issue. Second, and more
20 telling, is that the market apparently agrees with this assessment. New competitors,
21 in asking for subsidies to provide service to certain residential customers, apparently

1 do not believe that they can profitably provide service by recovering only those costs
2 that the OCA argues are the costs of local service and the costs necessary to provide
3 universal service. The market, which is of primary importance as competition is
4 introduced, apparently does not agree with the OCA's view of the local exchange
5 world. Third, even if the OCA's cost allocations were accepted, the costs do not go
6 away. If these local loop costs are not to be recovered from residential customers,
7 they must be recovered from some other customers. Thus, the true cost of providing
8 universal service still exists, and the subsidy is still required from business customers
9 and small business customers. By including the cost of the local loop where it
10 properly belongs, as part of local service, we can at least honestly determine the cost
11 of providing universal service and can devise a mechanism for providing this support;
12 the OCA's cost allocations obscure, but do not eliminate, this cost and make it more
13 difficult to address the issue of providing the necessary support. All of these
14 problems are further aggravated by the arrival of competition.

15 Q. You have previously identified some of the universal service plans and funding
16 mechanisms which have been suggested in this case. Why is the way in which
17 universal service support is generated in these plans important to small businesses?

18 A. As I have pointed out previously, several of the plans suggested in this case, including
19 Bell Atlantic's "play or pay" plan, may increase the total cost of providing universal
20 service or may allow the customers of new entrants to avoid paying for the costs of
21 providing universal service which have been incurred by the incumbent in the past

1 but not yet recovered. Such a policy, if implemented, could have a disproportionate
2 impact on small businesses.

3 Because local exchange competition will most likely begin with larger businesses,
4 small businesses run the risk of paying a disproportionate share of the cost of
5 universal service. Competition will drive down the prices of services to larger
6 businesses, which will then be capable of making only a smaller contribution to the
7 cost of providing universal service. Small businesses, for whom local
8 telecommunications prices will probably not fall as rapidly, if at all initially, will
9 therefore pay a disproportionately higher share of the cost of providing universal
10 service. In addition, if customers who switch their local service to a new entrant are
11 allowed to avoid making a contribution to the cost of providing universal service, this
12 will place further burdens on customers who remain with the incumbent, perhaps
13 because they do not have as many choices, notably small businesses. Such an
14 asymmetric requirement to contribute to the cost of providing universal service will
15 only hasten the abandonment of the incumbent by larger business customers, leading
16 to a result which is not the result of competition but of regulatory policy and one
17 which is particularly costly to customers who must remain with the incumbent
18 carriers. Those customers who have no choice and who must remain with the
19 incumbent are likely to be small business customers. Such an outcome is not
20 consistent with the objective of equitably funding the provision of universal service.

1 Q. There have been a number of witnesses who have asked for a broad based universal
2 service support mechanism. Many of these same witnesses have also pointed out the
3 need to target the universal service support. Do you agree with the importance of
4 establishing such a broad based, targeted universal service support mechanism?

5 Yes, I do. This issue has been addressed by a number of witnesses in this case [for
6 example, GTE witness Williams, Testimony, page 10, lines 8-14, and page 58, line 9,
7 through page 59, line 12; Bell Atlantic witness Emmerson, Statement No. 3.1 (Direct
8 Testimony), page 2, lines 24-15, page 3, lines 10-13, and Appendix A, page 16; OCA
9 witness Johnson, Direct Testimony, January 10, 1996, page 3, lines 4-6; Sprint witness
10 Jamison, Direct Testimony, page 12, lines 13-16; AT&T witness Darrah, Direct
11 Testimony, page 4; and AT&T witness Mayo, Direct Testimony, pages 10-11].

12 With the introduction of competition, it becomes increasingly difficult to maintain
13 subsidy flows. If universal service support is to be maintained, therefore, it is crucial
14 to put in place a broad based, sustainable mechanism to recover the cost of providing
15 universal service. This means that the universal support mechanism should be
16 broadly based so that all customers, regardless of their local service provider,
17 contribute to the cost of providing universal service. This is similar to the way in
18 which all customers who make a long distance call, regardless of their long distance
19 carrier, make a contribution to the cost of the local exchange network (although
20 nothing is perfect -- private lines and private networks can avoid this payment). The
21 universal service support mechanism should also be one which is not easily by-passed,

1 so that all customers who are, in fact, supposed to pay the charge do, in fact, pay it.
2 The failure to implement a sustainable universal service support mechanism will
3 likely lead to the situation in which universal service support, to the extent that is
4 required, will simply not be available.

5 The recipients of universal service support should be targeted carefully so that they
6 are limited, insofar as possible, to those customers who need universal service
7 support to remain on the network. This could require additional rate restructuring
8 and less rate averaging. For instance, universal service support should only apply to
9 a customer's first access line; subsidizing all access lines with one below cost price
10 is not consistent with a targeted universal service program. In addition, not every
11 customer in a high cost area requires a subsidy in order to have access to affordable
12 telephone service.

13 Q. Does this conclude your testimony?

14 A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

AT&T Communications
of Pennsylvania, Inc.

v.

Verizon North, Inc.

Docket Number

C-20027195

DOCUMENT
FOLDER

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REBUTTAL TESTIMONY OF MICHAEL D. PELCOVITS

ON BEHALF OF MCI WORLDCOM NETWORK SERVICES, INC. ("MCI")

STATEMENT 1.0

*8/26/03
Hbg JK*

July 21, 2003

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1 **I. INTRODUCTION AND SUMMARY.**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Michael D. Pelcovits. I am a principal with the economic consulting firm
4 of Microeconomic Consulting and Research Associates (MiCRA). My business
5 address is 1155 Connecticut Avenue, N.W., Washington, D.C. 20036.

6 **Q. Would you please summarize your qualifications?**

7 A. I received my Ph.D. in Economics from the Massachusetts Institute of Technology in
8 1976. After serving on the economics faculty of the University of Maryland and as a
9 Senior Economist at the Civil Aeronautics Board, I have spent my entire career
10 specializing in the economics of regulation and competition in the
11 telecommunications industry.

12 From 1979 to 1981, I was a Senior Economist at the Federal Communications
13 Commission, Office of Plans and Policy. From 1981 to 1988, I was a founding
14 member and principal of the consulting firm Cornell, Pelcovits and Brenner. In 1988
15 I joined MCI Communications Corporation and remained with the Company
16 following its merger with WorldCom, until 2002. I held positions of increased
17 responsibility at MCI, and was appointed Vice President and Chief Economist of the
18 corporation. In this position I was responsible for the economic analyses of policy
19 and regulatory matters provided and presented by the Corporation before federal,
20 state, foreign, and international government agencies, legislative bodies and courts.

21 I have written a number of professional publications on economic and regulatory
22 issues. I have also appeared and spoken frequently before government bodies,

1 regulatory, industry, and academic forums. I have also testified over thirty times
2 before state regulatory commissions. The details of my background are included in
3 my attached curriculum vitae.

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

5 A. The purpose of my testimony is to address the proposals made by Verizon in this
6 proceeding to adjust the structure and level of its rates for switched access services
7 provided to interexchange carriers.

8 **Q. Please summarize your testimony.**

9 A. I begin my testimony with a description of switched access services and the rates
10 charged by local exchange carriers to IXCs in connection with those services. I then
11 provide a brief history of the development of the structure of switched access charges
12 in both the federal and the state jurisdictions, and show that the trend in that
13 development has been toward the elimination of subsidies to other services derived
14 from access charges and toward pricing of access services near to the cost of
15 providing those services.

16 The next section of my testimony discusses the benefits to consumers of prices for
17 services that closely reflect the costs of providing those services. I also explain the
18 deleterious effects of above-cost pricing of switched access services on competition
19 both in the market for long distance services and in the market for local exchange
20 services.

21 Finally, I recommend that the Commission act to immediately bring each element of
22 switched access to the corresponding rate that the Commission has already approved

1 for unbundled network elements (“UNEs”). The reason for my recommendation is
2 that I believe the current UNE rates can serve as a proxy for economic cost. I also
3 recommend that the non-cost based Carrier Charge be eliminated.

4 **II. DESCRIPTION OF SWITCHED ACCESS SERVICES AND CHARGES.**

5 **Q. What are access charges?**

6 A. Access charges are the fees paid by long distance companies to local exchange
7 carriers to use existing local facilities to originate and terminate long distance calls.
8 Access charges are paid on both the originating and terminating end of long distance
9 calls. On the originating end of a call, the long distance provider pays Verizon to
10 carry the call from the calling party to the long distance provider’s closest facility.
11 On the terminating end of a call, the long distance provider pays Verizon to carry the
12 call from its facility to the called party.

13 **Q. What is the difference between switched access and special access?**

14 A. There are two broad categories of access: special access and switched access.
15 Special access service refers to direct connections between large business customers
16 and their long distance providers. These direct connections are “always on,” meaning
17 that the path between the customer and the long distance provider is devoted to that
18 customer’s traffic. This connection is not shared with other customers, and does not
19 have to pass through a local switch, because the path is connected on a semi-
20 permanent basis (for a month or longer) rather than on a call-by-call basis. Special
21 access service is available at different capacities, depending upon the traffic demands
22 of the customer. These capacities are shown in Table 1 below, which provides the

1 type of circuit, the capacity in terms of bit rate, and the number of simultaneous voice
2 calls that can be carried on the circuit (i.e. voice grade capacity).

3 **Table 1: Special Access Service**
4

<u>Circuit Type</u>	<u>Bit Rate Capacity</u>	<u>Voice Grade Capacity</u>
DS-0	56 Kbps	1
DS-1	1.5Mbps	24
DS-3	45 Mbps	672

5

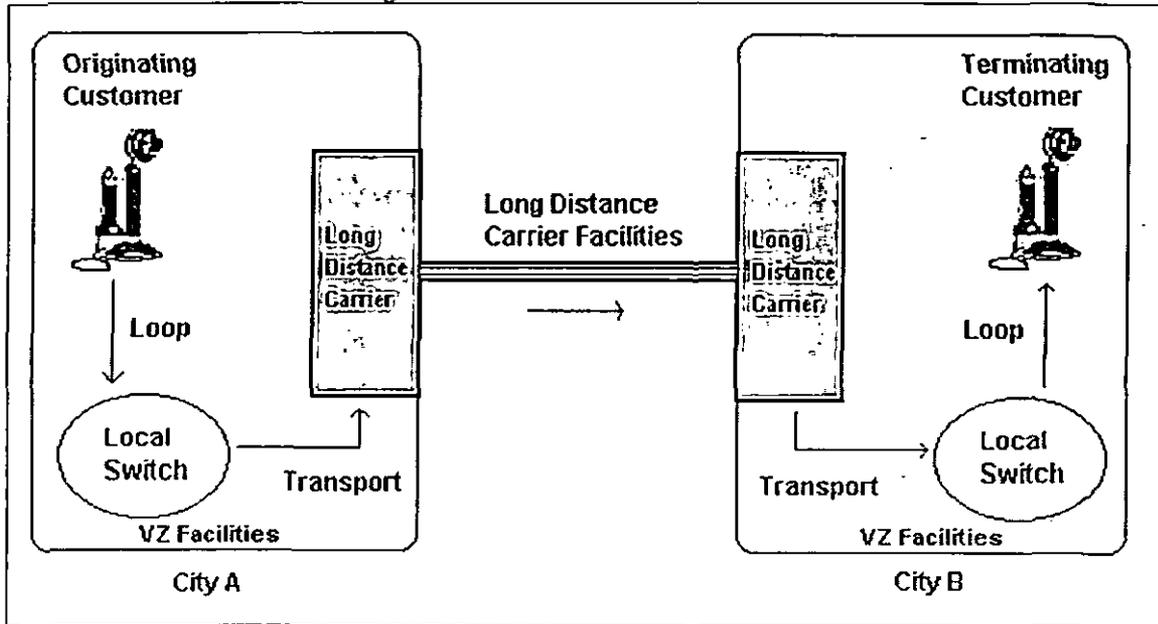
6 Residential customers and small business customers are rarely connected via special
7 access, because they do not generate the volume of long distance calls necessary to
8 justify the cost of a connection that is used only for long distance calling. Rather,
9 these customers are almost always connected to their long distance carrier with
10 switched access service.

11 **Q. What are the physical facilities used to provide intrastate switched access**
12 **service?**

13 A. As shown in Figure 1 below, an intrastate long distance call originates on the
14 customer's telephone in City A. The call is carried on the local loop to Verizon's
15 central office switch, and then transported to the long distance carrier's point of
16 presence ("POP"). This transmission constitutes originating switched access
17 services, and it is carried entirely on Verizon's facilities, until it reaches the nearest
18 physical location of the long distance carrier. The long distance carrier will transmit
19 the call on its own facilities to its own physical location in City B, where the called
20 party is located. At that point, the long distance carrier hands off the call to Verizon,
21 which then routes the call on its own transport, switching and loop facilities to reach
22 the called party. This is the terminating access function.

1

Figure 1: Switched Access Service



2

3

4

Q. When and why were access charges instituted?

5

A. Access charges were first instituted by the FCC in 1984 upon the divestiture of the Bell System into separate local companies (the Regional Bell Operating Companies) which were expected to function as regulated monopolies, and a nationwide long distance company (AT&T) which was expected to compete against other long distance providers such as MCI. The purpose of access charges was to replace intra-company payments previously made within the Bell System with a regulated system of nondiscriminatory fees to be paid by all long distance companies for access to each local network. Shortly after the FCC established access charges for interstate long distance calls, the state regulatory commissions established access charges for intrastate long distance calls. This regime of access charges was adopted throughout the country, even in areas that prior to 1984 were served by companies that were not part of the Bell System.

16

1 **Q. Historically, how have switched access charges been levied?**

2 A. The FCC and state commissions have recognized that switched access charges
3 historically had been a way to recover a portion of the allowed revenue requirement
4 of local exchange companies from interstate and intrastate long distance services.
5 Switched access rates had generally exceeded the economic, incremental cost of
6 providing access services, though the clear modern trend (as throughout the
7 telecommunications industry) is for access charges to be driven close to economic
8 cost.

9 Historically, switched access charges have been applied to the three basic network
10 components used to originate or terminate a long distance call. First, charges
11 associated with the subscriber loop, have been imposed in a variety of ways by
12 federal and state regulators. Previously, the long distance carriers paid large per
13 minute charges for use of the loop. Also, federal regulators imposed a portion of the
14 cost of the loop on the subscriber (often called a "subscriber line charge," or SLC).
15 More recently, a larger share of the cost of the loop has been recovered from higher
16 SLC charges or directly from the long distance carrier presubscribed by the customer
17 (often called a "presubscribed interexchange carrier charge," or PICC). Second,
18 access charges for use of the local switch are paid on a per minute-of use basis by the
19 long distance carrier. Third, charges associated with the use of interoffice transport
20 facilities, used to route calls between switches, are paid through a variety of
21 mechanisms, which I will explain later in the testimony.

1 **Q. What is the difference between intrastate and interstate switched access?**

2 A. Intrastate switched access charges are applied to all dial-up intrastate long distance
3 calls and are regulated by this Commission. Interstate switched access charges are
4 applied to all dial-up interstate calls; the FCC regulates this service.

5 **Q. What is the relation between the facilities used to provide intrastate switched
6 access service to the facilities used to provide unbundled network elements?**

7 A. Identical facilities are used to provide intrastate switched access service as are used to
8 provide unbundled network elements. In particular, the local switch is used in the
9 same way to provide the local switching element of intrastate access and the
10 unbundled switching element. Interoffice facilities (trunks and tandems) are also
11 used in the same way to provide the transport elements of intrastate access and the
12 unbundled transport elements. Indeed, the local telephone network provides a
13 number of services (local service, intrastate access service, interstate access service,
14 and unbundled network elements) using the identical facilities in exactly the same
15 way.

16 **III. DESCRIPTION OF INTRASTATE SWITCHED ACCESS RATES IN PENNSYLVANIA.**

17 **A. Brief History of Commission Orders on Switched Access Rates.**

18 **Q. Historically, how has the Commission set intrastate access rates in
19 Pennsylvania?**

20 A. While access rates initially were set substantially above cost, in the belief that a
21 subsidy to rates for basic local exchange service was required, the Pennsylvania
22 Commission has, since passage of the Telecommunications Act of 1996, adopted a
23 policy of replacing such implicit subsidies with explicit subsidies. In the process, the
24 access rates charged by incumbent local exchange carriers have been substantially

1 reduced. Most notably, in the *Global Order*, the Commission ordered a \$32 million
2 reduction in Verizon PA's local switching rate, resulting in a per minute rate of
3 approximately \$0.009.

4 At the same time, however, the Commission has left in place the Carrier Charge, a
5 monthly charge to interexchange carriers ostensibly designed to recover some non-
6 traffic sensitive costs associated with the local loop. The Carrier Charge was adopted
7 in the *Global Order* to replace, on a revenue-neutral basis, the Carrier Common Line
8 Charge ("CCLC"), which had been imposed on interexchange carriers on a per-
9 minute of use basis. Growth in access minutes had caused revenues from this rate
10 element to increase dramatically. Consequently, the Commission had imposed a cap
11 on CCLC revenues in 1998, requiring frequent filings by Verizon to lower the rate
12 and thus bring the revenues derived from the rate to a level below the cap. By
13 adopting a flat monthly rate per line, the Commission stabilized the amount of
14 above-cost revenue derived from this rate element.

15 While the Commission recognized in the *Global Order* that Verizon's access rates are
16 substantially above cost, and that efforts to more closely align those rates with cost
17 were appropriate, Verizon's rates for access service remain above cost, both through
18 the imposition of the Carrier Charge, and, as I will discuss later in this testimony, by a
19 remaining disparity between traffic-sensitive access rates and the cost of providing
20 access services.

1 **B. Description of Current Intrastate Switched Access Rates in Pennsylvania.**

2 **Q. What is the current structure of access rates or successor charges in**
3 **Pennsylvania?**

4 A. Table 2 below shows the tariff elements that correspond to the physical components
5 of the network.

6 **Table 2: Elements of Switched Access or Successor Charges**

Network Element	Rate Element	How Applied	Interstate Charge?	Intrastate Charge?
Loop	Subscriber Line Charge (SLC)	Per Line, to the retail customer	Yes	No
	Carrier Charge	Per Line, to the presubscribed long distance carrier	No	Yes
Switching	Local Switching Charge	Per minute of use to the long distance carrier	Yes	Yes
Transport	Direct Trunk	Per circuit per month	Yes	Yes
	Tandem switching	Per minute rates, depending upon facility configuration	Yes	Yes

7

8 These charges have evolved over the last twenty years sometimes in similar ways at
9 the interstate and intrastate jurisdictions, and sometimes in very different ways.

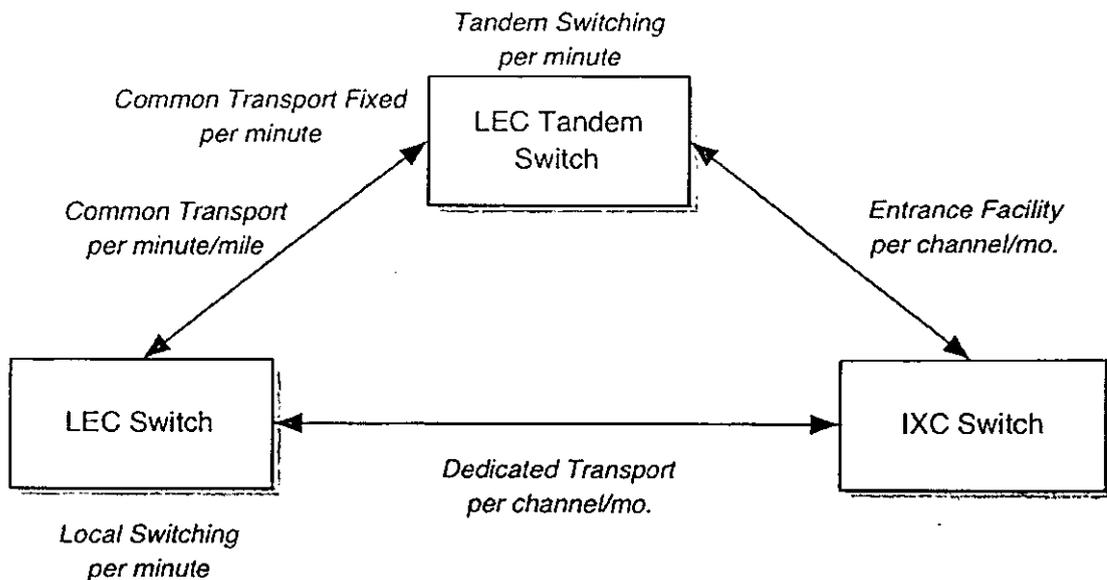
10 **Q. How are access charges for local switching applied?**

11 A. Long distance carriers are charged for use of local switches in originating or
12 terminating access, on a per minute-of-use basis.

1 Q. Please explain how transport charges are applied.

2 A. The identical rate structure applies to both interstate and intrastate switched access
3 charges. The structure of transport rates is quite complicated, because these rates
4 reflect two different types of transport arrangements used for switched access service.
5 As shown in Figure 2 below, access traffic can be routed directly from the local
6 switch to the long distance carrier, or indirectly via a tandem switch. In the case of
7 directly routed traffic, dedicated transport charges are applied. In the case of tandem
8 routing, the long distance carrier must pay for the transport links and for use of the
9 tandem switch. The transport link between the local switch and the tandem and the
10 tandem switch itself is used in common by all the long distance carriers, rather than
11 being dedicated to a single long distance carrier, therefore the fees for these facilities
12 are set on a per minute of use basis.

13 Figure 2: Transport Routing – Tandem And Direct
14



15

1 **Q. How do intrastate and interstate switched access rates for Pennsylvania**
2 **compare?**

3 A. As demonstrated in Table 3 below, Verizon's intrastate rates are generally higher than
4 Verizon's interstate rates for comparable tariff elements.

5 **Table 3: Verizon's Intrastate vs. Interstate Switched Access Rates**

Rate Element	Intrastate rates ¹ Cents per minute	Interstate rates ² Cents per minute	Intrastate as Percent of Interstate
Local Switching	0.9336	0.17085	546.4%
Tandem transport termination	0.0195	0.0000	∞
Tandem transport facility (per Mile)	0.0045	0.0030	150.0%
Tandem-switching	0.0983	0.1000	98.3%
Carrier Charge	0.63	0	∞

6

7 **Q. Why is there such a large disparity between the intrastate and interstate**
8 **switched access rates charged by Verizon?**

9 A. Interstate switched access charges have declined steadily since their inception in 1984
10 for two fundamental reasons: the FCC has tried to reduce interstate access charges to
11 the level of forward-looking cost, and since telecommunications is a declining cost
12 industry, the economic cost of providing access services has fallen substantially. The
13 FCC has implemented its policy of moving interstate switched access charges toward
14 cost in two main ways. First, the FCC adopted a policy of shifting recovery from per-
15 minute charges to per-line charges (*i.e.* the SLC and the PICC). Second, over the past
16 ten years, the FCC has required LECs to reduce rates under a price cap regime to
17 reflect productivity improvements in the telecommunications industry. The total

¹ Verizon Testimony of Debra Berry and Michael Wirl, Exhibit MJW-1.

² Tariff FCC No. 1, §§ 6.9.1.B; 6.9.2.A.

1 effect of productivity adjustments (net of offsets for inflation) over the past 10 years
2 has been about a 70% reduction in prices.

3 **Q. Weren't the reductions in the LECs' interstate switching and transport rates**
4 **offset by increases in SLCs as part of the FCC's "CALLS Order"?**

5 A. No. Significant reductions in interstate switching and transport rates took place on
6 July 1, 2000 without any offsetting increase in SLC charges. As the FCC stated in its
7 CALLS order, "price cap LECs will be making significant reductions to switched
8 access usage charges on July 1, 2000 without recovering these reductions through
9 flat-rated end-user charges."³ The FCC further noted that the increases in the SLC
10 were used to reduce or eliminate other charges, such as the residential PICC.⁴ The
11 FCC recognized that interstate switched access charges remained far above cost, that
12 high access rates served as an obstacle to the development of competition, and that
13 enacting the CALLS proposal to reduce interstate access rates toward cost-based
14 levels would have tremendous consumer benefits but would not require any offsetting
15 increases in other rates charged by LECs.⁵

16 Reductions in interstate switching and transport rates continued after July 1, 2000,
17 because the FCC continued to apply the 6.5% productivity factor, at least until the
18 rates reached the FCC's estimate of cost. Moreover, the productivity factor applied to
19 the entire interstate rate base of the ILECs, including the common line (subscriber

³ *In the Matters of Access Charge Reform and Price Cap Performance Review for Local Exchange Carriers*, Sixth Report and Order in CC Docket Nos. 96-262 and 94-1 (May 31, 2000) ("FCC's CALLS Order"), ¶ 158.

⁴ *FCC's CALLS Order*, ¶ 166.

⁵ *FCC's CALLS Order*, ¶ 158.

1 line) portion, and the FCC applied all of these savings to the switching and transport
2 rates, bringing them down by more than 6.5% (net of inflation) per year.⁶

3 By contrast, the price cap plan that applies to Verizon's intrastate rates in
4 Pennsylvania does not generate any benefits to ratepayers from productivity gains in
5 the common line portion of the local network. The intrastate carrier charge has
6 stayed at \$0.63 since adopted in 1999 in the *Global Order*, and was calculated to
7 generate the same gross revenue as the prior Carrier Common Line Charge. Verizon
8 has not made any reductions to its Carrier Charge rate to reflect the productivity
9 improvements over the course of the past five years, which have far outpaced
10 inflation.

11 **Q. What does the large difference in the intrastate and interstate switched access**
12 **rates charged by Verizon indicate about Verizon's role in the Pennsylvania**
13 **intrastate access market?**

14 A. This indicates that Verizon has market power in the switched access market in
15 Pennsylvania, and that competitive forces are not restraining Verizon's ability to
16 charge intrastate switched access rates that far exceed its costs. This means that
17 Verizon is able to set prices without regard to the cost of providing particular
18 services. If Verizon did not have market power, it would be unable to charge two
19 separate and substantially different prices for identical uses of its network.

⁶ FCC's *CALLS Order*, ¶ 161.

1 **IV. THE BENEFITS OF COST-BASED PRICING.**

2 **A. Consumer Benefits from Efficient Pricing at Economic Cost.**

3 **Q. You have summarized the Commission's previous determinations that intrastate**
4 **switched access rates should be moved to a level closer to cost. What are the**
5 **benefits of setting switched access rates at cost?**

6 A. Setting access rates at cost will benefit Pennsylvania consumers now and in the
7 future. The greatest benefit is that long distance carriers will be free to introduce new
8 and creative products and services to the Pennsylvania market. Their ability to do so
9 is currently hampered by the artificially high switched access charges that they must
10 pay Verizon. A reduction in access charges will benefit all consumers of intrastate
11 long distance service.

12 From an economic standpoint, it is possible to divide the benefits to the consumer
13 from driving prices to cost into short-term or "static efficiency" gains, and long-term
14 or "dynamic efficiency" gains.

15 **Q. What do you mean when you refer to "static efficiency gains"?**

16 A. From an economic perspective, static efficiency occurs when the value that a buyer
17 places on consuming a good equals the marginal cost of producing the good.
18 Consumers in a free market system benefit when goods and services are priced at
19 cost. When prices are set at cost, consumers and producers are given the right signals
20 of when to use, and how much to use, a particular good or service. By contrast, if
21 prices are set above cost, users will consume too little of service and substitute other
22 services which are not as desirable.⁷

⁷ Richard Lipsey, Peter Steiner, Douglas Purvis, *Economics*, 8th Edition, 1987, at 248-249.

1 Static efficiency is achieved in a free market economy in most industries through the
2 workings of the competitive market. If a single firm attempts to price above cost
3 (thereby denying consumers the benefits of *static efficiency*), then other firms will
4 reduce prices to attract their customers' business. By contrast, a firm with significant
5 market power, such as Verizon, will not set prices at cost unless it is compelled to by
6 regulation. Therefore, regulators have an important role to play in controlling market
7 power and driving results that parallel the outcome in competitive markets.

8 **Q. Why is it important to give users of intrastate switched access the right price**
9 **signals by ensuring that access charges are set at cost?**

10 A. Above-cost switched access charges will push long distance prices above their true
11 social costs. This will have the effect of discouraging long distance customers from
12 placing calls for which the benefit derived from the call exceeds the social cost.
13 Some calls either will not be made, or they will be made using an alternative
14 technology, such as voice over the Internet. Because of early technological
15 shortcomings, the use of the Internet for voice communications is perceived by
16 consumers as inferior and thus is not as valuable to consumers as a long distance call
17 made over customers' regular phones.

18 Furthermore, if switched access prices are set above cost, then long distance carriers
19 will be encouraged to use less efficient means of connecting to their customers. They
20 will be given an artificial incentive to bypass the switched access services of Verizon,
21 either by using special access provided by the LECs, or where available, by CLECs.
22 Because additional costs are incurred in supporting this bypass with no underlying
23 economic justification, this causes inefficient utilization of society's scarce resources.

1 **Q. What do you mean when you refer to “dynamic efficiency”?**

2 A. Dynamic efficiencies are created over time by the acceleration of technological
3 change, which relies upon long distance telecommunications networks. To the extent
4 that long distance rates are artificially high, usage will be depressed below optimal
5 levels and technological change will be skewed. Specifically, technologies that rely
6 upon use of long distance will be discouraged, and new services and innovations,
7 which otherwise might have appeared, may fail to materialize. The social costs of
8 these effects are difficult to measure, but are certainly an important consideration for
9 the Commission.

10 **B. The Effect of Above-Cost Access Charges on Competition in the Long**
11 **Distance Market.**

12 **Q. What is the effect of above-cost access charges on competition in the long**
13 **distance market?**

14 A. Whenever firms must compete against a vertically-integrated supplier that holds
15 market power over a critical input, there is a very strong likelihood that the supplier
16 will engage in anticompetitive conduct. The vertically integrated supplier in this
17 market is Verizon. Verizon provides switched access to independent long distance
18 carriers and also competes directly with those same carriers in the long distance
19 market. Verizon has had and continues to have both the incentive and ability to use
20 above-cost access charges to maintain an unfair and anticompetitive advantage in the
21 Pennsylvania long distance market.

1 **Q. How does a vertically integrated firm like Verizon engage in anticompetitive**
2 **behavior?**

3 A. Verizon's incentive to take advantage of its vertical structure to disadvantage
4 competitors is relatively straightforward. By taking business away from its rivals in
5 the long distance market, Verizon can increase profits and also disrupt its rivals' plans
6 to enter the local market and threaten Verizon's core monopoly. This is a very
7 powerful incentive, which I will discuss at greater length in the next section.

8 Moreover, Verizon is able to gain an unfair pricing advantage from above-cost
9 switched access charges because it does not face the same cost structure as its
10 competitors. Interexchange carriers wishing to provide long-distance service to a
11 Verizon retail customer incur actual marginal cost of access equal to the tariffed
12 switched access rates charged by Verizon. By comparison, Verizon incurs the much
13 lower actual marginal cost of providing the service rather than the tariffed rates; for
14 Verizon, the tariffed rates are just an internal transfer from one pocket of the
15 corporation to another. Verizon can and will ignore the tariff rates and set prices in
16 the long distance market that squeeze out competitors and increase its own profits.

17 **Q. What is a price squeeze?**

18 A. A price squeeze exists if the margin between (i) the LEC's toll price that it charges its
19 retail customers for long-distance service, and (ii) the tariffed switched access charge
20 that the LEC imposes on interexchange carriers that wish to offer competing long-
21 distance service to the same retail customers, fails to cover (iii) the cost of providing
22 long distance service. In such a case, although the LEC may be able to offer long
23 distance service profitably – because it does not incur the high access charges faced

1 by its wireline long-distance competitors – those competitors would be unable to earn
2 a profit. I will explain a price squeeze by giving a hypothetical example. Assume the
3 following:

- 4 1) The tariffed rate for switched access is 3 cents a minute.
- 5 2) The actual marginal cost of access is 1 cent a minute.
- 6 3) The cost of long distance service (above and beyond the cost or charge for
7 switched access) is 2 cents a minute. This cost is the same for the LEC
8 and the long distance carrier.

9 Under these conditions, if the LEC set a price for toll service below 5 cents a minute,
10 the long distance carriers would be subjected to a price squeeze. The LEC could
11 make a significant profit at, say 4.5 cents a minute: such a retail charge for long
12 distance would exceed the LEC's own costs of only 3 cents (1¢ for access + 2¢ for
13 toll cost). However, the competing long distance carriers would incur far higher costs
14 of 5 cents (3¢ for access + 2¢ for toll cost), and thus could not make any money.

15 **Q. Would you expect Verizon to set across-the-board toll prices below the**
16 **breakeven level of its competitors?**

17 A. Not necessarily. An across-the-board price squeeze may not be the most profitable
18 strategy, and may expose the LEC to regulatory scrutiny. A better choice for the LEC
19 is to establish a variety of pricing plans that give discounts to customers, which
20 competitors are not able to match.

21 Continuing with the example just given, suppose a customer would use 100 minutes
22 of long distance if the price were 5 cents a minute, and 150 minutes if the price were

1 4 cents a minute. If the LEC were not integrated into the long distance business, the
2 market price would be 5 cents a minute, and this customer would use 100 minutes of
3 long distance. But with the unfair advantage of lower access costs, the LEC could
4 offer the customer a plan that priced the first 100 minutes at 5 cents a minute and
5 additional minutes at 4 cents a minute. This would yield \$7.00 in revenue to the
6 LEC, rather than the \$5.00 that a competitor would earn by charging 5 cents a minute,
7 and generate \$2.50 in profits. (The profits are the revenues of \$7.50 minus the costs
8 of \$4.50, which are obtained by multiplying 150 minutes times the LEC's per minute
9 cost of 3 cents). All the other long distance companies could not offer such a plan
10 profitably and would lose customers to the LEC.

11 In summary, above-cost switched access charges provide the LEC with a significant,
12 artificial advantage, which will allow it to take customers away from equally, or more
13 efficient, long distance carriers without having to sacrifice profits. This is one of
14 those rare cases of having one's cake and eating someone else's lunch, too.

15 **Q. Is there any evidence that a price squeeze currently exists in the Pennsylvania**
16 **toll market?**

17 **A.** Indirect evidence of a price squeeze can be seen in the average revenues derived from
18 access charges to interexchange carriers and to Verizon's affiliated long distance
19 company. In response to AT&T's First Set of Interrogatories, Verizon provided
20 information on the switched access minutes billed to interexchange carriers and the
21 revenues derived from those minutes, as well as information on the switched access
22 minutes and revenues derived from billings to its affiliated carrier. Table 4 presents a

1 comparison of the average revenue per switched access minute derived from
 2 interexchange carriers and Verizon's affiliated carrier.

3 ***** BEGIN ALLEGEDLY PROPRIETARY INFORMATION *****

4 **Table 4: Average Revenue Per Minute – IXC vs. Verizon Affiliate**

	2000	2001	2002	YTD 2003
Intrastate Access MOU - VZPA (millions)	*,***.*	*,***.*	*,***.*	*,***.*
Intrastate Access Rev - VZPA (\$ millions)	***	***	***	**
Average revenue per minute	\$ *.***	\$ *.****	\$ *.****	\$ *.****
Affiliate MOU - VZPA (millions)	*	*,*	***.*	***.*
Affiliate Rev - VZPA (\$ millions)	*,****	*,***	*,***	*,***
Average revenue per minute		\$ *.****	\$ *.****	\$ *.****

5

6 ***** END ALLEGEDLY PROPRIETARY INFORMATION *****

7 The intrastate access revenues shown do not include revenues derived from the
 8 Carrier Charge.

9 The comparison shows that the average revenue per minute derived from intrastate
 10 switched access charges to interexchange carriers exceeds the average revenue per
 11 minute derived from access payments by Verizon's affiliate to Verizon. Moreover,
 12 while the average revenue per minute derived from IXCs has been increasing from
 13 2001 to 2003, the average revenue per minute derived from Verizon's affiliate has
 14 actually been declining in the same time period.

1 **Q. You have discussed the benefits of lowering access charges to cost. Won't there**
2 **be an offsetting cost of doing this, because it will be necessary, as Verizon claims,**
3 **to raise local rates to offset the revenues lost by Verizon?**

4 A. No. There is no reason to expect that access charge reductions must be offset by
5 increases in local rates. From a purely factual standpoint, Verizon has faced only
6 limited competition in local markets in the last several years. This has allowed
7 Verizon to continue to earn substantial profits in Pennsylvania, during a time when its
8 cost of capital has declined significantly.

9 From a conceptual standpoint, the notion that decreases in one set of rates must be
10 made up by increases in other rates is based on an outdated model of rate-of-return
11 regulation. Under this old form of regulation, the ILEC's rates were set to achieve a
12 level of revenues (the "revenue requirement") that was calibrated to enable the ILEC
13 to earn its allowed rate of return. In the past several years, the FCC and most states,
14 including Pennsylvania, have introduced incentive regulation plans, which eliminate
15 the concept of a revenue requirement and replace it with price caps on large baskets
16 of services provided by the ILECs. As a result, there is no guarantee that reductions
17 in one set of regulated rates must be offset by increases in other rates.

18 It is also important to put the possibility of switched access charge reductions into the
19 proper perspective. In 2001, Verizon's Pennsylvania revenues from intrastate access
20 services were only \$195 million. This amounts to only 5.5 percent of Verizon total
21 operating revenues of \$3.5 billion.⁸ Any reductions in intrastate access charges
22 would thus have a very small effect on Verizon's overall revenues. Therefore, there

⁸ Source: Verizon-PA Annual Report to the Pennsylvania Public Utility Commission.

1 is no reason to expect that a reduction in switched access charges would lead now, or
2 in the future, to an increase in local rates.

3 **Q. Verizon has claimed that it is no different than other local exchange carriers in**
4 **Pennsylvania, and that therefore it should be treated the same with regard to**
5 **offsetting access charge reductions with increases in rates for basic local**
6 **exchange service. Do you agree?**

7 A. No, I do not. While intrastate access revenues constitute a very small proportion of
8 total revenues for Verizon, the same is not true of other local exchange carriers in
9 Pennsylvania. For those carriers reporting state access revenues in their annual reports
10 to the Commission,⁹ 2001 intrastate access revenues constituted an average of 25.2%
11 of total revenues for Class A telephone companies, and 22.2% of total revenues for
12 Class B telephone companies. Clearly, reductions in rates for intrastate access
13 services, if not offset by other rate increases, would have a much larger impact on
14 these companies than on Verizon.

15 **Q. Verizon has claimed that, even with the rate increases for basic local exchange**
16 **service that it has proposed to offset reductions in access charges, the rate**
17 **charged for basic local service will still be substantially below the cost of that**
18 **service. Do you find this claim credible?**

19 A. While I have not examined Verizon's cost studies for basic local exchange service in
20 detail, I find the claim by Verizon that the statewide average cost of a dial tone line is
21 ***** BEGIN ALLEGEDLY PROPRIETARY INFORMATION ***** \$**.**
22 ***** END ALLEGEDLY PROPRIETARY INFORMATION ***** per month
23 strains credibility. Although I have not performed a Pennsylvania-specific TELRIC
24 analysis, I believe that the Commission's findings in the *Global Order* may serve as a

⁹ Not all companies provided a separate break-out for intrastate access revenues.

1 better indication of the level of Verizon's TELRIC costs.¹⁰ In the *Global Order*, the
2 Commission found that a cost-based monthly rate for unbundled local loops is
3 \$14.01, and that a cost-based monthly rate for a basic local switch port is \$1.90, for a
4 total of \$15.91. While the cost of an unbundled local loop does not include certain
5 costs associated with retail basic local exchange service, retail costs cannot account
6 for the difference of ***** BEGIN ALLEGEDLY PROPRIETARY
7 INFORMATION***** \$**.** ***** END ALLEGEDLY PROPRIETARY
8 INFORMATION ***** per month between the cost-based UNE rates and the cost
9 claimed by Verizon here.

10 In the *Global Order*, the Commission approved a wholesale discount for resale of
11 local exchange service of 18.43% (including operator services). Because the
12 wholesale discount is designed to eliminate retail costs avoided by the incumbent
13 LEC when local service is resold by a CLEC, adding the amount implied by this
14 discount to the UNE loop and port rate should, then, approximate the full retail cost
15 of the dial tone line. This cost, approximately \$19.50, ***** BEGIN ALLEGEDLY
16 PROPRIETARY INFORMATION ***** *****
17 ***** ***** END ALLEGEDLY PROPRIETARY INFORMATION
18 ***** For purposes of comparison of UNE rates to Verizon's average monthly rate
19 for basic residential local exchange service, I calculated the average monthly usage
20 UNE rate (including local switching, transport, and tandem switching) per residential

¹⁰ It is my understanding that MCI has presented evidence in other proceedings that the UNE rates adopted in the *Global Order*, do not, in fact, represent the actual TELRIC of Verizon's network, and that the true TELRIC is, in fact, lower.

1 line to be ***** BEGIN ALLEGEDLY PROPRIETARY INFORMATION *****
2 \$.**. ***** END ALLEGEDLY PROPRIETARY INFORMATION *****

3 Verizon has calculated the average residential monthly service rate to be \$13.50,
4 based on intrastate charges for the dial tone line and local usage. Verizon also
5 receives monthly revenue of \$6.44 per residence line from the interstate Subscriber
6 Line Charge¹¹ to defray a portion of the cost of the loop, as well as an average of
7 ***** BEGIN ALLEGEDLY PROPRIETARY INFORMATION ***** \$.**. *****
8 END PROPRIETARY INFORMATION ***** in monthly revenue for calling
9 features, for a monthly total of ***** BEGIN ALLEGEDLY PROPRIETARY
10 INFORMATION ***** \$.**. ***** END PROPRIETARY INFORMATION
11 ***** Because Verizon's monthly local service revenues are thus already above the
12 monthly cost of \$19.50, the proposed average monthly increase of \$1.90 proposed by
13 Verizon would increase revenues far above the cost of local exchange service.

14 **C. The Effect of Above-Cost Access Charges on Competition in Local**
15 **Markets.**

16 **Q. How does your analysis of above-cost switched access charges affect the prospect**
17 **of competition developing in local markets?**

18 A. I believe that above-cost access charges pose great danger because of developments
19 (or the lack of development) in local telecommunications markets. The reason is that
20 the greatest competition in the local telephone market for residential and business
21 customers is coming from the existing, large long distance carriers. To the extent that
22 the ILECs can irreparably damage the long distance carriers before they are able to

¹¹ Tariff FCC No. 11, §31.4.3.

1 gain a meaningful foothold in local markets, the ILECs will be able to perpetuate
2 their monopoly for many years to come.

3 CLECs have pursued different strategies to enter different segments of the market.
4 CLECs have invested significant capital in fiber optic facilities in the central business
5 districts of major cities. These facilities are used primarily to serve large business
6 customers, as well as to compete for the direct transport of traffic from LEC central
7 offices to the network nodes of the long distance carriers. These facilities are not
8 used to compete for the business of small business or residential customers, who are
9 the biggest originators and terminators of switched access traffic.

10 The only viable competitors to the LECs' local exchange service provided to
11 residential and small business customers are the CLECs that use the unbundled
12 network element platform (UNE-P). These CLECs are able to provide mass market
13 telecommunications products by purchasing unbundled network elements from the
14 LECs at TELRIC prices and then combining those UNEs with their own services or
15 functions.

16 **Q. What is the relation between the local exchange market and the long distance**
17 **market?**

18 A. The long distance market is highly competitive and has been so for many years. The
19 largest toll carrier is AT&T, and its share of the national long distance market has
20 fallen steadily over the past twenty years. Its share is now in the range of 40%,
21 depending upon how it is measured.¹² There are hundreds of long distance carriers in

¹² FCC, Trends in Telephone Service, May 2002, Chapter 10.

1 the market, and there are no significant barriers to entry or expansion, as shown by
2 the ease with which the RBOCs have entered and gained market share.

3 By contrast, competition in the local market has been very slow to develop. I have
4 explained this phenomenon early in my testimony. I want to emphasize here,
5 however that the asymmetry of the entry conditions in the local and long distance
6 markets creates a significant risk that the ILECs will be able to compete unfairly in
7 the market for bundled services, which may create significant problems down the
8 road for consumers of local and long distance services.

9 **Q. What is the effect of bundled products on competition in the local market?**

10 A. Bundled services have become increasingly important in residential telephone
11 markets. The ILECs and the IXCs are heavily advertising products that bundle local,
12 long distance, as well as several vertical features (*e.g.* call waiting, voice messaging).
13 It appears that consumers have a preference for bundled products, and that it will be
14 difficult for long distance providers to survive in this market in the long run, if they
15 are not able to offer a bundle.

16 **Q. If long distance carriers are free to compete in local markets using UNE-P, why**
17 **is it necessary to safeguard competition in the long distance market by forcing**
18 **switched access services to be priced at forward looking cost?**

19 A. There are several reasons for the Commission to remain concerned about the level of
20 switched access charges. First, to be competitive with Verizon, CLECs must have
21 access to the UNE platform at cost-based rates, and the platform must be provided
22 with well-functioning operational support systems. It is not in Verizon's interest,
23 however, to provide their competitors with a well-functioning UNE platform.

1 Therefore, CLECs will remain dependent on the Commission to establish and
2 maintain regulatory control over the pricing and operational aspects of UNE-P. The
3 LECs have attacked UNE-P on every legal and regulatory front, and it is still possible
4 that the eventual outcome of the recent Triennial Review at the FCC will be a slow
5 erosion of the UNE-P framework. Given these circumstances, the local market is not
6 fully and irreversibly open to competition.

7 It is especially important that the Commission do whatever is necessary to preserve
8 competition in intrastate long distance markets. As I mentioned above, the long
9 distance carriers are the most active CLECs competing for local customers in the
10 mass markets. They have the customer base, marketing expertise, and technical
11 expertise needed to enter and compete for local mass market customers. Moreover,
12 because many customers seem to prefer a bundle of local and long distance service,
13 the long distance carriers are the most natural entrants into the local market. At this
14 juncture, if Verizon were to use its control over switched access to gain an unfair
15 advantage over the long distance providers in the long distance market, they could
16 inflict severe damage on their most important rivals in the local market. The result
17 could be a return to the world of a vertically integrated monopoly controlling both the
18 local and long distance market.

19 **Q. What is the effect of the trend toward bundling upon competition in the local**
20 **exchange market?**

21 A. Bundling of different packages of services, targeted toward customers with different
22 usage characteristics, points up the necessity of ensuring that LECs and CLECs/IXCs
23 face similar cost structures. The cost structure faced by the LECs is a result of the.

1 structure of prices that they pay to their suppliers for inputs into their services. The
2 cost structure faced by the CLECs/IXCs is the result of the rate structure for UNEs
3 and switch access services approved by this Commission. If there is a mismatch in
4 these two cost structures, the ability of competitive service providers to offer effective
5 competition may be impaired relative to the incumbent.

6 Of particular concern in this regard is an increasing divergence in the nature of
7 switching costs incurred by the incumbent and the usage-sensitive rate structure
8 imposed upon both CLECs and IXCs. In recent years, the prices charged by switch
9 manufacturers for end office switches has moved from a usage sensitive structure to
10 one driven by the number of lines served by the switch. This price structure follows
11 naturally from the rapidly increasing processing power and rapidly declining cost of
12 the computer chips that perform call processing within the local exchange switch.
13 Switches now are built to be capable of handling the calling needs of all the lines that
14 might potentially be connected, and are said to be line-limited, rather than processor-
15 limited. The usage sensitive price structure incorporated into switched access tariffs
16 and the UNE prices for unbundled local switching has become a relic of a time when
17 switch capacity was expanded over time by increasing the number of processing
18 units.

19 The disparity between the usage-insensitive cost structure faced by the ILEC and the
20 usage-sensitive prices charged by the ILEC for use of local switches is creating a
21 competitive advantage for the ILECs. In effect, the ILEC incurs no incremental
22 switching cost as usage by its customers increases, while high usage-sensitive local
23 switching rates impose significant incremental costs on CLECs and IXCs as usage by

1 their customers increases. The popularity of flat-rated bundled offerings of local and
2 long distance services may, in relatively short order, make it impossible for
3 CLECs/IXCs to match the rate that the ILECs can offer. This competitive
4 disadvantage can only be remedied if the rates for switched access and unbundled
5 local switching are more closely aligned with both the cost structure and the cost level
6 that actually faces the incumbent LECs.

7 **IV. COMPETITION WILL NOT DRIVE PENNSYLVANIA INTRASTATE SWITCHED ACCESS**
8 **RATES TO COST.**

9 **Q. Verizon witnesses Berry and Wirl have stated that market forces may drive**
10 **access rates toward cost. Can competition in the market for local exchange**
11 **service be expected to drive intrastate switched access rates closer to cost over**
12 **time?**

13 A. The first step is to make sure that we have a clear understanding and definition of
14 what market we are talking about. A market is defined by the United States
15 Department of Justice's Merger Guidelines as "a product or group of products and a
16 geographic area in which it is produced or sold such that a hypothetical profit-
17 maximizing firm, not subject to price regulation, that was the only present and future
18 producer or seller of those products in that area likely would impose at least a "small
19 but significant and nontransitory increase in price."¹³

20 One way to conduct an inquiry about market definition is to begin with a narrow
21 product (service) and geographic market and asks whether a hypothetical monopolist
22 over that service could raise prices by a small but significant and non-transitory

¹³ United States Department of Justice, *Merger Guidelines*,
http://www.usdoj.gov/atr/public/guidelines/horiz_book/10.html.

1 amount?¹⁴ If the answer to that question is “yes,” then the relevant market has been
2 identified. If, however, in response to the price increase consumers would switch to
3 alternative services in sufficient amounts that the price increase of the “monopolist”
4 would be defeated, then the market must be expanded to include those services and
5 the market definition exercise repeated. This exercise continues until the smallest
6 service and geographic market areas are identified that could, in response to a price
7 increase by the hypothetical monopolist, sustain the price increase.

8 **Q. How should the Commission define the market for intrastate switched access?**

9 A. The intrastate access market consists of the originating and terminating switched
10 access connections provided by Verizon to long distance providers for intrastate long
11 distance calls. Because long distance carriers have no feasible alternative to reach
12 most local telephone customers in Pennsylvania, except by using the switched access
13 service of Verizon, this service constitutes a single market from an economic
14 perspective.

15 **Q. Can you illustrate this definition of the intrastate access market?**

16 A. Yes. Consider a hypothetical call originating in Pittsburgh with Mr. O and
17 terminating in Philadelphia to Mr. T. I will assume that Mr. O has selected Verizon
18 to be its local service provider and Sprint to be his long distance provider. On the
19 originating end, Mr. O will use his Verizon local telephone line to dial the long
20 distance call. Verizon will route the call to Sprint, which will carry the call to

¹⁴ See United States Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, April 2, 1992.

1 Philadelphia, where it will hand off the call to Verizon. Verizon will then terminate
2 the call to Mr. T.

3 Sprint must pay Verizon for the switched access service connection to Mr. O, even
4 though Mr. O is Verizon's local customer and has originated the call. The reason is
5 that under existing tariffs and established commercial practices, long distance carriers
6 rather than customers buy switched access service directly from LECs. Therefore, in
7 order to offer long distance service to residential customers, Sprint has no choice but
8 to use that customer's local carrier (Verizon), pay the applicable tariffed rate for
9 originating intrastate switched access, and attempt to recover the cost of switched
10 access indirectly in its own long distance rates.

11 **Q. What does this hypothetical demonstrate about the ability (or inability) of the**
12 **market to constrain Verizon's access rates?**

13 A. Under these circumstances, the marketplace does not constrain Verizon to set
14 switched access rates at cost. There are two separate and important reasons for this.
15 First, Mr. O does not pay these rates, so he has no direct incentive to pressure
16 Verizon to lower its rates. Second, even if Sprint could compensate Mr. O for using a
17 local carrier with lower switched access rates, Mr. O may not have a choice among
18 acceptable local carriers in Pennsylvania.

19 Sprint's hands are tied even more tightly on the terminating end of this call. In order
20 to complete the call, and provide long distance service to its customer, Mr. O, Sprint
21 has no choice but to purchase terminating switched access from Verizon. Sprint has
22 no alternative path to connect the call to Mr. T, as long as Mr. T is served by only one
23 LEC at a time. Quite simply, only one loop goes to Mr. T's house: Sprint has no

1 choice but to buy terminating access from Verizon, because there is no competing
2 carrier with a loop to Mr. T. Thus, the marketplace does not and cannot constrain
3 Verizon on terminating access rates.

4 **Q. Why is it necessary for the Commission to regulate the market for switched**
5 **access?**

6 A. Commission regulation is necessary to prevent Verizon from exercising its market
7 power. Market power is defined by the ability of a firm or firms to maintain price
8 above cost. The simple reason why Verizon has market power is that its switched
9 access customers, namely the long distance providers, have virtually no alternatives
10 to reach most of their long distance customers.

11 The absence of a choice for long distance providers allows Verizon to set prices
12 substantially in excess of cost without losing so much traffic as to make this high
13 price unsustainable or unprofitable. Above-cost switched access charges are
14 detrimental to the public interest because they increase the long distance carriers' cost
15 of doing business, cause consumers to pay higher retail rates, and distort the
16 development of competition in the marketplace.

17 **V. INTRASTATE ACCESS RATES SHOULD BE SET AT COST.**

18 **A. TELRIC Plus Joint and Common Costs Is the Correct Standard.**

19 **Q. You stated that it is harmful for switched access rates to be set above cost. What**
20 **measure of cost is appropriate for judging whether the rates of Verizon are**
21 **reasonable?**

22 A. The Commission has previously determined that intrastate access rates should be
23 aligned more closely with costs. I agree with that finding.

1 The appropriate benchmark for setting intrastate access rates is forward looking
2 incremental cost. There are several measures of forward-looking incremental cost,
3 including:

- 4 1) Long run incremental cost – LRIC;
- 5 2) Total service long run incremental cost – TSLRIC;
- 6 3) Total element long run incremental cost – TELRIC.

7 Estimates of cost based on any of these methods can be used for ratemaking purposes.
8 There are some differences between these methodologies, but they share important
9 features. First, as the names of the methodologies make clear, they consider only the
10 costs that the LEC will incur in the future and ignore historic or sunk costs. Second,
11 these costing methodologies attempt to estimate the costs that are incurred to provide
12 a specific service or use of the LEC's network, and exclude the costs of other
13 services.

14 **Q. If prices are set at forward-looking incremental cost, how will Verizon recover**
15 **common costs?**

16 A. To respond to this question it is necessary to explain the meaning of common costs.

17 Common costs are costs that are not attributable to a particular service. The
18 categories of costs that have been considered, in other contexts, as common costs are:
19 the fixed cost of network elements such as the switch, marketing cost, corporate
20 overhead cost, and the cost of the subscriber loop. Each one of these categories
21 should be treated differently.

1 **Q. Should marketing costs or other retailing costs be included in switched access**
2 **charges?**

3 A. No. These costs have nothing to do with the provision of switched access. These
4 costs should be recovered from the customers of the retail services provided by
5 Verizon. It would be anticompetitive to impose these costs on the competitors of
6 Verizon, who have their own retailing and marketing costs to recover from their own
7 customers.

8 **Q. How should corporate overhead costs be recovered?**

9 A. Corporate overhead is a catch-all term and can hide many sins. Some “overhead”
10 costs may actually have nothing to do with providing switched access or UNEs to
11 competitors. For example, the costs of Verizon’s Washington D.C. advocacy to enter
12 the long distance market in other states do not benefit switched access customers in
13 Pennsylvania. Other costs in this bucket may be legitimate costs of running the
14 business and should be recovered from all users. For example, a corporate-wide
15 human resources department benefits all of the company’s services, and its costs
16 should be recovered from all users. Much of a corporation’s true overhead costs are
17 actually very sensitive to the total size of the company and are therefore part of the
18 incremental cost of output. The reason these costs are usually referred to as overhead
19 cost is because they are difficult to assign to particular services or to estimate on a
20 forward-looking basis.

1 **B. Bringing Intrastate Access Charges to TELRIC.**

2 **Q. You stated earlier that the switched access charges of Verizon are in excess of**
 3 **cost. What is the basis for this statement?**

4 A. Pricing for unbundled networks offered by Verizon to CLECs are supposed to be set
 5 at the TELRIC of providing each element, and at this level are thus are fully
 6 compensatory of Verizon's forward-looking costs. A comparison of Verizon's
 7 intrastate switched access rates to Verizon's rates for the corresponding unbundled
 8 network elements demonstrates that Verizon's intrastate switched access rates
 9 currently are set substantially above cost, assuming that Verizon's current UNE rates
 10 accurately reflect the TELRIC of the network facilities used to provide the UNEs.

11 The details of this comparison are set forth in the following Table 5.

12 **Table 5: Comparison of Verizon's Intrastate Switched Access Rates to Verizon**
 13 **UNE Rates**

Rate Element	Intrastate Switched Access Rates¹⁵ Cents per minute	Verizon UNE Rates Cents per minute¹⁶	Access Rate as Percent of UNE Rate
Local Switching	0.9336	0.17085	546.4%
Tandem transport termination	0.0195	0.0144	135.4%
Tandem transport facility (per Mile)	0.0045	0.0003	1500.0%
Tandem-switching	0.0983	0.0795	123.6%
Carrier Charge	0.63	0	∞

14

15 **Q. What is your recommendation to the Commission about switched access rates?**

16 A. As an interim measure, I recommend that the Commission order Verizon to
 17 immediately lower switched access rates to the TELRIC-based unbundled network

¹⁵ Verizon Testimony of Debra Berry and Michael Wirl, Exhibit MJW-1.

¹⁶ Verizon Tariff Pa. P.U.C. No. 216. The local switching rate shown is the average of originating and terminating rates.

1 element rates already established by this Commission. This equalization of rates and
2 costs should be done as soon as possible, in order to mitigate the harm to consumers
3 and to competition from the existing above-cost access charges. I further recommend
4 that the Commission order Verizon to reduce intrastate access rates to the level of
5 each corresponding intrastate UNE rate at such time as the Commission completes its
6 pending re-evaluation of UNE rates. There simply is no sound economic or policy
7 reason for permitting Verizon to keep charging excessive intrastate access rates.

8 **C. The Carrier Charge Should Be Eliminated.**

9 **Q. Should switched access charges include any contribution associated with the**
10 **local loop?**

11 A. No. Switched access charges should not include any contribution to recovery of the
12 cost of the local loop. The reason for this is that the cost floor of the long distance
13 carriers will be increased above true marginal cost, which will force long distance
14 rates above cost, and repress the demand for long distance service.

15 **Q. Do you believe it is economically efficient to recover a portion of the loop cost**
16 **from wholesale prices charged to long distance carriers?**

17 A. No. Access services do not result in any incremental cost (the "IC" in TELRIC)
18 associated with the loop. The loop is needed to provide any form of telephone service
19 to the end user, and it is not driven or caused by the amount of usage, or the category
20 of services, utilized by the customer.¹⁷ For this reason, the most economically
21 rational way to recover the full cost of the loop is in prices charged to retail customers
22 or to CLECs that lease the entire loop using the UNE tariff.

¹⁷ For purposes of this testimony, I am looking at the usage of the loop and the other components of the local exchange network for voice-grade quality of service. To the extent the customer wishes to receive broadband service, there may be a cost associated with improving the quality of the loop.

1 Verizon currently recovers the cost of the loop in their interstate subscriber line
2 charges, which will increase to \$6.50 per line this month, and in the prices they
3 charge for local and other retail services. There has been no showing that there are
4 any loop costs which Verizon does not already recover through charges other than
5 intrastate access rates. Indeed, when Verizon provided its estimates for the TELRIC
6 of intrastate access, it did so only with respect to the switching and transport
7 elements, but not with respect to the loop. This makes good sense: there is no
8 TELRIC for access services associated with the loop element.

9 Even if Verizon did not already recover the full cost of the loop through their other
10 charges, which it does, there would be nothing to be gained by charging a portion of
11 the loop cost to the subscriber's presubscribed long distance carrier. The
12 Commission has recognized that it is inefficient to attempt to recover the non-traffic
13 sensitive cost of the loop from the usage-based CCLC charge. Converting these
14 charges to a line-based Carrier Charge is less problematic than the CCLC charge, but
15 is still inferior to recovering these costs through retail rates. The reason is that the
16 Carrier Charge becomes part of the marginal costs of the long distance providers,
17 which will be compelled to recover those costs from their customers -- in a manner
18 that most closely reflects how they incur these costs. Since the Carrier Charge is
19 incurred on a per-line basis, the long distance carriers will be driven to flow through
20 the Carrier Charge to their customers on a per-line basis. Therefore, at best, the
21 Carrier Charge will simply convert a local per-line charge into a long distance per-
22 line charge. There is nothing to be gained by creating this mechanism that turns the
23 long distance carriers into intermediaries to collect some of the per-line costs from

1 customers. The additional steps required to compute the Carrier Charge, bill it to
2 long distance carriers, and have the long distance carriers bill and collect it from their
3 customers, create costs and have no offsetting benefits.

4 **Q. Is there any need for Verizon to offset reductions in access charges with**
5 **increases to rates for basic local exchange service?**

6 A. No. Because the access rates that I propose fully compensate Verizon for the forward-
7 looking costs that it incurs in providing access services, because the cost of capital
8 has decreased significantly in recent years, and because the proposed access charge
9 reductions will have only a minimal impact on Verizon's overall revenues, I can see
10 no reason why any other rates should be increased to offset access charge reductions.

11 **VI. CONCLUSION.**

12 **Q. Please summarize your recommendations.**

13 A. The intrastate switched access charges of Verizon are substantially in excess of cost.
14 This is detrimental to consumers, who ultimately must pay higher rates for long
15 distance service. Excessive access charges also distort competition between LECs
16 and long distance providers, who are among the best-positioned companies to enter
17 the local market and break the long-standing bottleneck monopoly of the LECs.
18 I recommend that the Commission remedy this problem by requiring Verizon to
19 immediately bring their switched access rates to a level more closely approximating
20 forward looking costs, as embodied in Verizon's current rates for unbundled network
21 elements, and to maintain parity of switched access rates with UNE rates as the
22 Commission completes its re-evaluation of UNE rates. I also recommend that the
23 Commission eliminate the Carrier Charge immediately.

1 **Q. Does this conclude your testimony?**

2 **A. Yes, it does.**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

AT&T Communications
of Pennsylvania, Inc.

v.

Verizon North, Inc.

Docket Number

C-20027195

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

SURREBUTTAL TESTIMONY OF MICHAEL D. PELCOVITS

ON BEHALF OF MCI WORLDCOM NETWORK SERVICES, INC. ("MCI")

STATEMENT 1.1

8/26/03
Hbg JK

August 4, 2003

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1 **I. INTRODUCTION AND SUMMARY.**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Michael D. Pelcovits. I am a principal with the economic consulting firm
4 of Microeconomic Consulting and Research Associates (MiCRA). My business
5 address is 1155 Connecticut Avenue, N.W., Washington, D.C. 20036.

6 **Q. Have you already filed testimony in this proceeding?**

7 A. Yes. I filed rebuttal testimony on behalf of MCI on July 21, 2003.

8 **Q. What is the purpose of your surrebuttal testimony?**

9 A. The purpose of my testimony is to respond to the positions taken by Mr. Dunkel, on
10 behalf of the OCA, Mr. Kubas, on behalf of the OTS, and Mr. Buckalew, on behalf of
11 the OSBA, regarding the recovery of loop costs.

12 **Q. What is your understanding of Mr. Dunkel's, Mr. Kubas' and Mr. Buckalew's**
13 **testimony on the issue of loop cost recovery?**

14 A. Mr. Dunkel, Mr. Kubas and Mr. Buckalew all take the position that a portion of the
15 cost of the subscriber loop should be allocated to and recovered from intrastate toll
16 service. Hence, they all support retention of the carrier charge ("CC") currently
17 imposed on a flat per-line basis on intrastate long distance carriers.

18 Mr. Dunkel's position is that the residential dial tone line facility cost (i.e. the loop)
19 "is not a cost that is properly included in the TSLRIC of residential service,"¹ and
20 therefore it is inappropriate to recover the entire cost of the loop only from local
21 exchange service. Mr. Dunkel maintains that all services (including interstate toll,
22 intrastate toll, interstate switched access, intrastate switched access, and DSL) should

¹ Rebuttal Testimony of William W. Dunkel, at 48.

1 contribute to the cost of the loop, because these services could not be provided
2 without the loop being in place. Mr. Dunkel performs an analysis of the relative
3 contribution to the loop cost paid by various services and concludes that it is
4 reasonable for intrastate long distance carriers to pay a carrier charge ("CC") of \$1.20
5 per-line per-month.

6 Mr. Kubas also opposes the elimination of the CC. Mr. Kubas states in his testimony
7 that "there should be a CC to recover a reasonable portion of the cost of providing
8 local loops."² Mr. Kubas recommends that 26% of the cost of the local loop should
9 be recovered from services other than local exchange rates.³ He further recommends
10 that the 26% should be broken down so that 14% of the cost of the local loop should
11 be recovered from intrastate access, ITORP and intrastate toll.⁴ Mr. Kubas
12 recommends recovering more of the loop from intrastate than from interstate based on
13 his belief that "more people use intrastate toll service than interstate and 'other'
14 services."⁵

15 Mr. Buckalew takes a similar position, arguing that the loop "is part of the integrated
16 telephone network and was built to serve both local and toll usage."⁶ He states that
17 loop costs should not be viewed as "subscriber facilities in terms of cost
18 responsibility," because they do vary in the long run with usage.⁷ Mr. Buckalew

² Testimony of Joseph Kubas at 10.

³ Kubas at 6.

⁴ Kubas at 7.

⁵ Id.

⁶ Testimony of Allen G. Buckalew, at 6-7.

⁷ Buckalew, at 10.

1 recommends that 25% of loop cost be allocated and charged to intrastate carriers,
2 which would be allowed to decide how to collect it from their customers.⁸

3 **Q. Would you summarize your testimony in response to these three witnesses?**

4 A. Yes. First, I believe that Mr. Buckalew's statements about the sensitivity of access
5 line cost to usage cost are not substantiated in his testimony and for the most part are
6 inconsistent with studies that I have seen of the cost of local telephone networks.
7 Second, Mr. Dunkel's, Mr. Kubas' and Mr. Buckalew's proposals to allocate costs to
8 services, rather than to establish non-discriminatory, rational rates for identical uses
9 of the network is inconsistent with economic theory and incompatible with a market
10 that is, hopefully, in transition to greater competition.

11

12 **II. NON-TRAFFIC SENSITIVE NATURE OF THE LOOP.**

13 **Q. What is "the loop" and what are the primary factors that drive its cost?**

14 A. The loop is comprised of a pair of wires that begin at the customer's premises and
15 eventually terminate at the local exchange carrier's switch. In some geographic areas,
16 the wire pair terminates at a remote terminal before it reaches the local switch. The
17 remote terminal houses electronic equipment, which converts the analog signal
18 carried on the wire pair to a digital signal, which is then transmitted on fiber optic
19 cable to the central office. The cost of the subscriber plant ("the loop") is driven
20 primarily by the number of lines being provisioned and line density (i.e. the ratio of
21 lines to the size of the geographic area being served). It is also driven by the

⁸ Buckalew, at 13.

1 capabilities of the network, and in particular, by the amount of bandwidth that the
2 network is capable of carrying.

3 **Q. Are loop costs traffic sensitive?**

4 A. The vast majority of the loop plant used in this country is not traffic sensitive. The
5 wire pair that connects the subscriber to the local exchange network is dedicated to
6 the particular customer and is not more costly to operate as usage increases. The
7 same is true for the electronics housed in the remote terminal and the fiber optic
8 cables that carry dedicated subscriber channels to the central office. The switch port
9 is also dedicated to the individual customer and is not sensitive to the customer's
10 usage.

11 The only condition under which loop plant could be traffic sensitive is when the
12 electronics used in the remote terminals concentrates the signals coming from the
13 copper loops before transmitting them on the fiber optic cable. In this case, the
14 channels between the remote terminal and the switch are not dedicated to a single
15 subscriber, but are shared by several subscribers. This creates the possibility that the
16 required capacity on the fiber optic systems will depend upon the number of
17 subscriber lines that can be concentrated on a single trunk, which in turn could
18 depend upon the amount of traffic generated by the typical subscriber.

19 Based upon my knowledge of local exchange cost studies, however, I believe that the
20 sensitivity of costs to the amount of traffic, even under the most extreme conditions,
21 would be minuscule and is too small to be reflected in the rates for use of the local
22 loop. The cost per voice grade channel on a high capacity fiber trunk is only pennies

1 a month, so even a customer using the phone constantly would at most increase loop
2 plant costs by a few pennies a month.

3 **Q. Will loop costs be sensitive to the type of services provided by the local exchange**
4 **carrier?**

5 A. Yes. Loop plant that is capable of carrying higher bandwidth services will often be
6 *more expensive. For example, in order to provide digital subscriber line services*
7 (DSL) the LECs have had to add equipment at remote terminals or modify some of
8 the copper loop plant to improve the quality of the signal. Some LECs are planning
9 to upgrade the loop plant even more by replacing some of the copper loop with fiber
10 optic cable. This would enable transmission of even higher bandwidth service to the
11 customer. It is certainly appropriate for the customers of these higher bandwidth
12 services to pay more for service than the ordinary local exchange customer.

13 I disagree with other parties' suggestions, however, that the cost of the loop plant
14 should be allocated or apportioned in some manner among the many voice grade
15 services that use the loop, rather than being recovered from the end user on a per line
16 basis.

17 **III. LOOP COSTS SHOULD NOT BE ALLOCATED TO SERVICES.**

18
19 **Q. Why should the cost of the local loop not be allocated to and then recovered**
20 **from the services that use the loop?**

21 A. There are many reasons not to allocate the cost of a non-traffic sensitive piece of the
22 network to the different services that use it.⁹ First, any such allocation will be

⁹ I recognize that 25% of the loop cost is allocated to the interstate jurisdiction. From an economic standpoint, any allocation of non-traffic sensitive costs across jurisdictions is entirely arbitrary.

1 completely arbitrary and unrelated to cost causation. Second, any such allocation will
2 create distortions and give subscribers an artificial incentive to circumvent rates that
3 are driven by arbitrary cost allocations. Third, any such allocation is incompatible
4 with competitive markets, which are beginning to develop in Pennsylvania.

5 **Q. Why is the allocation of non-traffic costs to different voice-grade services**
6 **arbitrary?**

7 A. Allocation of loop costs to the services that use the loop is arbitrary, because there is
8 no sound basis either for determining what should constitute a separate service, or for
9 selecting the percentage of loop costs that should be allocated to each service.

10 Mr. Buckalew testifies that he has in the past recommended using the assumption of
11 “equal availability of the loop, i.e. 50% local, 50% toll (25% interstate and 25%
12 intrastate toll).”¹⁰ He further states that this Commission could allocate the 75% of
13 the loop costs which are in its jurisdiction any way it decides is reasonable.

14 Mr. Buckalew is ignoring, however, that the labeling of some calls as local and some
15 as long distance, is itself arbitrary, and that these service distinctions lead to retail
16 price differences that are entirely artificial. This is evident from the proliferation of
17 calling plans, by wireline and wireless carriers, that treat all calls the same. These
18 calling plans are being made possible, in part, because there is no artificial cost
19 allocation scheme imposed on wireless carriers or CLECs that use the UNE-Platform.

20 Mr. Buckalew, Mr. Kubas and Mr. Dunkel argue that each “service” should pay a
21 portion of the loop cost, because the loop is needed to provide these services. By this

Nevertheless, the FCC has mitigated the distortion created by this allocation by creating the subscriber line charge.

¹⁰ Buckalew, at 12.

1 logic, it would make just as much sense in today's environment to label each of the
2 dozen or so vertical services made possible by the loop, e.g. caller ID, call waiting,
3 call forwarding, as a separate service and then recover an equal portion of the loop
4 costs from each of these services, along with toll and local service. The arbitrary
5 nature of this exercise should be obvious, because the LECs can freely shrink or
6 expand the number of these "services" by bundling vertical services into packages.
7 By Mr. Buckalew's, Mr. Kubas' and Mr. Dunkel's logic, loop costs should be
8 reallocated every time there is a new vertical service or repackaging of existing
9 services.

10 **Q. Why will there be distortions caused by allocation of loop costs to different**
11 **services?**

12 A. Distortions will be created because the rates for the "services" will need to recover
13 loop costs that are unrelated to the actual cost of these services. As I explained in my
14 July 21 testimony, rates set above cost discourage efficient use of the network and
15 give customers' incentives to use services that are free of inflated or artificially
16 allocated costs.

17 To take an example, if 25% of the loop cost is allocated to intrastate toll, then
18 competition will drive up toll rates to cover these loop costs. Previously, when loop
19 costs were imposed on toll carriers based on the volume of traffic, these costs were
20 recovered in the higher per-minute price of toll service. This depressed the demand
21 for toll service and gave customers an artificial incentive to use services that did not
22 have to pay these loop costs on a minute-of-use basis.

1 The Carrier Charge, which was established to reduce this distortion by charging loop
2 costs to long distance carriers on a per-line basis, is an improvement, but is far from
3 ideal. As I explained in my July 21 testimony, there is nothing to be gained by
4 creating this mechanism that turns the long distance carriers into intermediaries to
5 collect some of the per-line costs from customers. The additional steps required to
6 compute the Carrier Charge, bill it to long distance carriers, and then have the long
7 distance carriers bill and collect it from their customers, create transactions costs and
8 have no offsetting benefits.

9 **Q. Why is the allocation of loop costs to different services incompatible with**
10 **competition?**

11 A. Competition drives prices to cost. As I explained above, there is no cost relationship
12 between the loop costs and the different voice grade services provided by the LECs.
13 Since some competitors will not be subject to these cost allocation rules, they will be
14 freer to create more rational price structures than other carriers that are still burdened
15 by these rules, and better-positioned to attract customers. Ultimately, the cost
16 allocation system will break down, if more and more customers have a choice of
17 using the unburdened services.¹¹

18 **IV. CONCLUSION**

19 **Q. Please summarize your recommendations.**

20 A. The cost of the subscriber loop should not be allocated or apportioned among the
21 intrastate voice-grade services that use the local exchange network. None of these

¹¹ Certain allocation schemes would actually give the incumbent LECs a pricing advantage over its competitors. For example, if loop costs are assessed on toll or access services on a per-minute-of-use basis, this would increase the long distance carriers' marginal cost above the incumbent LECs' marginal cost. I have already described in my July 21 testimony how a difference in marginal costs can lead to a price squeeze in toll markets

1 services cause these costs directly, and any allocation method chosen will be arbitrary
2 and introduce pricing distortions into the marketplace. I recommend that all forward-
3 looking loop costs should be recovered directly from the subscriber, or where
4 necessary from a competitively-neutral universal service fund. Thus, the Carrier
5 Charge should be eliminated in its entirety for both Verizon Pennsylvania, Inc. and
6 Verizon North, Inc.

7 **Q. Does this conclude your testimony?**

8 A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

AT&T Communications of
Pennsylvania, Inc.,

v.

Verizon North Inc.

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Docket No. C-20027195

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REBUTTAL TESTIMONY
OF
SCOTT A. MCINTYRE
STAFF DIRECTOR - PUBLIC POLICY
QWEST COMMUNICATIONS CORPORATION
JULY 18, 2003

STATEMENT NO. 1.0

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I. EXECUTIVE SUMMARY

Qwest Communications Corporation (“QCC”) supports the efforts of the Pennsylvania Public Utility Commission in its attempts to coordinate intrastate switched access within the territories of Verizon Pennsylvania Inc. (“Verizon PA”) and Verizon North Inc. (“Verizon North”)(collectively “Verizon”). QCC believes however, that there is an opportunity to significantly increase the benefits to consumers at this time by taking a step further by aligning intrastate and interstate switched access rates.

Restructuring access is a vital step toward the broader policy goal of establishing appropriate economic pricing, at both the federal and state levels, for retail products and services, intrastate and interstate access, unbundled network elements and interconnection. Appropriate economic pricing reduces the opportunity for arbitrage and improves the ability of telecommunications providers to invest economically. This drives market behavior that enhances competition and this ultimately benefits consumers.

The current patchwork of intercarrier compensation mechanisms, including access, are based on pre-divestiture and pre-Telecommunications Act regulatory schemes that no longer further the policies of recent law or this Commission. Instead, the mechanisms reflect and reinforce artificial distinctions among carriers, and create unavoidable opportunities for economically irrational, regulation-driven arbitrage.

1 As Qwest Communications International Inc. made clear in its intercarrier compensation
2 comments currently pending before the Federal Communications Commission (FCC)¹,
3 over the long term, the public policy goal for intercarrier compensation, including access,
4 should be a simple, predictable, and market-oriented regime that applies to any hand-off
5 of traffic on the public switched network. To that end, QCC proposes a unified bill-and-
6 keep regime for intercarrier compensation, under which each carrier would recover from
7 its end users the costs of its own access facilities, including the costs of its loops and of
8 the terminating switching function. Until a unified, simple, predictable, market-oriented
9 regime exists, the Commissions should work in conjunction with the FCC to support
10 policies that move the industry further toward those broader goals. With the FCC's
11 completion of an initial restructure of interstate access, through implementation of its
12 *CALLS* Order², and in light of its expiration mid 2005, the timing is right for addressing
13 access as proposed herein.

¹ *In the Matter of Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92. See, Comments of Qwest Communications International, Inc. filed August 21, 2001 and Reply Comments of Qwest Communications International, Inc. filed November 5, 2001. (Exhibit 1.0)

² Simply put, the so-called *CALLS* Plan instituted a transitional access restructure for larger ILECs by reducing interstate switched access and implementing an interstate end user subscriber line charge. That shifted revenue recovery from end users through toll charges to end users through flat rated monthly rates. See, *Access Charge Reform, Sixth Report and Order*, 15 FCC Rcd 12962 (2000) ("*CALLS* Order"). A similar transitional plan has been adopted for non-price cap LECs. See *Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers, Notice of Proposed Rulemaking*, 16 FCC Rcd 460 (2001).

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II. INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME, TITLE AND ADDRESS.

A. My name is Scott A. McIntyre. I am employed by Qwest Services Corporation (“QSC”) as Staff Director – Public Policy. My business address is Room 3214, 1600 7th Avenue, Seattle, WA, 98191.

Q. PLEASE EXPLAIN ON WHOSE BEHALF ARE YOU TESTIFYING TODAY AND THAT ENTITY’S RELATIONSHIP TO THE QWEST FAMILY OF COMPANIES.

A. I am testifying on behalf of Qwest Communications Corporation (“QCC”). QCC is the "classic Qwest" operating company. Qwest Communications (“QC”), is the former US West and Regional Bell Operating Company that provides local phone service in 14 states. Currently, QCC is an interexchange carrier and a competitive local exchange carrier providing service in states other than those states in which QC provides local phone service. I am employed by Qwest Services Corporation (“QSC”) which is the parent company of QC and QCC, and provides various services to these entities such as training, human resource functions, financial, legal, and corporate communications. Qwest Communications International Inc. (“QCII”) is the holding company of all of these companies. In my testimony, when I refer to “Qwest” I am referring to the collection of companies under the QCII umbrella that provide various telephony services.

1 **Q. PLEASE REVIEW YOUR EDUCATION, WORK EXPERIENCE, AND PRESENT**
2 **RESPONSIBILITIES.**

3 A. I earned a Bachelor of Science degree in Electrical Engineering at the University of
4 Washington in 1974. I have worked for Qwest (and its predecessor companies U S WEST
5 Communications, Inc. and before that, Pacific Northwest Bell) since 1970. In the past 33
6 years, I have held many positions that have given me a broad understanding of the
7 telecommunications business. I have experience in the installation and repair of local
8 residence and business telephone services. I also have experience in analyzing and
9 planning new central office equipment and interoffice network facilities. I have
10 performed cost analyses on many aspects of the business and analyzed departmental
11 budgets in great detail. From 1987 to 1999, I managed private line voice and data
12 products. This included the development, pricing and marketing for a wide range of
13 products serving business customers across QC's fourteen-state region.

14
15 Since July 1999, I have been in my current position as a policy and pricing expert,
16 representing QC on issues involving various services. I also represent QC on issues
17 concerning competition and performance measures. This wide range of experience has
18 provided me with an understanding of how services are provided, the pricing and
19 marketing that support these services and the impacts of regulation and competition.

20
21 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN PENNSYLVANIA?**

22 A. No.

23

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE REGULATORY**
2 **AGENCIES IN OTHER STATES?**

3 A. Yes. I have testified on several different occasions in Oregon, Washington, Colorado,
4 Nebraska, New Mexico, Arizona, Utah, Idaho, Wyoming, Iowa, and Minnesota.

5

6 **Q. HAVE YOU SPECIFICALLY TESTIFIED ON THE TOPIC OF SWITCHED**
7 **ACCESS RATES OR ACCESS REFORM?**

8 A. Yes. I have testified and/or developed comments concerning the restructuring of access
9 rates, the subsidies included in access rates and how reforming access should be
10 approached at the state level.

11

12 **III. PURPOSE OF TESTIMONY**

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. The purpose of my testimony is to explain how Verizon's proposed rate restructure is a
15 step in the right direction, but does not go as far as it should in terms of a rational policy
16 of access pricing. While the elimination of the Carrier Common Line charge (CCL) is an
17 important and essential step in the process state commissions should undertake to
18 transform past decisions *into more up-to-date, pro-competitive policies*, eliminating the
19 price discrepancy between state and interstate rates is equally important. Lowering access
20 rates to interstate levels on a revenue neutral and competitively neutral basis will not only
21 reduce industry problems concerning arbitrage and accurate billing, it will encourage
22 competitive investment, reduce confusion among customers, and create long-term benefits
23 for all consumers.

1

2 **Q. WHY ARE YOU FILING TESTIMONY ON BEHALF OF QCC IN THIS CASE?**

3 A. QCC is the only Qwest entity that provides telephony services in Pennsylvania.

4 However, QCC is just one member of the Qwest family of companies that provides
5 telephony services in general. Qwest is a major Incumbent Local Exchange Carrier
6 (ILEC), Interexchange Carrier (IXC), Competitive Local Exchange Carrier (CLEC),
7 wireless service provider, and provider of internet backbone services, Qwest is in a rare
8 position to provide a balanced view of the evolving switched access market. Qwest both
9 charges for and pays for switched access and is impacted by the numerous regulatory
10 variances in these rates. I am here to testify on behalf of QCC, which is part of a larger
11 company that is both a major customer and major provider of the services involved in this
12 case. It is this unique perspective that I bring to this docket.

13

14 **IV. POLICY GOALS FOR SWITCHED ACCESS**

15 **Q. WHY IS INTRASTATE SWITCHED ACCESS RESTRUCTURING NECESSARY?**

16 A. Reducing intrastate switched access charges to interstate levels on a revenue neutral and
17 competitively neutral basis will benefit the emerging competitive landscape of
18 telecommunications. Restructuring switched access is a vital step toward the broader
19 policy goal of establishing appropriate economic pricing, at both the federal and state
20 levels, for retail products and services, intrastate and interstate switched access, unbundled
21 network elements and interconnection. Appropriate economic pricing promotes capital
22 investment and drives market behavior that enhances competition, ultimately benefiting
23 consumers.

1

2 **Q. WILL CONSUMERS BENEFIT FROM REDUCING INTRASTATE SWITCHED**
3 **ACCESS RATES TO FCC LEVELS?**

4 A. Yes. Since the intrastate toll market is highly competitive, it is reasonable to assume that
5 toll providers will pass through intrastate switched access reductions in the form of lower
6 toll rates. Competitive pressures, rather than additional regulation, should be allowed to
7 drive those reductions to customers.

8

9 Longer term benefits will come in the form of a more rational and competitively neutral
10 rate platform. This will allow competition to grow in an environment where capital
11 investments have a greater chance to benefit the investor. This, in turn, will encourage
12 more competitive investment. In the current environment, some investments are based on
13 niche services that may only be short-term arbitrage opportunities. Other investments
14 may only be viable if regulatory rules stay the same, while still others may rely on
15 regulatory rules changing in the near future. This environment puts all investing on shaky
16 ground. As a consequence, consumers pay the price in the form of limited competition
17 that is not equally available to all customers. Indeed, robust competition requires that
18 archaic regulatory rate platforms be changed to competitively neutral structures that can
19 be sustained over the long term.

20

21 **V. SUBSIDIES AND SWITCHED ACCESS**

22 **Q. ARE THERE STILL SUBSIDIES IN INTRASTATE SWITCHED ACCESS**
23 **RATES?**

1 A. Generally, yes, and they fall into two categories. The first is the clearly identifiable
2 subsidy produced by Carrier Common Line (CCL) charges. The CCL charge has no
3 direct access cost component and therefore represents pure contribution to the business.
4 This rate element is a mechanism that was established to support the Non-Traffic
5 Sensitive portion of basic exchange service, which is the loop. The other less obvious
6 form of subsidy falls under the guise of public policy efforts to keep basic exchange rates
7 low. This public policy aspect to switched access rates is not as well defined as the CCL
8 charge, but it is a form of subsidy as well. Subsidies are certainly debatable issues
9 however, the debate depends on how one defines the factors that determine whether
10 subsidies exist. Applicable costs are certainly one area that has been and will be argued
11 from various perspectives. Without a clearly agreed upon cost base, subsidies can not be
12 clearly quantified. In any case, the restructuring of switched access should be continued
13 even if quantification of subsidies or their very existence is not agreed upon. Too much
14 consideration of subsidies will only divert attention from the real goal of access
15 restructure that establishes a rate structure that is sustainable in a fully competitive
16 telecommunication market. Once access is fully restructured and priced at competitively
17 neutral rates, the issue of subsidies in switched access rates will become moot.

18
19 **Q. WHAT DOES THE HISTORY OF SWITCHED ACCESS RATES HAVE TO DO**
20 **WITH THE EXISTENCE OF CURRENT SUBSIDIES?**

21 A. When switched access rates were first created, with the divestiture of the Bell System,
22 they included more contribution than would have been normal from a market perspective.
23 Prior to the divestiture of the Bell System, and the proliferation of competition in the long

1 distance market, long distance rates were kept high in support of low local service rates
2 for public policy reasons. The concept of universal service drove this implicit subsidy in
3 toll rates. Toll service was still considered somewhat of a luxury. It made sense, from a
4 policy perspective, to keep these rates artificially high to promote the concept of universal
5 local service. This subsidy was intended to support the Non-Traffic Sensitive (NTS)
6 portion of local service. The NTS portion of local service is the loop, the cost of which
7 does not vary with usage. Switched access rates were developed to keep long distance
8 carriers on equal ground competitively, while maintaining significant support for local
9 service. The easily identifiable implicit subsidy was the CCL charge, but maintaining
10 relatively high rates for other switched access rate elements also supported this concept.
11 Setting the amount of this contribution above cost, which is higher than might otherwise
12 be reasonable in a competitive market, is a matter of public policy. This higher
13 contribution level helped offset low basic exchange rates.

14
15 **Q. WHY IS IT IMPORTANT TO KEEP THIS HISTORICAL PERSPECTIVE IN**
16 **MIND AS WE RESTRUCTURE ACCESS RATES?**

17 **A.** It is important to understand the historical perspective because there have been so many
18 changes in the industry. Technology has changed which has driven significant cost
19 changes. Prices have changed causing pricing philosophies to change. This means that
20 while the original intent of high switched access rates might have been to support the NTS
21 costs of local service, there is no identifiable trail for this hidden support. To deal with
22 restructuring now, we must understand that there once was the intent to support NTS
23 costs, even though there is no current formula to determine how much of this intended

1 support exists in today's environment.

2

3 **Q. IS IT POSSIBLE TO MOVE AHEAD WITH ACCESS REFORM EVEN THOUGH**
4 **THIS SUBSIDY ISSUE REMAINS VAGUE?**

5 A. Yes. The FCC has done it, and the states should also. There are no disadvantages to
6 significant reductions in intrastate switched access though there are several benefits that I
7 will describe in more detail later. On the whole, customers will experience toll rate
8 reductions that balance out any offsetting rate increases. The consumer is the ultimate
9 winner in all aspects of this proposal. This makes rational switched access pricing clearly
10 in the public interest, since it is the public that has the most to gain in the long run.

11

12 **VI. IMPROVED SWITCHED ACCESS PRICING**

13 **Q. WHAT IS QCC PROPOSING IN THIS PROCEEDING?**

14 A. QCC is proposing that Verizon's intrastate switched access rates be lowered to FCC levels
15 with revenue neutral offsets in other services. This will eliminate the CCL charge
16 completely and reduce the rates for many other rate elements.

17

18 **Q. WHY IS QCC MAKING THIS PROPOSAL FOR ACCESS REDUCTIONS?**

19 A. QCC believes that further reductions in intrastate switched access are necessary to reduce
20 jurisdictional pricing disparity, including the issues associated with such disparity, and to
21 promote rational economic pricing.

22

1 **Q. WHAT DOES QCC MEAN BY “REVENUE NEUTRAL”?**

2 A. Revenue neutral means that revenues lost by the reduction in the rates of certain services
3 may be offset by increases in rates for other services. This balance should occur at a point
4 in time based on service quantities and rates existing at that point in time.
5

6 **Q. WHY SHOULD ACCESS REPRICING BE REVENUE NEUTRAL?**

7 A. The pricing reductions proposed here are largely driven by public policy and the need to
8 establish competitively neutral pricing platforms. As the telecommunications market
9 becomes more and more competitive; it is important to eliminate many of the pricing
10 policies of the past 100 years. This will allow for robust competition without pricing
11 anomalies that confuse customers and generate inefficient investment. Revenue neutrality
12 insures that companies are not penalized for the progressive restructuring of rates that are
13 in the long term best interests of competition and consumers. This repricing should result
14 in lower long distance rates and should therefore be revenue neutral to consumers as a
15 whole.
16

17 **Q. HOW MUCH WILL OTHER SERVICE PRICES NEED TO BE INCREASED TO
18 OFFSET ACCESS REDUCTIONS TO FCC RATE LEVELS?**

19 A. QCC is not in a position to analyze that impact. It will depend on what services are
20 included in the restructure and whether the adjustments are implemented at one time or
21 phased in.
22

1 **Q. IS A PHASED IN APPROACH REASONABLE?**

2 A. Yes. The phasing in of rate restructuring such as this is reasonable as long as the time-
3 frame is not too long. The FCC will revisit access when the current *CALLS* Order expires
4 in 2005 and states should be in a position to follow the FCC's lead.

5
6 **Q. HAS THE FCC SHIFTED ITS PUBLIC POLICY CONCERNING HIGH**
7 **CONTRIBUTION IN SWITCHED ACCESS RATES?**

8 A. Yes. Over the past several years, the FCC has reduced interstate switched access rates and
9 increased the End User Common Line (EUCL) charge. This has effectively transferred
10 the local service support from switched access rates to the EUCL charge. These charges
11 are flat rate charges applied on a per line basis. This has shifted local service support paid
12 by carriers through switched access rates back to end users, where it should be.

13
14 **Q. IS THE SWITCHED ACCESS PRICING PROPOSED BY QCC IN THIS FILING**
15 **CONSISTENT WITH THIS NEW FCC POLICY?**

16 A. Yes. The intrastate switched access reductions and corresponding revenue neutral offsets
17 proposed by QCC are consistent with the action and direction of the FCC in its Intercarrier
18 Compensation docket and, specifically, in its *CALLS* Order. Interstate switched access
19 will continue to decline as the FCC moves closer to a bill and keep regime for all
20 intercarrier compensation. The FCC completed its initial restructure of interstate switched
21 access in 2000, through implementation of its *CALLS* Order³. QCC's proposal is

³ See Footnote 2.

1 completely consistent with that Order.

2

3 **Q. IS QCC'S PROPOSAL IN THIS PROCEEDING IN PENNSYLVANIA**
4 **CONSISTENT WITH QC PROPOSALS WITHIN ITS 14 STATE REGION?**

5 A. Yes. QC has proposed similar pricing in several states within its region and will continue
6 to do so at least until the FCC provides further guidance on the federal switched access
7 structure either through approval of a replacement plan for *CALLS* and/or through an
8 Order from its pending Intercarrier Compensation docket. When that occurs QC will
9 consider the FCC action and make necessary adjustments to its state advocacy. Interstate
10 switched access is the same service as intrastate switched access, and they should be
11 priced consistently. Restructuring to achieve that consistency should be done on a
12 revenue neutral and competitively neutral basis. In order to further stem arbitrage issues,
13 it is important that state commissions take steps toward a more unified regime for access,
14 but at the same avoid moving ahead of the FCC, which would simply reverse arbitrage
15 incentives.

16

17 **Q. WHAT ARE THE BENEFITS OF PARITY BETWEEN STATE AND**
18 **INTERSTATE SWITCHED ACCESS RATES?**

19 A. The benefits are described below.

20 **1. Bringing Intrastate Access Rates In Line With Interstate Rates Will Eliminate**
21 **Rate Arbitrage.**

1 The existing disparities between the interstate and intrastate access charge structures
2 invites rate arbitrage.⁴ In particular, the ILEC often cannot determine whether a call is
3 local, intrastate or interstate; e.g., if the customer uses a dedicated link to an IXC for both
4 local and long-distance calls. Thus, customers and other carriers have the incentive and
5 ability to disguise toll calls as local calls. By doing so, the other carrier can benefit from
6 the favorable terms of local interconnection—including being paid for terminating calls
7 while avoiding carrier access charges.

8
9 A high degree of regulatory intervention is far from ideal in these matters. A much better
10 solution is to rationalize the rate structure in order to fix the problem. With a rational rate
11 structure where intrastate rates are at parity with interstate rates, payments of CLECs and
12 IXCs would depend on the activities that the ILEC performs on their behalf—not on what
13 is reported on the honor system in the different jurisdictions. Once these rate arbitrage
14 opportunities are eliminated, firms and investors alike can make economic decisions based
15 upon a stable regulatory environment rather than transitory, niche business opportunities.

16
17 **2. Economic Penalties Will Be Removed For Carriers That Rate Average Their Toll**
18 **Plans**

⁵ In an *ex parte* filed with the FCC in support of its recent petition to withdraw its FCC tariff on physical collocation, Verizon stated that one of the reasons supporting the move was the elimination of tariff shopping and the “dual [federal and state] regulatory scheme.” Therefore, in other contexts, Verizon has supported the elimination of rate arbitrage opportunities that exist between the intrastate and interstate jurisdictions. *Id.*

1 Under the current switched access rate regime, state switched access rates differ from
2 interstate rates. Indeed, switched access rates differ from state to state and from LEC to
3 LEC. IXCs price their services in the aggregate. Where one state or LEC has higher than
4 average switched access rates, the IXC must decide whether to create a specific rate plan
5 for the area or accept lower contribution when pricing its services for that area.

6
7 Maintaining several area-specific rate plans imposes greater costs on IXCs than managing
8 a single rate plan or a few rate plans. Alternatively, an IXC that decides to maintain a
9 single rate plan incurs costs in the form of lower contribution that the carrier must recover
10 in some other way. In either case, the carrier may choose to withhold some services in an
11 area or create higher priced plans in order to compensate for the disparity in intrastate
12 switched access rates. Ultimately, the Pennsylvania consumer pays the price for this
13 inefficiency.

14
15 **3. The Hidden Support That All Network Users Pay In Various Incalculable Ways**
16 **Will Be Eliminated**

17 Carriers pass uneconomic costs on to their customers in a variety of ways, most of which
18 will be hidden from the consumer. Because these uneconomic costs are hidden from the
19 consumer, the consumer has a difficult time making sound economic choices among local
20 and long distance providers. Reducing intrastate switched access rates, on a revenue-
21 neutral basis, to the level of their interstate counterparts will significantly reduce the
22 uneconomic costs from the carrier's calculation of the price for its services. This, in turn,
23 will afford consumers rates that more accurately reflect costs in their decision-making

1 process for choosing a local and/or long distance provider.

2

3 **Q. IS THE TIMING RIGHT FOR FURTHER RESTRUCTURING VERIZON'S**
4 **INTRASTATE SWITCHED ACCESS RATES?**

5 A. Yes. QCC believes it is in the public interest and in the interest of competition that the
6 goal for switched access restructure should eliminate structural discrepancies on a
7 jurisdictional level. As long as that goal is clear and is achieved on a revenue neutral and
8 competitively neutral basis, we should move forward as quickly as is reasonable.

9

10

VII. CONCLUSION

11 **Q. PLEASE SUMMARIZE YOUR POSITION ON VERIZON'S PROPOSAL TO**
12 **RESTRUCTURE ITS SWITCHED ACCESS RATES.**

13 A. Verizon's proposal to restructure its switched access rates within its two territories is a
14 necessary step toward access restructuring. QCC believes however, that a more
15 significant step should be taken at this opportunity.

16

17 To achieve a market-oriented regime, the Commission, along with the FCC should work
18 to support policies that move the industry toward lowering intrastate switched access rates
19 to the federal level on a revenue and competitively neutral basis. With the FCC's
20 completion of an initial restructure of interstate switched access, through implementation
21 of its *CALLS* Order, the timing is right for this Commission to close the jurisdictional gap
22 by taking state switched access rates and structure to the federally-tariffed level.

23

1 It is also appropriate to recognize that the FCC has taken significant steps to move support
2 for local services back to the end user in a way that is consistent with cost causation. The
3 FCC has indicated that it will continue with this philosophy in its current and future
4 proceedings as the competitive nature of telecommunications continues to evolve. It is
5 appropriate for the states to follow that lead and not stay too far behind. When the next
6 generation of FCC rulings on access reform is implemented, Pennsylvania should be in a
7 position to follow that lead without exposing end-users to significant rate impacts. This
8 will allow competitors to respond with services and pricing that are most beneficial for
9 consumers. The FCC signals have been clear on its direction. Aggressive competition
10 will also require clear signals from this Commission to encourage capital investment in a
11 capital intensive industry. The clearer those signals and their similarity with the FCC's
12 signals, the more willing the investment will be.

13

14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

15 **A. Yes it does.**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

AT & T Communications of
Pennsylvania, Inc.,

v.

Verizon North Inc.

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Docket No. C-20027195

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Before the
Federal Communications Commission
Washington, D.C. 20554

AUG 21 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Developing a Unified Intercarrier) CC Docket No. 01-92
Compensation Regime)

COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL, INC.

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August 21, 2001

EXECUTIVE SUMMARY

In a rational telecommunications world, a carrier would be just a carrier and a call would be just a call. But this is not yet that world. Legacy regulation, rather than any underlying market necessity, is principally responsible for the balkanization of the telecommunications industry into specialized carriers providing specialized services. The existing crazy-quilt of intercarrier compensation schemes reflects and reinforces these artificial distinctions among carriers, and it creates unavoidable opportunities for economically irrational, regulation-driven arbitrage. Qwest's ambition, like the Commission's, is to shatter those artificial distinctions, and this proceeding is a critical step in the right direction. As an incumbent LEC, a CLEC, an IXC, an Internet backbone provider, an ISP, and a wireless provider, Qwest transcends regulatory typecasting, and it appears here not as a representative of any particular industry segment, but as a representative of the industry as a whole.

In Qwest's view, the ultimate objective of this proceeding should be the creation of a simple, predictable, and market-oriented intercarrier compensation regime that will apply to any hand-off of traffic on the public switched network, including local traffic, Internet-bound traffic, and conventional access traffic. The best choice for such a regime is bill-and-keep, under which each carrier would recover from its end users the costs of its own access facilities, including the costs of its loops and of the terminating switching function. That approach would present enormous advantages over the existing intercarrier compensation schemes – *i.e.*, the “calling party's network pays” (“CPNF”) regime now applicable to local traffic and the access charge regime applicable to interexchange traffic.

First, bill-and-keep would largely resolve, *without regulatory intervention*, the basic problem underlying any approach to intercarrier compensation: the incentive and ability of

terminating carriers to charge extracompensatory rates for call completion. So long as carriers can demand intercarrier compensation for terminating calls of any kind, that “terminating access monopoly” can be alleviated through regulatory intervention, but never truly eliminated; only bill-and-keep can uproot the problem at its source. *Second*, by shifting cost recovery to end users, bill-and-keep would increase the role of market forces, and decrease the role of regulation, in resolving traditionally vexing questions of cost recovery. That advantage is important now, and it will become even more important as competition develops and the need for retail rate regulation diminishes. As competition develops and the telecommunications world is increasingly populated by non-dominant carriers, the choice between bill-and-keep and any variant of the CPNP regime is, at bottom, a choice between less regulation of competitive carriers and more. *Finally*, by eliminating any intercarrier charge for termination of traffic on the public switched network, bill-and-keep would increase regulatory stability and – just as important – reduce regulation-driven arbitrage opportunities.

The single most important variable in the establishment of any bill-and-keep regime is the problem of transport: the question of where one carrier’s responsibility ends, and another’s begins, in transporting calls between networks. Although the DeGraba proposal is a promising theoretical start, it suffers from a critical flaw. The default rule it prescribes (transport all the way to the terminating carrier’s central office) is, as DeGraba himself acknowledges, a “penalty default” that would almost inevitably require carriers to engage in extensive, time-consuming negotiations. Like regulation, negotiation imposes significant transactions costs; and rules creating a pervasive need for it should be avoided where possible. The Commission should thus focus its inquiry on a default transport rule that reduces the need for both regulation and negotiation by more closely approximating the ways in which carriers actually interconnect in

the real world. And the Commission should similarly ensure that any transport rule it adopts preserves incentives for competitors to continue providing facilities-based transport alternatives.

The Commission should also accompany the adoption of bill-and-keep with a commitment to increased flexibility in the regulation of end-user rates. Bill-and-keep would fall short of expectations if, for example, access charges retained much of their current inefficient structure and the obligation to pay them in that form were simply shifted from interexchange carriers to end users. Instead, the Commission should allow all carriers, including those traditionally subject to retail rate regulation, to offer their customers a variety of alternative pricing plans – some more usage-sensitive, some more flat-rated – to cover the network costs that interstate access charges currently address. The Commission should also refine existing universal service mechanisms to accommodate what, under 47 U.S.C. § 254(g), would be one of the inevitable consequences of bill-and-keep: an increase in total telecommunications rates for end users in high cost areas. The carriers serving those end users, however, should receive additional federal subsidies only to the extent that the relevant end user rates would otherwise exceed an appropriate benchmark.

Finally, with the possible exception of intrastate access traffic, the Commission has legal authority to impose bill-and-keep for any exchange of traffic over the public switched network. That is true both for any interstate access service regulated under 47 U.S.C. § 201 and for any traffic governed by the intercarrier compensation standards of 47 U.S.C. §§ 251(b)(5) and 252(d)(2). Although section 252(d)(2) is ambiguous in some respects, it explicitly preserves bill-and-keep as a permissible default rule for all traffic subject to section 251(b)(5). Because this is an area in which national leadership is urgently needed, the Commission should impose bill-and-keep to the limits of its jurisdiction and, if necessary, persuade the states to follow suit.

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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Developing a Unified Intercarrier) CC Docket No. 01-92
Compensation Regime)

COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL, INC.

The ambition of the Telecommunications Act of 1996 is the creation of a telecommunications world characterized by much competition and little regulation: a world in which a carrier is just a carrier, a call is just a call, and private parties make the rules. This proceeding on intercarrier compensation is a bold and critical step toward realizing the Act's deregulatory vision, and Qwest applauds the Commission for opening it.

Of all the carriers that will be commenting in this proceeding, Qwest probably comes closest to sharing the Commission's own broad-based concern for the future development of the industry as a whole, and not just any particular segment of it. In the years since the Act's passage, Qwest has built itself into precisely the sort of boundary-shattering carrier that Congress envisioned, operating in almost every major sector of the telecommunications industry. Having merged with U S WEST, it is the nation's fourth largest incumbent local exchange carrier ("ILEC"), annually collecting roughly \$500 million in switched interstate access revenues. At the same time, Qwest is one of the country's largest interexchange carriers ("IXCs"), with more than \$650 million in annual switched interstate access *expenses*. Qwest is also a facilities-based competitive LEC ("CLEC") that competes for the customers of other ILECs, and to that end it will have deployed fiber rings in more than two dozen out-of-region cities by year's end. On top

of that, Qwest is one of the nation's largest providers of Internet backbone services and of various other services based on Internet protocol. And it provides wireless services to more than one million subscribers.

Qwest's objective is not to specialize in any particular one of these roles, but to pursue them all, in a free market, unfettered by regulations that perpetuate the legacy distinctions that have fragmented this industry. What Qwest seeks is an intercarrier compensation regime that ensures fair competitive conditions for all industry players and permits them to compete solely on their economic and technological merits. That, of course, is the Commission's own central goal in this proceeding. And, as the Commission itself has already tentatively concluded, the best way to ensure rational competition is to adopt bill-and-keep as the compensation rule for any hand-off of traffic on the public switched network.

As the Commission is aware, there now is no consistent scheme of intercarrier compensation rules; there is instead a crazy-quilt of different rules that arise from legacy regulation and follow legacy distinctions among carriers. Interexchange calls are governed by an "access charge" regime in which the carrier in the middle of a call pays the carriers on either end. Exchanges of traffic between LECs competing in the same service area are typically governed by a calling-party's-network-pays ("CPNP") regime, in which the originating carrier pays the terminating carrier for the latter's costs of transporting and terminating calls to their ultimate destinations. Interconnection between adjoining (non-competing) LECs is often, though not always, governed by bill-and-keep. And exchanges of traffic for the purpose of delivering a dial-up call from the customer of an incumbent LEC to a CLEC serving an Internet service provider ("ISP") is now governed by a CPNP regime that, under current plans, will be phased out over time to become more like a bill-and-keep approach. The persistence of these methodological

differences has very little to do with technology or economics and everything to do with the retention of outdated, economically irrational regulatory distinctions.

This proceeding should have, as its ultimate goal, the creation of a unified intercarrier compensation regime in which those legacy distinctions are obliterated, regulation is rare, and utility-maximizing market forces rather than regulatory mandates drive distinctions among telecommunications carriers and services. To glimpse what such a regime would be like, one need look no further than the world of wireless telecommunications, a world that the Commission has largely exempted from legacy regulation. That regulatory restraint has resulted in meaningful competition – based on price, coverage, and quality of service – among different facilities-based providers; in de-emphasis of rigid distinctions between retail local and long-distance services; and in proliferation of unregulated, competing retail plans that solve the problem of network cost-recovery through creative mixes of flat-rated and usage-sensitive end-user charges.

Although the analogy should not be overstated (in part because wireless carriers are typically not rate-regulated dominant carriers or carriers of last resort), the Commission's successful experiment in non-regulation of wireless services is nonetheless instructive as an objective for the telecommunications world as a whole. The ultimate goal of this proceeding should be, as with the Commission's treatment of wireless, a stable and uncomplicated regulatory environment in which *carriers* and their *end users*, rather than *regulators*, decide which calls should be treated like which other calls and how the *costs* of calls should be recovered over time. To reach that goal, the Commission should begin its analysis with the following first principles:

- ***Market-driven rates.*** The costs of a call should be recovered in a way determined as much as possible by the carriers handling them rather than by regulators. That

approach is optimal because there is no “right” way to price calls so as to recover a carrier’s total network costs. Put another way, regulation could never solve the problem of network cost recovery as well as the market; and, to avoid inefficiency and arbitrage, regulators should therefore leave resolution of that problem as much as possible to carriers and their end users.

- *Consistency.* The same basic principles of intercarrier compensation should apply to any hand-off of traffic over the public switched network for any traffic that touches that network. The rules should not vary with the traditional treatment of any given carrier under legacy regulation. Neither should those rules vary with the type of technology or architecture employed by a particular carrier within its network.
- *Simplicity.* When carriers and end users understand the rules and can rely on their continued applicability into the foreseeable future, they will make efficient decisions regarding the development and use of telecommunications facilities. In contrast, preservation of the existing patchwork of complex and constantly changing intercarrier compensation schemes would have the opposite effect: it would continue to depress rational facilities-based investment and skew the competitive marketplace.

These first principles should be uncontroversial, but they have powerful consequences for the outcome of this proceeding. In these comments, Qwest builds on these principles in proposing the following courses of action.

First, the Commission should adopt bill-and-keep as the appropriate default rule for all traffic, including access traffic, that uses the public switched network. (For these purposes, “bill-and-keep” is broadly defined to mean any compensation rule that would preclude a carrier from charging another carrier for any of the costs of its own local access facilities, including the loop and the local switch that serves it. See *NPRM* ¶ 8 n.10.) Particularly as competition expands and consumers enjoy greater choices among different telecommunications providers, bill-and-keep is the optimal default rule for intercarrier compensation because (1) it would eliminate market-distorting arbitrage opportunities, and the effects of the “terminating access monopoly,” without resort to regulatory intervention; (2) it would permit market forces, rather than regulation, to resolve the question of cost recovery; and (3) by setting intercarrier Compensation for

termination costs at a permanent rate of zero, it is far simpler and more predictable in application than any rival approach. Section I of these comments addresses these issues in detail.

Second, the Commission should seek further comment before reaching any final decision on the single most important variable that separates the different proposed versions of bill-and-keep: the proper allocation of responsibility for transport. Although the DeGraba proposal discussed in the NPRM is a promising start, that proposal falters in proposing a “penalty default” that may be inefficient and would automatically require time-consuming negotiations among carriers.¹ The Commission should nonetheless build on the DeGraba proposal and look for ways to improve it. It should focus that inquiry by emphasizing that an optimal transport solution would achieve the following objectives: (1) reduce the need for regulation, (2) prescribe an *efficient* default outcome that reduces the very need for negotiation in many cases, and (3) preserve appropriate incentives for the development of facilities-based competition in the provision of transport services. And it should accordingly investigate whether there might be efficient default rules that would permit originating carriers to relinquish transport responsibility at points that better match the ways in which carriers actually interconnect.

Third, to realize the full potential of bill-and-keep, the Commission should grant all carriers flexibility in the way in which they bill end users to recover the costs that they

¹ Patrick DeGraba and coauthors Jay Atkinson and Christopher Barnekov filed separate Office of Plans and Policy “white papers” in December 2000 proposing different versions of bill-and-keep, and their proposals form the backdrop of the NPRM. See Patrick DeGraba, “Bill and Keep at the Central Office as the Efficient Interconnection Regime,” OPP Working Paper #33 (2000) (“DeGraba”) and Jay M. Atkinson & Christopher C. Barnekov, “A Competitively Neutral Approach to Network Interconnection,” OPP Working Paper #34 (2000) (“Atkinson/Barnekov”). Although the two white papers appear to disagree on the question of transport (as discussed in Section II below), they agree on two basic principles of bill-and-keep: (1) that an originating carrier may not charge another carrier for costs internal to the first carrier’s network; and (2) that a terminating carrier should be responsible for all of its own termination costs (i.e., the cost of the loop and end-office switching).

previously recovered from other carriers. Adoption of bill-and-keep would not eliminate the network costs that LECs currently recover through access charges, and LECs would need to recover those costs directly from end users – rather than, as now, *indirectly* from end users through IXCs. Although bill-and-keep is an indispensable methodological step in the right direction, many of its principal benefits can be achieved only if the Commission simultaneously ensures that all carriers, including those subject to retail rate regulation because they have been deemed “dominant,” will have significant flexibility in the manner in which they charge end users for the services currently subject to access charges. The Commission would not achieve what it has set out to achieve if, in adopting bill-and-keep, it did no more than shift the current market-insensitive structure of access charge payments from IXCs to end users. Instead, incumbent LECs should be permitted to experiment, just as wireless carriers and CLECs now do, with a range of flat-rated and usage-sensitive plans for their subscribers.

Finally, although the elimination of access charges would require end users in high cost areas to bear much greater responsibility for the unusually high cost of serving them, the Commission should address that concern through appropriate adjustments to existing universal service mechanisms. In so doing, the Commission may need to increase federal universal service funding to defray some of the cost of serving those end users, but only to the extent that those end users would otherwise pay *rates* that exceed an appropriate benchmark. Moreover, the Commission should consider exercising its statutory discretion to expand the base of universal service contributors to include all providers of “telecommunications,” including, for example, providers of cable modem service.

The final section of these comments addresses the Commission’s legal authority to impose bill-and-keep for all traffic that uses the public switched network. With the possible

exception of intrastate access charges, the Commission has such legal authority with respect to all such traffic, including traffic that falls within the scope of 47 U.S.C. § 251(b)(5). Although the accompanying pricing provision – section 252(d)(2) – is ambiguous in a number of key respects, the bill-and-keep savings clause of section 252(d)(2)(B) confirms that, whatever else the statute may prescribe, it undoubtedly permits “arrangements that *waive* mutual recovery [of costs] (*such as bill-and-keep arrangements*).” 47 U.S.C. § 252(d)(2)(B) (emphasis added). Viewed in combination with section 252(d)(2)(A), that provision is most reasonably construed to give the Commission a *choice*, in prescribing a compensation scheme for any given class of traffic, between *either* bill-and-keep *or* a cost-based CPNP regime; and the Commission is free to choose the former rather than the latter if it believes that doing so would serve the public interest.

I. Bill-and-Keep Would Offer Substantial Advantages Over the CPNP and Access Charge Regimes.

The prevailing intercarrier compensation regime consists of two related systems. First, local traffic subject to section 251(b)(5) is governed by a pure CPNP scheme, in which the called party’s network collects full compensation from the calling party’s network for all of the costs of transporting and terminating a call. Second, conventional interexchange traffic, traditionally characterized by the involvement of *three* carriers in any given call, is governed by the “access charge” regime, in which the caller’s IXC pays both the calling party’s LEC and the called party’s LEC for all costs of originating and terminating the call.² One key feature those regimes

² The Commission devoted only one paragraph in the NPRM (§ 97) to the application of bill-and-keep to interstate access traffic. In that paragraph, the Commission noted that, while “[t]he long-term goal of this *NPRM* is to develop a uniform regime for all forms of intercarrier compensation, including interstate access,” it did not “anticipate implementing major changes to our access charge rules in the initial phase of this proceeding.” *Developing a Unified*

have in common is a pervasive need for regulation: because any given LEC is entitled to collect compensation from other carriers to recover costs associated with the LEC's own network, regulators must ensure that the rates charged bear some resemblance to the costs incurred.

Bill-and-keep would eliminate such intercarrier compensation and would instead require each carrier to *internalize* the costs of its network and pass them on to its own end users. Thus, particularly where those end users have choices among telecommunications providers, bill-and-keep would permit market forces, rather than regulation, to determine the best means for recovering those costs; and, in *all* circumstances, it would deprive carriers of any opportunity to exact supracompetitive rates from another carrier for the termination of any call. In a nutshell, that emphasis on simple, market-driven solutions to traditionally vexing regulatory problems explains why bill-and-keep is preferable to either CPNP or the access charge regime. Bill-and-keep is preferable to those alternatives *now* as a method of eliminating arbitrage opportunities, as the Commission has learned in the context of ISP-bound traffic. And, as discussed below, bill-and-keep will become even more preferable as competition continues to develop and the need for regulation of end user rates subsides. Because in this proceeding the Commission should pick a compensation rule to last well into this new century, it should choose a rule that is designed to accommodate, rather than frustrate, the development of full-blown competition in this industry.³

Intercarrier Compensation Regime, Notice of Proposed Rulemaking, CC Docket No. 01-92, FCC 01-132 (rel. Apr. 27, 2001) ("NPRM"), The Commission explained that, under the so-called *CALLS* plan, the structure of current access charge regime for price-cap LECs will persist, with some modifications, until the expiration of the plan on June 30, 2005. See *Access Charge Reform*, Sixth Report and Order, 15 FCC Rcd 12962 (2000) ("CALLS Order"). A similar transitional plan has been proposed for non-price cap LECs. See *Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, Notice of Proposed Rulemaking, 16 FCC Rcd 460 (2001).

³ Under the Commission's current rules for "local" traffic covered by 47 U.S.C. § 251(b)(5), a terminating carrier is entitled to collect, within the category of "termination," only the costs of

A. Bill-and-keep is the most direct, deregulatory solution to the terminating access monopoly problem.

At its root, the problem of intercarrier compensation arises because there are many telecommunications networks in the world, calls must cross from one network to another, and some rule must govern how compensation for the costs of those calls should be allocated across those networks. The traditional solution is to permit the terminating carrier to charge the originating carrier (or the IXC) for its costs in completing the call. The most basic flaw in that approach is that the terminating carrier has an obvious incentive to charge other carriers rates that exceed compensatory levels. Moreover, because the terminating carrier typically controls the only switch and only line leading to the called party (and thus enjoys a so-called “terminating access monopoly” in placing calls to that party), it often has not just the incentive, but also the ability, to charge extracompany rates to the other carriers, unless regulators step in to cap the rates. *See NPRM* ¶ 53.

end-office switching; it may not recover any portion of its fixed loop costs, which are borne entirely by that carrier’s end users. *See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, 11 FCC Rcd 15499, 16024-25 ¶ 1057 (1996) (“Local Competition Order”); *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, Order on Remand and Report and Order, CC Docket Nos. 96-98 and 99-68, FCC 01-131 (rel. Apr. 27, 2001) ¶ 68 (“ISP Reciprocal Compensation Order”). (Under the existing access charge regime, the regulatory goal, though not in all cases the current practice, is to remove loop costs from the charges that IXCs pay LECs.) Thus, the most straightforward difference between bill-and-keep and CPNP is that, under CPNP, the originating carrier compensates the terminating carrier for the costs of end office switching (in addition to transport), whereas under bill-and-keep the terminating carrier absorbs those end office switching costs itself. The question of transport is somewhat more complicated: as discussed, under both CPNP and some but not all versions of bill-and-keep, the originating carrier pays all the costs of transport. (Under the access charge regime governing interexchange calls today, the IXC pays the applicable transport costs.) We discuss these distinctions in greater detail below.

So long as one carrier may charge others for the costs of terminating calls, this “terminating access monopoly” would be a problem even under the best of circumstances. The terminating carrier could often succeed in imposing extracompensatory rates even if the carriers that must pay them were able (and they usually are not) to flow them back to their own end users. That is so because those end users typically have no control over the *terminating carrier’s* subscribers and thus are likely to have little leverage in persuading those subscribers to choose a different carrier with lower terminating rates. As it happens, existing regulation makes the problem even worse, because it generally *precludes* the originating carrier or the EXC from flowing a particular terminating carrier’s charges back to the calling parties or from assessing those charges on the terminating carrier’s own customers. For example, state regulators often (though not always) preclude incumbent LECs from imposing usage-sensitive rates on residential subscribers for local calls; that is one reason why incumbent LECs have complained that their end users lack adequate price signals to use the local network efficiently when placing dial-up calls to ISPs. An analogous restriction arises in federal law under 47 U.S.C. § 254(g), which requires EXCs to spread their recovery of access charges across their entire customer base – and therefore shields the calling party from any awareness of, much less any need to complain about, the access charges assessed by the terminating LEC.⁴

Properly implemented, bill-and-keep would address the very root of the terminating access monopoly problem by depriving the terminating carrier of the right to collect from another carrier any amount for the termination of a call. Conversely, so long as the Commission retains the CPNP and access charge regimes, the terminating access monopoly problem will

⁴ See 47 U.S.C. § 254(g) (“the rates charged by providers of interexchange telecommunications services to subscribers in rural and high cost areas shall be no higher than the rates charged by each such provider to its subscribers in urban areas,”).

persist and, particularly when combined with regulatory restrictions on the flow-back of terminating carrier charges to calling parties, will always create a need for regulation to keep those charges under control. Such regulation has traditionally taken the form of access charge regulation (for interexchange calls) and reciprocal compensation rules (for local calls). Indeed, the consequences of the terminating access monopoly are so acute that the Commission recently had to take the unusual step of subjecting CLECs to its general rate regulation authority under section 201 of the Communications Act, limiting the access charges that CLECs may assess IXCs for the termination of interexchange calls.⁵

The Commission's need to exercise that general ratemaking authority over CLECs is a powerful sign that something fundamental is wrong with the existing intercarrier compensation regime. Over the long term, as consumer choices expand, fewer and fewer carriers will be dominant, and more and more carriers should be freed from any need for regulatory oversight of the rates they charge their end users. Put another way, in the long run, most carriers will be CLECs, whether or not they once were ILECs. In its starkest terms, therefore, the question here is whether it makes sense, as an intercarrier compensation policy for the new competitive telecommunications era, to subject all carriers (including CLECs) to more regulation rather than less. As discussed in the following sections, the answer is plainly no, and bill-and-keep – which would resolve the terminating access monopoly problem potentially *without* regulation – is a far preferable alternative.

⁵ See *Access Charge Reform, Reform of Access Charges Imposed by Competitive Local Exchange Carriers*, Seventh Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 96-262, FCC 01-146 (rel. Apr. 27, 2001).

B. Properly implemented, bill-and-keep would leave the question of cost recovery, as much as possible, to market forces rather than regulation.

Few issues have been the subject of greater regulatory controversy in recent years than (i) what the “true” costs of terminating telecommunications traffic are, (ii) what the most rational rate structure for recovering such costs is (*e.g.*, per minute vs. flat-rated, the proper role for “peak load” considerations, etc.), and (iii) whether termination costs are typically the same for one class of carriers (such as incumbent LECs) as they are for another (such as CMRS providers or those CLECs that specialize in ISP-bound traffic). And, as the Commission itself has acknowledged, regulators, despite their expertise and dedicated effort, are unlikely ever to set termination rates at truly efficient levels. *See ISP Reciprocal Compensation Order* ¶¶ 75-76. That is so for several independent reasons.

First, it may be *conceptually* impossible for any regulator to devise a single, economically rational mechanism for recovering termination costs. In a traditional business with low fixed and substantial incremental costs, a company is expected to set price at marginal cost. But one attribute of a typical telecommunications network (and of any industry with very high fixed costs and low marginal costs) is that, at all points on the supply-demand chart, average cost exceeds marginal cost. Thus, setting prices at marginal cost would obviously leave the telecommunications company unable to recover its fixed costs.

That attribute traditionally fueled the beliefs that a telecommunications network is a natural monopoly; that one carrier (*e.g.*, the Bell System) should provide ubiquitous services within a particular calling area with minimal interconnection obligations; and that rates could be adjusted to reflect a wide range of different political and social goals so long as that carrier’s cost recovery was sufficient in the aggregate. Ever since MCI began offering services in competition with the Bell System, however, regulators have struggled with the problem of setting intercarrier

rates for recovery of costs. There is no economically satisfying solution to that problem, because (1) individual calls “cause” only very small (and sometimes negligible) marginal costs, and (2) every carrier must find some way to recover its fixed costs over time. Traditionally, the Commission has regulated money flows from one carrier to another largely (though by no means entirely) on a per-minute basis, even as it has looked for additional ways to convert per-minute charges into flat-rated ones.⁶ For example, that per-minute cost-recovery framework has largely governed access charges and compensation for LEC-to-LEC traffic, including ISP-bound traffic.

But per-minute cost recovery – and, more generally, any single regulatory plan for intercarrier cost recovery – inevitably fails to reflect the way in which costs are actually incurred. The case of transport and termination costs, the costs principally at issue in this proceeding, is particularly instructive. A carrier incurs most such costs not when it terminates a given call, but when it purchases the switching capacity necessary to ensure that the call can be terminated during the peak load portion of the day. *See, e.g., ISP Reciprocal Compensation Order* ¶ 76. Indeed, for that reason, per-minute termination pricing arguably creates a cross-subsidy running from those who use the network principally during off-peak hours to those who use it principally during peak hours. Of course, regulators could try to tweak the system such that carriers charge more for use during peak periods, an approach analogous to a cost-recovery methodology sometimes used in the electric power industry.⁷ But, even apart from the pragmatic obstacles to

⁶ *See CALLS Order*, 15 FCC Rcd at 13017 ¶ 134; *Access Charge Reform*, First Report and Order, 12 FCC Rcd 15982, 16034-35 ¶¶ 123-24 (1997); *see also Access Charge Reform*, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 14221, 14327-33 ¶¶ 208-225 (1999) (“Pricing Flexibility Order”).

⁷ *See* W. Kip Viscusi, John M. Vernon & Joseph E. Harrington, *Economics of Regulation and Antitrust* 379-86 (3d ed. 2000).

that approach (discussed below), that arrangement would also misrepresent the inevitably lumpy manner in which costs (*i.e.*, the costs of the necessary switching capacity) are incurred.⁸

Second, even if it were *conceptually* possible for regulators to set cost-sensitive rates to recover termination costs, the pragmatic obstacles might nonetheless be insurmountable. To begin with, switching technology changes over time, and regulation simply cannot keep pace with the latest cost-reducing developments. Also, because different carriers have different network architectures and termination facilities, they have different costs of termination, and it would be nearly impossible for regulators to address those costs on a carrier-by-carrier (or switch-by-switch) basis. As the Commission has rightly observed, “there may be administrative difficulties in establishing peak-load pricing schemes that may outweigh the benefits,” since the differences in termination costs “are likely to vary depending on the network, and the amount and type of traffic terminated at a particular switch.” *Local Competition Order*, 11 FCC Red at 16028-29 ¶ 1064; *accord ISP Reciprocal Compensation Order* ¶ 76.

By definition, bill-and-keep would resolve many of these problems so long as every carrier has some flexibility in the assessment of retail end user rates. The most immediate benefits of bill-and-keep would appear in the form of a much smaller role for regulation in the business practices of CLECs and, where competition has freed them from traditional rate regulation, incumbent LECs as well. In those settings, the core advantage of bill-and-keep is that it would allow carriers to come up with menus of creative pricing plans to recover (from end users) the costs of the network generally, including the costs of terminating traffic. Where competition has developed, those plans would be subject to full-blown market pressures: if the

⁸ As discussed below, many of these concerns also apply to transport costs, which are lumpy as well. Cables and fibers used for such transport are installed in bulk, not on an incremental strand-by-strand basis as they are needed.

rates are too low, the carrier will fail to recover its costs, and if they are too high (compared to what other carriers offer), consumers will switch to other carriers. Those market pressures are much more likely than regulatory prescriptions to produce efficient results.

As discussed in Section III below, a true solution to this set of problems would require a commitment, not just to bill-and-keep, but also to some flexibility in the rates that carriers may charge their end users for the recovery of costs that used to be recovered from other carriers. But bill-and-keep would remain a necessary element of the solution for the reasons discussed elsewhere in this section. Moreover, precisely *because* it shifts the cost recovery responsibility to end users rather than other carriers, bill-and-keep would permit far greater flexibility, and thus far greater efficiency, than the existing intercarrier compensation schemes in the recovery of termination costs, even if those resulting rates are still subject to regulatory oversight. That is because a carrier has a steady, one-to-one relationship with any given subscriber that it does not have with the multiplicity of other carriers. A carrier and its subscriber can enter into a variety of efficient plans customized to their particular needs – *e.g.*, a large bucket of minutes for a flat monthly fee. Under the existing compensation schemes, by contrast, each carrier may generally *have* to recover costs from every other carrier on a call-sensitive basis because there may be no other feasible way to allocate such costs *among different carriers*. That fact alone may typically preclude any non-usage-sensitive rate structure for the recovery of termination costs under any CPNP regime.

C. Bill-and-keep would reduce opportunities to engage in regulatory arbitrage and anticompetitive uncertainty about the future course of regulation.

Any time a regulator sets intercarrier compensation rates at levels that do not faithfully track the frequently changing costs of the work performed – a problem that, as discussed, will beset any effort to approximate termination costs with regulated rates (see *ISP Reciprocal*

Compensation Order ¶¶ 75-76) – the inaccuracy will give rise to destabilizing arbitrage opportunities. The most notorious example involves the termination of ISP-bound traffic. Although many CLECs have provided a variety of services to a broad base of customers, some CLECs have specialized in the termination of traffic to ISPs. CLECs have done so not because that class of services creates greater overall *value* than other telecommunications services, but principally because (until the Commission intervened this past April) the prescribed termination rates exceeded the underlying costs of termination, and the CLECs in question were thus able to extract extracompensatory subsidies from originating carriers. *See ISP Reciprocal*

Compensation Order ¶¶ 67-76. As discussed above, that problem was exacerbated by the fact that most incumbent LECs cannot flow those extracompensatory costs back to the end users that make the calls at issue, because, given existing regulatory obstacles, most incumbents cannot generally charge residential subscribers usage-sensitive rates for local traffic or dial-up Internet-bound traffic. As a result, the end users initiating such traffic received no price signals encouraging them to use the network efficiently.

Moreover, because the effects of regulation on the marketplace are so unpredictable, the short-term arbitrage opportunities created by regulation sow uncertainty and instability, and those factors in turn impair rational investment decisions.⁹ That is one essential lesson of the ISP reciprocal compensation experience: whenever a regulatory arbitrage opportunity arises, a few carriers will adopt business plans designed primarily to take advantage of that opportunity. At

⁹ Arbitrage opportunities can also retard the deployment of value-creating new services to consumers. For example, DeGraba claims that, “[b]ecause the use of per-minute termination charges appears to be incompatible with the use of packet-switched technology, carriers that terminate more traffic than they originate may well refuse to cooperate with other carriers in jointly adopting compatible packet-based technologies if this means that they will lose reciprocal compensation revenues.” DeGraba ¶ 85.

that point, changing the rules to restore regulatory rationality can cause severe economic dislocations.

Bill-and-keep would reduce these inefficient arbitrage opportunities by requiring each carrier to internalize its own costs of termination, thereby replacing regulatory solutions to the question of cost-recovery with market-driven solutions. The example of ISP-bound traffic is instructive. So long as originating LECs must pay for the costs of terminating such traffic, and so long as they are barred from "flowing back" those costs to the particular end users that cause them, the result will be economically inefficient on two levels: termination rates will imperfectly match termination costs, and -- just as important -- cost causers will receive no price signals (from either a carrier or an ISP) to use the network efficiently.

Bill-and-keep would largely eliminate both of those problems. A CLEC providing termination services to an ISP, for example, would negotiate a price with the ISP itself to cover the costs of termination, and the products of such free-market negotiation would almost certainly approximate "true" termination costs more effectively than regulation could. Similarly, bill-and-keep would, in those same circumstances, provide what CPNP can never provide (at least in the absence of any flow-back mechanism): price signals for end users to use the network efficiently. In particular, since bill-and-keep would require ISPs, rather than originating LECs, to pay for the costs of termination, those ISPs would often have, for the first time, an incentive to ensure that their own subscribers use the network with greater efficiency.

A different regulatory dilemma that has arisen from existing intercarrier compensation schemes concerns the recent growth of Internet telephony services. The popularity of Internet telephony has grown in part because enhanced services are typically exempt from access charges

under current regulation.” The contours of that “access charge exemption,” however, are unclear. For example, some IXCs claim that *any* voice traffic employing IP is subject to the access charge exemption, even when it is otherwise indistinguishable from conventional long-distance traffic, a position that, in Qwest’s view, is inconsistent with existing Commission policy. So long as the access charge regime persists in anything like its current form, however, disputes concerning the scope of the exemption will assume extraordinary importance as the technology for delivering interexchange voice calls through Internet protocol (“IP”) becomes more and more efficient. To ensure technological neutrality in this setting, the Commission could either repeal the access charge exemption but do nothing else or it could eliminate the access charge regime to which the exemption applies. Because that regime is itself fatally flawed for the reasons discussed elsewhere in these comments, Qwest supports the latter option.

The arbitrage issues raised by Internet telephony and those raised by intercarrier compensation for ISP-bound traffic may differ in a number of respects, but they share two principal characteristics. First, they reveal that the multiplicity of compensation schemes for different classes of traffic enormously complicate predictions about the regulatory obligations of any given carrier with respect to any other carrier. Second, and more generally, they both point to the disconcertingly prominent role that regulation has assumed in shaping the business plans that define the present and future course of this industry.

The ultimate shape of the telecommunications world should not turn on the outcome of such academic regulatory disputes as whether a LEC-to-CLEC handoff of ISP-bound traffic is more “like” an ordinary exchange of local traffic or more “like” the cooperation of two LECs in

¹⁰ See generally *Federal-State Joint Board on Universal Service*, Report to Congress, 13 FCC Rcd 11501 (1998) (“1998 Report to Congress”).

the origination and termination of conventional interexchange traffic. Nor should it turn on the fine points of distinction between “computer-to-computer” versus “phone-to-phone” IP telephony. See *1998 Report to Congress*, 13 FCC Rcd at 11543-44 ¶¶ 87-88. The Commission should drain such disputes of their principal significance – and eliminate the anticompetitive uncertainty that they have sown – simply by adopting bill-and-keep as the single compensation rule for the hand-off of all traffic over the public switched network for any traffic that touches that network.”

Finally, although the Commission had once expressed concern that bill-and-keep would create inefficient incentives for carriers to specialize in *originating* traffic, it has since suggested that this concern may have been somewhat overstated. As it now observes, “[a] carrier must provide originating switching functions and must recover the costs of those functions from the originating end-user, not from other carriers. Originating traffic thus lacks the same opportunity for cost-shifting that reciprocal compensation provides with respect to serving customers with disproportionately incoming traffic.” *ISP Reciprocal Compensation Order* ¶ 73. Of course, it is always hazardous to predict that any given regulatory regime, even a minimalist one such as bill-and-keep, will produce no regulatory anomalies. But we fully agree with the Commission that bill-and-keep is far less likely to produce such anomalies than the CPNP regime has already been shown to produce.

¹¹ The Commission has not sought comment on intercarrier compensation for any hand-off of information service traffic to an Internet backbone. Cf. *NPRM* ¶ 2. In the backbone context, compensation issues have worked themselves out without any government involvement at all: no backbone provider is dominant; “peers” drop traffic off to other peers at the closest point of interconnection; and although non-peers must typically pay for transport and termination services from other backbone providers, those services are typically quite competitive. See generally Michael Kende, “The Digital Handshake: Connecting Internet Backbones,” OPP Working Paper #32 (2000).

D. Bill-and-keep is at least as consistent as CPNP with principles of cost causation.

Supporters of the existing CPNP approach claim that bill-and-keep is inefficient because it does not place all the costs of a call on the party that initiates the call. Although bill-and-keep is not a perfect cost-allocation scheme, it is nonetheless at least as efficient, and perhaps more so, than CPNP in this respect.

In any call, both the calling party and the called party make choices that result in the accrual of costs. A calling party chooses to place a call and, at every moment during the call, chooses whether to allow it to continue. The called party chooses whether to accept the call and also chooses, at each point after the first moment, whether to maintain the connection. (To be sure, as discussed below, the terminating carrier typically has no control over whether it incurs call set-up costs; it is in that respect at the mercy of the calling party.) For its part, the terminating carrier makes investment choices that determine the efficiency of its network architecture and termination technology, and those choices also affect the level of costs associated with the receipt of a call.

Under the CPNP regime, the called party and its carrier bear none of the costs of the call, even though each is in a position to reduce those costs (the called party by hanging up sooner, and the terminating carrier by cutting termination costs). That approach is inherently inefficient: because both the called party and its carrier are able to reduce the costs incurred in a call, they should bear some responsibility for paying those costs. Indeed, at least in theory, the CPNP regime could deter many calls from being made even when the aggregate benefits of a call to both parties exceed any usage-sensitive costs of the call, at least where the two parties have no independent business relationship and the originating party has no firm expectation that the called party will reciprocate in the future with an all-expenses-paid call of his own. For example,

if the cost of an interexchange call (or a local call billed on a usage-sensitive basis) is 3, and each party to the call would derive from it a benefit of 2, the call *should* be made from an efficiency perspective, but is *unlikely* to be made unless its costs can be spread out to each party that benefits from it.

For these reasons alone, a bill-and-keep scheme is as efficient as any CPNP approach. It gives calling parties appropriate incentives to make efficient calls that would not otherwise be made; it gives called parties appropriate incentives to end calls earlier if their continuation would be inefficient; and it places greater obligations on each carrier to internalize the costs of its network, thereby inducing each carrier to ensure that it employs efficient termination technology.¹² Bill-and-keep may not embody the perfectly efficient solution to the problem of cost causation: the share of costs a called party may appropriately be said to “cause” is a complex issue, and the “true” share (however defined) may well be different from the share that the called party would be expected to bear under any particular version of bill-and-keep. But, at a minimum, the solution bill-and-keep prescribes to the cost causation problem is no more arbitrary than the solution prescribed under the CPNP approach.

11. The Question of Transport Requires Considerable Analysis and Deliberation.

Under any bill-and-keep regime, a carrier would be expected to provide its own terminating switches and loops and, as a general matter, would be precluded from recovering the costs of those facilities from originating carriers. There remains the problem of assigning

¹² Of course, even under a CPNP regime, carriers will have a substantial incentive to reduce their termination costs, because (1) regulated termination rates tend not to be based on the actual termination costs of any given carrier other than the incumbent LEC, and (2) many calls will require a carrier to internalize termination costs no matter what the intercarrier compensation scheme, because those calls will have *originated* on the terminating carrier's network as well. Nonetheless, at the margin, bill-and-keep does present some additional incentive beyond what CPNP would provide to ensure efficiency in termination.

responsibility for providing the transport necessary to ensure physical interconnection between the networks of two carriers. As discussed below, the transport question is sufficiently complex that the Commission should seek extensive comment before settling upon any definitive answer. But that should not deter the Commission from (1) acting now in adopting bill-and-keep, in principle, as its intercarrier compensation rule and (2) sharpening the additional inquiry into the transport question by identifying the key characteristics, discussed below, of an optimal transport default rule.

A. The concept of POIs.

One central concept in any discussion of transport is the “point of interconnection,” or “POI.” It is important to distinguish between two related but distinct uses of the term “POI.” A *physical* POI is the place where two networks actually interconnect. For example, the POI between a LEC and an IXC is typically the latter’s “point of presence” (or “POP”) at the edge of the former’s network. And, “for the transmission and routing of telephone exchange service and exchange access,” an incumbent LEC must provide physical interconnection to “any requesting telecommunications carrier,” including any CLEC or CMRS provider, at “any technically feasible point within” the incumbent’s network. 47 U.S.C. § 251(c)(2).

A *financial* POI is the demarcation point signifying where one carrier’s responsibility to cover the costs of a call begins and the other carrier’s responsibility ends. That financial POI may or may not coincide with the physical POI. For example, the physical POI between a LEC and an IXC is the POP, but, under the current access charge regime, the MC bears financial responsibility to the LECs on either side of an interexchange call for the costs of originating, transporting, and terminating the call from one end user to another; the relevant financial POIs are thus, in effect, the location of those end users (or, more precisely, points somewhere between

the end users and their central office switches, depending on the applicable access charge rules). Similarly, although CLECs or CMRS providers may generally demand physical interconnection under section 25 I(c)(2) "at any technically feasible point" within an incumbent LEC's network, the financial POI under CPNP is often far removed from that point, since an originating carrier must cover the transport and termination costs of the terminating carrier. By contrast, the financial POI for adjacent, non-competing incumbent LECs often does coincide with the location of the relevant physical POI.

This description of physical and financial POIs provides an important, alternative way to conceptualize how bill-and-keep operates in practice. In essence, a bill-and-keep regime is an approach to intercarrier compensation that, among other things, establishes a *financial* POI between two carriers at some point between the originating carrier's network and the terminating carrier's central office, irrespective of the *physical* POI that those carriers might ultimately choose. For example, under the default rule proposed by DeGraba (discussed in more detail below), a carrier would have financial responsibility for delivering a call to the terminating carrier's central office, but it may well choose to purchase transport from the terminating carrier for a portion of the way. In those circumstances, the physical POI could fall in any number of places between the two carriers' networks, but the financial POI (under the default rule) would remain the terminating carrier's central office. In that sense, what DeGraba proposes is a relatively limited form of bill-and-keep; a more comprehensive form might move the financial POI closer to the edge of the terminating carrier's network.

One central objective of the current proceeding is to define a technology-neutral rule for the financial POI that would be applicable to any hand-off of telecommunications on the public switched network, irrespective of legacy regulation. As discussed more fully below, such a rule

would be most efficient if, among other things, it allowed financial POIs to coincide with workable physical POIs in as many circumstances as possible – or, to put the same point another way, if it prescribed a default rule for transport responsibility that, *without any need for further negotiation*, produced a non-wasteful transport outcome in the majority of cases. Such a rule would permit carriers to get on with their business immediately; only later would they need to engage, at their option, in the time-consuming exercise of negotiating ways to reach even more efficient solutions to their individualized problems than the one prescribed by the default rule. To the extent, however, that this approach would permit an originating carrier to relinquish responsibility for transport at the edge of the terminating carrier’s network, it would present significant practical concerns that the Commission should carefully consider, as discussed below

B. The DeGraba and Atkinson/Barnekov proposals.

The NPRM describes two alternative solutions to the transport problem. First, under the DeGraba proposal for “central office bill-and-keep” (“COBAK”), the originating carrier in a two-carrier call would bear total responsibility for delivering a call to the terminating carrier’s end office, thereby inducing each carrier to employ efficient switching technology.” If there is no competitive market for such transport, then, under DeGraba’s proposal, the rates that the terminating carrier may charge the originating carrier would be subject to regulation. See DeGraba ¶¶ 120-21. In a three-carrier call involving an intermediate carrier (such as an IXC) with which the caller has an independent contractual relationship, the originating carrier would

¹³ Depending on the Commission’s ultimate solution to the question of transport, the terminating access problem discussed in section I(A) above may persist in somewhat attenuated form in light of the terminating carrier’s “bottleneck control over the trunk port at the central office.” *NPRM* ¶ 53. If the DeGraba proposal were accepted in its entirety – a course that Qwest does not recommend – it might need to be supplemented with an additional rule permitting access to the trunk port at non-monopolistic rates.

bear responsibility for delivering the call to the point of presence of the LXC, and the LXC would then be responsible for delivering the call to the terminating carrier's end office. *See id.* ¶¶ 23-30. Whether a particular call should be treated as a two-carrier or a three-carrier call for these purposes ultimately turns on whether any intermediate carrier has an independent contractual relationship with, and thus the ability to recover transport costs from, the calling party.¹⁴

Under the Atkinson/Barnekov proposal, interconnecting carriers would evenly split the costs "solely incremental to interconnection." The Atkinson/Barnekov paper itself (at ¶¶ 71 and 72) leaves it somewhat unclear whether the interconnection costs to be split evenly would include the cost of transport outside of a local calling area. Also, even though their paper does not itself say so, the Atkinson/Barnekov proposal for splitting costs has led some to suggest that, when carriers disagree about the proper designation of the transport facilities for which they both must pay, they would routinely seek regulatory intervention to resolve the dispute. Indeed, in the

¹⁴ In the *NPRM*, the Commission attributed to Qwest the suggestion that "a bill-and-keep arrangement does not work when three carriers are involved in the transport and termination of traffic, because the middle carrier that transports the traffic from one LEC to the other does not really have a 'customer' involved in the call from which it can recover costs." *NPRM* ¶ 71. Three-carrier scenarios fall into two categories: those in which the end user has an independent relationship with the intermediate carrier (such as an LXC), and those in which it does not. Where the end user *does* have an independent relationship with the intermediate carrier, the sole obligation of the originating carrier under bill-and-keep is to transport the call to a point of interconnection with that intermediate carrier, which must terminate the call to the third carrier and recover its own transport costs from the end user. In contrast, the concern identified by Qwest and addressed by the Commission arises only with respect to the *second* category of three-carrier scenarios, in which the end user *lacks* an independent relationship with the intermediate carrier. In a typical example, a "transiting" LEC provides transport functions for the originating carrier without an opportunity to recover the costs of those functions from any relevant end user customer. In that context, a sensible bill-and-keep approach, such as DeGraba's, would treat this as a *two-carrier* call: it would require the originating carrier to ensure transport – through one means or another – to some point of interconnection with the terminating carrier. The originating carrier may choose to provide that transport itself, or it may choose to use the transport services of a transiting carrier. If it chooses the latter option, it must of course pay the transiting carrier for providing those services.

absence of additional clarification, it is difficult to see how implementation of this cost-sharing approach could proceed without either a cumbersome bidding process or some other form of substantial regulatory oversight.

All other things being equal, the DeGraba proposal appears more likely than the Atkinson/Barnekov alternative to avoid unnecessary regulation, and many of the comparative benefits of the DeGraba proposal are simply the product of avoiding the regulatory indeterminacy that would arise under the Atkinson/Barnekov framework, at least as we understand it. Under that latter framework, as DeGraba observes, “if one network wanted to interconnect at a single point, while the second carrier wanted to interconnect at multiple points, it is not clear how an arbitrator would decide this issue.” DeGraba ¶ 69. Similarly, it would be exceedingly difficult, in practice, for regulators to identify the costs that are properly designated as the “incremental cost[s] of transport.” See *id.* In contrast, the DeGraba default rule would lead to private negotiations that could produce efficient interconnection arrangements: Where “two networks both originate and terminate traffic, it generally will be in their mutual interest to negotiate a meet-point interconnection arrangement, since it is generally cheaper to build a single transport trunk than for each individually to construct a separate transport trunk” (the default consequence upon impasse). *Id.* ¶ 73.

One flaw in DeGraba’s proposal, however, is that the default outcome it prescribes is a penalty default: *i.e.*, it is explicitly inefficient because it would usually make no sense for each carrier to build its own transport facilities all the way to each other carrier’s central office to carry only the traffic it originates, and carriers would therefore be required to negotiate around the rule. (Put another way, the *financial* POI prescribed by DeGraba’s approach would almost never coincide with any sensible physical POI.) Although private negotiations are often better

than regulation as a means of resolving difficult problems, the very process of negotiation imposes significant costs, and the optimal default rule would avoid *both* regulation *and* negotiations whenever possible. For example, the DeGraba approach might not effectively restrain any incentives carriers have to delay negotiations in various circumstances – or to refuse to engage in them altogether – to the detriment of their competitors.

There are other, related respects as well in which DeGraba's proposal fails to resolve important questions. In particular, while DeGraba gives a sound justification for adopting some clear financial POI – *i.e.*, some clear default rule subjecting an originating carrier to all the costs of transport up to a defined point of interconnection – he provides less justification for designating the terminating carrier's "central office" (or "end office") as that point. Requiring the originating carrier to deliver calls so deeply into the terminating carrier's network may be problematic. Among other concerns, it increases the likelihood that, at some point in the call's path, there may be few transport alternatives outside of the terminating carrier's network, and that in turn would inevitably lead to calls for regulatory intervention in the rates the terminating carrier may charge for providing that transport. *See generally* DeGraba ¶¶ 120-21. And DeGraba's use of the "central office" as the demarcation point in carrier responsibility for a call would inevitably lead to difficult implementation questions concerning which facilities, in fact, would qualify as central offices, a point that DeGraba himself acknowledges. *See id.* ¶¶ 103-08. The Commission should hesitate before adopting an interconnection rule for the 21st century that incorporates, as a key element, a technological convention of the 20th century.

One imaginable alternative would be "POIBAK" (rather than DeGraba's "COBAK") – a responsibility to deliver traffic only to the *physical* point of interconnection established through any existing POI designation process. That approach would at least have the advantage of

familiarity. But because many of the existing physical POIs were never intended to coincide with financial POIs, it is at best unclear thus far whether mechanically designating any existing physical POI as the relevant financial POI would generally produce fair or efficient results. More fundamentally, since the POI designation procedures differ for LEC-to-LXC, LEC-to-CMRS, and LEC-to-LEC traffic, and because they tend to require significant regulatory involvement, there would also be significant questions about whether complete adoption of those procedures here would be consistent with principles of technological neutrality and regulatory non-intervention.

C. The elements of a sensible transport solution.

Although the DeGraba proposal is a useful starting point for further discussion, it does not provide a complete and satisfactory answer to the problem of transport. The Commission should develop a fuller record before adopting any ultimate solution, and it should focus further comment by embracing the following three principles.

First, an optimal solution to the transport problem would reduce, to a bare minimum, any role for regulatory intervention to mediate particular carrier disputes. As DeGraba recognizes, the best way to achieve that goal is to prescribe a clear default rule that requires little case-by-case elaboration. That, as discussed, is the principal advantage of the DeGraba proposal over the Atkinson/Barnekov alternative.

Second, to reduce the need for time-consuming *negotiation*, the specified default outcome should be not just clear, but also *efficient* in most cases: it should be an outcome that usually makes sense as an economic and technological matter. It therefore should not be, as in DeGraba's proposal, a penalty default that parties are inevitably required to circumvent through negotiation, with all of its attendant transactions costs, and it also should not be a default

outcome that carriers could manipulate simply to impose anticompetitive costs on their rivals. That goal and the separate goal of reducing regulatory involvement may be in some tension, but they are not in irreconcilable conflict, and harmonizing them is one of the principal challenges of this proceeding.

Finally, any transport solution should preserve appropriate incentives for the development of facilities-based competition in the provision of transport services. The DeGraba version of bill-and-keep would leave a significant role for regulation in determining transport rates, at least where the terminating carrier exercises market power in the provision of transport. See DeGraba ¶ 121. But just as regulation should always be the exception rather than the rule, the Commission should minimize the circumstances in which one carrier's entitlement to another's existing transport facilities at forward-looking cost would deprive the first carrier of an adequate incentive to build facilities of its own. In a growing number of areas, facilities-based providers have built, or have announced plans to build, competitive transport facilities. Facilities-based competition in the provision of such services should eliminate the need for regulatory intervention. The rules the Commission adopts in this proceeding should be built to last indefinitely, and they should be written on the assumption that facilities-based competition, particularly in the provision of transport, will and should be an increasingly pervasive feature of the telecommunications landscape.

An alternative means of achieving the same objective – reducing regulatory intervention in the provision of transport – is to give an originating carrier some flexibility in deciding for itself where to deliver traffic in the terminating carrier's network; the terminating carrier would then assume full responsibility for transporting the call from that point to its own end office and, ultimately, the called party. (In contrast, under DeGraba's approach, the originating carrier

would be responsible for transport deep into the terminating carrier's network – indeed, all the way to the central office serving the called party.) This alternative approach would present a mix of advantages and disadvantages. First, the closer to the edge of the terminating carrier's network the call is dropped off, the less need there will be for regulatory oversight of the transport rates needed to deliver the traffic to its ultimate destination. Similarly, by requiring the terminating carrier to internalize the costs of transporting a larger portion of the call, such an approach may have the desirable consequence of forcing that carrier to optimize the efficiency of its network, and it would reduce the extent to which one carrier could be held captive to another carrier's choice of network architecture.¹⁵ Finally, the less specific an originating or transiting carrier's responsibility to transport a call to a defined point within a terminating carrier's network, the less need there will be to resolve such conundrums as whether (under the DeGraba proposal) a particular switching facility constitutes a "central office." Cf. DeGraba ¶¶ 103-08.

On the other hand, limiting the originating carrier's transport responsibilities to the edge of the terminating carrier's network could pose significant concerns as well. Without some limiting principle, permitting a carrier to drop a call off *anywhere* in a terminating carrier's network may not be an optimally efficient solution for a typical circuit-switched telecommunications network, in which predictability of transmission paths remains a critical component of network planning. Cf. note 11, *supra*. One variation that might help address that concern would be to allow each carrier, for termination purposes, to designate a minimum number of points within a prescribed geographical area at which any other carrier may deliver

¹⁵ In some contexts, and under any approach, it might be necessary to require any terminating carrier to locate at least one point of presence in a defined geographic area that it serves (or alternatively to pay for the costs of transport), so as to avoid situations in which the originating carrier must subsidize long-distance transport to a terminating carrier's remote switch simply to complete a truly local call. See DeGraba ¶ 111.

traffic. For these purposes, the relevant geographical area could be defined on a variety of levels: as a metropolitan statistical area (“MSA”); as a LATA; as a state; or as a multi-state region.

There may be other possibilities as well, and Qwest’s goal here is primarily to stimulate further discussion of the transport issue, to which Qwest will return in its future submissions. Because the questions presented here are extraordinarily complex, the Commission should likewise seek more specific comment, in light of the principles discussed above, on how to design a transport rule that will ensure the development of efficient network architectures driven by 21st century technology rather than by legacy regulation.

III. The Commission Should Lay the Groundwork for Resolving a Number of Implementation Issues Related to the Adoption of Bill-And-Keep.

Under any approach to intercarrier compensation for interexchange calls, network costs will ultimately be borne by end users (in the aggregate). The only questions are (a) whether those costs will be recovered from end users directly or indirectly, and (b) how much regulatory intervention will distort economically efficient recovery of those costs. The adoption of bill-and-keep for all traffic, including conventional access traffic, would ensure economic efficiency in the long term. But it would also create a need for significant restructuring of end user charges and universal service.

A. The Commission should accompany any move to bill-and-keep with a commitment to flexibility in the regulation of end user charges.

Bill-and-keep would not eliminate the underlying costs traditionally recovered through access charges; it would simply remove the IXC from the picture and require LECs to recover the costs of access directly from end users (rather than, as now, indirectly from end users through

the IXC).¹⁶ That approach would present the most immediate advantages in competitive settings, where the rates that carriers charge their end users are unregulated and subject to market pressures. But for bill-and-keep to achieve all that is expected of it, all carriers, including those traditionally subject to regulation as "dominant" carriers, will need greater flexibility in the charges they assess their end users. A switch to bill-and-keep would fail to achieve many of the advantages discussed above if the Commission were simply to retain essentially the current access charge rate structure (with all of its inefficiencies) but shift the payment obligation from IXCs to end users. Indeed, if that were the only step the Commission took, many of the same arbitrage opportunities that exist today would persist: for example, many end users would still choose Internet telephony to avoid, through the ESP exemption, the inefficiently structured per-minute access charges associated with the public switched network. And, although it would be approving rates for end users rather than carriers, the Commission would still have to fit the square peg of per-minute access charges into the round hole of the way transport and termination costs are actually incurred.

¹⁶ As DeGraba observes (at ¶ 125):

It is important to recognize that shifting the recovery of these costs from carriers to end users should not, on average, increase the total costs faced by end users. This is so because carriers that currently pay inter-carrier charges, like long-distance carriers, pass these costs on to end-user customers in the form of higher rates. Thus, although a customer may see an increase in the bill he receives from his LEC, he should see a corresponding decrease in other charges, such as lower charges from his long-distance carrier. Of course, to the extent that the existing interconnection regime (and the current geographic averaging requirement for long-distance carriers) involves implicit subsidies, a shift to COBAK may result in some shift in costs among specific groups of consumers, such as raising slightly the costs of customers in high cost areas. Any undue additional burden, however, should be able to be addressed through targeted universal service or other support.

The solution to this problem is to permit all carriers, including dominant carriers, to design menus of different retail rate options from which their customers may choose.¹⁷ We are *not* suggesting that, where customers lack choices, dominant carriers should be freed from all regulatory oversight in their assessment of end user charges. We are, however, contending that the current rate structure for the recovery of access-related costs inaccurately represents the ways that those costs are actually incurred – and that it is never optimal, even where rate regulation is required, for regulators to pick *any one* rate structure to straitjacket an entire class of services. The best evidence of an efficient solution to the problem of cost recovery comes from industry segments in which end user rates are *not* heavily regulated, such as wireless or long-distance. In those settings, carriers tend to offer their end users not one rate plan but choices among a number of different price structure options, ranging from plans featuring minimal flat fees and significant per-minute charges to plans featuring higher flat fees combined with large buckets of free minutes. There is no reason why, while maintaining an appropriate oversight role, the Commission could not afford LECs similar flexibility in recovering from end users (under bill-and-keep) the network costs that LECs now recover from IXCs.

While rate structure flexibility is a necessary condition for a truly rational intercarrier compensation scheme, it is by no means a sufficient one; the adoption of bill-and-keep is independently necessary as well, for the reasons addressed in Section I above. It is worth adding that, for reasons related to those just discussed, section 254(g) itself provides another important reason why bill-and-keep would create the most efficient means of recovering the costs of interexchange calls. As noted, section 254(g) requires IXCs to average their rates among their

¹⁷ Of course, Qwest and other carriers would need a reasonable implementation period after any Commission order in which to establish the recording, billing, and other back office changes necessary to implement the new rate plans.

entire subscriber base. Thus, *under the access charge regime*, that provision creates an implicit and economically inefficient cross-subsidy running from end users in low cost areas to those in high cost areas, because the LECs in the latter areas must impose high access charges on IXCs, which the IXCs must then recover nationwide. By shifting payment obligations from IXCs to end users, bill-and-keep would remove the costs of access from the scope of that national averaging requirement and would therefore permit a more efficient allocation of those costs to the specific end users that cause them.

Finally, it also bears emphasis that, in the long term, there will be more competition, fewer dominant carriers, and thus fewer contexts in which regulators will *need* to regulate retail rates *at all*. That is particularly so in this era of convergence, in which telephone companies, cable operators, and wireless providers (to name a few) have entered into increasing competition for the provision of substitutable services to end users. Where consumer choices have eliminated the need for retail rate regulation, a shift to bill-and-keep would mean *no* role for regulation (with respect to termination costs), whereas retention of CPNP or the conventional access charge regime would mean a significant *continued* role for regulation (because someone would have to devise an intercarrier cost recovery plan for termination costs). This Commission stands on the threshold of a new century, and it is now writing the rules that will apply decades into the future. Bill-and-keep is the ideal regime for that increasingly competitive, and increasingly deregulated, world.

B. The Commission should accompany any move to bill-and-keep with appropriate adjustments to universal service mechanisms.

As discussed, access charges are a mechanism for recovering from end users indirectly (through their IXCs) certain network costs that LECs would otherwise need to collect from them directly. Bill-and-keep would remove the IXC from this money flow, with two consequences.

First, the rates IXCs charge end users would likely drop significantly, because competitive pressures would drive an IXC's rates down towards its costs, and because, once access charges are eliminated, those costs would generally consist only of the internal costs of the IXC's network and any applicable transport costs. *Second*, LECs would need to raise end user charges to ensure adequate cost recovery.¹⁸ Any replacement of access charges with assessments on end users would lead to elimination of some cross-subsidies and, in some cases, to a need to replace those cross-subsidies with explicit universal support mechanisms.

That need derives in particular from the present operation, under the conventional access charge regime, of section 254(g), which, as previously noted, provides "that the rates charged by [IXCs] to subscribers in rural and high cost areas shall be no higher than the rates charged by each such provider to its subscribers in urban areas." 47 U.S.C. § 254(g). IXCs typically pay higher-than-average access charges to LECs that exclusively serve sparsely populated areas, because the network costs of the LECs in serving those areas are in fact high. Under section 254(g), the IXCs must spread recovery of those high charges across their national subscriber base; they may not pass them back specifically to the callers who make and receive the high-cost calls. If access charges were eliminated, IXCs would no longer need to recover those charges at all, and end users in high-cost areas would be required to bear much greater responsibility for these increased costs on their own. As a result, there may be a need for targeted increases in the level of universal service funding to help subsidize basic telephone service for those end users

¹⁸ As a definitional matter, these increases would not strictly be increases to the "subscriber *line* charge," because the charges at issue would relate not specifically to the loop (*i.e.*, the "line"), but to such functions as switching, the costs for which have often been viewed as usage-sensitive, albeit lumpy. Of course, so long as LECs are regulated as dominant carriers, they are entitled to at least a constitutionally compensatory rate of return, and that fact alone would require a new cost-recovery mechanism to make up for the elimination of access charges.

whose *aggregate* (local plus interexchange) telephone rates have dramatically increased as a result of a switch to bill-and-keep. *See generally* DeGraba ¶ 125.

Current law provides that “[c]onsumers in all regions of the Nation, including . . . those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services . . . that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.” 47 U.S.C. 254(b)(3). Although the Commission has recently focused on subsidizing services to end users to cover *costs* that exceed a designated benchmark, there is no sound basis for using federal support mechanisms to underwrite any service to high cost users unless their overall *rates* would also exceed an appropriate benchmark. Because, however, the Commission will need to examine these and other issues on remand from the Tenth Circuit’s recent decision in *Qwest Corp. v. FCC*, Nos. 99-9546, 99-9547, 00-9505, 2001 WL 864222 (10th Cir. July 31, 2001), we defer until then a fuller exposition of the relationship between a move to bill-and-keep on the one hand and state and federal universal service programs on the other. The Commission should of course coordinate the two proceedings to ensure that the concerns raised in one are taken into account in the other.

Any need for increased universal service subsidies for high-cost areas would trigger a related need to revisit the *contribution* mechanisms that underlie the federal subsidy programs. In particular, any expansion of federal universal service subsidies should be accompanied by a commensurate expansion in the class of entities that contribute to the federal subsidy mechanisms. It is economically irrational to impose on “telecommunications carriers” alone the burden of contributing to a fund that may, in turn, be used to subsidize a wide variety of services that *use* telecommunications but may not qualify as *telecommunications services* under the

statutory definition.¹⁹ The Commission has broad discretion to extend federal contribution obligations not just to providers of “interstate telecommunications services,” but also to “[a]ny other provider of interstate *telecommunications*.” 47 U.S.C. § 254(d) (emphasis added).

As the Fourth and Ninth Circuits have held, the provision of cable modem service includes an essential “telecommunications” component, whether or not the finished service is appropriately characterized as a “telecommunications service.”²⁰ And, because cable modem service is an economic substitute for digital subscriber line (“DSL”) services, and because DSL revenues add to a LEC’s contribution obligations, insulating cable modem service from similar obligations contradicts principles of technological neutrality. Likewise, to the extent that ISPs provide telecommunications as part of their provision of information services, the Commission should consider whether they too should bear an appropriate share of universal service obligations.²¹ These issues – the distinction between “telecommunications” and “telecommunications services” and the relevance of that distinction in allocating responsibility for funding federal universal service mechanisms – present some of the most difficult problems facing the Commission today, and the Commission should seek further comment on them. Of

¹⁹ See 47 U.S.C. § 254(b)(3); compare 47 U.S.C. § 153(43) (defining “telecommunications”) with 47 U.S.C. § 153(46) (defining “telecommunications service”).

²⁰ See *MediaOne Group Inc. v. County of Henrico*, Nos. 00-1680, 00-1709, 00-1719, 2001 WL 788864 (4th Cir. July 11, 2001); *AT&T v. Portland*, 216 F.3d 871 (9th Cir. 2000); see also Brief of the FCC as Amicus Curiae at 19, *MediaOne, supra* (No. 00-1680 *et al.*) (“the challenged ordinance [mandating ‘open access’ for cable modem service] requires MediaOne to provide ‘telecommunications facilities’ – facilities that ISPs would use solely for purposes of transmission or ‘telecommunications’”). The Commission has sought further comment on these issues in its pending *Inquiry Concerning High-speed Access to the Internet Over Cable and Other Facilities*, Notice of Inquiry, 15 FCC Rcd 19287, 19294-96 ¶¶ 18-20 (2000).

²¹ See generally *Implementation of the Non-Accounting Safeguards of Section 271 and 272 of the Communications Act of 1934 as amended*, Order on Remand, CC Docket No. 96-149, FCC 01-140 (rel. Apr. 27, 2001) ¶¶ 38-39.

course, the Commission need not await the final resolution of this proceeding before alleviating the current anomalies in the way federal universal service programs are funded.

Although adjusting the contribution mechanisms would remove some of the obvious competitive inequalities of the day, the basic long-term dilemma would persist: regulation cannot keep pace with the evolution of technologies and services to ensure permanent competitive neutrality in the design of contribution mechanisms. At bottom, the only way to eradicate that dilemma at its source is to revisit first principles. It is widely understood that, from an economic efficiency perspective, it is less sensible to derive universal service contributions from telecommunications-related revenues than from general tax revenues.²² And there is no apparent reason why, in this respect, public funding for the nation's telecommunications needs should be treated differently from funding for such other public goods as streets and highways. Although that is an issue that must ultimately be taken up by Congress, and although its resolution is obviously separable from the questions presented in this proceeding, complete regulatory rationality in this industry may never be achieved until this most fundamental anomaly is uprooted.

C. The Commission should allow market forces to deal with the problem of "unwanted calls."

As discussed above, the premises of bill-and-keep are, among others, (1) that both parties to a call are free to end it at any point; (2) that each party thus "causes" some portion of the cost of the call past the first instant of connection; and (3) that each should therefore bear a portion of the call's costs. It may be unavoidable, however, that carriers will end up incurring call set-up

²² See, e.g., Jerry Hausman & Howard Shelanski, *Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies*, 16 Yale J. on Reg. 19, 30 (1999) ("[t]he alternative of subsidizing universal services through general tax revenues" is "a good option from the standpoint of efficient public finance").

costs for some unwanted calls even if the called party hangs up as soon as the call is placed.

That is the case whether or not the called party is exempted from any retail charge for the first minute of a call; even if so, the terminating carrier must absorb the cost and will presumably pass it on to all customers in the form of slightly higher rates. Cf. DeGraba ¶ 118.

It is unclear that this will be a significant problem in practice. Even under bill-and-keep, originating carriers must bear a substantial portion of the costs of a call; efficient originating callers will thus often have adequate incentives not to let unwanted calls proliferate. In any event, to the extent that there is concern about non-trivial termination costs for certain kinds of unwanted calls (such as telemarketing calls), carriers have already devised some mechanisms (such as caller identification, privacy messages, and non-solicitation messages) that are effective in screening calls in certain circumstances, and more technologies might be deployed in the future to block additional categories of calls until after the called party has specifically authorized their transmission. In sum, there is no reason for regulatory concern about this set of issues at this point, and, if any such concern arises later, it can be addressed then.²³

²³ As DeGraba discusses, bill-and-keep would not “entirely eliminate the incentive for a business that only receives calls to claim to be a network,” because the business could then “avoid having to pay a subscription fee (i.e., purchase business service from the interconnecting carrier).” DeGraba ¶ 115. For that reason, DeGraba aptly observes that a business claiming to be a network should be entitled to the rule prohibiting the originating carrier from charging for interconnection only if that business “exhibits characteristics of a network, such as ownership of a switch” and “interconnect[ion] with the incumbent’s signaling system.” DeGraba ¶¶ 115-116. For these purposes, regulators would need to distinguish between true “switches” (comparable in complexity and functionality to switches owned by even the smallest carriers) and private branch exchanges (“PBXs”), which are owned by most large non-carrier businesses. In any event, no matter how this “sham network” problem is resolved, bill-and-keep would mark at least an incremental improvement over the CPNP regime, in which a “sham” carrier not only avoids subscription charges but also *receives money* from the originating carrier.

IV. The Commission Has Legal Authority To Impose Bill-and-Keep.

As shown above, sound public policy supports the adoption of bill-and-keep as the unifying intercarrier compensation scheme for all traffic over the public switched network. The Commission has also sought comment on whether it has *legal authority* to impose bill-and-keep across the board. Two central questions govern that issue. *First*, does the Commission have *jurisdiction* to promulgate *any* rules to address a given class of traffic – either (1) because the traffic falls within the scope of section 251(b)(5), which the Commission has jurisdiction to implement in light of the Supreme Court’s decision in *AT&T v. Iowa Utils. Bd.*, 525 U.S. 366 (1999), or (2) because the traffic falls within the scope of the FCC’s general interstate regulatory authority under section 201? And, *second*, is bill-and-keep consistent with the *substantive* requirements of the Communications Act, including, with respect to traffic covered by section 251(b)(5), the accompanying pricing standards of section 252(d)(2)?

With respect to most telecommunication traffic, the answer to both of these questions is yes. Although it is unclear whether the Commission has authority to impose bill-and-keep for conventional *intrastate* access traffic, that uncertainty should not deter the Commission from imposing bill-and-keep to the limits of its jurisdictional authority.

A. The Commission has authority to impose bill-and-keep for traffic falling within section 251(b)(5).

The Commission has determined that, when viewed in combination with section 251(g), the “reciprocal compensation” provision of section 251(b)(5) is properly construed to apply to all telecommunication traffic involving at least one LEC except “access” traffic (including “information access”). See *ISP Reciprocal Compensation Order* ¶¶ 34-41; *Local Competition Order*, 11 FCC Rcd at 15997 ¶ 1008. Thus, section 251(b)(5) covers most non-ISP-bound LEC-to-LEC and most LEC-to-CMRS traffic, including paging traffic. See, e.g., *Local Competition*

Order, 11 FCC Rcd at 15997¶ 1008. Over time, as the FCC exercises its authority to “supersede[] by regulation[]” the grandfathering provisions of section 251(g), the class of traffic subject to section 251(b)(5) may increase in size.²⁴

The “reciprocal compensation” obligation of section 251(b)(5) is fleshed out in section 252(d)(2). Section 252(d)(2)(A) provides:

For the purposes of compliance by an incumbent local exchange carrier with section 251(b)(5) of this title, a State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless – (i) [they] . . . provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier’s network facilities of calls that originate on the network facilities of the other carrier; and (ii) [they] . . . determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.

Section 252(d)(2)(B) further provides, however, that section 252(d)(2)(A) “shall not be construed . . . to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements).”

In the *Local Competition Order*, the FCC construed section 252(d)(2) to permit bill-and-keep for balanced traffic but not for unbalanced traffic. *See* 11 FCC Rcd at 16055¶ 1112. The Commission should now revisit and reverse that conclusion. First, as discussed above, the Commission has *already* rejected its stated policy basis for limiting bill-and-keep to balanced traffic: *i.e.*, the concern that, absent such a limitation, carriers would have artificial incentives

²⁴ Section 251(g) preserves the pre-1996 Act regulatory status quo with respect to the matters included within its scope until the grandfathered rules “are explicitly superseded by regulations prescribed by the Commission.” In theory, therefore, if a class of traffic is properly deemed to fall both within the scope of section 251(b)(5) and within the class of grandfathered regulations under section 251(g), that traffic would be subject to the substantive standards of section 251(b)(5) if, and only if, the Commission specifically determines, through superseding regulations, that it should be subject to those standards. *See generally ISP Reciprocal Compensation Order* ¶ 40; *but cf. id.* ¶ 37 n.66.

only to originate traffic. See *ISP Reciprocal Compensation Order* ¶¶ 72-73. Second, the Commission provided no substantial legal analysis to support its suggestion that the statute prohibits bill-and-keep for unbalanced traffic: it simply assumed, without explaining why, that section 252(d)(2) is satisfied only when an originating carrier pays money to cover the transport and termination costs of another carrier whenever the traffic between the two is asymmetrical. See *Local Competition Order*, 11 FCC Rcd at 16055 ¶ 1112. As we now discuss, the statute, while highly ambiguous on this point, can reasonably be, and should be, read *not* to contain such a prohibition.

As an initial matter, section 252(d)(2)(A), even read apart from the bill-and-keep savings clause in section 252(d)(2)(B), uses a specialized term to describe what an originating carrier must pay the terminating carrier for transport and termination costs: “a reasonable approximation of the *additional costs* of terminating such calls” (*i.e.*, calls that the originating carrier delivers to the terminating carrier’s customers). 47 U.S.C. § 252(d)(2)(ii) (emphasis added). In this context, the term “additional costs,” which appears nowhere else in sections 251 and 252, could reasonably be construed to include only the short-run (per-call) incremental costs of delivering traffic to the called party. *Those* costs may well be negligible, because, as discussed above, individual calls do not typically “cause” transport and termination costs; those costs consist instead of the lumpy investments needed to ensure *peak* load capacity. For that reason alone, bill-and-keep proposals such as DeGraba’s, which effectively set the termination rate at zero, are consistent with section 252(d)(2).

In any event, irrespective of what section 252(d)(2)(A) might be construed to mean in isolation, the bill-and-keep savings clause of section 252(d)(2)(B) makes clear that nothing in the statute precludes the Commission’s discretion to impose bill-and-keep for any class of traffic

within its jurisdiction. That savings clause provides that section 252(d)(2)(A) “shall not be construed . . . to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, including arrangements that *waive mutual recovery* (such as bill-and-keep arrangements).” (Emphasis added.) While this language is unclear in some respects, it could not be plainer in preserving, at a minimum, “arrangements that waive mutual recovery (such as bill-and-keep arrangements).” Nothing in that savings clause is limited to balanced traffic, a point that the Commission essentially overlooked in 1996.²⁵

Read in combination, subparagraphs (A) and (B) of section 252(d)(2) thus provide a *choice* of intercarrier compensation methodologies as the default option for intercarrier compensation: *either*, under subparagraph (B), a bill-and-keep arrangement that “waive[s] mutual recovery” as between carriers *or*, under subparagraph (A), any CPNP arrangement under which an originating carrier compensates a terminating carrier for the true “additional costs” of terminating individual calls, whatever that term may be construed to signify. Viewed together, what these two provisions indisputably foreclose is any nonconsensual arrangement – common before passage of the 1996 Act (*see, e.g., Local Competition Order*, 11 FCC Rcd at 16010-11 ¶ 1030) – in which one carrier forces another to pay charges for transport and termination that are not in fact limited to the costs of providing those services, or in which an *originating* carrier (such as a LEC) charges a *terminating* carrier (such as a CMRS provider) for the costs of origination. *See, e.g., 47 C.F.R. § 51.703(b).*

²⁵ It is noteworthy that bill-and-keep, if imposed for all traffic, would remove most of the arbitrage opportunities that create large categories of unbalanced intercarrier traffic in the first place. For that reason, adoption of bill-and-keep would largely *eliminate* the very class of traffic as to which the Commission once thought the adoption of bill-and-keep would be most legally problematic.

To be sure, as the Commission itself has recognized, adoption of bill-and-keep for all traffic subject to section 251(b)(5) would mark a significant policy reversal, albeit one for which the Commission has begun laying a foundation. See *NPRM* ¶¶ 76-77. It is hornbook law that an agency is permitted to change its mind on both policy matters and on questions of statutory interpretation so long as it gives a reasoned explanation for its change in course. See, e.g., *Rust v. Sullivan*, 500 U.S. 173, 187 (1991); *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 862 (1984). For the reasons discussed, the Commission has more than an adequate basis for rejecting its perfunctory – and already partially repudiated – rationale for precluding the use of bill-and-keep for unbalanced traffic subject to section 251(b)(5).

LEC-CMRS traffic, the legal status of which the Commission has addressed at some length in the *NPRM* (¶¶ 78-96), should be treated like any other traffic subject to section 251(b)(5). The Commission has previously subjected LEC-CMRS traffic to regulation under that provision because, although a CMRS provider is presumptively not classified as a “LEC,” see 47 U.S.C. § 153(26), the Commission has construed section 251(b)(5) to apply to any local traffic that involves at least one LEC. See *Local Competition Order*, 11 FCC Rcd at 15997, 16016-17 ¶¶ 1008, 1043. The upshot of that determination is that the FCC has rulemaking authority to determine the appropriate methodological treatment of intercarrier compensation for that traffic no less than any other traffic included within the scope of section 251(b)(5). See *Iowa Utils Bd.*, 525 U.S. at 377-81. Since, for the reasons just discussed, bill-and-keep is appropriate for section 251(b)(5) traffic generally, it is appropriate for LEC-CMRS traffic in particular.

B. The Commission has authority to impose bill-and-keep for interstate access traffic.

1. Conventional interstate access traffic

The Commission indisputably has jurisdiction to set intercarrier rates for conventional interstate access traffic. Nothing in the Communications Act poses any substantive obstacle to the adoption of bill-and-keep (*e.g.*, some variant of the DeGraba proposal for “calls involving three carriers”) for such traffic. Of course, as in all other contexts, the Commission would need to justify that policy change with a reasoned explanation. As discussed above, however, such an explanation is readily available here.

2. ISP-bound traffic

In the *ISP Reciprocal Compensation Order* (¶¶ 23-65), the Commission has already explained, in great detail, why section 251(g) removes ISP-bound traffic from the scope of section 251(b)(5) and why the Commission may thus regulate it pursuant to its general interstate authority under section 201. Although the Commission’s decision to exclude ISP-bound traffic from the scope of section 251(b)(5) is on review in the D.C. Circuit, *WorldCom, Inc. v. FCC*, No. 01-1218 (D.C. Cir. filed May 17, 2001), the decision was correct and should be upheld. Even if the decision is not upheld, moreover, the only consequence would be that such traffic would be subject to section 251(b)(5), not that it would be immune from bill-and-keep. Because bill-and-keep is appropriate for any traffic subject to section 251(b)(5), it would be appropriate for this traffic as well, even if it were deemed to fall within the scope of that provision.

3. Intrastate access traffic

The one class of traffic that the FCC may lack clear jurisdiction to address is intrastate access traffic, and the Commission would encounter similar jurisdictional obstacles if it sought to replace intrastate access charges with an increase in end user rates on the intrastate side of the

cost-recovery ledger. By definition, intrastate access traffic does not fall directly within the scope of the Commission's section 201 authority, and the Commission has previously concluded that it falls outside the scope of section 251(b)(5) as well (even though, as the Commission acknowledges, this latter conclusion may not be compelled by the statutory language).²⁶

Even if the Commission lacked authority to impose bill-and-keep for intrastate access charges, however, that should not dissuade it from extending bill-and-keep to all other traffic to the fullest extent of its authority. This is an area in which the Commission's leadership is urgently needed, and many states would likely respond to that leadership by imposing bill-and-keep for intrastate access traffic on their own. And, even if they did not, their reluctance to eliminate conventional intrastate access charges would simply induce carriers, for example, to funnel all toll traffic through networks (such as the Internet) in which "the interstate and intrastate components [of the traffic] cannot be reliably separated" – and that are thus deemed categorically subject to the Commission's section 201 authority. See *ZSP Reciprocal Compensation Order* ¶ 52. If unaddressed, such arbitrage could dramatically narrow the class of toll traffic subject to state, rather than federal, jurisdiction, potentially leaving incumbent LECs without full recovery of their intrastate costs (because they would lose intrastate access revenues, perhaps without a corresponding increase in their end user rates).²⁷

²⁶ See *ISP Reciprocal Compensation Order* ¶ 37 n.66 (deeming statute "ambigu[ous]" on this point but reaffirming earlier conclusion that section 251(b)(5) excludes "traffic subject to parallel intrastate access regulations"); see generally *Louisiana PSC v. FCC*, 476 U.S. 355 (1986) (holding that, under section 2(b), the FCC lacks authority over intrastate rates, subject only to a narrow "impossibility" exception).

²⁷ Similar jurisdictional issues could arise for any class of intrastate traffic – including traffic covered by section 251(b)(5) – as to which carriers would be required to recover from end users the network costs that they used to recover from other carriers. In particular, although the Commission has jurisdiction to regulate *intercarrier* compensation for section 251(b)(5) traffic, it may lack jurisdiction to raise end user rates on the intrastate side of the ledger to make up for

It is exceedingly unlikely that the states would do nothing in response to such arbitrage. More likely, they would follow the Commission's lead in adopting bill-and-keep as a unifying intercarrier compensation rule for all traffic. And this would not be the first time that this Commission has realized that, to eliminate legacy regulation, it must sometimes act first and rely on the resulting dynamics of the free market to restore consistency between state and federal regulation."

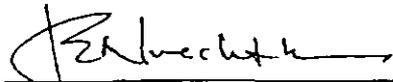
the elimination of intercarrier compensation under bill-and-keep. That fact, combined with the concerns discussed in the text, illustrates why it is important for the Commission to exercise leadership in this area and to persuade the states to adopt compensation mechanisms that accommodate a shift to bill-and-keep as the new paradigm for intercarrier compensation.

²⁸ See, e.g., *Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, 8785-86 ¶ 14 (1997) ("[A]s competition develops, the marketplace itself will identify intrastate implicit universal service support, and . . . states will be compelled by those marketplace forces to move that support to explicit, sustainable mechanisms[.]").

CONCLUSION

The Commission should adopt bill-and-keep for all traffic to the fullest extent of its jurisdiction, not because bill-and-keep would benefit any one class of carriers, but because the regulatory rationality it would introduce into this industry would benefit *all* carriers and, just as important, the public at large. To be sure, decisive action today may well result in short-term discomfort for some – including, in some respects, Qwest itself. But only comprehensive reform will rationalize the intercarrier compensation regime and realize the Act's goal of a technologically neutral, economically rational playing field for all segments of the telecommunications industry.

Respectfully submitted,



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August 21, 2001

CERTIFICATE OF SERVICE

I, Russell P. Hanser, do hereby certify that on this 21st day of August, 2001, I have caused true and correct copies of the foregoing Comments of Qwest Communications International, Inc., to be served by hand delivery upon the following parties:

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NOV 5 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Developing a Unified Inter-carrier Compensation Regime. CC Docket

N 01 92

Dear Ms. Salas:

On behalf of Qwest Communications International, Inc. ("Qwest"), I enclose for filing an original and four copies of Qwest's reply comments and the supporting declaration of William P. Rogerson. Pursuant to the *Notice of Proposed Rulemaking* released by the Commission on April 27, 2001, diskette copies of Qwest's comments are being served separately on Ms. Wanda Harris and Qualex International.

Please do not hesitate to contact me with any questions or concerns.

Very truly yours,

Scott F. Llewellyn

No. of copies sent 014
DATE SENT

- cc (w/encls): Service List
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ORIGINAL

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Developing a Unified Inter-carrier)
Compensation Regime)

CC Docket No. **RECEIVED**

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FEDERAL COMMUNICATIONS COMMISSION
BY THE SECRETARY

REPLY COMMENTS OF
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November 5, 2001

EXECUTIVE SUMMARY

Bill-and-keep would permit, and CPNP would preclude, the steady deregulation of the telecommunications industry over the long term. In a nutshell, that is because bill-and-keep requires a carrier to recover from its *end users* costs that CPNP entitles it to recover from *other carriers* – and because, although there will always be a need to regulate the rates that even non-dominant carriers charge other carriers, there is never a need to regulate the rates such carriers charge their own end users. For example, if a non-dominant carrier charges an end user a supracompetitive rate for terminating calls, the market itself will correct the problem, because the carrier will lose the customer to a competitor with lower prices. But if the carrier is allowed to recover the costs of the same service from another carrier serving a different customer, no market mechanism can normally deter the first carrier from charging an arbitrarily high price.

Thus, so long as CPNP is the rule – so long as one carrier may recover its *own* network costs from *another* carrier rather than from its own end users – the only solution to this “terminating access monopoly” is pervasive regulation, even of the smallest upstart carrier. Such regulation is undesirable and, because of bill-and-keep, unnecessary. By requiring carriers to recover their network costs from their own end users rather than from other carriers, bill-and-keep would eliminate any need to regulate non-dominant carriers, because those end users could take their business elsewhere.

Opponents of bill-and-keep, such as AT&T, respond that the deregulatory benefits of bill-and-keep would be limited because the end user rates of ILECs (to the extent they are dominant in given markets) may still require regulation. That argument is unsound on two levels. To begin with, bill-and-keep would permit significant deregulation today, because, among other considerations, non-dominant carriers are already significant

terminators of traffic, as illustrated by the industry's recent experience with ISP-bound traffic and CLEC access charges.

More fundamentally, AT&T's argument on this point is remarkably short-sighted. Because any regime the Commission selects in this proceeding should be built to last, the question is not whether bill-and-keep presents obvious advantages over CPNP *today* (even though it does), but whether it will present such advantages ten and fifteen and twenty years from now. The answer is yes. As the telecommunications world becomes increasingly defined by intermodal competition, and as it becomes increasingly populated by non-dominant carriers, the choice between CPNP and bill-and-keep is, at bottom, a choice between heavy regulation of this industry and very little at all.

Opponents of bill-and-keep also suggest that the costs of unnecessary regulation are low -- that regulation is, in effect, no less capable than market forces of "getting the rates right." This is sophistry. As illustrated by years of unhappy experience with access charges and reciprocal compensation rates, regulation is unpredictable, destabilizing, and inherently incapable of setting accurate intercarrier rates for the recovery of origination and termination costs. That is why the legacy of such regulation is litigation and pervasive arbitrage. Moreover, unlike bill-and-keep, CPNP would permanently mire the Commission in inappropriate judgment calls about whether one class of carriers has higher or lower network costs than another and, accordingly, whether the intercarrier compensation rates of some carriers should be higher or lower than those of other carriers. Those decisions should be left to the market, as bill-and-keep would permit, and should not be left to regulation, as CPNP would require. No carrier should be forced to

subsidize another carrier's choice of technology or network architecture; such choices should be validated (or not) by the choices made by each carrier's own end users.

There is no merit to the time-worn argument that CPNP is more faithful than bill-and-keep to economic principles of cost causation. The premise of CPNP is that the calling party "causes" all the costs of a call. That is demonstrably false: for example, the called party "causes" many of those costs by publicly listing its telephone number and agreeing to take a given call, and the called party's network is free to choose more or less efficient terminating technology. By splitting costs between the calling and the called parties, bill-and-keep is thus *at least* as faithful as CPNP to principles of cost causation. As the Commission has already indicated, there is also no basis for concern that bill-and-keep would cause carriers to specialize in originating traffic or that it would increase the volume of unwanted calls. In any event, if unwanted calls were the problem, the answer would be to regulate them directly, as the Commission has already done.

The defining attribute of bill-and-keep is a default division of financial responsibility, at some point between two networks, for the costs of handling traffic that travels over both networks; in the absence of negotiation, each carrier must recover from its end users, and not from other carriers, all network costs on its side of that point. The DeGraba proposal would establish that point at the end office serving the called party and would then rely on negotiations to produce more efficient outcomes. That approach suffers from two significant shortcomings. First, it would give a comparative bargaining advantage to carriers (such as ILECs) that have many end offices to which other carriers (such as CLECs) must bear the financial burden of providing transport. Second, by requiring carriers to obtain transport to points deep within an ILEC's network, the

DeGraba approach would increase calls for regulatory intervention in the use of an ILEC's transport facilities.

To avoid those problems, Qwest proposes an alternative approach, under which a carrier would bear a default financial obligation to deliver traffic to the "edge" of another carrier's network. Designation of the "edge" of a network would vary depending on whether the network is circuit-switched or packet-switched, given the quite different ways such networks operate. The edge of a hierarchical circuit-switched network would be defined as the access tandem serving the called party's end office. In contrast, the "edge" of a packet-switched network would be defined as any technically feasible point, such as a gateway, within a defined geographic area. Because this "edge of the network" approach would sharply limit the number of points to which carriers would bear a default financial responsibility to deliver traffic, it would be more equitable than DeGraba's approach as among carriers, and it would be more likely to produce efficient, negotiated transport solutions, such as the deployment of two-way trunks where justified by traffic volumes. Moreover, by permitting a carrier to relinquish financial responsibility for traffic at the edge of an ILEC's network, it would reduce calls for government intervention in the provision of an ILEC's transport facilities at regulated rates.

There is no merit to the contention that bill-and-keep would increase an ILEC's ability to discriminate against unaffiliated interexchange carriers. The potential for such discrimination is logically independent of the Commission's choice of intercarrier compensation regimes. Under bill-and-keep, as under CPNP, existing safeguards such as 47 U.S.C. § 272(e) would suffice to protect competition in the interexchange market. To remove any doubt on this issue, the Commission should simply clarify that, under bill-

and-keep, each ILEC must provide its end users with access to unaffiliated IXCs on the same terms, at the same rates, and with the same quality of service as the access it provides to its own IXC affiliate.

Some commenters oppose bill-and-keep on the ground that, by shifting network costs to end users rather than IXCs, it would reduce the implicit cross-subsidies that smaller ILECs currently receive under the geographic averaging mechanism of 47 U.S.C. § 254(g). That, however, is ultimately just an argument for replacing such cross-subsidies with explicit, competitively neutral funding mechanisms. There is no valid argument for continuing to fund universal service through implicit, competitively skewed subsidy mechanisms based on access charges.

Although the Commission may lack jurisdiction to impose bill-and-keep for intrastate access traffic, the Tenth Circuit's recent universal service decision underscores the Commission's responsibility to give states incentives to adopt appropriate funding mechanisms on the intrastate side of the ledger. For example, the Commission may condition the receipt of federal universal service funding on a state's willingness to remove implicit subsidies from intrastate access charges. Once those subsidies are eliminated, the states would perceive little advantage in retaining the current access charge regime, and a national consensus would likely develop in support of bill-and-keep for all traffic. Finally, there is no merit to suggestions that the 1996 Act precludes bill-and-keep for all traffic falling within the scope of 47 U.S.C. § 251(b)(5). The language of section 252(d)(2) is appropriately understood to permit a choice between *either* bill-and-keep *or* a truly cost-based CPNP regime. The Commission is free to choose the regime that better serves the public interest, and that regime is bill-and-keep.

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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Developing a Unified Intercarrier) CC Docket No. 01-92
Compensation Regime)

REPLY COMMENTS OF
QUEST COMMUNICATIONS INTERNATIONAL, INC.

Qwest Communications International, Inc. ("Qwest") hereby submits these reply comments in the above captioned proceeding.¹

INTRODUCTION

Bill-and-keep requires carriers to recover costs from their end users, whereas CPNP entitles them to recover many of those costs from other carriers.* As competition develops over time, more and more carriers will become non-dominant, and any need to regulate the rates they charge their end users will disappear, because the market itself will drive end user prices towards cost. But an increase in competition would never reduce the need to regulate critical rates that CPNP, unlike bill-and-keep, would entitle one

¹ See *In the Matter of Developing a Unified Intercarrier Compensation Regime*, Notice of Proposed Rulemaking, CC Docket No. 01-92, FCC 01-132 (rel. Apr. 27, 2001) ("*NPRM*").

² "Calling party's network pays" ("CPNP") denotes an intercarrier compensation regime in which the calling party's network bears responsibility for all the costs of a call and pays compensation to other carriers involved in the call. As used here, the term is broadly defined to encompass both the current reciprocal compensation scheme for local calls and the traditional access charge regime, under which the calling party's interexchange carrier ("IXC") must compensate the local exchange carriers ("LECs") on either end of a long-distance call. "Bill-and-keep," in contrast, is defined to mean any compensation rule that would preclude a carrier from charging another carrier for any of the costs of its own local access facilities.

carrier to charge another. That, in a nutshell, is why bill-and-keep is preferable to CPNP. Unlike CPNP, it would eliminate the terminating access monopoly without regulation of non-dominant carriers, it would avoid the destabilizing arbitrage opportunities and litigation that inevitably accompany regulated intercarrier rates, and it would emphasize the role of market forces, rather than regulation, in a carrier's efforts to recover its network costs.

Supporters and opponents of bill-and-keep seem to be talking past one another largely because the supporters are approaching the issue from the perspective of the industry over the long term, whereas opponents are focused on the transitory disputes and special interests that tend to characterize a portion of the industry at any fixed point in time. Thus, the parties most opposed to bill-and-keep for LEC-to-LEC traffic are those that have made short-term windfalls by specializing in the termination of traffic at above-cost rates. The parties most opposed to bill-and-keep for access traffic are certain incumbent LECs that have a particular stake in preserving the economically irrational – and ultimately unsustainable – role of access revenues in the funding of universal service. And, more generally, the parties most opposed to bill-and-keep in any setting are carriers such as AT&T that have staked their business plans on the continuation of heavy regulatory intervention in all aspects of the telecommunications industry.

Moreover, although some parties contend that the Commission should continue to have two vastly different regimes for “local” and “long distance” traffic, that anachronistic approach would exacerbate the arbitrage and inefficiency that already beset the telecommunications world. At the end of the day, a call is simply a call, and arbitrage will inevitably thwart any artificial, distance-related distinction among types of calls.

Moreover, as several CLECs observe, the Commission should view with considerable skepticism any suggestion by incumbent LECs that bill-and-keep makes less sense for access traffic than for other kinds of traffic – or that, five years after enactment of section 254, regulators should still postpone the day in which a competitively neutral funding mechanism, rather than the nationwide customer base of conventional LECs (see 47 U.S.C. § 254(g)), subsidizes network costs in high-cost areas. The Commission should thus simultaneously adopt bill-and-keep for all traffic within its jurisdiction and encourage the states to do the same.

ARGUMENT

- I. **Bill-and-keep is preferable to alternative intercarrier compensation schemes, and the policy arguments of its opponents are without basis.**
 - A. **Bill-and-keep is the best long-run solution to the terminating access monopoly problem.**

There are two serious contenders for the role of unified intercarrier compensation scheme in the long run: a “cost-based” CPNP approach, and bill-and-keep. CPNP would require the government to regulate certain intercarrier rates in perpetuity, whether a given carrier is dominant or not. Moreover, because such regulation is necessarily both imperfect and contentious, it would guarantee a world of arbitrage, litigation, and industry instability. Bill-and-keep avoids those problems, and for that reason alone it is the better choice, particularly over the long term.

1. **Bill-and-keep is the optimal solution to the terminating access monopoly in an increasingly competitive world.**

The first major advantage of bill-and-keep over CPNP derives from the fact that, whereas there would always be an obvious need to regulate the termination rates that non-dominant carriers charge other carriers, there is never a need to regulate the rates

they charge their end users. Because bill-and-keep would require carriers to recover from *end users* costs that CPNP would entitle them to recover from *other carriers*, bill-and-keep would eliminate the terminating access monopoly with little or no regulation of non-dominant carriers (and potentially, in some contexts, less regulation of dominant carriers as well). In contrast, CPNP would guarantee permanent, heavy regulation of every carrier, whether dominant or not. That advantage is comprehensively discussed in the attached Declaration of William Rogerson ("Rogerson Decl."), at 8-15.

Here it is important to focus on the severity and breadth of the "terminating access monopoly." That term refers not only to the recent efforts by some CLECs to charge IXCs radically above-cost rates for the termination of interexchange traffic, although that is perhaps the most obvious and familiar manifestation of the problem, but more generally to an economic phenomenon that arises whenever two or more carriers must cooperate in the completion of a call. In any given local or long-distance call involving more than one carrier, the terminating carrier typically controls the only line and local switch connecting the called party to the network, and the caller typically lacks any relationship with the terminating carrier. As a result, the terminating carrier has strong incentives to extract as high a payment as possible from the carrier with which the caller does have a relationship, and the caller is normally powerless to do much about it.

That terminating monopoly problem would thus require pervasive rate regulation of a carrier's termination rates *even if* the other carrier were entitled to pass the high costs of termination back, in the form of higher rates, to the particular calling parties that place the calls at issue. *See* Rogerson Decl. 9-12. But the problem is even worse than that, because various regulatory obstacles typically preclude ILECs (for local calls) and IXCs

(for long-distance calls) from passing such costs back to a specific calling party. *See, e.g., 47 U.S.C. § 254(g)*. The calling party thus normally lacks any interest in affecting the rates the terminating carrier charges for local or long-distance calls. *See Rogerson Decl. 9, 12-13.*³ Indeed, those same regulatory obstacles deprive a calling party of any incentive to object when a LEC charges an IXC arbitrarily high rates for *origination* as well. *See id.* at 13-14. In short, because the existing regime insulates LECs from any pressure *by their own end users* to lower above-cost intercarrier rates, CPNP does not create the price signals needed to ensure rational correspondence between prices and cost. The Commission has traditionally turned to rate regulation to address that problem: regulation under section 251(b)(5) of transport and termination rates for local traffic, and regulation under section 201 of access charges for interexchange traffic.

Bill-and-keep would eliminate, at the source, the very need for regulation of intercarrier termination charges. Some commenters observe that bill-and-keep would not immediately eliminate the need for regulation of all termination charges, because, until competition develops, dominant carriers may still have the ability and incentive to charge their end users more than the economic cost of the services they provide. *E.g., AT&T Comments 17*. Even in the short term, that argument misses the key points that CLECs are already significant terminators of traffic; that, where they are, they hold a monopoly over terminating access; and that bill-and-keep would thus dramatically reduce the extent to which this Commission would need to regulate them, since there would be no need to

³ Under CPNP, even if ILECs and IXCs *were* permitted to pass these costs back to calling parties, it is unlikely that calling parties would be sufficiently motivated by (or even attentive to) inefficiently high termination rates that they would withhold calls to end users of particular carriers and thereby exert indirect pressure on those carriers to lower those rates to efficient levels. *See Rogerson Decl. 8-12.*

regulate the rates they charge their own end users (as distinguished from the rates they charge other carriers).

The argument for CPNP, and against bill-and-keep, becomes even weaker when analyzed within the long time horizon that this Commission should consider when deciding the best way to bring long-term rationality to the field of intercarrier compensation. The premise of the 1996 Act, and of the Commission's regulatory philosophy as a whole, is that facilities-based competition will succeed over the long term in providing an ever-growing number of consumers with an expanding set of telecommunications alternatives to incumbent LECs. The parties may dispute the details of that inexorable trend, but even today, and even in the residential sector, competition is more widespread than industry pessimists would have this Commission believe. Wireless services, for example, are already available as an alternative to landline telephony for most Americans. "While most wireless customers may not be willing to 'cut the cord' just yet in the sense of canceling their subscription to wireline telephone service, it is indisputable that wireless service has significantly changed the way Americans communicate. . . . For some, wireless service is no longer a complement to wireline service but has become the preferred method of communication."⁴ Moreover, in a world in which cable modem service has leapt out to an early head start over DSL as the predominant broadband technology for residential subscribers (in part because of regulatory disparities), an increasing number of consumers can be expected to choose the

⁴ *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, Sixth Report, FCC 01-192 (rel. July 17, 2001), at 32.

cable modem platform as the source for all of their telecommunications needs, including voice telephony.⁵ And, of course, such forms of intermodal competition merely supplement the statutory rights CLECs enjoy to an ILEC's own network under the 1996 Act.⁶

It is against this backdrop that the Commission should review AT&T's claim (Comments 17) that bill-and-keep would have no effect on the need to regulate termination rates and would simply change (from carriers to end users) the identities of the parties that must pay such rates. As AT&T appears to recognize, its position rests on the premise that competition is futile and that incumbent LECs will retain the same market position in ten, fifteen, or twenty years that they have today. If that premise is false – and all indications are that it is false – the advantages of bill-and-keep over CPNP become dramatically apparent. In a competitive world populated by non-dominant carriers, the choice between bill-and-keep and CPNP is, quite literally, a choice between continued heavy regulation of this industry and very little regulation at all.

⁵ See Remarks of FCC Chairman Michael K. Powell, “Digital Broadband Migration Part II” (Oct 23, 2001) (<http://www.fcc.gov/Speeches/Powell/2001/spmcp109.html>), at 3-4 (noting “the real competitive choices that have been introduced through alternate platforms, particularly wireless and cable telephony services,” and predicting that “[a] great deal of competition . . . , particularly for residential consumers, will come from other platforms such as cable and wireless systems”).

⁶ See *Local Telephone Competition: Status as of December 31, 2000* (Industry Analysis Div. May 2001), at 1 (reporting a “29% growth in CLEC market size during the *second half* of the year 2000”) (emphasis added); *id.* at 2 (reporting that, over the course of the year 2000, the number of UNE loops that ILECs provided to other carriers increased “by 62%, to a total of about 5.3 million,” in addition to the 6.8 million lines resold to CLECs).

2. Regulation is incapable of getting intercarrier rates "right."

Opponents of bill-and-keep further suggest that regulation is just as capable as the market of fixing an appropriate price to recover the costs of termination (or, in the case of access traffic, the costs of origination as well). Those opponents both overestimate the ability of regulation to "get the price right" and underestimate the social and economic costs of getting the price wrong. AT&T, for example, contends that any arbitrage problem associated with CPNP "is *easily solved* simply by strict application of the existing requirement of cost-based prices." AT&T Comments 8 (emphasis added).

These opponents appear unaware that regulators have tried and failed for many years to produce prices for origination and termination services that are accurately structured to reflect the "costs" of providing those services, and the result has been litigation, arbitrage, and regulatory uncertainty. Indeed, one need look no further than the Fifth Circuit's recent decision rejecting the 6.5% X-factor justification in the *CALLS Order*, or the D.C. Circuit's rejection of the Commission's prior rationale for the same X-factor, to recall how impossible it is to achieve regulatory certainty in this area so long as one carrier may charge another for its own origination or termination costs.⁷ And, as discussed in Qwest's opening comments (at 12-15), the fault lies not in the regulators but in the type of regulatory question at issue.

"Getting the rates right" is impossible enough on several levels even when the Commission has answered all the basic methodological questions. See Rogerson Decl. 14-15, 18-20. First, as the experience in the states has shown, regulators acting in good

⁷ See *Texas Office of Public Util. Counsel v. FCC*, 265 F.3d 313, 328-29 (5th Cir. 2001); *United States Tel. Ass'n v. FCC*, 188 F.3d 521 (D.C. Cir. 1999).

faith can and do disagree profoundly in the application of a single methodology – TELRIC – to any given rate element.⁸ Second, regulators cannot, and should not, be expected to keep pace on a monthly basis with the latest price-reducing developments in termination rates. *Id.* at 5, 14-15. And, even if they could, the industry's inability to predict what regulators will do itself tends to skew the market. Bill-and-keep would altogether eliminate that problem by specifying a single, predictable, and permanent solution to the recovery of termination costs.

Third, simply as a matter of practical necessity, CPNP narrows the options available for the recovery of termination costs. CPNP all but requires some variant of per-minute pricing because, as a practical matter, that is the only feasible way to enable a terminating carrier to allocate responsibility for termination among the multiplicity of other carriers that deliver traffic to any given subscriber of the terminating carrier.⁹ Bill-and-keep, in contrast, would permit carriers to experiment with various combinations of usage-sensitive and flat-rated charges on the subscribers with whom they have a steady, ongoing relationship – an option that is infeasible under CPNP. This distinction between the two approaches is quite significant, because, as discussed in Qwest's opening comments (at 12-15), no per-minute rate can accurately reflect the costs of providing

⁸ See, e.g., *In the Matter of Joint Application by SBC Communications, Inc., et al., for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, Memorandum Opinion and Order, CC Docket No. 00-217, FCC 01-29, 191 (rel. Jan. 22, 2001) (“TELRIC-based pricing can result in a range of rates, which is wide enough to encompass” “significantly different” rates in different states).

⁹ Indeed, in curtailing the use of the flat-rated PICC on EXCs in favor of an increased subscriber line charge, the Commission itself indicated that direct end user charges allow for more “straightforward, economically rational pricing structure[s]” than do intercarrier charges. *Access Charge Reform*, Sixth Report and Order, 15 FCC Rcd 12962, 12991-92, ¶ 78 (2000) (“*CALLS Order*”) (eliminating the residential and single-line business Presubscribed Interexchange Carrier Charge).

termination services. From an economic perspective, the costs to be recovered are the extremely lumpy costs (unassociated with any particular call) of assuring adequate capacity to accommodate traffic during peak load periods.¹⁰ When the market is permitted to decide how those costs should be recovered (as, for example, in the unregulated retail plans offered by wireless carriers), the result is a range of different solutions, most of which involve some element of flat-rated pricing. Again, for the network costs at issue here, that is an option available only under bill-and-keep, not under CPNP.

Even more fundamentally, CPNP would require the Commission and the states to continue playing a heavy regulatory role in the resolution of disputes among different categories of carriers about whether and how each such category should be treated differently in the intercarrier compensation calculus. Such disputes already abound within the industry. For example, CLECs and ILECs argue about whether, as AT&T contends, a CLEC should be able to "charge higher 'tandem' switching rates when it terminates calls from a switch in its efficient, single-layer switching architecture that serves a geographic area comparable to a tandem switch in the incumbent's legacy two-layer switching architecture." AT&T Comments iii. At the same time, CLECs and ILECs argue about whether carriers that specialize in terminating traffic to a specific kind of customer -- such as ISPs -- incur lower termination costs and should be compensated less. See *ISP Reciprocal Compensation Order* ¶ 93. Similarly, LECs and CMRS

¹⁰ *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Intercarrier Compensation for ISP-Bound Traffic*, Order on Remand and Report and Order, CC Docket Nos. 96-98, 99-68, FCC 01-131, at ¶ 76 (rel. Apr. 27 2001) ("*ISP Reciprocal Compensation Order*").

providers argue about whether the latter incur higher termination costs than the former.

See, e.g., *NPRM* ¶¶ 104-05; AT&T Wireless Comments 22-23.

Unlike bill-and-keep, CPNP compels the Commission to resolve such disputes. And, to resolve them, the Commission must make intrusive, value-laden comparisons among incommensurable network architectures and technologies and the costs they generate in handling particular kinds of traffic. Such comparisons are inevitably inexact, transitory, controversial – and unnecessary. Indeed, the Commission could avoid such comparisons altogether by moving to a bill-and-keep regime. Under bill-and-keep, the Commission would no longer need to ask whether CLECs have achieved unusual efficiencies by specializing in a single class of customers. Nor would it need to decide whether CLECs should be paid more than ILECs for termination at the central office on the theory that “CLEC networks may use long-loops or fiber rings in place of the tandem switches deployed by ILECs,” and “delivery of a call to the CLEC central office may often be the functional equivalent” – for pricing purposes – “of delivering a call to the ILEC tandem office.” Focal Comments 45. These cross-technology comparisons are arbitrary and, ultimately, deeply inimical to any truly deregulatory approach to telecommunications. More fundamentally, no carrier should be compelled to subsidize, through another carrier’s origination or termination rates, that second carrier’s choice of network architecture. That second carrier should have its choice validated – or not – based on the willingness of its own end users to support it by paying rates to that carrier.

3. The regulatory inaccuracies inherent in CPNP have significant market-distorting consequences.

Contrary to the position of CPNP’s champions, the arbitrage consequences of not “getting the price” right under CPNP are considerable and ultimately quite harmful to the

industry. As the ISP experience has shown, an entire segment of the telecommunications industry can grow up in reliance on a gap between termination rates and costs, and the cost of making the necessary regulatory correction is further industry instability. In a competitive environment, so long as CPNP is the rule, such arbitrage opportunities will be unavoidable, because carriers will always look for ways to exploit the inevitable inaccuracies in government-imposed intercarrier rates. And the effects of such distortions will be particularly severe where – as is the norm under current regulation – the originating carrier or IXC lacks authority to pass artificially high intercarrier termination rates back to the specific end users that originate the calls. *See, e.g.*, 47 U.S.C. § 254(g); *see generally* Rogerson Decl. 13-14.

The ISP example illustrates the consequences of such regulatory distortion. Above-cost termination rates produced not just an artificial subsidy for heavy dial-up Internet usage, but a wealth transfer from ILECs (the originating carriers paying the above-cost rates) to CLECs (the terminating carriers that received those rates). Because the states did not permit the ILECs to pass that burden back specifically to the end users who made ISP-bound calls (indeed, the states generally barred the ILECs from responding to the increased traffic by raising their rates at all), those end users received no price signals to use the ILECs' networks efficiently. This Commission wisely recognized that it makes no sense to subsidize heavy use of the Internet by artificially disadvantaging one class of carriers (and their shareholders or rate-payers) to the benefit of another. *See ISP Reciprocal Compensation Order* ¶¶ 66-76. Moreover, correcting the problem disrupted business plans that were based on gaming the regulatory system, and that in turn caused further economic dislocation. Contrary to the inexplicable position

taken by Time-Warner Telecom (Comments 10-11), the underlying culprit here was the regulatory problem, not the correction. And there would have been no such problem, and thus no need for subsequent correction, if the government had chosen bill-and-keep from the outset.

The type of arbitrage opportunity created by excessive *intercarrier* rates should be distinguished from the quite different arbitrage opportunities that arise when regulation sets an above-cost *retail* rate for a service offered by a dominant carrier, a competitive carrier offers the same service at an unregulated rate, and the market actors choosing between those two services *are the same ones who must pay the rate*. In that context, those market actors (typically end users) receive immediate price signals that cause them to choose the cheaper service, and that dynamic automatically begins moving industry prices towards costs.

That is not the case here: When a regulator sets *intercarrier* termination rates too high, it is often the case that *no* relevant market actor will receive appropriate price signals, and arbitrary intercarrier wealth transfers may persist without any market correction whatsoever. That is what was so pernicious about above-cost reciprocal compensation rates in the ISP-bound traffic context. Because the typical originating carrier (an ILEC) was barred from passing back to particular end users the termination rates charged by a CLEC serving an ISP, no end user had any incentive to avoid ISPs served by CLECs that charged above-cost rates, and the only mechanism for correcting the problem was a purely regulatory one. Such distortions will always be a threat so long as government engages in the precarious exercise of making one carrier pay for another's network costs.

B. Bill-and-keep is consistent with principles of cost-causation.

As explained in William Rogerson's Declaration (at 25-28), bill-and-keep is at least as consistent as CPNP with economic principles of cost causation. Indeed, the very premise of CPNP is that the calling party is responsible for all of a call's costs and that the called party is responsible for none. That premise is obviously false: the called party is capable of precluding costs from being incurred simply by declining to take a call or choosing to terminate it, and the called party's network has continuous opportunities to pick more or less efficient terminating technology. The supposed economic advantage of CPNP is illusory on another level as well, because regulatory restrictions preclude carriers in a wide range of circumstances from passing the costs of specific calls back to the individual calling parties that supposedly "cause" them.

In questioning the economic foundation of bill-and-keep, most opponents attack a straw man: the notion, upon which arguments for bill-and-keep do *not* rest, that the calling party and the called party evenly share exactly the same benefit on any given call. *E.g.*, Time-Warner Telecom Comments 6. The question is not whether each party shares *benefits*, but whether each is a causer of *costs* in the sense that each stands in a position to preclude certain costs from being incurred. The answer to that question is undoubtedly yes: each carrier can take measures to lower the costs of termination, and each end user can take measures -- from hanging up to requesting an unlisted number -- to avoid call-related costs.

Second, and more fundamentally, the argument for bill-and-keep is not that it perfectly assigns costs to the parties that cause them, but that its method of allocating costs is at least as efficient as CPNP's alternative method and that it is preferable to

CPNP in the other respects discussed above (namely, an increased reliance on market forces rather than regulation in the recovery of each carrier's network costs, the elimination of arbitrage opportunities, and the preservation of long-term industry stability). There can be no credible argument that CPNP somehow does a better job than bill-and-keep of allocating costs: with respect to any given call, CPNP inaccurately presumes that the calling party must pay for 100% of the call, even though, by answering the telephone and permitting the call to continue, the called party is responsible for a significant percentage of the costs that are incurred.

Proponents of CPNP contend that this deficiency will be sorted out if every called party perceives an obligation to settle accounts by placing a commensurate number of calls back to the original calling parties. *E.g.*, AT&T Comments 23. But that is no answer at all. Many calls are made between parties without any kind of ongoing relationship, and there is no reason to believe that, even where parties do make an effort to call each other back, the resulting costs will be borne with anything approaching proportionality. In sum, the principle of cost-causation is not remotely a strike against, and if anything is further support for, the adoption of bill-and-keep over CPNP: See Rogerson Decl. 25-28.

- C. There is no basis for concern that bill-and-keep would induce carriers to specialize in originating traffic or would increase the number of unwanted calls.**

In the *ISP Reciprocal Compensation Order*, the Commission soundly repudiated its previous concern that bill-and-keep would give carriers uneconomic incentives to specialize in the origination of traffic. As the Commission observed there, "[a] carrier must provide originating switching functions and must recover the costs of those

functions from the originating end-user, not from other carriers. Originating traffic thus lacks the same opportunity for cost-shifting that reciprocal compensation provides with respect to serving customers with disproportionately incoming traffic." *ISP Reciprocal Compensation Order* ¶ 73.

That analysis is correct. In contending otherwise, a few CLECs argue that bill-and-keep would enable carriers specializing in origination to undersell the rates that other carriers charge their own subscribers. *E.g.*, Time-Warner Telecom Comments 11. The CLECs' argument is that those other carriers must charge their subscribers not just for the origination costs of any given call, but for the termination costs of that same call as well. This argument is without merit. If bill-and-keep is the intercarrier compensation rule, a carrier operating in a competitive environment will succeed in charging its end users only for the portion of network costs for which it is legally responsible. By hypothesis, that will not include the costs of terminating a call on another carrier's network. As a result, there would be no regulatory incentive for a carrier to specialize in originating traffic, because the price it could successfully charge for performing that service would need to cover the quite significant costs of origination plus some significant portion of transport, and those would be the same costs that other, competing carriers would need to recover as well. *See* AT&T Wireless Comments 27-28.

Some CLECs contend that current ILEC retail rates are designed to recover both the origination and the termination costs of all (non-access) calls originating on the ILEC's network. *E.g.*, Time-Warner Telecom Comments 23-25; *see also* Focal Comments 10-11. That contention, which the Commission has already rejected, is both inaccurate and irrelevant to the merits of bill-and-keep. As a factual matter, the

Commission has repudiated similar claims by the same CLECs "that ILEC end-user rates are designed to recover from the originating end-user the costs of delivering calls to ISPs." *ISP Reciprocal Compensation Order* ¶ 88. As the Commission observed, "most states have adopted price cap regulation of local rates," and thus "rates do not necessarily correlate to cost in the manner the CLECs suggest." *Id.* at n. 174. That is not only true but an understatement. Even apart from the typical inability of ILECs to raise local rates to accommodate the growth of ISP-bound traffic, the use of price caps renders nonsensical any effort to draw a close correspondence between an ILEC's current retail prices and the specific functions that are performed in the disposition of local calls.

In any event, even if ILEC rates were currently structured such that some CLECs would specialize in originating traffic if exempted from an obligation to cover termination costs, that fact could not logically support an argument against bill-and-keep. Unlike the low termination rates (and sharing of intercarrier revenues) that CLECs could offer ISPs before the Commission stepped in this past April, the lower retail rates charged by the CLECs for originating traffic would not reflect an arbitrary carrier-to-carrier wealth transfer or any other irrational subsidy. They would reflect only the underlying cost of providing the portion of the service for which those CLECs would be responsible under bill-and-keep. To the extent that ILECs respond to those low rates by reducing their own rates to compete for the same customers, that would be an obvious benefit of bill-and-keep, not a disadvantage.

There is, finally, no empirical basis for the argument that bill-and-keep would increase the number of unwanted calls by companies that place more calls than they receive, such as telemarketers. As an initial matter, it is obviously not the case that, as

AT&T contends, bill-and-keep would make "every call a collect call." AT&T Comments 33. To the contrary, as the Commission has explained, carriers under a bill-and-keep regime – and thus the customers of those carriers – would need to cover the costs of each call's origination as well as a substantial share of transport costs as well. *See ZSP Reciprocal Compensation Order* ¶ 73. There is no empirical basis for concluding that the volume of telemarketing calls would significantly increase if the costs of a call were split between originating and terminating carriers rather than, as now, borne entirely by the originating carrier. *See also Rogerson Decl.* 30-31.

Even if bill-and-keep were likely to increase the number of unwanted calls, the appropriate solution is not to reject bill-and-keep itself but to address the problem of unwanted calls directly. First, the market has already produced a number of caller identification and call blocking technologies that shield subscribers from unwanted calls, and such market responses can be expected to become even more effective over time. *See Qwest Opening Comments* 39. In any event, even if the market could not be trusted to solve this problem, the appropriate regulatory response would be to enforce direct restrictions on the ability of telemarketers to place calls to nonconsenting individuals. Indeed, the Commission now follows exactly that approach. As AT&T itself observes (Comments 32-33), there are already highly effective restrictions on the kinds of telemarketing calls that can be placed to the subscribers of any wireless service "*or any [other] service for which the called party is charged for the call.*" 47 C.F.R. § 64.1200(a)(1)(iii) (emphasis added). Moreover, the Commission and a number of states independently require telemarketers to place called parties on a "do not call" list upon request. *See* 47 C.F.R. § 64.1200(e)(2)(iii).

11. An efficient bill-and-keep regime would allocate default financial responsibility for transport at the "edge of the network."

The defining characteristic of bill-and-keep is a default division of financial responsibility for the costs of handling traffic at some point between two interconnecting networks; in the absence of negotiation, each interconnecting carrier – whether it is an ILEC, CLEC, wireless provider, or IXC – must recover from its end users, and not from the other carrier, all network costs on its side of that point.” Qwest has called that point the “financial point of interconnection,” or “financial POI.” It is to be distinguished from the place where two networks actually interconnect, which Qwest has called the “physical POI.” As an example of the difference between these two points, the physical POI between an originating LEC and an IXC in a long-distance call is today the POP, but the financial POI is, in effect, the loop side of the end office switch, since the IXC bears financial responsibility for all costs from that point.

At bottom, two basic variables define the major differences among bill-and-keep proposals: (1) the mechanism for identifying financial POIs in each network, and (2) the mechanism for determining the placement and types of physical transport links between the two networks. These two variables are obviously related, as DeGraba’s proposal

¹¹ Under current Commission regulations, each carrier is required to designate at least one physical POI in every LATA that it serves for the receipt of terminating traffic. The Commission should retain that approach under bill-and-keep and should clarify that, where a carrier makes only one physical POI available in a LATA, it is responsible for all network costs incurred on its side of the POI (*i.e.*, this designated physical POI also serves as the carrier’s financial POI). Although LATAs are the creatures of an obsolescent regulatory regime, they remain a readily available – if imperfect – means of dividing up the country for these purposes.

illustrates.¹² DeGraba would address the first issue (the designation of financial POIs) by requiring a carrier, in the absence of negotiations, to provide transport in any LEC-to-LEC call all the way to the end office serving the called party. Put another way, it would automatically place the financial POI for the call at that end office, and it would require the terminating carrier to recover from its own end users the costs of all "local access facilities" (*i.e.*, terminating switching and the loop) on its side of that point. The DeGraba proposal would then address the second issue (the deployment of efficient transport facilities between the two networks) by relying on negotiations against the backdrop of the specified default outcome. The premise of the DeGraba approach is that the very inefficiency of the default outcome – *i.e.*, each carrier's obligation to provide transport to the other carrier's end office over one-way transport facilities – would induce each carrier to negotiate an efficient, mutually advantageous transport solution, such as the use of two-way trunking.

In that respect, DeGraba's designation of the end office as the default dividing line for financial responsibility would not result (and is not intended to result) in *physical* points of interconnection anywhere near the end office. It would, however, have quite significant effects on the relative bargaining power of the two interconnecting carriers. In particular, DeGraba's approach would disadvantage those carriers that have fewer "end offices" than the carriers with which they must interconnect, because their transport burden under the DeGraba regime would be greater than that of the other carriers. That

¹² "The DeGraba proposal" denotes the December 2000 white paper written by Patrick DeGraba and issued by the Office of Plans and Policy. *See* Patrick DeGraba, "Bill and Keep at the Central Office as the Efficient Interconnection Regime," OPP Working Paper #33 (2000) ("*DeGraba*").

fact presents significant competitive concerns, since ILECs typically have many more end offices in a given locale than do CLECs. Moreover, because DeGraba's default rule would require CLECs to obtain transport deep within an ILEC's network, it would generate calls for intrusive government intervention in an ILEC's provision of its transport facilities at regulated rates to help CLECs meet their transport obligation.

Those defects in DeGraba's approach – the asymmetry of obligations as between ILECs and CLECs, and the potential for undue regulation of transport within an ILEC's network – can be resolved by adopting a different approach to the placement of financial POIs. In Section III.A, below, Qwest proposes such an approach, under which financial responsibility would be allocated (by default) at the “edge” of an interconnecting carrier's network. In a circuit-switched ILEC network, that generally means the access tandem serving the called party's end office,

That default designation of financial POIs, however, is only a first step. The ultimate goal of any sensible transport solution is the creation of conditions under which any two carriers will make use of efficient transport arrangements – and, in particular, two-way trunks between their networks wherever justified by traffic volumes. Requiring interconnecting carriers to specify financial POIs for any given call does not *by itself* produce efficient two-way transport arrangements between the carriers' networks, because (among other considerations) the financial POI in carrier X's network for traffic flowing in one direction would seldom coincide with the financial POI in carrier Y's network for traffic flowing in the opposite direction. As discussed below, the question is whether, in the spirit of DeGraba, the Commission should rely on intercarrier

negotiations against the backdrop of financial POI default rules to produce efficient two-way trunking arrangements.

- A. **The default dividing line for financial responsibility in the transport of telecommunications traffic should be drawn at the edge of the other carrier's network.**

There are several advantages to a default rule that designates the financial POI for a given call at the edge of the other carrier's network. The term "edge of the network," which is defined more precisely below for different types of networks, can be roughly described as the set of points within a carrier's network where interconnection with other networks is technically feasible and where it is efficient for that carrier to manage a high volume of traffic bound for, or originating from, end users distributed over a broad geographic area. The edge of a carrier's network is thus to be distinguished from points deep within a carrier's network architecture, such as an end office (in a hierarchical circuit-switched network) serving a small number of end users distributed over a confined area.

One key advantage of designating the financial POI at the edge of the network is that it would limit the number of points in an ILEC's network to which other carriers would have a financial obligation to transport traffic, and it would therefore remove the anticompetitive asymmetry (discussed above) inherent in the DeGraba approach. Moreover, by removing that asymmetry, it would ensure that each carrier has roughly equal incentives to negotiate efficient transport solutions (including the deployment of two-way trunks), since neither carrier would be systematically much worse off or much better off than the other in the event that negotiations break down. That would greatly alleviate any theoretical concern that ILECs might avoid good faith negotiations, and

make themselves slightly worse off in the short term, in the hope that, by making CLECs *much* worse off, they could drive them from the market altogether. *See* Rogerson Decl. 7-8. Finally, because a range of transport options is typically available for carriers that interconnect at the edge of others' networks, sparing an interconnecting carrier from an obligation to deliver traffic to multiple points deep within each network would significantly reduce the circumstances in which there would be calls for regulatory intervention in the rates that ILECs may charge an interconnecting carrier for transport using the ILEC's facilities. *See id.* at 17-18.¹³

To identify the "edge" of a carrier's network for purposes of dividing financial responsibility between interconnecting carriers, the Commission must first distinguish between two different types of network architecture. In the hierarchical circuit-switched architecture that characterizes the networks of the major ILECs, the "edge" is typically the location of a higher-order switch such as an access tandem. In a "flat" packet-switched architecture, by contrast, the "edge" could include any node in the local network where interconnection is technically feasible.

This distinction reflects the fundamentally different ways in which traffic is routed over these two types of networks. As the Internet backbone illustrates, hot potato routing – the delivery of a call to the closest technically feasible point on another carrier's

¹³ Because Qwest's approach would permit interconnection at the edge of an ILEC's network, it would significantly reduce and perhaps eliminate the circumstances in which an interconnecting carrier could be said to have been "impaired," under 47 U.S.C. § 251(d)(2), by the denial of access to an incumbent LEC's transport facilities at regulated rates. *See generally Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Supplemental Order Clarification, 15 FCC Rcd 9587 ¶¶ 12-17 (2000) (noting context-specific character of "impairment" analysis under section 251(d)(2)).

network – is generally an efficient transport solution for a packet-switched network, because the individual packets constituting that call can follow any number of routes within that network to their final destination and, by definition, will not tie up a given “circuit.”¹⁴ As observed in Qwest’s opening comments (at 30), however, it would not be similarly efficient to permit a carrier to drop a call off anywhere in a typical circuit-switched network, because such networks require both predictability of transmission paths and conservation of the available circuits occupied by circuit-switched traffic.

For these reasons, the dividing line of financial responsibility – *i.e.*, the financial POI – should vary depending on whether a given network is circuit-switched or packet-switched. For packet-switched networks, the financial POI is appropriately placed at any technically feasible point, such as a gateway, within a defined geographic area. (As discussed in note 11, above, the relevant area is probably best defined, given current conventions, as a LATA.) The upshot of this approach is that, if carrier A drops off traffic at any given gateway on carrier B’s packet-switched network, carrier B must recover from its end users – and not carrier A – the costs it incurs in handling those calls on its side of that point.

The approach proposed here requires somewhat greater elaboration when applied to a traditional circuit-switched network. In that context, an appropriate financial POI is any point in the carrier’s network corresponding to the access tandem serving the called party’s end office (or, in the event the carrier has no such tandem, to the end office itself). For example, suppose that carrier A – which could be an IXC, a wireless carrier, or a

¹⁴ See generally Michael Kende, “The Digital Handshake: Connecting Internet Backbones,” OPP Working Paper #32 (2000).

LEC – drops off traffic at carrier B's access tandem at the edge of the latter's circuit-switched network, and suppose that carrier B's end user is served by an end office subtending that tandem. In that event, carrier B must recover from its end user, and not from carrier A, all costs associated with that traffic on its side of that point, including tandem switching, end office switching, and transport between the end office and the tandem. Now contrast the following situation: An ILEC has two access tandems – Tandem A and Tandem B – in a LATA. A CLEC wishes to interconnect with the ILEC *only* at Tandem B. Under the approach described here, the CLEC is free to choose that option, and it will pay none of the costs beyond its side of Tandem B for traffic to end users served by an end office subtending Tandem B. It will, however, bear financial responsibility for the additional network costs of delivering to Tandem A any traffic to end users served by an end office subtending Tandem A but not Tandem B. Because it would be generally inefficient to route such calls through two tandem switches, the originating carrier should receive appropriate price signals to deliver them to the tandem serving the relevant end office. Finally, it bears emphasizing that these outcomes are merely defaults; carriers are of course free to negotiate alternative allocations of financial responsibility if they wish.

B. Carriers are likely to negotiate efficient two-way trunking solutions without extensive regulatory intervention beyond the designation of the financial POIs.

An identification of financial POIs in a given carrier's network is a critical component of an efficient transport solution, but it does not complete the inquiry. Networks do not exactly coincide, and one carrier's financial POI for traffic moving in one direction will be separated – whether by a matter of inches or miles – from the other

carrier's financial POI for traffic moving in the other direction. Somehow that gap must be bridged, for otherwise – if they simply follow the default rules for financial POIs – carriers will deploy inefficient one-way trunks to other carriers' networks.

Before addressing whether regulatory specificity is needed to meet that objective, it is important to restate the efficient and desired outcome: the deployment of two-way trunks between the respective networks wherever justified by traffic volumes. Given the financial POI rules described above, detailed additional regulation may well be unnecessary to achieve that outcome. Any two carriers have a shared interest in reducing their aggregate costs by deploying a single, efficient two-way trunk, rather than two inefficient and redundant one-way trunks, for the traffic between their two networks. Of course, each carrier has an individual, self-interested incentive to avoid paying as much of the cost of that trunk as possible. But, given each carrier's background obligation to interconnect with other carriers, *see* 47 U.S.C. § 251(a)(1), and given that the default outcome is the construction (to the disadvantage of both carriers) of separate one-way trunks, each carrier would have a strong incentive to agree to share the costs of a single two-way trunk so long as *some* traffic flows in each direction between the two carriers.

Indeed, negotiations are more likely to succeed in producing efficient transport solutions under the approach proposed here than under the DeGraba proposal. Because carriers would be free to relinquish financial responsibility at the edge of another carrier's network, the default outcome would no longer disproportionately benefit carriers, such as large incumbent LECs, that have many end offices to which other carriers, such as CLECs, would bear the financial responsibility for delivering traffic. Qwest's approach would thus give ILECs added incentives to negotiate transport solutions in good faith,

because impasse would no longer make other carriers systematically worse off than ILECs. *See* Rogerson Decl. 7-8. In sum, designation of financial POIs at the edge of the network may well be enough to ensure fair and efficient two-way trunking solutions, without further regulation, for most intercarrier interconnection.

A significantly more interventionist option would be to promulgate detailed, nationally uniform regulations comprehensively establishing how networks must interconnect in specified circumstances, when two-way trunks should be required, how financial responsibility for those trunks should be allocated among the intercarrier carriers, how routing should be determined, and so forth. *See, e.g.,* AT&T Wireless Comments 42-44. As in other contexts, however, it is far easier to add regulations incrementally once the need for them becomes apparent than it is to rescind regulations that, in hindsight, may not be strictly necessary. The Commission should thus adopt a market-oriented approach based on the placement of financial POIs at the edge of the network, study how well the market responds to the imperative for negotiation, and only then consider whether a more interventionist approach is necessary.

One context in which narrowly targeted regulatory intervention might arguably be necessary is where the traffic volume between carrier A's end office and carrier B's network is heavy enough to justify a direct trunk group that bypasses carrier A's tandem switch. For example, if that direct trunk group runs through the tandem location (and not through the tandem switch itself), it may be necessary to require carrier B to segregate the traffic destined for carrier A's high-volume end office so that it can be placed on the direct trunk group. The potential problem in such cases is that, if these direct-trunking disputes are viewed in isolation, carrier B may appear to have too small an incentive to

deviate from its default option of simply delivering all traffic on an unsegregated basis to the tandem switch. On the other hand, carriers normally negotiate a broad range of issues in combination, and it is unlikely that carrier B would permit negotiations to break down altogether, and thereby incur an obligation to underwrite the entire cost of inefficient one-way trunks, simply to avoid an efficient solution to direct trunking needs.¹⁵

C. Appropriate implementation of bill-and-keep would eliminate concerns about ILEC discrimination against unaffiliated IXCs.

AT&T (Comments 48-51) and WorldCom (Comments 24-27) express concern that bill-and-keep would increase an ILEC's ability to discriminate – with respect to both quality of service and pricing of local access – against unaffiliated IXCs in favor of the ILEC's own long-distance affiliate. That concern is misplaced. *See* Rogerson Decl. 21-24. Any ability of ILECs to engage in price or non-price discrimination is independent of the intercarrier compensation regime the Commission adopts. And any such ability can in any event be adequately addressed through regulations prohibiting such discrimination. *See id.* This is why the Commission has long imposed structural separation requirements

¹⁵ Many calls involve three carriers: the originating carrier, the terminating carrier, and a carrier that provides transport services in between. An IXC is a transport service provider that has an independent relationship with the calling party. It would be subject to the rules discussed in this section, and it would be responsible for recovering from its own subscribers all costs between the financial POI of the originating carrier and the financial POI of the terminating carrier. In contrast, a “transiting” carrier is a transport service provider that does *not* have an independent relationship with the calling or called party. Such a carrier essentially serves as a subcontractor to the originating carrier, helping the latter meet its responsibility to deliver calls to the terminating carrier's network. As discussed in Qwest's opening comments (at 25 n.14), a transiting carrier is entitled to be paid by the originating carrier for performing that service.

for non-BOC dominant LECs that offer long-distance services and why Congress added for BOCs the more specific safeguards set forth in 47 U.S.C. § 272(e).¹⁶

In challenging bill-and-keep on the ground that it would permit discrimination against stand-alone IXCs, therefore, AT&T and WorldCom attack a straw man: they appear to assume that, in transitioning to bill-and-keep, the Commission would overlook the need to retain appropriate safeguards against discrimination. Of course, the Commission would not overlook that need, and in any event the statutory safeguards set forth in section 272(e) would remain in force. To remove any doubt on this issue, the Commission should simply clarify that, under bill-and-keep, each ILEC (to the extent that it is dominant in the access market) must provide its end users with access to unaffiliated IXCs on the same terms, at the same rates, and with the same quality of service as the access it provides to its own IXC affiliate.

With respect to pricing, this means that, until it is deemed non-dominant in the provision of access services, an ILEC must have a standard menu of rates (which could be flat-rated or usage-sensitive or some combination of the two) for local services, and that menu cannot vary depending on an end user's choice of IXCs.¹⁷ With respect to quality of service, this non-discrimination imperative means, among other things, that

¹⁶ The Commission recently sought comment on whether it should relax structural separation requirements for non-BOC ILECs. See *In the Matter of 2000 Biennial Regulatory Review, Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules*, Notice of Proposed Rulemaking, CC Docket No. 00-175, FCC 01-261 (rel. Sept. 14, 2001).

¹⁷ As AT&T appears to acknowledge (Comments 50), its concern about anticompetitive "price squeezes" by dominant LECs would be no more valid under a bill-and-keep regime than it is under the existing access charge regime. See Rogerson Decl. 24; see also *Southwestern Bell Tel. Co. v. FCC*, 153 F.3d 523, 548 (8th Cir. 1998) (affirming Commission determination that IXC price squeeze concerns "are unwarranted because adequate safeguards are in place to prevent such an occurrence").

each ILEC must agree to route any tandem-switched traffic bound for its own IXC affiliate through the same end office-to-tandem trunks that it uses to route tandem-switched traffic bound for an unaffiliated IXC. And, just as ILECs typically divert overflow access traffic from direct trunk groups onto tandem-switched transport facilities en route to any IXC, they should be required to ensure that those same facilities are available to handle overflow traffic from direct trunk groups destined for unaffiliated IXCs. *See* Rogerson Decl. 22.

111. The adjustments bill-and-keep would require to end user rates and universal service are not "disadvantages" of bill-and-keep, but steps in the right direction.

A number of carriers and states oppose bill-and-keep on the ground that it would increase end user rates, particularly the rates charged by the independent ILECs operating in high-cost areas. *E.g.*, NTCA Comments 12-13. Reduced to its essentials, this is simply an argument to postpone the day in which universal service subsidies will be explicit and competitively neutral rather than, as now, implicit and inefficient.

Although bill-and-keep would lead to rate increases for some services, it would also lead to at least commensurate rate reductions for other services. Today, consumers end up paying for access charges through higher IXC rates, and, as a group, they would do at least as well if those charges were imposed on them directly rather than, as now, indirectly through their IXCs. Put another way:

[S]hifting the recovery of [access] costs from carriers to end users should not, on average, increase the total costs faced by end users. This is so because carriers that currently pay inter-carrier charges, like long-distance carriers, pass these costs on to end-user customers in the form of higher rates. Thus, although a customer may see an increase in the bill he receives from his ILEC, he should see a corresponding decrease in other charges, such as lower charges from his long-distance carrier.

DeGraba at ¶ 125. Indeed, for the reasons discussed above, a move to bill-and-keep for all traffic would produce significant gains for net consumer welfare. Bill-and-keep would reduce the significant costs of regulatory uncertainty and inefficient arbitrage, and a significant portion of those savings would be passed on to consumers in the form of lower retail rates within the telecommunications industry as a whole.¹⁸

The “consumer welfare” concerns raised about the application of bill-and-keep to access traffic are therefore not concerns about consumer welfare in the aggregate, which bill-and-keep could only enhance. Instead, the concern is that, as rates for most end users go down, rates for other end users would rise to meet the actual costs of serving them (in the absence of an explicit universal service response). That is because bill-and-keep would eliminate current implicit subsidy mechanisms that shield certain end users from bearing responsibility for the unusually high costs involved in connecting them to the network.

The existing access charge regime embodies two principal subsidy mechanisms. First, current access charges as a whole may exceed the aggregate costs of providing the specific access services with which they are associated, thereby permitting incumbent LECs to offer lower rates for basic local service.¹⁹ Second, and more important in this

¹⁸ Although some critics suggest that consumers would find it hard to read their bills after a switch to bill-and-keep (e.g., AT&T Comments 6, 33), those concerns are a sham. At worst, consumers would have to pay two separate sets of charges: those that cover the services offered by an end user’s LEC, and those that cover the services offered by an end user’s IXC. But that, of course, is the case today. The only difference is that certain costs that used to be associated with the IXC would now be associated with the LEC. There is nothing particularly “confusing” about that outcome, and in any event all carriers would have an incentive to find market-oriented ways to reduce any confusion.

¹⁹ The *CALLS Order* purported to eliminate that implicit subsidy mechanism for price-cap LECs on the interstate side of the ledger. *But see Texas Office of Pub. Util. Counsel,*

context, 47 U.S.C. § 254(g) requires an IXC – to the extent that it must pay access charges – to recover them not from the specific end users that cause them to be incurred, but from the IXC's national subscriber base. That national averaging requirement forces an IXC's end users in low-cost areas to pay significantly above-cost rates for conventional long-distance calls so that end users in high-cost areas may pay artificially low rates. Bill-and-keep would largely eliminate this subsidy mechanism because, by requiring each LEC to recover its network costs from its own end users, it would remove access charges from the scope of the costs that are subject to the national averaging requirement.

Although including access charges within the scope of that requirement may have made sense as a transitional measure in the wake of the 1996 Act, it would be inappropriate on two levels to rely on that mechanism as a long-term solution to universal service needs. First, it is implicit rather than explicit and, as such, is irreconcilable with the new universal service mandate of section 254. Second, the geographical averaging mechanism is not at all competitively neutral: it places the subsidy burden not on telecommunications providers as a whole, but on providers of a limited category of telecommunications services (conventional long-distance services). That, too, cuts against the grain of section 254, which emphasizes the twin needs, in a competitive marketplace, to make universal service mechanisms fully explicit and to spread the

265 F.3d at 327-28 (vacating that portion of *CALLS Order*). Moving to bill-and-keep for access traffic would not by itself necessarily eliminate *this* form of implicit subsidy where it persists, because regulators could theoretically choose to retain the subsidy mechanism in the form of higher rates that ILECs charge end users directly (rather than indirectly through higher access rates charged to those end users' IXCs).

contribution obligation as broadly as possible among providers of telecommunications generally.

In short, the geographic averaging mechanism that bill-and-keep's opponents wish to preserve is an anachronism and should be eliminated. Qwest understands that, by eliminating that implicit subsidy mechanism, bill-and-keep would require a significant expansion of current universal service mechanisms. In particular, it would require appropriate increases in the level of explicit contributions to the universal service fund. But that, again, is the necessary by-product of the reforms required by section 254.

Along these lines, there is no merit to suggestions that, by moving to bill-and-keep for access traffic, the Commission would somehow *violate* section 254(g). Cf. Focal Comments 42. By its terms, that provision merely requires "providers of interexchange telecommunications services" to average their rates among their entire subscriber base; it does not require such providers to pay access charges to ILECs. Indeed, relieving IXCs of the need to subject access charges to that national averaging requirement is the only way to satisfy the larger emphasis in section 254 on explicit and competitively neutral funding mechanisms. If anything, therefore, bill-and-keep is more consistent than the current access charge regime with the universal service principles of section 254. A few parties also seek to revive the moribund argument that a separate subprovision within section 254 – 47 U.S.C. § 254(k) – must be interpreted to require IXCs, rather than end users, to bear the costs of access. That position, which has no foundation in either the letter or the objectives of section 254, has now been squarely rejected not just by the Commission, but also by two courts of appeals. *See Texas Office*

cf. Pub. Util. Counsel, 265 F.3d at 323-24; *Southwestern Bell*, 153 F.3d at 559. The Commission should reject it here as well.

Finally, adoption of bill-and-keep for interexchange traffic will require the recovery directly from end users of certain network costs that had previously been recovered indirectly from end users through access charges. The Commission should permit significant flexibility in the recovery of those costs. As discussed in Qwest's opening comments (and above), one of the principal benefits of bill-and-keep is that, for the first time, it would make it feasible to employ flat-rated recovery of the costs of terminating access where that is more efficient than recovery through usage-sensitive charges. Any decision to adopt bill-and-keep should be accompanied by sufficient flexibility in end user rates that those rate structure efficiencies can be achieved.²⁰

IV. The Commission has legal authority to impose bill-and-keep for most traffic.

The parties' divergent interpretations of the statutory provisions addressing intercarrier compensation rates confirm that those provisions, like a number of other

²⁰ Because adopting bill-and-keep for access traffic would require significant reform of existing subsidy mechanisms, it would be appropriate to solicit the views of the Joint Board, just as the Commission might wish to do in response to the Tenth Circuit's recent decision invalidating the Ninth Report and Order. *See generally* 47 U.S.C. §§ 254(a), 410(a). Nonetheless, to avoid undue delay, the Commission should enforce a strict timetable for the presentation of the Joint Board's report and recommendation. A Joint Board could also recommend any adjustments to the current separations rules that might be appropriate to accommodate bill-and-keep. *See* 47 U.S.C. § 410(c). Although NECA hints that bill-and-keep would require significant changes to those separations rules, it is unclear why that would be so. As NECA acknowledges, bill-and-keep addresses how network costs are recovered (*i.e.*, from end users or from other carriers), not how they are allocated between jurisdictions. *See* NECA Comments 13. Of course, this Commission and its state counterparts would need to continue ensuring that ILECs receive a compensatory rate of return on both the interstate and intrastate sides of the ledger. *See generally Smith v. Illinois Bell Tel. Co.*, 282 U.S. 133 (1930). But there is no apparent reason why, after adoption of bill-and-keep, that requirement could not be met within the existing separations regime.

provisions in the 1996 Act, “[are] in many important respects a model of ambiguity or indeed even self-contradiction.” *AT&T v. Iowa Utils. Bd.*, 525 U.S. 366, 397 (1999). In these circumstances, where there is no obvious way to reconcile the various strands in the statutory text, the result is a rule of considerable deference to the Commission. As the Supreme Court has observed, “Congress is well aware that the ambiguities it chooses to produce in a statute will be resolved by the implementing agency.” *Id.* The Commission has broad discretion to resolve those ambiguities to pursue what, in light of its institutional expertise, it concludes is in the public interest. *See id.*

A. The Commission has authority to impose bill-and-keep for traffic covered by section 251(b)(5).

Opponents of bill-and-keep mistakenly treat the language of section 252(d)(2) as though it reflected a deliberate congressional choice as between CPNP and bill-and-keep for particular categories of traffic. *E.g.*, AT&T Comments 36-41. That provision does no such thing; in particular, it nowhere limits the reach of the bill-and-keep savings clause to cases of balanced traffic.²¹ Instead, Congress gave the FCC and the state commissions a choice: either to elect “arrangement[s] that waive mutual recovery (such as bill-and-keep arrangements)” or to elect a truly cost-based CPNP regime. *See Qwest*

²¹ AT&T contends (Comments 36) that section 252(d)(2)(B)(i) “clarifies that ‘arrangements that waive recovery (such as bill-and-keep arrangements)’” are permissible only “if they ‘afford the mutual recovery of costs through the offsetting of reciprocal obligations.’” The first of those statutory quotations by AT&T omits a word in the bill-and-keep savings clause: that clause explicitly preserves “arrangements that waive *mutual* recovery (such as bill-and-keep arrangements).” AT&T thus nonsensically contends that the savings clause preserves “arrangements that *wave* mutual recovery” of costs only if those arrangements also (impossibly) “*afford* the mutual recovery of costs.” 47 U.S.C. § 252(d)(2)(B)(i) (emphasis added). The Commission is entitled to assume that Congress meant to make sense, and any ambiguity in this statutory language should be resolved in favor of an appropriately robust construction of this savings clause.

Opening Comments 43. What section 252(d)(2) precludes is the imposition of a non-cost-based scheme of compelled payments between carriers. But section 252(d)(2) does not constrain the Commission's choice of bill-and-keep if it determines, as it should here, that it would better serve the public interest than a purportedly cost-based CPNP alternative.

In any event, even if the bill-and-keep savings clause were ignored, section 252(d)(2)(A), standing alone, would not preclude bill-and-keep arrangements, because at most it would require regulators to permit recovery of the "additional costs" of transport and termination. *See* Qwest Opening Comments 42. That specialized term is reasonably construed to limit any intercarrier payments to the short-term marginal costs (effectively zero) of transporting and terminating each call. *Id.* Contrary to WorldCom's suggestion (Comments 19), determining that the "additional costs" of transport and termination are zero for these purposes does not somehow imply that the *total element long run* incremental cost of switching and transport is zero for purposes of setting the rate that CLECs must pay when leasing an ILEC's network elements. TELRIC was adopted under a different statutory standard: the UNE cost standard of section 252(d)(1). The Commission's implementation of that provision in that context has no logical bearing on its authority to impose bill-and-keep as an appropriate intercarrier compensation mechanism.

Citing the Supreme Court's 1999 decision in *Iowa Utilities Board*, Focal suggests that, in adopting bill-and-keep for traffic covered by section 251(b)(5), the Commission would cross a perceived jurisdictional line dividing (1) the FCC's authority to issue general methodological rules from (2) the states' power to set particular rates. Focal

Comments 32-33; *see generally Iowa Utilities Bd.*, 525 U.S. at 384. This argument is without merit. Bill-and-keep is a methodology, not a "rate." The Commission has no less authority to preclude intercarrier termination charges for all traffic than to preclude it for balanced traffic – or, for that matter, to preclude one carrier from charging another for the cost of originating a local call (as, indeed, it has already done, *see* 47 C.F.R.

§ 51.703(b)). More generally, the Supreme Court has made abundantly clear that the Commission has plenary authority to resolve broad methodological issues of national importance to the industry. The issue before the Commission here is as general and nationally significant as they come: whether the rationalized intercarrier compensation regime for the 21st century will be bill-and-keep or some version of CPNP. The Commission can and should resolve that issue in favor of bill-and-keep.

B. The Commission has authority to adopt measures encouraging states to move towards bill-and-keep for intrastate access traffic.

The Tenth Circuit recently held that, under sections 254(b)(3) and (b)(5), the Commission has not just an opportunity but an "obligat[ion]" to induce the states – by "carrot or . . . stick" – to do their part in ensuring comparable rates within their states.²² The logic of the Tenth Circuit's ruling strongly indicates that the Commission has a more general authority to give the states appropriate inducements to make the transition from irrational, implicit funding mechanisms to the rational, explicit mechanisms required by section 254. Indeed, the very cornerstone of section 254 is the principle that, on both the interstate and the intrastate sides of the ledger, universal service should be funded not by ILECs alone through geographic rate-averaging and other implicit subsidies, but by "[a]ll

²² *Qwest Corp. v. FCC*, 258 F.3d 1191, 1204 (10th Cir. 2001) (internal quotation marks omitted).

providers of telecommunications services” through “equitable and nondiscriminatory contribution[s]” to explicit subsidy mechanisms.²³ Just as the Commission must “develop mechanisms to induce adequate state action” to fulfill the comparable-rate objectives of subsections 254(b)(3) and (b)(5),²⁴ so too must the Commission adopt mechanisms to induce state compliance with the core objective of subsections 254(b)(4), (e), and (f): a comprehensive transition by the FCC and the states to explicit, competitively neutral universal service programs.

Qwest therefore agrees with SBC (Comments 33-43) that the Commission can and should condition receipt of federal universal service funding on a state’s willingness, over time, to remove all implicit subsidies from its intrastate access charges and to convert them into explicit intrastate funding mechanisms. That carrot is likely to be highly effective, since the federal fund will play a critical new role in replacing the implicit subsidies that section 254(g) now produces under the existing access charge regime and that the adoption of bill-and-keep would sensibly eliminate. Once the states transition away from those implicit subsidies, any residual attraction of retaining the existing intrastate access charge regime would be highly attenuated, because that regime could no longer be used as a competitively skewed source of funding for universal service. The way would then be cleared for the Commission to lead a national regulatory consensus in support of bill-and-keep.

Finally, even if some states were reluctant to adopt bill-and-keep, such that conventional access charges accompanied intrastate but not interstate access traffic, that

²³ 47 U.S.C. § 254(b)(4); *see also* 47 U.S.C. §§ 254(e) & (f).

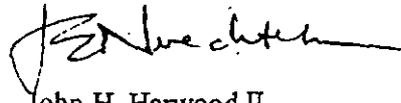
²⁴ *Qwest Corp.*, 258 F.3d at 1204.

reluctance would increasingly lead carriers to route traffic through digital networks (such as the Internet) in which "the interstate and intrastate components [of the traffic] cannot be reliably separated" – and that are thus categorically subject to the Commission's section 201 authority to impose bill-and-keep. *See ISP Reciprocal Compensation Order* ¶ 52. As discussed in Qwest's opening comments (at 46-47), and as also observed by SBC (Comments 42-43), that inevitable consequence of digital technology would make alternatives to bill-and-keep unsustainable in any jurisdiction over the long term.

CONCLUSION

For the reasons set forth here and in Qwest's opening comments, the Commission should adopt bill-and-keep for all traffic to the fullest extent of its jurisdiction.

Respectfully submitted,



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November 5, 2001

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November 5, 2001

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1. INTRODUCTION

I am William P. Rogerson. I am Professor of Economics at Northwestern University, where I am also Co-Director of the Center for the Study of Industrial Organization and Director of the Program in Mathematical Methods in the Social Sciences. I served as Chief Economist at the Federal Communications Commission from June 1, 1998 to May 31, 1999. I have also served on the Faculty of Economics at Stanford University and spent a year visiting the University of Chicago as an Olin Fellow at the Center for the Study of the Economy and State. I served as Chair of the Department of Economics at Northwestern from 1996-1998 and was elected a Fellow of the Econometric Society in 1999. In addition to conducting academic research, I have served as a consultant to a number of government agencies and non-profit organizations, including the Federal Trade Commission, the Institute for Defense Analysis, the Logistics Management Institute, the Office of the Secretary of Defense (Program Analysis and Evaluation), the RAND Corporation, and the U.S. Department of Justice.

I have been asked by Qwest Communications International, Inc. (Qwest) to read and analyze the record created thus far in the Commission's intercarrier compensation proceeding,¹ and to offer my views on the suitability of bill-and-keep as a basis for creating a new unified and efficient intercarrier compensation regime.² I conclude that bill-and-keep would promote efficiency and enhance competition, both by rationalizing and unifying existing regulations, and

¹My curriculum vitae is attached as an appendix to this Declaration.

²This proceeding was initiated by a Notice of Proposed Rulemaking issued by the Commission on April 27, 2001. *Developing a Unified Intercarrier Compensation Regime*, Notice of Proposed Rulemaking, CC Docket No. 01-92, FCC 01-132 (rel. Apr. 27, 2001) (NPRM).

³"Bill-and-keep" refers to a regime whereby a carrier recovers its network costs primarily, if not exclusively, from its end users, rather than interconnecting carriers.

by allowing the Commission to deregulate termination prices and certain other key prices charged by non-dominant carriers. Such a regime would be superior to one based on calling party's network pays (CPNP). While the main advantages of bill-and-keep would be captured by the basic bill-and-keep regime described by the Commission in its NPRM and the accompanying staff paper by DeGraba,"the proposal outlined by Qwest in its reply comments' to modify the basic regime by moving to a division of financial responsibility at the "edge of the network" offers some extra advantages that make it a particularly desirable choice. In this Declaration, I explain the major advantages that a basic bill-and-keep regime offers, the extra advantages that Qwest's "edge of the network" proposal offers, and, finally, why the arguments advanced by opponents of bill-and-keep are incorrect, insignificant, or properly dealt with by simple safeguards and rules.

2. EXECUTIVE SUMMARY

In its recent NPRM on intercarrier compensation regimes, the Commission begins its reexamination of all currently regulated forms of intercarrier compensation by observing that the current system is a crazy patchwork of regulations that treat the same types of economic transactions in very different ways depending upon factors which make no essential economic difference. When one carrier hands off a telephone call to another carrier, existing regulations might require that the first carrier compensate the second carrier, that the second carrier compensate the first carrier, or that neither compensate the other, all depending upon

¹See Patrick DeGraba, *Bill-and-keep at the Central Office as the Efficient Interconnection Regime*, OPP Working Paper 33, December 2000 (DeGraba 2000).

²Reply Comments of Qwest Communications International, Inc., *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92 (Nov. 5, 2001) (Qwest Reply Comments).

economically irrelevant factors such as whether the call is viewed as local or long distance, whether the carriers are local carriers or long distance carriers, whether the carriers are wireline or wireless carriers, and whether the call ultimately terminates at an Internet service provider (ISP) or not. The Commission observes that the current system creates distortions and arbitrage opportunities by treating what are essentially similar transactions in such disparate ways. These arbitrary distinctions bias technology choices, pick winners and losers in advance, and at times encourage firms to make massive investments simply to earn arbitrage profits rather than to accomplish any real productive purpose. In this NPRM, the Commission sets out toward the ambitious and laudable goal of subjecting this patchwork of regulations to a searching and thorough analysis and to replace it, to the extent possible, by a single unified regime explicitly designed to promote efficiency and competition and minimize the need for regulatory intervention as competition continues to develop.

In particular, in the NPRM and an accompanying staff paper by DeGraba 2000, the Commission suggests that bill-and-keep might provide the basis for creating such an efficient unified system. Under bill-and-keep, local carriers⁶ are not allowed to charge interconnecting carriers for the local carriers' own costs of originating and terminating calls within the local network. Rather, they must look to their own end-users for recovering these costs. Different types of bill-and-keep regimes can be created by varying either the definition of what facilities are viewed as being local access facilities or the default responsibilities of carriers to provide

⁶In this paper I will use the term "local carrier" to refer to any carrier providing end users with a direct link to the public switched network through a loop and end office switch or the functional equivalent of such facilities. This term includes incumbent local exchange carriers, competitive wireline local exchange carriers, and providers of wireless service. I will use the term incumbent local exchange carrier (ILEC) as it is used in the Communications Act of 1934, as amended. See 47 U.S.C. § 251(h).

transport between networks. In its reply comments, Qwest suggests one modification to the basic bill-and-keep proposal described by the Commission, by suggesting that the definition of local access facilities be expanded to include tandem switches serving end offices and transport between tandem switches and end offices (when such tandems exist). Qwest describes this approach as an "edge of the network" default division of financial responsibility since this modification essentially expands the definition of local access facilities outwards to the edge of the local carrier's network.

Moving to a bill-and-keep regime offers three main advantages.⁷ First, a bill-and-keep regime is significantly less regulatory than the current regime because, under bill-and-keep, there is no need to regulate termination prices charged by non-dominant carriers. Second, certain severe regulatory arbitrage problems that occur under the current regime can be completely avoided under a bill-and-keep regime. Third, under the Qwest proposal, it should be possible to reduce regulation of the transport prices that ILECs charge interconnecting carriers.

First, bill-and-keep is significantly less regulatory than the current regime because it eliminates the need to regulate termination prices charged by non-dominant carriers.⁸ As will be discussed below, even in very competitive telecommunications markets where there are large numbers of competing local carriers, it will still be necessary for government to regulate the termination prices that non-dominant local carriers charge other firms, due to the terminating monopoly problem. However, there is no need to regulate termination prices that non-dominant

The first two advantages of bill-and-keep apply to both *the DeGraba 2000* and Qwest proposals and, in fact, to almost any sensibly designed bill-and-keep regime. The third advantage applies to the Qwest proposal but not to the DeGraba 2000 proposal.

⁷As will be discussed in Section 4.1.4, a similar argument can also be made with respect to *origination prices charged by non-dominant local carriers for long distance calls*; these must be regulated under the current regime but could be deregulated under a bill-and-keep regime.

local carriers charge their own end users, because competition for these end users will itself control prices. Because even very good regulators will never be able to obtain sufficiently detailed, accurate, or timely information to set all prices equal to their perfectly efficient levels, regulation can never be expected to create the same incentives for efficiency that can be created by competitive markets. This is particularly true in industries such as telecommunications where technology is evolving rapidly and where there is a need for flexibility and experimentation with pricing structures and business models. And regulation is costly. Therefore, the fact a bill-and-keep regime would allow the Commission to let competition set prices that would otherwise have to be set by regulation is a significant advantage. That is crucial because, in the NPRM, the Commission states that one of its goals is to identify a system that "minimizes the need for regulatory intervention, both now and as competition continues to develop."

Second, a particularly serious and pernicious arbitrage problem that arises under the CPNP regime can be completely avoided by switching to a bill-and-keep regime. To the extent that termination prices that carriers are allowed to charge other carriers are set above the actual cost of providing termination in a CPNP regime, incentives are created for CLECs to invest in facilities that allow them to serve end users such as ISPs that primarily receive calls but do not originate calls, even if the CLECs are not the lowest cost service providers. Furthermore, because these termination fees paid by the originating carrier are not passed back to end users making the calls, such high prices do not automatically sow the seeds of their own destruction by creating incentives for end users to try to avoid using ISPs served by CLECs that charge these high fees.

* See NPRM at 3.

Third, the bill-and-keep system proposed by Qwest should allow the Commission to significantly deregulate ILEC provision of transport services to interconnecting carriers. This is because the Qwest proposal relieves interconnecting carriers of the responsibility to purchase transport deep within the ILEC network in order to deliver calls to every end office of the ILEC. Instead, under the Qwest proposal, interconnecting carriers are permitted to relinquish financial responsibility for traffic at the ILEC tandem. It is much more likely that competitive alternatives will be available for the more limited amount of transport that interconnecting carriers will be required to provide under the Qwest proposal.

The remainder of this Declaration proceeds as follows. Section 3 describes the broad outlines of the Qwest proposal for implementing a bill-and-keep regime. Section 4 discusses the three main advantages of moving to such a regime. Section 5 considers the potential problems with moving to a bill-and-keep regime that have been identified by various parties in the first round of comments of this proceeding. I show in each case that these problems are either incorrect or insignificant or that simple modifications can be made to the basic bill-and-keep regime to deal with them. Finally, Section 6 draws a brief conclusion.

3. QWEST'S BILL-AND-KEEP PROPOSAL

In this section, I will describe the main features of the Qwest proposal for a bill-and-keep regime. The proposal is described in more detail in Qwest's reply comments. Although the Qwest proposal supplements, expands upon, and clarifies the DeGraba 2000 proposal in a number of ways, it is similar in broad outline to the DeGraba proposal ~~with~~ one main exception. This is that Qwest proposes that the definition of local access facilities (i.e., network assets whose costs must be recovered from a local carrier's own end users) be expanded to include the tandem switch serving the end office, and transport between the tandem switch and end office, in

addition to the end office and loop. More specifically, Qwest proposes that, if an interconnecting carrier chooses to drop off a call at a tandem switch serving the called party's end office instead of directly at the end office, the terminating carrier would be responsible for recovering all termination costs beyond that point, including tandem switching and transport between the tandem and end office. Qwest refers to this approach as an "edge of the network" default division of financial responsibility, since this modification essentially expands the definition of local access facilities outwards to the edge of the local carrier's network.

There are two main advantages of the Qwest proposal over the DeGraba 2000 proposal. First, it places less onerous default transportation obligations on CLECs (and other non-ILEC local carriers), and therefore will encourage the growth of competition in local telecommunications markets. ILECs have historically constructed hierarchical networks, where multiple end office switches connect to a tandem switch. However, many other local carriers have chosen to build "flatter" network structures with no tandems, fewer end offices, but longer loops. This means that an area that an ILEC serves with multiple end offices connecting to a single tandem will often be served by another local carrier, such as a CLEC, with a single end office. The DeGraba proposal has the effect of imposing asymmetric transportation obligations on the CLEC and ILEC in such a case: The ILEC is typically required to deliver calls only to a single location in the CLEC's network while the CLEC is required to deliver calls to multiple end offices in the ILEC's network, even though both networks are serving the same area. By contrast, the Qwest proposal would reduce the transport obligation of the CLEC so that it is more symmetric to the transport obligation of the ILEC.

To the extent that the Qwest proposal reduces CLECs' costs of exchanging traffic, it would encourage the growth of the CLEC industry and therefore speed the overall growth of

competition in local telecommunications markets. In particular, the Qwest proposal, as compared to the DeGraba 2000 proposal, would reduce the extent to which an ILEC could prevent entry or induce exit of CLECs simply by refusing to negotiate efficient two-way trunking arrangements. Therefore, the Qwest proposal would reduce any potential incentives that ILECs might have to refuse to negotiate efficient transport arrangements, relative to the DeGraba proposal.

The second advantage of Qwest's proposed change to the DeGraba 2000 proposal is that it will allow the Commission to further deregulate prices that ILECs charge interconnecting carriers for transport. This issue will be discussed in detail in Section 4.

4. THE MAIN ADVANTAGES OF MOVING TO A BILL-AND-KEEP REGIME

4.1 Bill-and-keep eliminates the need for regulation of termination prices charged by non-dominant carriers.

4.1.1. The terminating monopoly problem.

Among economists that study telecommunications, it is a well understood and completely accepted fact that local carriers will set termination fees too high if they are allowed to charge those fees to calling parties.¹⁹ The reason is that the local carrier has a sort of "monopoly" with respect to the property right of being able to terminate calls to any of its end users. Therefore, the local carrier will find it profit-maximizing to raise its prices above cost in order to take advantage of this monopoly power. So long as end users of the local carriers care more about minimizing the prices that they pay the local carrier than about minimizing the prices that callers

¹⁹See the various articles and books cited below.

to them pay, unregulated termination prices will be inefficiently high no matter how much *ex ante* competition there is for end users among the local carriers.

There are at least three reasons why it is reasonable to expect that consumers will care more about minimizing the prices they themselves pay than about minimizing the prices that parties calling them pay. First, unless there is some direct business relationship between the two parties or they are part of the same family unit, an end user will lose no money himself if a party calling him (or the calling party's carrier) has to pay more. Rather, the only possible negative effect on the called party is that that party may receive fewer calls, which does not capture the full cost of higher rates experienced by the calling party." Second, as will be discussed in more detail in section 4.1.3 below, under current institutional arrangements following largely from state regulations, even this effect generally does not exist. This is because local carriers charge termination fees to other carriers and these carriers generally are not allowed to flow back termination charges to their end users making the call. Therefore an end user choosing a local carrier will quite rationally predict that (under current institutional arrangements) the local carrier's higher termination prices to the calling party's carrier will NOT reduce the number of calls the end user receives. Third, even if a system where charges could be flowed back to calling end users were instituted, higher termination charges on calling parties would reduce the number of calls an end user receives only to the extent that calling parties had sufficiently good information to be aware of the termination charges that every different local carrier charged and

"For example, suppose a calling party reduced its calling very little in response to a price increase but instead simply spent more. The calling party would still be worse off by the extra amount it was paying, but the called party would not perceive that there was any harmful effect of the price rise.

which local carrier each of the people they called subscribed to. Consumer information on this issue is likely to be far from perfect.

Experience in Great Britain confirms that end users do not seem to place much weight on the issue of termination charges levied on others when they choose a telephone provider. In Great Britain, wireless phone operators charge termination fees directly to the calling party. The British regulatory authority, OfTel, has found that users of mobile phones pay very little attention to the size of these termination fees when they choose their carrier and, in fact, generally do not even know what they are.

Generally, OfTel survey data . . . suggests that residential mobile phone owners are mostly driven by cost when it comes to choosing their mobile phone network. However, they appear to place very little weight on the price of calling their mobiles when they choose their mobile network. Only 15% of potential subscribers found out how much it would cost to call their mobile, and this cost was not thought to be a significant factor in their choice of a network. This survey data also suggested that even if it was a significant fact&, they might face difficulty in getting and understanding information on costs of calling mobiles.¹²

One of the first academic papers that I am aware of that described the terminating monopoly problem was by British economist Mark Armstrong, who built a model along these lines in order to explain why he thought that the British government needed to regulate the termination prices that wireless telephone companies charged to calling parties even though the market appeared to be quite competitive.¹³ Armstrong was recently invited to write the chapter on network interconnection for the forthcoming *Handbook of Telecommunications Economics*,

¹²See OfTel, *Review of the Price Control on Calls to Mobiles - A Consultive Document Issued by the Director General of Telecommunications*, 9-10 (February 2001) (available at www.oftel.gov.uk/publications/mobile/ctom0201.htm) (OfTel 2001).

¹³Mark Armstrong, "Mobile Telephony in the U.K.," (September 1997), Nuffield College, Oxford.

and his analysis of the terminating monopoly problem occupies one of three major sections in his chapter. He summarizes his findings as follows:

[W]hen a subscriber signs up with a network, that network has a monopoly over delivering calls to the subscriber, and it can extract monopoly profits from the callers to this subscriber. Even if the market for subscribers is intense, so that overall profits are eliminated in the sector, these monopoly profits - and the consequent deadweight losses - persist.⁴

In their recent book on Competition in Telecommunications, Laffont and Tirole draw the same conclusion:

It is worth recording here the common fallacy that small players do not have market power and should therefore face no constraint on their termination charges. This fallacy results from a misunderstanding of the definition of a market. A network operator may have a small market share in terms of subscribers; yet it is still a monopolist on the calls received by its subscribers.⁵

Furthermore, this problem is not merely theoretical. In Great Britain, when termination prices that mobile networks were allowed to charge calling parties were unregulated, networks charged high termination fees that were clearly above cost, and this forced the British government to step in and regulate these rates. In a recent statement, Oftel, the British regulatory authority, sums up the problem as follows:

The overall effect of the calling party pays principle in the retail market is that, whereas mobile networks have an incentive to keep the price of those services required and paid for by the mobile owner at a level to attract and retain customers, they have less incentive to keep the price of calls to mobiles low because the callers cannot take their business elsewhere if dissatisfied (the caller has to use that network to reach that particular phone number). . . . Overall, Oftel's view is that the calling party pays principle results in there

⁴See Mark Armstrong, "The Theory of Access Pricing and Interconnection," in *The Handbook of Telecommunications Economics*, North Holland (forthcoming 2001), section 3, at 40 of manuscript version dated February 2001.

⁵Jean-Jacques Laffont and Jean Tirole, *Competition in Telecommunications*, MIT Press, Cambridge, 2000, at 186 (emphasis in original).

being limited incentive for the [wireless providers] to reduce charges to the competitive level; rather there is an incentive for [wireless providers] to keep them high.¹⁶

As the above Oftel quote explains, the source of the problem when local carriers are allowed to charge terminating prices to people other than their own end users is that the person choosing the local carrier is NOT the person paying the termination prices. Therefore, termination prices will not play a significant enough role in the end user's selection of a local carrier, and termination prices will be inefficiently high. This problem obviously does not apply if the end user himself is paying the termination charges, and this is why there is no need to regulate termination prices that local carriers levy on their own end users. In this case, the person choosing the local carrier is the person paying the termination price, so competition will result in termination prices being 'competed down to cost.

4.1.2. When carriers cannot pass through terminating charges to calling parties, the terminating monopoly problem is exacerbated.

It is obvious that the terminating monopoly problem grows even more severe if local carriers are allowed to charge terminating prices to other carriers and these other carriers are not allowed to pass through these terminating prices to their own end users. In such a case, callers view the terminating price as zero no matter how high it gets, and therefore callers' demand to place calls remains high even if the local carrier raises prices. This creates an extraordinarily high incentive for local carriers to raise termination prices.

This is precisely the situation that exists for both long distance and local calls. For the case of long distance calls, existing pricing regulations require IXCs to charge an average rate for all their calls independent of the termination charges that are actually levied for a particular call."

¹⁶See Oftel (2001) at 9.

¹⁷See 47 U.S.C. § 254(g).

With respect to long distance termination prices, local carriers are therefore in the enviable position that IXCs that provide services nationwide such as AT&T will continue to charge exactly the same prices to reach their end users regardless of how high the local carrier raises its termination prices. Until very recently, the termination prices that CLECs charged IXCs were completely unregulated. The Commission was forced to begin regulating these prices precisely because such carriers had no incentive to keep these prices low.¹³

For the case of local calls, state regulatory commissions, generally speaking, require ILECs to charge a flat rate for all local calls. Therefore, end users of the ILEC calling end users of another local carrier view the incremental cost of the call to be zero regardless of how high the other local carrier raises its termination prices. Since the termination prices that local carriers are allowed to charge ILECs have always been regulated, we have not observed the same extraordinarily high prices that occurred in the previously unregulated market for CLEC termination of long distance calls. But precisely the same logic applies, and we can be sure that a local carrier would have an extremely strong incentive to raise its local termination rates charged to other carriers to very high levels if these rates were unregulated. Therefore there will be a permanent need for regulation of termination prices so long as local carriers are allowed to charge these prices to other carriers rather than their own end users.

4.1.3. When interexchange carriers cannot pass through originating access charges to their end users, then originating access charges by non-dominant carriers must be regulated.

The same type of problem described above for the case of terminating fees also exists for originating fees. That is, if a local carrier (even if non-dominant) is allowed to charge

¹³*Reform of Access Charges Imposed by Competitive Local Exchange Carriers*, Seventh Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 96-262, FCC 01-146 (rel. Apr. 27, 2001) (*CLEC Access Charge Order*).

origination fees to an interconnecting carrier and the interconnecting carrier is not allowed to flow back these charges to the calling party, the carrier will have an incentive to raise these origination fees above the competitive level. This is precisely the situation that exists with respect to originating long distance access charges. The same regulation that requires IXCs to charge an average termination fee (as part of their long distance rates) across all their end users also requires them to charge an average origination fee across all of their end users.¹⁹ Therefore, if a particular local carrier raises the originating access charges that it levies on IXCs, IXCs are not allowed to respond by raising the long distance prices they charge to end users of that particular local carrier. Rather, the IXCs must continue to charge an average rate that reflects the origination costs they experience across all their end users. Therefore, in effect, a small local carrier can raise its originating access charges without affecting the prices its end users pay for long distance service at all. This, of course, gives the local carrier a powerful incentive to raise originating access charges.

Of course, no such incentive exists under a bill-and-keep regime because, in this case, the local carrier charges origination fees directly to its own end users. Therefore, so long as the local carrier is non-dominant, competition among local carriers for end users will control these prices.

4.1.4. The costs of regulating non-dominant carriers.

It is impossible for regulation to set all prices equal to correctly calculated forward looking costs because the task is simply too complicated and requires too much information. The job of the regulator is not simply to discover the one correct per-minute rate that all carriers should charge for all types of traffic for all time. The constant introduction of new products and

¹⁹See 47 U.S.C. § 254(g).

technologies means that underlying cost conditions are always changing and that the regulatory system must be constantly responding to new issues and problems. To complicate matters further, the cost of end office switching is in many ways a peak load cost: *i.e.*, the main cost is building capacity and there must be enough capacity to meet peak demand. In such cases, it is likely that even more complex pricing schedules using time-of-day pricing are likely to be efficient. The chance of even very good regulators being able to get this even more complex problem right grows even smaller.

4.2 Bill-and-keep eliminates severe arbitrage problems that occur under CPNP.

Recent events surrounding the issue of ISP-bound traffic^m illustrate a particularly serious and pernicious arbitrage problem that arises under the CPNP system that could be completely eliminated by switching to a bill-and-keep regime. The problem occurs when local carriers are able to find a class of end users that primarily receive calls and the per-minute cost to the local carrier of terminating the traffic is less than the regulated termination rate set by government. In such a case, these end users will become virtual "money pumps" for local carriers since they are able to earn a profit on every minute of incoming traffic and this is not counterbalanced by payments for traffic in the opposite direction.

In retrospect, it now appears that the termination rates that CLECs were allowed to charge ILECs for terminating ISP-bound traffic were well above their actual cost of providing termination. This created an incentive for CLECs to invest in facilities that allowed them to

^m*See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Intercarrier Compensation for ISP-Bound Traffic*, Order on Remand and Report and Order, CC Docket Nos. 96-98 and 99-68, FCC 01-131 (rel. April 27, 2001), for the Commission's most recent order on this subject and a history of events leading up to the current situation.

serve ISPs, not because they were necessarily more efficient providers of service to ISPs, but because government regulations allowed them to earn a price well above cost for serving ISPs. Because the existing regulatory structure did not allow ILECs to pass these termination charges back through to their own end users, the fact that CLECs charged high termination prices had no effect at all on the demand of the ILECs' end users for the services of ISPs served by CLECs.

Years after the problem became apparent, and years after CLECs had invested large amounts of money to serve and attract this group of end users, the regulatory process finally ground into action, and the Commission recently decided to lower the termination rate that local carriers are allowed to charge for ISP-bound traffic. While it appears that this particular arbitrage problem created by this particular class of traffic may now have been substantially dealt with, massive distortions in business investment decisions occurred in the meantime.

Furthermore, new pricing problems will likely arise in the near future and may cause equally severe problems before government is able to respond to them. One new problem on the horizon concerns paging companies. Under Commission regulations, paging companies are viewed as local carriers that only terminate traffic. Therefore, under the existing CPNP regime, they are entitled to charge other local carriers termination fees. The cost of terminating traffic for paging companies is considerably less than the normal termination price that regular local carriers are allowed to charge. Thus, if paging companies were allowed to charge this regular price, every paging end user would become a "money pump" for the paging company. Paging companies would have an incentive to pay people to become their end users and to pay other people to page the first group of people. The Commission was aware of this problem and dealt with it a number of years ago by specifying that paging companies would only be allowed to

charge a special extremely low terminating price.¹¹ Based on conversations with Qwest staff, I have become aware that instances are now arising where paging companies are attempting to avoid this regulation by becoming end users of CLECs. Under this new arrangement, paging traffic runs from the end users of the ILEC to end users of the paging company through the CLEC, and the CLEC is attempting to charge the regular high termination price for this traffic. Once again, even if the Commission eventually is able to respond to this arbitrage opportunity by making a one-time piecemeal adjustment to the regulated price of termination for one more class of traffic, there will be dislocations of investment in the meantime. Furthermore, another new arbitrage opportunity is likely to come along as soon as this one is solved.

4.3 Bill-and-keep will allow further deregulation of transport prices that ILECs charge to other carriers.

Another advantage of bill-and-keep is that it will allow further deregulation of transport prices that ILECs charge interconnecting carriers. To understand the reason for this, one may view the market for intra-LATA transport purchased by interconnecting carriers as being divided into two segments: (i) transport between the ILEC's tandem switches and subtending local switches, and (ii) transport from other local carriers' end offices to the ILEC tandem. Alternate sources of supply to the ILEC are much more likely to exist for market segment (ii) than market segment (i), because the higher levels of traffic and greater number of interconnecting carriers at tandems have generally encouraged more alternate providers to build transport facilities to tandems. Under a properly structured bill-and-keep regime, carriers are no longer required to purchase items in market segment (i) from the ILEC in order to exchange traffic with the ILEC.

¹¹See *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Dockets No. 96-98,95185, 11 FCC Rcd 15499, 16043-44 ¶ 1092-93 (1996).

Instead, the ILEC directly sells these services to end users under prices that are regulated as part of end user charges so long as the ILEC is deemed to be dominant. However, interconnecting carriers will still continue to purchase items in the second market segment from the ILEC.

Because the ILEC is less likely to have market power in this segment due to the comparatively greater availability of transport from LECs, other LECs, CAPs, etc., the Commission may deem it more appropriate to deregulate ILEC provision of transport to interconnecting carriers.

Therefore the advantage of moving to a bill-and-keep regime is that, by separating market segment (i) from market segment (ii), it removes any obstacles to deregulation of market segment (ii).

5. ARGUMENTS RAISED BY OPPONENTS OF BILL-AND-KEEP ARE INCORRECT, INSIGNIFICANT, OR PROPERLY ADDRESSED THROUGH SIMPLE SAFEGUARDS AND RULES

5.1 It is preferable to replace regulation with competition where possible instead of merely attempting to more accurately set regulated prices equal to forward-looking cost.

Janus Ordover and Robert Willig, on behalf of AT&T, argue that most of the arbitrage problems that occur under the CPNP system could be solved if regulators were able to do a perfect job of always setting all regulated prices equal to correctly defined forward-looking cost.²² I think that Ordover and Willig are basically correct that, in theory, if regulators had enough information, time, and knowledge to set all prices equal to their theoretically perfect values, regulation would then work quite well. In fact, since the "perfect values" for prices are by definition the values that competitive markets would set, the statement that "perfect" regulation is just as good as competitive markets is really more of a definition of what is meant by perfect regulation than a statement with any real economic content.

²²Janus Ordover and Robert Willig, August 20, 2001, "Declaration of Janus A Ordover and Robert D Willig on Behalf of AT&T Corp.," (Ordover and Willig), section VI.

I am a bit puzzled as to why Ordover and Willig think that the observation that CPNP would work quite well if it could be paired with a theoretically perfect regulatory process creates a justification for CPNP. As I have stated above, one of the main advantages of moving to a bill-and-keep regime over a CPNP regime is that it reduces the need for regulation. In particular, there is no need to regulate termination fees charged by non-dominant carriers under bill-and-keep, but these fees must be regulated under CPNP. I agree with Ordover and Willig that if regulation could always produce theoretically perfect prices, then there would be no real need to replace regulation by competition where this is possible. My main point is that it is impossible for regulation to achieve this ideal of theoretical perfection and that it therefore makes sense to substitute competition for regulation when this is possible. Therefore, while I agree that CPNP would work fairly well if regulation could always set theoretically perfect prices, I disagree strongly that this statement somehow provides a justification for CPNP.

In other parts of their declaration, Ordover and Willig in fact acknowledge precisely this point - that it is not realistic to expect that regulation will always get prices perfectly correct.

Their declaration includes the following two statements:

We recognize that it is no easy or error-free task for regulators to estimate costs and set rates. The many "bumps in the road" to cost-based reciprocal compensation rates illustrate the difficulties regulators face in a world of imperfect and asymmetric information. We are therefore entirely sympathetic to the desire to find a regime that can remedy existing market distortion but that would not require rate regulation."

We recognize, of course, that setting cost-based rates that replicate competitive market outcomes is no simple task, and we are strong proponents of a first principle of economic regulation that such ratemaking should not even be attempted if markets and competition can be relied upon to accomplish these goals instead."

³Ordover and Willig at 9.

⁴Ordover and Willig at 6.

Therefore even Ordoover and Willig seem to acknowledge that it is highly desirable to implement policies that allow competition to set prices rather than regulation when this is possible.

Replacing the current CPNP regime with a bill-and-keep regime accomplishes this result.

5.2 Bill-and-keep is deregulatory because it allows deregulation of termination prices charged by non-dominant local carriers.

Both Ordoover and Willig,²⁸ and DeGraba 2001 in his paper filed on behalf of WorldCom,²⁹ make the argument that bill-and-keep is no more deregulatory than CPNP because there will be an equal need to regulate dominant ILECs under either regime. As I have stated many times in this paper, the main reason that bill-and-keep is more deregulatory than CPNP is NOT principally because it allows less regulation of ILECs (although it accomplishes that as well, as discussed in section 4.3), but rather because it allows less regulation of non-dominant local carriers. Therefore, the argument that there is an equal need to regulate the ILEC under both regimes does nothing to contradict or weaken the argument of this paper that bill-and-keep is less regulatory because it allows for considerably less regulatory oversight of non-dominant local carriers. The significant regulatory distortions and arbitrage opportunities that I have described in this paper flow from the fact that regulation has failed to set termination prices charged by non-dominant carriers at the correct levels. Moving to a bill-and-keep regime will rectify these serious problems because competition will then be able to determine these prices.

Furthermore, moving to a bill-and-keep regime will reduce regulatory uncertainty by creating a more stable regulatory structure that does not need to constantly change as new

²⁸See Ordoover and Willig, section III.

²⁹See Patrick DeGraba, August 20, 2001, "Implementing Bill and Keep Intercarrier Compensation When Incumbent LECs Have Market Power," Declaration of Patrick DeGraba, filed on behalf of WorldCom (DeGraba 2001) at 5.

regulatory arbitrage opportunities created by the CPNP system become apparent and are dealt with on a piecemeal basis. This reduction in regulatory uncertainty will itself create a more favorable environment for local carriers to compete in, thereby increasing investment in such carriers.

53 Bill-and-keep will not increase the ability of incumbent ILECs to discriminate against unaffiliated IXCs by exercising control over the transport of originating traffic.

The argument that a bill-and-keep regime might give ILECs an extra opportunity to disadvantage unaffiliated IXCs is made most completely by DeGraba 2001 in a paper filed on behalf of WorldCom. DeGraba 2001 correctly observes that, under the DeGraba 2000 proposal, the ILEC would have the default financial responsibility to transport originating traffic between the ILEC end office and the IXC POP. This is also true under the Qwest proposal. DeGraba 2001 is also correct in noting that this would represent a change from the current regime, under which the IXC has default financial responsibility for both directions of traffic between the IXC POP and the ILEC end office. DeGraba 2001 suggests that this change in responsibility could raise new problems for IXCs under the following scenario, which I will call the DeGraba 2001 Scenario.

The DeGraba 2001 Scenario

Suppose that the end office of an ILEC and the POP of an IXC are currently connected by a two-way trunk owned by the IXC and that this is the most efficient interconnection method. Now suppose that, after the implementation of bill-and-keep, the ILEC insists on routing originating traffic through the ILEC tandem and transporting the traffic itself to the IXC POP using its own facilities. It then charges the IXC's end users for this service. This creates three problems for the IXC, according to DeGraba 2001. First, the ILEC is able to block originating traffic in ways that neither the IXC nor the regulator can monitor or prevent, causing the IXC's service quality to deteriorate. Second, the IXC has a more difficult time being competitive on price because the ILEC now charges the IXC's end users high prices for origination, reflecting the (inefficient) one-way transport route it insists on using. Third, the IXC now has excess transport

capacity which it cannot sell or lease because the ILEC refuses to use it and there is no other use for this transport capacity.

A bill-and-keep regime is unlikely to create significant problems of the sort DeGraba 2001 describes. First, with respect to the issue of call blocking, based on conversations I have had with Qwest staff, I believe that the service quality concern would be largely resolved by simple safeguards that required the ILEC to treat traffic bound for unaffiliated IXCs in a nondiscriminatory fashion relative to traffic bound for its own long distance affiliate. For example, the ILEC could be required to provide direct trunking on a non-discriminatory basis. As another example, for long distance traffic taken through the tandem, the ILEC could be required to transport traffic of its own affiliate on the same trunks that it uses to transport the overflow traffic of other IXCs so all traffic would be subject to the same rate of call-blocking. In particular, even when a direct trunk exists to carry traffic from a particular end office, overflow traffic is typically carried on non-dedicated trunks that flow through the tandem; a natural and simple safeguard would be to require the ILEC to carry all such overflow traffic (including the overflow traffic of its own affiliate) on the same trunks.

Second, with respect to the issue of raising the IXC's costs, once again, safeguards requiring the ILEC to treat all IXCs (including its own affiliate) in a non-discriminatory fashion would largely deal with this problem. Furthermore, DeGraba 2001's concern would not be significant even in the absence of such safeguards. DeGraba 2001's argument assumes that the ILEC will be able to pass along all of the costs of its inefficient transport choice to IXC end users. (This is why costs to IXC end users are raised.) That is, DeGraba 2001 assumes that the ILEC will be automatically allowed to pass through any increases in transport costs that it incurs by purposely choosing an inefficient transport method. If an ILEC is subject to rate-of-return regulation and if the ILEC incurs more costs, it would have a basis to argue that rates should be

raised to recover these costs. However, even in a pure rate-of-return system, an ILEC would have to justify that these costs are reasonable and necessary, and this might be hard to do in a situation where the ILEC is purposely not using an already-constructed two way trunk that is generally acknowledged to be the most efficient method of transport. More important, recovery of interstate costs by larger ILECs is currently regulated under a price cap regime that does not automatically allow pass-through of costs. That is, under the regulatory regime actually in existence for these carriers, the ILEC is not allowed to raise its prices if its costs go up; conversely it is not required to lower its prices if its costs go down. Therefore, assuming that the Commission does not make some radical break with its previous policies, the prices that larger ILECs will be allowed to charge end users for transport will be regulated according to some sort of price cap system. In particular, this means that ILECs will not be able to raise their prices simply by switching to more inefficient transport methods.

Third, with respect to the stranded assets issue, any sudden excess supply of capacity on the part of an IXC will be matched by an equal excess demand for capacity on the part of the ILEC that now has the responsibility to transport the traffic. The same amount of traffic will still need to be transported after the change, and the same amount of capacity will still exist to transport it. Therefore, there should be a resale market for the IXC's excess capacity if the IXC turns out to have a significant amount of such excess capacity.

5.4 Bill-and-keep will not increase the ability of incumbent LECs to engage in price discrimination against unaffiliated IXCs.

DeGraba 2001 discusses extensively the argument that bill-and-keep will enable ILECs to engage in price discrimination against unaffiliated IXCs.²⁷ He begins with an example where

²⁷DeGraba 2001, section 3.

an ILEC disadvantages a rival IXC by charging users of its own long distance service a lower per-minute rate for local origination than it charges users of rival IXCs' long distance services. However, he then immediately acknowledges that a simple rule stating that the ILEC is not allowed to discriminate in this fashion would solve this problem and that the Commission would surely pass such a rule.²⁴ I agree with this conclusion.

DeGraba 2001 then proceeds to a more subtle example of discrimination. He considers a case where an ILEC offers to sell a "bucket" of long distance minutes for a flat fee to end users that use the ILEC's own long distance service but continues to charge a per-minute fee to end users for local origination that use rival IXCs' services. He correctly observes that it will be more difficult to make some unambiguous determination of whether or not such a scheme is discriminatory and concludes that situations like this could make it difficult for regulators to determine whether or not the ILEC is discriminating against rival IXCs. While I think this observation is generally correct, I also think that it is completely irrelevant to the issue of comparing a bill-and-keep regime with a CPNP regime. The reason is that exactly the same sorts of "fuzzy" situations could arise under a CPNP system. For example, under a CPNP system an ILEC could choose to offer its own end users a "bucket" of long distance minutes and simultaneously charge a per minute access rate to rival IXCs. Exactly the same difficulties with determining whether or not such a system is discriminatory would arise. More generally, any non-discrimination requirement enforced in a CPNP system by requiring the ILEC to charge the same access fees to all carriers could be equally well enforced in a bill-and-keep system by requiring the ILEC to provide all end users the same access fee options, irrespective of their choice of IXC.

²⁴DeGraba 2001 at 20.

5.5 Bill-and-keep will not create worse incentives for efficient use of the telephone network.

A number of the papers submitted by economists in the first round of this proceeding attempt to argue that having the calling party pay for all of the costs of a call will cause more efficient usage of the phone system than having the called party pay for at least a share of the costs of a call, as occurs under bill-and-keep.”

It is useful to begin by recalling what DeGraba 2000's main point is on this issue. It is NOT that a bill-and-keep system will definitely induce superior decisions regarding short run use of the telephone network than will CPNP. Rather, his point is much more modest than this; it is simply that no clear conclusions can be drawn in this regard and that the significant advantages that bill-and-keep exhibits in other areas therefore justify its adoption.

More specifically, his point is that, in general, good incentives for short run use of the telephone network will be created when the costs of making phone calls are allocated in proportion to the average relative benefits of telephone calls. Under a CPNP system, the calling party pays for 100 percent of the call. Under a bill-and-keep regime, the calling party pays for less than 100 percent of the call but more than 50 percent of the call. (The precise share depends on the nature of the transport rule that is chosen.) DeGraba 2000's point is simply that recitations of examples where calling parties generally receive more benefits than called parties provide no scientific or empirical basis for predicting that one of these two regimes will create better incentives than the other. For example, suppose we viewed a recitation of examples as

”See Ordoover and Willig, section IV; Lee Selwyn and Scott Lundquist, “Efficient Intercarrier Compensation Mechanisms for the Emerging Competitive Environment,” August 2001, paper submitted on behalf of Focal, Pac-West, RCN, and US LEC (Selwyn and Lundquist) at 44-47; and Joseph Farrell and Benjamin Hermalin, “Analysis of Central Office Bill and Keep,” August 2001, paper submitted of behalf of Time Warner, (Farrell and Hermalin), section V.

sufficient evidence to conclude that calling parties generally receive 75 percent of the benefits of all calls. (Of course, even this would represent quite a heroic conclusion to draw based only on a list of examples.) Suppose also that we were able to determine that a specific bill-and-keep regime under consideration would have calling parties pay for 60 percent of the costs of making calls. It still might be the case that bill-and-keep produced superior results to CPNP since the share of cost borne by callers under bill-and-keep (60 percent) is closer to 75 percent than is the share of benefits borne by callers under CPNP (100 percent). It certainly does not seem obvious that CPNP would be the superior regime.

For similar reasons, bill-and-keep is at least as consistent as CPNP with principles of cost causation. CPNP arbitrarily allocates all cost-recovery to the calling party, even though the called party contributes to many of those costs by accepting the call, and even though its carrier makes cost-consequential decisions about network technology and design. The argument that the calling party should be required to pay for all of the cost of a call because it is the sole "causer" of the call is therefore fallacious. After the first second of a telephone call, the called party is as much a causer of the call as is the calling party, since either can terminate the call if it wishes. Ordover and Willig respond that, to the extent that CPNP incorrectly allocates the cost of calls, parties could make up for this deficiency by agreeing to take turns calling one another or perhaps even exchanging dollar payments. But this obviously isn't always possible and, furthermore, is a clumsy and awkward mechanism at best.

Farrell and Hermalin make a different argument.²⁶ Based on a more general model that generalizes some of the assumptions implicitly made by DeGraba 2000, they show that a more complex analysis may be required to determine the optimal intercarrier compensation rule and

²⁶Farrell and Hermalin, section V.

that considerations similar to those that enter Ramsey pricing may need to be taken into account. They use their analysis to argue that DeGraba 2000's simple example, where splitting costs evenly between the parties creates perfectly optimal incentives, relies on special assumptions. It is true that their analysis identifies factors that DeGraba 2000 did not consider. However, far from nullifying the main point of DeGraba 2000, their analysis strengthens it. By identifying a range of new complex issues that need to be taken into account, Farrell and Hermalin make it even more difficult to develop any unambiguous sense of whether or not one of the regimes would create better incentives for short run use of the network than the other.

Furthermore, proponents of CPNP have failed to notice the critical fact that the model which they are using to support the claim that CPNP creates better incentives than bill-and-keep actually differs fundamentally from the way that CPNP works in practice, at least for the case of local calls. The model that proponents analyze is really a model of *Calling Party Pays*, not *Calling Party's Network Pays*. That is, the result that is shown is that when callers receive all of the benefit of calls, it would be optimal to charge *callers* a termination price equal to the incremental price of making a call. However, as has been discussed extensively above,¹³ for the case of local calls from the end user of an ILEC to the end user of a local carrier, in most jurisdictions callers are charged a completely flat rate by the ILEC regardless of whether the ILEC is asked to pay termination charges to the local carrier. Therefore, in the case of local calls, given current institutional arrangements, no incentives are created for the calling party to consider the incremental cost of a call when the local carrier is allowed to charge terminating rates to the ILEC. This is because the costs are not passed on to the calling party and therefore

¹³See Section 4.1.3.

simply disappear into a "black hole" where neither the caller nor the receiver pays any attention to them.

5.6 Bill-and-keep will not create incentives for CLECs to inefficiently specialize in originating traffic.

Farrell and Hermalin²⁸ suggest that a bill-and-keep regime might remove a CLEC's incentive to specialize inefficiently in serving end users that primarily receive calls (such as ISPs) only at the cost of giving CLECs new incentives to specialize inefficiently in serving users that primarily originate calls. They acknowledge, however, that bill-and-keep would not create such a reverse problem if ILECs were allowed to charge prices to their own end users that appropriately reflect the costs of providing these end users with service in a bill-and-keep environment. Rather, their argument depends on the assumptions that (i) ILECs levy incremental charges on originators of local calls to cover both the incremental cost of originating and terminating calls; and (ii) they will continue to be required to do this after the adoption of bill-and-keep."

These assumptions are both invalid. With respect to assumption (i), ILECs generally do not levy any incremental charges on end users for making or receiving purely local calls. That is, a single flat-rated fee is levied to cover these costs. Bill-and-keep does not produce any

²⁸Farrell and Hermalin at 6.

²⁸The argument is as follows: Suppose that the ILEC charged the calling party a per-minute fee to cover the incremental costs of both originating and terminating a local call and charged the called party no per-minute fee. Under a CPNP system, the CLEC would have no incentive to try to attract end users that primarily originate calls because it would have to pay termination fees to the ILEC. However, under a bill-and-keep system, it would not have to pay termination fees to the ILEC and therefore, according to the argument, would have an incentive to try to attract end users that primarily originate calls because it would not have to charge for termination as well.

systematic incentive for CLECs to specialize in originating traffic when ILECs use flat-rated charges.

With respect to assumption (ii), Farrell and Hermalin suggest that the fact that ILECs did not have sufficient pricing flexibility to counter CLEC efforts to attract ISPs under the CPNP regime suggests that they will not have sufficient pricing flexibility to counter the efforts of CLECs to attract end users that primarily originate traffic under a bill-and-keep regime. However, this comparison is clearly inapt. In the case of ISP-bound traffic, CLECs were able to make large profits even if they charged ISPs a price of zero. Therefore, in order to compete with CLECs, ILECs would have needed the flexibility to pay ISPs large "bribes" in order to induce them to agree to accept service. In the scenario described by Hermalin and Katz, where the adoption of bill-and-keep gives CLECs the incentive inefficiently to attract end users that only originate calls, all that the ILEC would have to do to counter these efforts would be to charge incremental origination prices no greater than incremental origination costs. That is, the ILEC would need only the flexibility to adjust prices closer to costs. In my opinion, the fact that ILECs did not have the flexibility to offer large "bribes" to selected end users does not shed much light on the question of whether or not they would have the flexibility to adjust prices closer to costs.

Selwyn and Lundquist make an argument that is similar to that of Farrell and Hermalin.⁴ They argue that current pricing practices are incompatible with bill-and-keep and would have to be changed radically if bill-and-keep were adopted. The same rebuttals apply to this argument as well. Namely, the assumption that ILECs generally charge calling parties a per minute fee to cover the incremental costs of both originating and terminating local calls is simply false.

⁴Selwyn and Lundquist at 39-43.

Furthermore, even if this assumption were true in some cases, the type of adjustments in prices that would be required under a bill-and-keep regime simply involve moving prices closer to costs and would not be difficult to implement.

5.7 To the extent that CPNP reduces unwanted phone calls, it will also reduce wanted phone calls.

Ordover and Willig³³ observe that (i) some phone calls that people receive, such as solicitations during the dinner hour, are unwanted; (ii) parties pay higher prices for making calls under a CPNP system than under a bill-and-keep system; and (iii) since the end users that originate unwanted calls might be expected to make fewer of these calls if they had to pay more to make them, fewer unwanted calls are made under a CPNP system than would be made under a bill-and-keep system.

However, there is no reason to believe that raising the price of making a telephone call will have a substantially larger effect on unwanted calls than wanted calls. That is, Ordover and Willig's reasoning about the relative effects of CPNP vs. bill-and-keep on the number of phone calls that are made applies equally well to all phone calls. Ordover and Willig are essentially therefore simply making the trivial observation that having a policy that makes phone calls more expensive will result in fewer phone calls being made. In such circumstances, there are fewer "bad" phone calls made, but there also are fewer "good" phone calls made. Ordover and Willig certainly provide no basis for drawing the conclusion that having a policy that makes phone calls more expensive for calling parties is good because the social benefits from the reduction in "bad" phone calls is greater than the social costs from the reduction in "good" phone calls. Taking Ordover and Willig's reasoning to its logical extreme demonstrates the fallacy in their argument.

³³Ordover and Willig at 13-18.

According to Ordoover and Willig's reasoning, simply shutting the telephone system down entirely would be an even more desirable policy choice than adopting CPNP because this would entirely eliminate all unwanted phone calls. Of course, this reasoning ignores the "side effect" that all desirable phone calls would also be eliminated.

In any event, if the number of unwanted phone calls were a concern, it would be more appropriate for the Commission to take additional policy actions that specifically reduce unwanted phone calls, rather than policy actions that reduce all phone calls. For example, the Commission already restricts telemarketing calls in certain circumstances and permits called parties to ask to be placed on a "no call" list.*

6. CONCLUSION

If intercarrier compensation charges were determined under a bill-and-keep regime, then carriers would be responsible for recovering their origination and termination charges from their own end users instead of from other carriers. A key advantage of moving to such a system is that it removes the need to regulate termination prices charged by non-dominant carriers and thereby removes all of the possibilities for mistakes, distortions, and arbitrage opportunities that regulation can cause. An appropriately designed bill-and-keep system is therefore superior to a CPNP system. The bill-and-keep system proposed by Qwest improves upon the system proposed by DeGraba 2000 and would therefore be a particularly desirable system for the Commission to consider adopting.

* See Qwest Reply Comments at 18.