BEFORE THE
TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

REC'D TN REGULATORY AUTH.
'00 JUL 11 PM 1 51
OFFICE OF THE EXECUTIVE SECRETARY

In re:	)	
	)	
Petition for Arbitration of the Interconnection	)	
Agreement Between BellSouth	)	**Docket No. 99-00948**
Telecommunications, Inc. and Intermedia	)	
Communications Inc. Pursuant to Section 252(b))		
of the Telecommunications Act of 1996	)	

INTERMEDIA COMMUNICATIONS INC.'S RESPONSES TO BELLSOUTH TELECOMMUNICATIONS, INC.'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS

INTERMEDIA COMMUNICATIONS INC. ("Intermedia"), through its undersigned counsel, hereby submits its responses to BellSouth Telecommunications, Inc.'s ("BellSouth") First Request for Production of Documents ("Document Requests").[1]

---

[1] Intermedia is a large, multistate corporation with employees and records located in many different locations in Tennessee and other states. In the course of its business, Intermedia creates numerous documents that may not be subject to state or federal record retention policies. These documents are kept in numerous locations that are frequently moved from site to site as employees change jobs or as the business is reorganized. Therefore, although Intermedia has extensively searched its records in response to discovery requests in this proceeding, it is possible that not every document or information has been identified in response to these requests. In the event additional information and/or documents should come to light subsequent to the filing of Intermedia's responses to discovery requests, Intermedia will provide such additional information and/or documents, as appropriate.

POSTED 7-11-00

PRODUCTION REQUESTS

1. Produce copies of all documents identified in response to BellSouth's First Set of Interrogatories to Intermedia.

RESPONSE: See **Attachment 1** through **Attachment 5**. Please note that **Attachment 2** and **Attachment 3** are strictly confidential and proprietary documents, the production and use of which are subject to, and governed by, a confidentiality agreement between BellSouth and Intermedia.

2. Produce all documents that support or refer or relate to the recurring and nonrecurring rates you contend BellSouth should charge Intermedia for frame relay elements necessary to provide packet-switched services in Tennessee, including the User-to-End Network Interface, Network-to-Network Interface, and the Data Link Control Identifiers and Committed Information Rates.

RESPONSE: Intermedia does not possess any documents that are responsive to this Document Request.

3. Produce all documents that refer or relate or pertain to Intermedia's contention that its switch(es) serve a geographic area comparable to BellSouth's tandem switch. Produce all documents that refer, relate or pertain to the tandem switching functions allegedly performed by Intermedia's switch(es) in Tennessee.

RESPONSE: See **Attachment 1** through **Attachment 3**.

4. Produce all documents that refer or relate to Intermedia's claim that for purposes of reciprocal compensation, Intermedia should be compensated for end office, tandem, and transport elements of termination where Intermedia's switch serves a geographic area comparable to the area served by BellSouth's tandem switch.

RESPONSE: See **Attachment 4**.

5. Produce copies of all agreements between Intermedia and an Incumbent Local Exchange Carrier (other than BellSouth) under Section 252 of the Act, whether the agreement was reached through voluntary negotiation or compulsory arbitration.

RESPONSE: Intermedia objected to this Interrogatory on various grounds (see Objections of Intermedia Communications Inc., filed June 29, 2000). Subject to and without waiving its objections, please see **Attachment 5**.

6. Produce all documents upon which Intermedia intends to rely or introduce into evidence at the hearing on this matter.

RESPONSE: See **Attachment 1** through **Attachment 4**. Intermedia reserves the right to introduce additional documents at the hearing on this matter, as appropriate.

7. Produce any and all cost studies, evaluations, reports or analyses prepared by or for Intermedia concerning any issue raised by Intermedia in the Arbitration Petition.

RESPONSE: Intermedia objected to this Interrogatory on various grounds (see Objections of Intermedia Communications Inc., filed June 29, 2000). Subject to and without

waiving its objections, Intermedia states that it does not possess any documents that are responsive to this Document Request.

8. Produce documents sufficient to reflect the location of Intermedia's end-users in relation to Intermedia's switch(es).

RESPONSE: Intermedia objected to this Interrogatory on various grounds (see Objections of Intermedia Communications Inc., filed June 29, 2000). Subject to and without waiving its objections, please see **Attachment 3**.

9. Produce any cost studies for establishing prices for the new UNEs in the FCC's *UNE Remand Order*.

RESPONSE: Intermedia does not possess any documents that are responsive to this Document Request.

Respectfully submitted,

INTERMEDIA COMMUNICATIONS INC.

By: 

H. LaDon Baltimore
FARRAR & BATES, LLP
211 Seventh Avenue North
Suite 420
Nashville, TN 37219
(615) 254-3060
(615) 254-9835 (facsimile)

Of Counsel
Scott A. Sapperstein
Senior Policy Counsel
Intermedia Communications Inc.
3625 Queen Palm Drive
Tampa, Florida 33619
(813) 829-4093
(813) 829-4923 (facsimile)

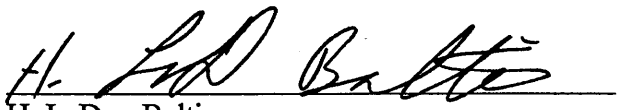
Jonathan E. Canis
Ronald J. Jarvis
Enrico C. Soriano
KELLEY DRYE & WARREN LLP
1200 19th Street, N.W., Fifth Floor
Washington, D.C. 20036
(202) 955-9600
(202) 955-9792 (facsimile)

ITS ATTORNEYS

Dated: July 11, 2000

CERTIFICATE OF SERVICE

I hereby certify that on this 11th day of July, 2000, a true and accurate copy of the foregoing was served by hand delivery, overnight delivery or U. S. Mail, first class postage prepaid, to Guy Hicks, Esq., BellSouth Telecommunications, Inc., 333 Commerce Street, Suite 2101, Nashville, TN 37201-3300.



H. LaDon Baltimore

ATTACHMENT 1

Information:
Document Library • Features & Benefits • FAQs •

Products:
DMS SuperNode • Data Manager SPM

Solutions:
Local Exchange Carriers • Inter Exchange Carriers • Competitive Access Providers

Purchasing Information
Contact DMS-500 •

Service & Support:
Product Support • Training • User Group •

Related Info:
Local Number Portability • DMS-500 Conversions • Accessing the Local Loop • Global Professional Services - For Service Providers • Enterprise Edge for CLEC



DMS-500

Local and Long Distance Switch

The DMS-500 Local and Long Distance Switch is a DMS SuperNode application that combines local services of the DMS-100 switch, toll and operator services of the DMS-100/200 Traffic Operator Position System (TOPS), and long distance services of the DMS-250 switch. In addition to the trunk connections supported by the DMS-250, the DMS-500 delivers all line types currently supported by the DMS-100 system for residential and business applications.

The DMS-500 is a total solution with one of the industry's most application-rich portfolios of carrier services loaded with major capabilities that are market-ready today. These include local services, long distance services, call center services, operator services, and data services. And, as part of the Nortel Networks Succession Solutions plan, the DMS-500 is uniquely positioned for the evolution to data-centric communications.

• Benefits

- Ability to quickly generate new revenue through new services, new markets, and new end-to-end telephony offerings
- Fully functional local/long distance switch enabling revenues to be generated on both sides of the switching business
- Maximum market flexibility for service providers:
  - selling or reselling long distance services
  - operating with or without operator services
  - offering business and residential line services
- Cost and operational efficiencies gained in combining DMS-100/200 and DMS-250 services:
  - reducing front-end hardware requirements
  - reducing office site and environmental requirements
  - centralizing operations, administration, maintenance, and provisioning (OAM&P)
- Expanded pre- and post-sales service support to build a network, train the staff, and operate the network, if needed
- Multi-vendor network operability ensured with the DMS-500 SuperNode system's open architecture

© copyright / privacy statement

Information:
Document Library • Features & Benefits • FAQs •

Products:
DMS SuperNode • Data Manager SPM •

Solutions:
Local Exchange Carriers • Inter Exchange Carriers • Competitive Access Providers •

Purchasing Information

Contact DMS-500 •

Service & Support:
Product Support • Training • User Group •

Related Info:
Local Number Portability • DMS-500 Conversions • Accessing the Local Loop •

DMS-500

Conversions

Converting an existing DMS-100 or DMS-250 switch to a DMS-500 enables service providers to offer Class Five through Class One end-office and toll applications. The DMS-500 - teamed with the Nortel Networks S/DMS AccessNode - gives service providers the power to choose how to access their residential and business customers.

DMS-500 Switching System - The Platform for New, Full-Service Providers

Nortel Networks DMS-500 Local and Long Distance Switching System provides a cost-effective vehicle to satisfy the evolving demands of the telecommunication marketplace. With one switching platform, service providers are able to offer local services such as Centrex, CLASS, ISDN, and ACD; long-distance services such as basic long distance, N00/NXX number services, calling card, virtual private networking, operator, and AIN services. The DMS-500's flexibility in integrating and increasing functionality gives service providers the competitive advantage they need to succeed.

The ease of converting an existing DMS-100 or DMS-250 switch to a DMS-500 reflects a true commitment to meet the demands of service providers and to optimize their network investment. More importantly, it underscores Nortel Networks desire for the continued success of its customers by preparing them for the challenges of today and those of tomorrow.

Conversion of a DMS-100 or a DMS-250 to a DMS-500

- **DMS-100/200 to DMS-500**
  An existing DMS-100/200 switch is converted to a DMS-500 system with the addition of new operating software and physical trunk facilities that support long-distance services, all while maintaining current services. For switches with BCS34 or earlier software, Nortel Networks first converts the DMS-100/200 switch to BCS36 capabilities, and then uses a One Night Process (ONP) to add the remaining capabilities of the DMS-500 feature set.
- **DMS-250 to DMS-500**
  DMS-250 conversion is as straightforward as the DMS-100/200 conversion. A DMS-250 is converted by adding new operating software, physical line facilities to support local access services, and interworking trunks for local-to-long distance switching. Current DMS-250 services are maintained during the conversion process. If necessary DMS-250 switch capabilities are first converted to BCS36 and then, using the ONP, to full DMS-500 status.

© copyright / privacy statement

Information:
Document Library • Features & Benefits • FAQs •

Products:
DMS SuperNode • Data Manager SPM •

Solutions:
Local Exchange Carriers • Inter Exchange Carriers • Competitive Access Providers •

Purchasing Information

Contact DMS-500 •

Service & Support:
Product Support • Training • User Group •

Related Info:
Local Number Portability • DMS-500 Conversions • Accessing the Local Loop •

DMS-500

FAQs

Q: Can my company upgrade our current DMS-100 switch to a DMS-500?
A: Yes, it is possible and easy to convert your DMS-100 switch to a DMS-500. All that is involved is adding some trunking and software, which can be loaded via Nortel Networks One Night Process.

Q: Is this a new switch or a version of Nortel Networks existing DMS SuperNode systems?
A: We believe the DMS-500 is an exciting new breed of product. It integrates the interexchange functionality of the DMS-250 with the feature-rich local exchange services from the DMS-100. It is particularly ideal for start-up applications found in the emerging CLEC telephony market.

Q: How is this product different from your current DMS-100 or DMS-250 systems?
A: The DMS-500 integrates the functionality of our premier local and long distance central office switches. This is ideally sized to meet the needs of the exploding list of emerging telephony providers.

Q: What does the DMS-500 come equipped with as a standard offering in terms of features? What is optional?
A: This product comes with a base software offering that is made up of the base DMS-250 and DMS-100 software offerings including SS7, Business and Residential POTs, IXC trunking and routing, ANI, Authcode, Account code screening and validation. Optional features include Centrex, ACD, CLASS, AIN, TCAP SCP database interface for network applications, 700/800/900 number services, and MCDN networking services.

Q: Is the DMS-500 available in various versions?
A: The DMS-500 is designed to address small to even large applications. It can utilize the SuperNode or SuperNode SE to provide room for growth.

Q: Can the DMS-500 system be configured with just local lines or long distance trunks? If so, how does pricing/capabilities compare to the existing DMS-100 or DMS-250 systems?
A: The DMS-500 has the flexibility to be configured to meet your needs. In situations where the interest is in exclusively long distance or local services, the DMS-500 would be priced comparable to an appropriately sized DMS-100 or DMS-250.

• Advanced Search
NORTEL NETWORKS
Search Go
Products & Services | Customer Solutions | Order Online | Customer Support | Partners
News & Events | Custom News | Careers | Global Information | Corporate Information
Home | Languages | Contact Us | Help
© copyright / privacy statement

DMS-500 System Advantage

AT A GLANCE

Local/long distance switch cost-effectively opens the door to lucrative new markets

the advantage

DMS-500

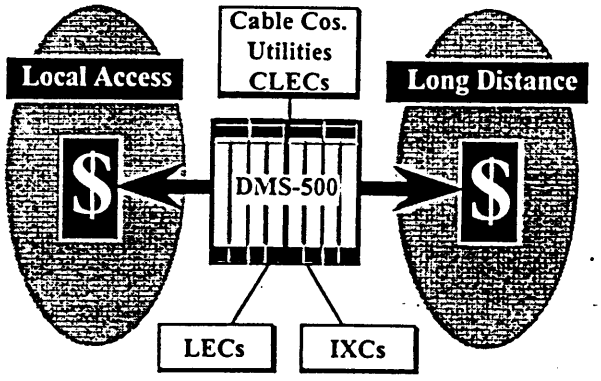
- ❑ ***Revenue Opportunities***
  Cost-effective way to penetrate new markets
- ❑ ***Flexibility***
  Versatile platform to accommodate network needs
- ❑ ***Differentiation***
  Range of capabilities to suit niche or mass markets
- ❑ ***Scalability***
  Modular design to allow for future expansion
- ❑ ***Interoperability***
  Standards compliance for interworking with array of equipment types
- ❑ ***Efficiencies***
  Combined platform that reduces footprint, equipment requirements

As service providers face the challenges of deregulation-inspired competition, they are also anticipating new opportunities with their own entry into untested markets and growing subscriber demand for quick, reliable access to advanced services.

Whether an incumbent in the local or long-distance marketplace or an entrepreneurial service provider, the key to a successful multimarket business strategy is a versatile switching platform that can cost-effectively deliver a range of services and applications to a variety of subscriber types. Nortel's (Northern Telecom's) DMS-500 switching system fulfills these requirements with all the reliability and robustness represented by the Nortel brand. Around the world, switches in the DMS family supply more than 100 million digital lines and 35 million digital trunks—making Nortel a leader in the global movement to fully digital networks.

The DMS-500 Local and Long Distance Switch is a DMS SuperNode switch application that combines the local and long distance services provided by other switches in the DMS family.

In the local marketplace, the DMS-500 system allows the service provider to offer everything from narrowband residential services to custom packages of highly sophisticated business features. Long-distance functionality gives the provider access to a market expected to bring gross revenues of $80 billion in 1997. For full integration of services, the provider can offer local/long distance packages, yielding the twin benefits of service efficiency and subscriber convenience.



LEC, Local Exchange Carrier
IXC, Interexchange Carrier
CLEC, Competitive Local Exchange Carrier

A DMS-500 system can be deployed as a new installation or as an upgrade to an existing DMS-100, DMS-100/200, or DMS-250 switch. Regardless of the deployment scenario, the investment can quickly pay dividends in the form of revenue gains, additional market share, and improved competitive positioning.

Key Benefits of DMS-500 Switching System

- ## *Ability to Quickly Generate New Revenue*

  The DMS-500 switch is an excellent, cost-effective way to establish a point of presence in markets previously out of reach. Initial product investments can help to broaden revenue streams when an existing DMS system is migrated to a platform that directly supports local, business, operator, and long distance services.

- ## *Maximum Service Provider Flexibility*

  Service providers can develop a highly flexible market entry or expansion strategy as an interexchange carrier (IXC) selling or reselling long distance services, a local exchange carrier (LEC) toll office with or without operator services, or an LEC end office offering business and residential line services.

- ## *Service Development and Differentiation*

  With its full range of service capabilities—from narrowband residential and business features to wideband data switching and Intelligent Network applications—the DMS-500 allows network providers to develop, package, and sell unique new services and service bundles to specific niche or mass customer markets.

- ## *Scalable Architecture*

  The DMS-500 switch uses a modular, scalable design that can meet a wide range of line and trunk size requirements, enabling network providers to enter the local/long distance market by deploying an economically sized DMS-500 switch today and adding advanced capabilities later as service needs expand.

- ## *Local/Long Distance Network Interoperability*

  The DMS-500 system provides a fully functional, standards-compliant technology for both local and long distance services on a switching platform that interworks with a wide variety of vendor-supplied network switching and transmission equipment.

- ## *Cost and Operational Efficiencies*

  By combining both local and long distance services and functions, the DMS-500 switch reduces front-end hardware requirements, conserves office and environmental space, and simplifies the centralization of operations, administration, maintenance, and provisioning functions.

About This Document

This document is a product overview for network planners, engineers, and marketers who need information about the DMS-500 systems—Nortel's multimarket switching platform. It has been designed to complement—not replace—more detailed Nortel technical documents.

Contents

At a Glance ..... *i*
The DMS-500 Solution *1*
DMS-500 Overview *5*
The Nortel Advantage *9*

For More Information

For more detailed information, contact your Nortel account representative or call 1-800-4 NORTEL (1-800-466-7835) or 1-506-674-5470.

Email questions or comments to "nortel_mrktngpubs@nortel.com" ("Nortel Mrktngpubs" for Nortel employees using internal QuickMail).

Our World Wide Web (Internet) homepage is at URL http://www.nortel.com

1

The DMS-500 Solution

the advantage

The DMS-500 system supports a wide range of lucrative applications that embrace local and long distance markets

As competition stiffens in the deregulated telecommunications marketplace, the service provider faces increasing pressure from business subscribers desiring to gain an advantage in their own markets. In addition to enhanced services such as Virtual Private Networking and Dialable Wideband Service, these subscribers are seeking a new business relationship with the provider centered on a commitment to creative solutions and customer service.

Deregulation also entails the dissolution of traditional market boundaries: interexchange carriers (IXCs) are moving into local services, local exchange carriers (LECs) are moving into long distance markets, and cable companies and competitive LECs (CLECs) are seeking to establish services that address both markets. To flourish in this climate, the service provider must be responsive to the subscriber—creating custom packages and otherwise differentiating its service offerings from the rest of an increasingly crowded field (see Figure 1).

Nortel's DMS-500 platform supports a comprehensive range of revenue-producing, value-added network applications embracing the local and long distance markets as well as operator services. The DMS-500 enables local service providers to extend long-distance services to their subscriber base and to new customers. Likewise, long-distance providers can offer local exchange services from the DMS-500 while retaining access to their traditional national markets.

Market Opportunities

The flexible DMS-500 system enables the service provider to tailor a cross-market business plan according to individual requirements. With the onset of deregulation, the bundling of local and long distance services has drawn particular interest among subscribers who would prefer the convenience of dealing with a single provider. This section includes descriptions of the local and long distance markets and the services that can be offered in each on the DMS-500 system.

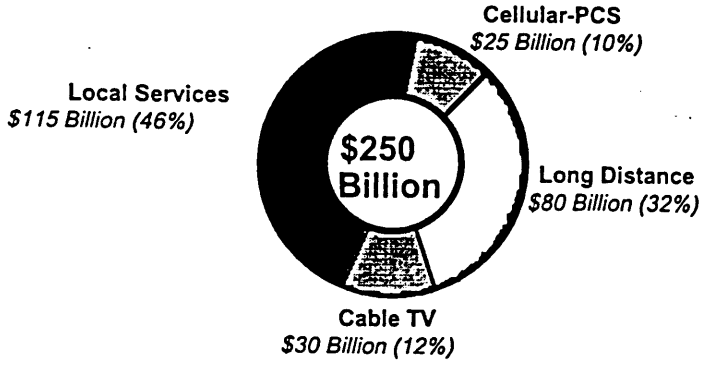


Figure 1. U.S. Telecom Markets—Estimated Revenues for 1997

Local Markets

The feature-rich DMS-500 system allows service providers to offer unique service blends and customized packages to local exchange subscribers, who are expected to generate annual revenues of $115 billion by the end of 1997. The versatile platform allows local service providers to focus on specific niches or mass markets using DMS local services highlighted below.

- ***Meridian Digital Centrex (MDC)***—Nortel's flexible voice and data business services include more than 400 features, which can be packaged to fit the needs of individual subscribers. Among the key MDC features are:
  - — *Voice Features* help ensure call coverage, improve call handling, and make the placing and handling of calls more convenient.
  - — *Tailored Centrex* eases provisioning of and modifications to MDC services.
  - — *Data Services* include Datapath Switched 56, DataSPAN fast packet, ISDN features compliant with National ISDN 2/3 standards, and the multirate-on-demand Dialable Wideband Service.
  - — *Call Center Services* ease the handling of large volumes of incoming calls.
  - — *Billing and Tracking Services* include Station Message Detail Recording to help businesses track their communications costs.
- ***Residential Enhanced Services***—Nortel's portfolio of powerful, productivity-enhancing features for residential and small business subscribers includes the following:
  - — *Custom Calling Services* such as Call Forward, Call Waiting, Three-Way Calling, and Speed Dialing.
  - — *Other Enhanced Services* such as Call Transfer, Teen Service, Call Forward Remote Activation, Call Forward of Call Waiting, Warm Line, Call Hold, and Subscriber Activated Call Blocking.
  - — *CLASS Features* such as Calling Number and Name Display, Calling Name and Number Display Blocking, Call Trace, Screen List Editing, Automatic Call Blocking, and Automatic Recall.
  - — *Centrex to the Home (Hometrex)* offers a subset of MDC features for home use.
  - — *Analog Display Services Interface (ADSI)* such as Call Waiting Display and Call Waiting Display with Disposition.
- ***ISDN Services***—The popularity of Internet surfing and telecomuting are fueling the demand for ISDN, which offers digital clarity plus faster connections than most analog modems. An ISDN Basic Rate Interface (BRI) line features 2B+D connectivity, with each B channel rated at 64 kbps. ISDN Primary Rate Interface (PRI) uses trunk connections to link digital PBXs, host computers, and LANs to central office switches, with 23 channels at 64 kbps for voice or data and one message channel at 64 kbps.

Long Distance Markets

Long distance functionality available through the DMS-500 platform and highlighted below allows the service provider to secure a share of this lucrative market, which is expected to generate total annual revenues of more than $80 billion by the end of 1997.

- ***Information Database Services***—These databases contain subscriber calling and called party information to assist interexchange call processing and Intelligent Network applications.
  - — *700 Number Services*–number translations for customer service numbers dealing with information about and assistance with network features.
  - — *800 Number Services*–number translations for toll-free calls across local calling area boundaries.
  - — *900 Number Services*–number translations used for opinion polls across a wide calling area or to provide special information services.
  - — *Account Codes*–validation numbers for fraud protection and charging calls to user projects, departments, or special accounts.
  - — *Authorization Codes*–validation numbers used to identify subscribers, bill calls, prevent unauthorized network access, and perform similar functions.
  - — *Calling Cards*–giving subscribers access to any carrier.
- ***Call Validation and Trunk Routing***—DMS-500 software can validate user access to long distance services in ways other than those listed above, and then route calls according to those received and interpreted parameters.
  - — *Call Routing*–provides call validation, routing, and feature selection based on calling number, class of service, digits received over Feature Group D trunks, or the time, day, and date.
  - — *Equal Access Trunks*–allow equal access routing to long distance carriers over Feature Group D trunks using either multifrequency or CCS7 signaling.
  - — *CCS7 Release Link Trunks*–provide initial CCS7-based trunk connections so that enhanced service providers, such as banks, can collect the information needed to complete a service call, release the CCS7 trunk connection, and bridge the call over standard trunks.
- ***Enterprise Network Services***—These services offer businesses cost-effective and efficient telecommunications between private facilities in different calling areas.
  - — *Dedicated Access Lines (DALs)*–non-switched DS-1 trunk facilities for private wide area network (WAN) data communications.
  - — *Meridian Switched Network (MSN)*–for MDC subscribers, direct dialing for non-local intra-business calls.
  - — *Virtual Access to Private Networks (VAPN)*–direct dialing between two separate private networks, effectively bypassing the public network and avoiding additional access charges.

- *Data and Video Services*—Interexchange data and video switching is growing at an increasing pace as businesses expand operations and require sophisticated communications technologies to keep them competitive.
  - — *Switched 56-kbps Service*–data exchange and videoconferencing for nationwide multipoint data and/or video connections.
  - — *Dialable Wideband Service (DWS)*–on-demand, easily tracked connections of variable bandwidth—such as that required in videoconferencing—over public facilities.
  - — *ISDN Primary Rate Interface (PRI)*–highly reliable and flexible trunking facilities for traffic aggregation to Wide Area Telephone Service (WATS), DWS, and other services; enterprise-based hybrid network switching; and compatible interfaces with interexchange networks that use CCS7.
  - — *Integrated Echo Cancellation*–integration of voice and data within the network without the expense of external echo cancellers.
  - — *Bearer Capability Routing*–routing based on the contents of user service information within PRI or CCS7 messages.
- *Multiple Dialing Plans*—The flexible DMS-500 software can recognize, process, and route different signaling protocols and multiple dialing plans.
  - — *Full 10-Digit Routing*–provides 10-digit routing to the station level.
  - — *7-Digit On-Network Routing*–facilitates VPN services by allowing private-to-private, private-to-public, and public-to-private network 7-digit dialing.
  - — *User Partitioning*–allows multiple private users to share trunk facilities.
  - — *Private and Public Speed Dialing*–allows abbreviated dialing for long distance calls.
  - — *Hotline Number Dialing*–an emergency number service that allows the user to connect to a dedicated number without dialing it.
  - — *Automatic Number Identification via DTMF Trunks*–facilitates calling line identification to call centers not yet using ISDN PRI trunks.
  - — *International Direct Distance Dialing (IDDD)*–allows direct dialing by the subscriber to international numbers.
- *Virtual Private Networking*—This Intelligent Network-based service enables service providers to establish intra-business communication links across service boundaries without using external databases or costly private facilities.

Operator Services

Nortel was the first to automate alternate billing and directory assistance call completion and the first to use speech recognition to automate directory assistance. The DMS-500 provides end-to-end operator services: from position, to switch, to database applications, to audio processors. Nortel developed the first operator workstation that could perform both toll services and directory assistance. Nortel's 17,000 operator workstations in North America account for 95 of every 100 operators.

2

DMS-500 Overview

the advantage

DMS-500 software loads include a comprehensive set of features, but service providers pay only for features that are actually used

The DMS-500 Local and Long Distance Switch is a DMS SuperNode switch application combining the local services of the DMS-100 switch toll and operator services of the DMS-100/200 Traffic Operator Position System (TOPS); and long distance services of the DMS-250 switch.

The core of the DMS-500 system—called the DMS SuperNode—uses a powerful, flexible architecture built around the latest commercially available microprocessing technology. The DMS SuperNode system can serve every switching application across the public network, offering a range of local and long distance services to businesses and residences worldwide.

The single switching platform of the DMS-500 system allows service providers to become full-service providers to their existing subscribers and to offer a full range of services to new subscribers. Having two major business applications on a single platform sharply reduces the cost of ownership—including such expenses as training, maintenance, facilities, space, and power—and accelerates introduction of local and long distance features to the market.

Nortel, which provides 70 percent of all digital centrex service lines in the U.S, has a record of reliability, innovation, and customer service that stands at the forefront of the industry. Nortel's DMS systems serve more central offices in the United States than switches made by any other vendor. Around the world, DMS switching systems supply more than 115 million digital lines and 35 million digital trunks.

DMS-500 Software—Full Spectrum of Features

The DMS-500 software load includes a comprehensive set of features by combining the line side service of the DMS-100/200 software and the interexchange features of the DMS-250 software into a single load. Each load is delivered with full feature availability, but the service provider pays only for those features actually deployed. Features can be deployed as demand warrants without the necessity of changing the software load, greatly reducing the risk of service-affecting network problems. The service provider also has the option of trialing a feature for a specified period without charge.

Configuration and Capacity

The DMS-500 system can be configured to meet the specific business requirements of each service provider. Carriers have the option of deploying either long distance or local services initially, and then converting to provide both services at a later date. In situations where the network provides long distance or local service exclusively, the cost of the DMS-500 would be comparable to an appropriately sized DMS-100 or DMS-250 system. If other

types of services are required in the future, the existing switch can easily be upgraded by adding the associated peripheral modules and the service circuits.

Capacity Thresholds—DMS-500 Lines, Trunks

The following capacity thresholds apply to DMS-500 lines and trunks:

- CCS for lines is 6.
- CCS for user trunks is 28.8.
- CCS for Interworking Trunks (IWT) is 28.8.
- Average call holding time (ACHT) is 180 seconds.

The maximum supportable number of lines and user (non-IWT) trunks for the DMS-500, given the particular call model's requirements for line and trunk percentages, is shown in Table A for the DMS SuperNode Series 60 and Series 70 Extended Memory (EM) BRISC processors. The required number of IWTs, given the percentage of calls that use IWTs in the particular Call Model, is also provided. (Note: Blocking in the line-side peripherals—where concentration is likely to occur—was not taken into account in Table A calculations. A call blocked in the peripherals may or may not be seen as an origination in the Computing Module. Trunks are not concentrated, and trunks for TOPS positions are not covered in the table.)

Table A: Interworking Trunks (IWT)
Requirements and Maximum Supportable Lines and Trunks

	Default Call Model	Number of Lines	Number of Trunks	Number of IWT DS-0 Ports Reqd.
Series 60	High 100	77,049	28,537	4238
	High 100 TOPS	*	*	*
	High 250	26,879	41,066	4436
	100/250 Even	49,189	31,579	7604
Series 70 EM	High 100	122,278	45,288	7076
	High 100 TOPS	*	*	*
	High 250	42,466	64,878	7374
	100/250 Even	77,836	49,972	13,236

* Not supported

DMS SuperNode SE Line and Trunk Capacity

The DMS SuperNode SE is a reduced-size version of the DMS SuperNode that combines the DMS-Core processing engine, the DMS-Bus high-speed messaging component, the Enhanced Network (ENET) non-blocking switching matrix, and the Link Peripheral Processor (LPP) into a single, compact cabinet.

The size and the configuration of the enhanced switching network (i.e., ENET), and not the capacity of the processor, determine the difference in the number of configurable network ports (lines and trunks) that can be supported by the DMS SuperNode and DMS SuperNode SE platforms.

Remote Access Vehicles

The DMS-500 system supports all remote access vehicles currently available for the DMS-100. Switch remotes include the Remote Switching Center (RSC), the RSC-S, the Remote Line Concentrating Module (RLCM), and the Outside Plant Module (OPM). Digital loop carriers that are supported include Nortel's AccessNode and DMS-1 Urban as well as other vendors' TR-303 and TR-08 compliant access vehicles. A direct digital interface to low-end access vehicles (such as D4 channel banks) is currently under development.

OAM

Operations, administration, and maintenance (OAM) is handled by the same Maintenance and Administration Position (MAP) terminals used today on the DMS-100/200 and DMS-250. All operational measurements, log utility reports, and various maintenance reports available for these systems are also available for the DMS-500 system. To facilitate database file management, an Ethernet Transmission Control Protocol/Internet Protocol (TCP/IP) interface permits manual transfer of billing records and other files into and out of the DMS-500 switch.

Conversion of DMS System to DMS-500

A DMS-100, DMS-100/200, or DMS-250 meeting call mix and application requirements can easily be upgraded to a DMS-500. After the reconfiguration of the switch hardware, new software is loaded through Nortel's One Night Process (ONP), which requires no service interruption. Additional trunks, lines, and other facilities may be needed as demand for services grows.

DMS-500 vs. Competitors' Platforms

The following attributes of the DMS-500 are ***not*** found in platforms manufactured by some Nortel competitors:

- Features allowing the DMS-500 system to serve as a full-service central office and interexchange platform (rather than a central office switch with "access tandem/toll" capabilities)
- Availability of centrex services regardless of whether Integrated Services Digital Network (ISDN) is also available
- Feature transparency across the network
- Integrated call center capabilities (rather than external Automatic Call Distribution (ACD) that is dependent on ISDN)
- Multinode reorigination for calling card applications
- Availability of Release Link Trunk (RLT) through Common Channel Signaling No. 7 (CCS7) or ISDN (a great advantage for access to enhanced service providers [ESPs] and service nodes in the Advanced Intelligent Network [AIN])

In addition, the following DMS-500 features enable a smooth migration to external databases:

- Flexible dialing plans
- Virtual private networking capabilities
- Authorization codes
- Account codes
- Personal identification numbers (PINs)
- User-friendly prompt tones
- Call branding capability
- Easy-to-use billing formats
- Integrated 800/900 functionality
- Calling card services

the advantage

Nortel offers a complete approach to network planning and building, from business case development to network operations

3

The Nortel Advantage

Support Services

Nortel offers its customers a total network solution by helping them build, operate, and market telecommunications services as well as by providing contracted turnkey operations. Nortel's veteran network planning organization has worked with new market entrants for over 15 years. This expertise is made available through Nortel's Support Services organization, which offers optional, as-needed services to complement a network provider's core staff and internal resources. With our knowledge of the carrier network business and our proven ability to deliver state-of-the-art communications solutions, Nortel can offer a comprehensive approach to network building.

Among the broad range of optional services that Nortel makes available are:

Business Planning

Any level of service, from business plan development to tactical assistance in implementing sales strategies in a target market.

Network Design and Services Development

Analysis and design of local or global networks to meet business requirements, better integrate new services into an exiting network, and more—using sophisticated planning and modeling tools.

Engineering Services

Design for up-to-date networks that meet current needs and enable cost-effective future growth . . . plus in-service engineering that fine tunes the switch for maximum efficiency in call processing, facility use, and equipment capacity.

Operations and Maintenance

A choice of different support levels, including the following: (1) complete switch maintenance and management; (2) on-site technicians to help during a critical network rollout period; (3) remote coverage during evenings and weekends; or (4) emergency assistance.

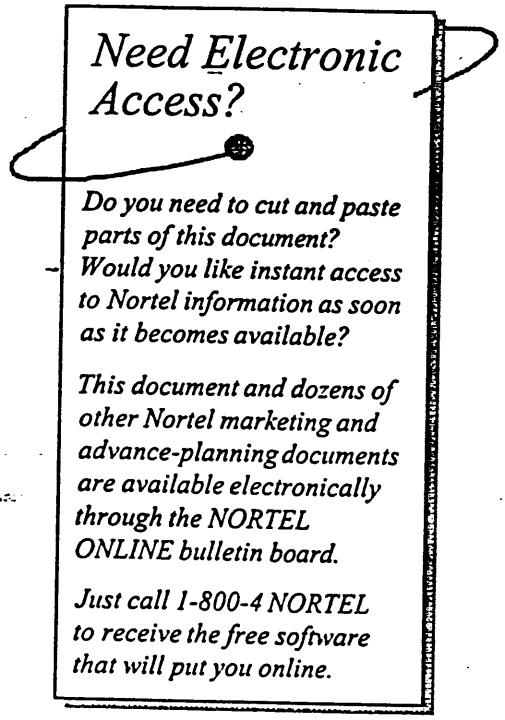
By taking advantage of Nortel expertise in these areas, service providers can quickly enter new local and long distance markets with a differentiating set of services and capabilities. Finally, Nortel can assist with creative financing options that minimize start-up costs and risks, letting providers focus their resources on aggressive market entry strategies.

The Nortel Difference—Competitive Networks

Nortel has worked with more than 150 carriers in North America—including the top industry players—to help them build successful businesses in their markets. More than 400 Nortel switches are now providing 8 million ports around the globe, making Nortel a preferred supplier of local and long distance switch solutions.

Much of North America's telecommunications infrastructure was designed and built by Nortel. Nortel deployed the first fully digital switches more than two decades ago, and we have teamed with network providers worldwide to deliver more than 110 million lines of digital switching in over 90 countries. To achieve this position, Nortel has established close working relationships with each carrier. Our customers tell us what they want, and, in turn, we offer them products and services that can help to fuel their business plans for rapid revenue expansion and market share growth.

Top carriers have chosen Nortel and the DMS family of switches to be their main resource in North America. Now, as these carriers enter the lucrative global marketplace, they are choosing Nortel and the DMS portfolio to form the backbone of their international business expansion.



DMS, DMS-100, DMS-100/200, DMS-250, DMS-500, SuperNode, DataSPAN Meridian, Meridian Digital Centrex, Nortel, TOPS, and the Globemark are trademarks of Northern Telecom.

Datapath is a trademark used by Northern Telecom under license

All other trademarks are the property of their respective holders.

Information:
Document Library • Features & Benefits • FAQs •

Products:
DMS SuperNode • Data Manager • SPM •

Solutions:
Local Exchange Carriers • Inter Exchange Carriers • Competitive Access Providers •

Purchasing Information
Contact DMS-500 •

Service & Support:
Product Support • Training • User Group •

Related Info:
Local Number Portability • DMS-500 Conversions • Accessing the Local Loop •

DMS-500

A Long Distance Switch Solution for Local Exchange Carriers

As deregulation opens previously secure telephone networks to greater competition, the network providers who succeed will be responsive to changing market conditions and possess a combination of market savvy and enhanced technological agility. To move quickly into the long distance phone business, local exchange carriers (LECs) can now turn to the DMS-500 Local and Long Distance Switch.

DMS-500 Switching System
The DMS-500 Local and Long Distance Switch is a DMS SuperNode system application that combines the local/tandem services of the DMS-100/200 switch, the operator services of the DMS-100/200 Traffic Operator Position System (TOPS), and the long distance services of the DMS-250 switch. The DMS-500 system - purchased as a new switch or converted from a DMS-100/200 system - allows LECs to enter the lucrative long distance market today and provide full, custom service solutions to their subscribers.

Features and Services
The DMS-500 system offers a flexible and cost-effective way for local carriers to use one switching platform to establish a single point of presence in, and provide revenue-generating services to, both local and long distance markets.

- Local Revenue Services
The DMS-500 switch supports both residential and business service needs with the telecommunications industry's broadest range of station features, including:

- Custom Calling Call Waiting, Three-Way Calling, Call Forwarding features
- Custom Local Area Signaling Service (CLASS) Calling Number Delivery, Calling Name Delivery, Automatic Callback, Automatic Recall, Screening List Editing features
- Meridian Digital Centrex (MDC) the industry's most extensive business services portfolio, including S/DMS BusinessExpress, our advanced services offering for small businesses and enterprise networks
- National ISDN Basic Rate Interface (BRI) and Primary Rate Interface (PRI) Services
- DMS-100 Meridian Automatic Call Distribution (ACD)
- Bellcore Automatic Message Accounting (AMA) format, Centrex Station Message Detail Recording (SMDR)

- E800 Database access
- Operator Services access with DMS-100/200 TOPS capabilities
- Analog Display Services Interface (ADSI)
- Speech Recognition Services
- ADAS, AABS, AIN 0.1, etc.

- Long Distance Revenue Services
The DMS-500 switch supports a full complement of inter-exchange dialing plans and revenue-generating services, including:

- Dialing Plans and Database Services 800/900 Number Service, Wide Area Telephone Service (WATS), International Direct Distance Dialing (IDDD), Authorization Codes, Calling Cards, Account Codes, and Personal Identification Numbers (PINs)
- Enterprise Networking (Voice and Data) Meridian Switched Network, Dedicated Access Lines (DALs), Virtual Private Network (VPN)
- Long Distance Data Switching Services (Data and Video) ISDN PRI Service, Switched 56 Calling, Dialable Wideband Service (DWS)
- DMS-250 Call Detail Recording (CDR)
- AIN 0.2 NetworkBuilder, etc.

Software and Feature Capabilities
The DMS-500 switch combines mature, field-proven DMS-100/200 and DMS-250 capabilities into one software load for a comprehensive set of services on one switching platform. The current software load - NCS10 - combines the NA0010 features of the DMS-100/200 and the UCS10 features of the DMS-250.

Benefits
The advantages of the DMS-500 switch and the partnership with Nortel Networks can help LECs counter the anticipated decrease in local access fees brought on by deregulation, squarely meet the competition moving into local markets, and maximize revenue potential across the board by developing, packaging, and marketing new local, toll, and long distance services.

The following attributes of the DMS-500 switch benefit LECs in a variety of ways, from market strategy to network planning to service delivery.

- **Ability to Quickly Generate New Revenue**
  The DMS-500 switch is a cost-effective way to open service pathways beyond the local arena and establish a point of presence in markets previously out of reach. Initial product investments can help to broaden revenue streams when an existing DMS-250 system is migrated to a platform that directly supports local access services.
- **Maximum Service Provider Flexibility**
  Service providers can develop a highly flexible market entry or expansion strategy as an IXC selling or reselling long distance services, a LEC toll office with or without operator services, or a LEC end office offering business and residential line services-and do it today.
- **Service Development and Differentiation**
  With its full range of service capabilities - from narrowband residential and business features to wideband data switching and Intelligent Network applications - the DMS-500 allows network providers to develop, package, and sell unique new services and

service bundles to specific niche or mass customer markets.

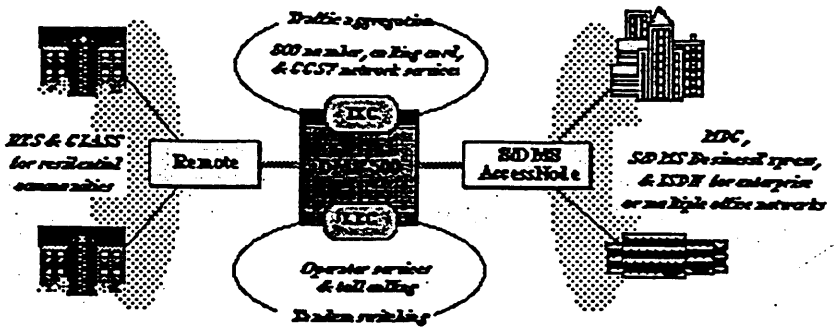
- **Scalable Architecture**
  The DMS-500 switch uses a modular, scalable design that can meet a wide range of line and trunk size requirements, enabling network providers to enter the local-long distance market by deploying an economically sized DMS-500 switch today and adding advanced capabilities later as service needs expand.
- **Local and Long Distance Network Interoperability**
  The DMS-500 system provides a fully functional, standards-compliant technology for both local and long distance services on a switching platform that inter-works with a wide variety of vendor-supplied network switching and transmissions equipment.
- **Cost and Operational Efficiencies**
  Combined DMS-100/200 and DMS-250 services and functions provide the following cost and operational efficiencies in a reduced-size, cost-effective footprint:
  - reduced front-end hardware requirements and subsequent expenditures
  - reduced office site and environmental requirements, such as installation space; power; cabling; peripheral modules; and heating, ventilation, and air conditioning (HVAC)
  - centralized operations, administration, maintenance, and provisioning (OAM&P) with DMS-100/200 and DMS-250 functions supported by a unified DMS Maintenance and Administration Position (MAP)

Network Applications

The technology of the DMS-500 system offers a distinct advantage to network providers competing in today's challenging telecommunications markets. By getting closer to the end user, an IXC or new LEC becomes a direct service provider instead of offering services indirectly. Because the DMS-500 system is designed for maximum switching versatility, it can deliver a wide range of local and long distance services tailored to the unique needs of any network or subscriber market.

In a deregulated environment, the DMS-500 switch can serve as a Class 4/5 access tandem switch using the following typical connections:

- subscriber line connections through remote switching platforms to provide custom calling and CLASS features to residential subscribers
- subscriber line connections through S/DMS AccessNodes (or other DMS remote access vehicles) to provide Centrex-based advanced voice and data services to a variety of businesses or business locations
- trunk connections to a LEC central office to provide toll center, billing, and operator-based services
- trunk connections to an IXC to provide traffic aggregation for long distance voice transport together with CCS7-based signaling trunks for Intelligent Network applications



Line connections to the DMS-500 switch include all line types currently supported by the DMS-100 system for residential and business applications, from Plain Old Telephone Service (POTS) analog lines to ISDN BRI digital lines.

Line interfaces on the DMS-500 switch comply with LATA Switching System Generic Requirements (LSSGR) and other published Bellcore Technical References (TRs) for Class 5 end offices and Class 4/5 access tandem offices delivering line services in the local loop.

Trunk connections to the DMS-500 switch include all trunk types currently supported by the DMS-100/200 and DMS-250 systems for interswitch, interoffice, and interexchange communications, such as:

- Feature Group A, B, C, and D*
- Intermachine Trunk (IMT)*
- Dedicated Access Line (DAL)
- ISDN PRI
- Centralized AMA (CAMA)
- Integrated Business Network (IBN)*
- Inter-Toll (IT)*
- Access to Carrier (ATC)*

*Note: Feature Group D, IMT, IBN, IT, and ATC trunks support both multifrequency (MF) and CCS7 signaling.

Trunk interfaces on the DMS-500 system comply with Bellcore and American National Standards Institute (ANSI) requirements defining T1 CCS7 for inter-LATA transport services.

Converting a DMS-100/200 System
A DMS-100/200 switch is converted to a DMS-500 switch with the simple addition of physical trunk facilities and new software, all while maintaining current services. For switches with BCS34 or earlier software, Nortel Networks first converts the DMS-100/200 system to BCS35 or BCS36 capabilities, and then uses a One Night Process (ONP) to add the remaining capabilities of the DMS-500 feature set.

Hardware Requirements
The DMS-500 system is based on a mature switching technology that uses the same hardware architecture of front-end and network elements found on today's DMS family of switches. This shared architecture makes the process of converting a DMS-100/200 system into a DMS-500 system as

simple as adding DMS-250 operating software, together with the necessary peripheral equipment for line side access.

Whether a DMS-100/200 switch at an established site is converted to a DMS-500 switch, or a DMS-500 switch is purchased for a new site installation, the following hardware is required.

DMS SuperNode or DMS SuperNode SE with:

- BRISC Series 60 Processor
- 96-Meg Memory Cards
- Enhanced Network (ENET), required for initial switch installations only
- Extended Peripheral Module Plus (XPM+)-based peripherals
- Link Peripheral Processor (LPP) with 8-Meg CCS7 Link Interface Units (LIU7s) (NTEX22BA/BB)
- Message Switch and Local Message Switch processor upgrades to NT9X13DD cards

• Advanced Search
NORTEL NETWORKS Search GO
Products & Services | Customer Solutions | Order Online | Customer Support | Partners
News & Events | Custom News | Careers | Global Information | Corporate Information
Home | Languages | Contact Us | Help
© copyright / privacy statement

DMS-250

The DMS-250 is a high-capacity long-distance tandem switching system for interexchange carriers of all sizes. Through the advanced DMS SuperNode processing architecture, state-of-the-art hardware, optimized system software, and maximum processing capacity, the DMS-250 provides high-speed message handling capacity to meet the most demanding voice and data communications needs of today's long distance users.

The DMS-250 is part of the Nortel Networks Succession Solutions converged voice/data network. This carrier-grade packet data system can be configured to handle from 480 to more than 100,000 trunks; offers enhanced operation, administration, maintenance, and provisioning (OAM&P) capabilities; offers N00, virtual private networking, calling card, AIN, wholesale capabilities, dialable wideband services; and supports a variety of custom features including speed calling, conference calling, and access to the carrier's operator.

• Benefits

- Increased revenue with the delivery of powerful long-distance services
- Reduced training and maintenance costs and the need for spare equipment by using common, modular software and hardware technology
- Advanced OAM&P capabilities allow rapid introduction of new services
- Evolutionary path to Nortel Networks Succession Solutions

(more)

Information:
Document Library • Benefits • Tech Specs •

Products:
DMS SuperNode • Data Manager SPM •

Solutions:
Services Portfolio •

Purchasing Information

Contact DMS-250 •

Service & Support:
User Group •

Related Info:
Succession • Global Professional Services - For Service Providers

© copyright / privacy statement

Information:
Document Library • Benefits • Tech Specs •

Products:
DMS SuperNode • Data Manager SPM •

Solutions:
Services Portfolio •

Purchasing & Information
Contact DMS-250 •

Service & Support:
User Group •

Related Info:
Succession •

DMS-250

Benefits

- **Accelerated Delivery of New Features**

  With a redesigned, modular software architecture, it is easier than ever to create new capabilities and enhance existing ones.

- **Easy Growth to Match Market Needs**

  The modular, scalable system architecture of the DMS-250 system allows network providers to add processing capacity, memory capacity, trunk capacity, and services as they are needed. For example, a DMS-250 system can easily grow from a relatively small configuration to 100,000 ports though incremental additions. Enhanced processors, additonal switching matrices, peripherals, and trunk cards can be added without redesigning the system or interrupting service.

- **Protected Investment**

  DMS family switching systems - from local to international systems - all operate on a common hardware base platform. That means that the carrier's investment is protected even as the business takes new directions and the network changes. It also means uncommon flexibility. For example, add software to a DMS-250 system and you have a DMS-250/300 system, capable of handling domestic and international long distance services. Or with the addition of software and certain DMS-100 hardware elements, a DMS-250 switch becomes a DMS-500 switch-capable of providing local and long distance service from a single platform.

- **Compatibility in the Multi-Vendor Network**

  With an open architecture that embraces industry standards, the DMS-250 system functions effectively in today's multi-vendor network. The system is fully compatible with industry-standard telecommunications protocols, including Common Channel Signaling System No. 7 (CCS7), Integrated Services Digital Network (ISDN) and Bellcore's Advanced Intelligent Networking (AIN).

- **Industry-Leading Reliability**

  The DMS-250 system offers the robust performance expected of public carrier systems. Crucial system components, such as the core processing module, are duplicated - "hot" standby units are ready to automatically take over operations if necessary. With a solid record of performance worldwide, the DMS-250 system has

earned recognition from industry journals for superior hardware and software quality and is known as "best in class" in terms of hardware- or software-related outages.

• Advanced Search
NORTEL NETWORKS Search GO
Products & Services | Customer Solutions | Order Online | Customer Support | Partners
News & Events | Custom News | Careers | Global Information | Corporate Information
Home | Languages | Contact Us | Help
© copyright / privacy statement

ATTACHMENT 2

PROPRIETARY MATERIAL

ATTACHMENT 3

PROPRIETARY MATERIAL

ATTACHMENT 4

DOCKET NO. 11644-U

ARBITRATION ISSUES

Issue 2(a): Should the definition of "local traffic" for purposes of the parties' reciprocal compensation obligations under Section 251(b)(5) of the 1996 Act include the following: Subissue 2(a): ISP traffic?

BellSouth: Calls to ISPs are not local and accordingly should be excluded from the definition of local traffic

Intermedia: Reciprocal compensation should apply to calls originated by BellSouth and transported and terminated by Intermedia to its ISP customers, and vice versa.

Staff Recommendation: Consistent with previous decisions of this Commission, Reciprocal Compensation should apply to calls terminated to ISP customers. In the event the FCC establishes some other mechanism for compensation for such calls, the parties may petition the Commission to revisit this issue at that time.

Issue 3: Should Intermedia be compensated for end office, tandem, and transport elements, for purposes of reciprocal compensation?

BellSouth: The Commission should deny Intermedia's request for tandem switching compensation when Intermedia proved neither that its switch is actually performing tandem switching nor that its switch serves a geographic area comparable to BellSouth's switch. This is based on their observations of other Commissions rulings on similar issues (California's, Florida's, Minnesota's and, Utah's Public Service Commissions).

Intermedia: Intermedia fully satisfies the requirements of the FCC rule 51.711(a)(3) and is therefore entitled to receive reciprocal compensation at the tandem interconnection rate.

Staff Recommendation: That Intermedia has demonstrated that its switches perform tandem switching functions and that it serves a geographic area comparable to the area served by BellSouth, therefore the tandem rate element for reciprocal compensation is applicable.

Issue 6: For the purposes of collocation, should intervals be measured in business days or calendar days?
Issue 8: Is BellSouth's interval for responding to Intermedia's bona fide collocation requests appropriate?
Issue 9: Is BellSouth's interval for physical collocation provisioning appropriate?

BellSouth: BST uses business days in order to measure collocation intervals because of the reliance upon skilled contractors and governmental personnel. Also as the competition in Georgia increases, the number of collocation applications received by BellSouth increased. So maintaining the current intervals is vital in order to properly respond to the volume of applications received. If calendar days are used to measure collocation intervals, then BellSouth submits that its actual provisioning intervals would require modification.

Intermedia: Collocation provision intervals in the parties' agreement should be expressed in calendar days rather than business days.

Staff Recommendation: Consistent with prior Commission decisions: Intervals shall be measure in calendar days; the interval for responding to Intermedia's bona fide collocation requests shall be 30 calendar days; and, the interval for physical collocation provisioning shall be 90 calendar days under ordinary circumstances and 120 calendar days under extraordinary circumstances.

Issue 10: Are BellSouth's policies regarding conversion of virtual to physical collocation reasonable?

BellSouth: The terms and conditions that should apply for converting virtual collocation to physical collocation should be consistent with the terms and conditions of the assessment and provisioning of physical collocation. This is because BellSouth evaluates both of these applications in the same manner. If a collocator makes a request for conversion from virtual to physical collocation, the collocator should be responsible for any cost incurred. BellSouth would allow conversion of virtual collocation to physical without requiring the relocation of the equipment where three conditions are met: 1) that there is no change in the amount of equipment or the configuration of the equipment that was in the virtual collocation arrangement; 2) that the conversion of the virtual collocation arrangement would not cause the equipment or the results of that conversion to be located in the space that Bellsouth has reserved for its own future needs; and 3) that due to the location of the virtual collocation arrangement the converted arrangement does not limit BellSouth's ability to secure its own equipment and facilities.

Intermedia: Intermedia should be allowed to convert its virtual collocation arrangements to physical collocation arrangements without requiring the relocation of its equipment and it should be done in a timely manner. Intermedia does not disagree with BellSouth that it should be able to reserve space for future use, so long as it is reasonable. Intermedia is willing to accept the proposition that "in place" conversion of virtual collocation to physical collocation may not be permitted where the conversion would cause the arrangement to be located in the area reserved for BellSouth's future growth. Intermedia is also willing to agree that "in place" conversion will be allowed if (a) Intermedia does not increase the amount of space it occupies, and (b) any changes to the arrangement can be accommodated by existing power, HVAC, and other requirements. Intermedia also believes that the application fee should not be the same as the application fee for a new request for physical collocation ($3850) as not many of the same tasks are required and further that the 90 day turnaround on such an application is unreasonable.

Staff Recommendation: The Staff recommends that virtual collocation may be converted to "in place" physical collocation according to the following criteria: 1) that there is no change in the amount of equipment or the configuration of the equipment that was in the virtual collocation arrangement; 2) that the conversion of the virtual collocation arrangement would not cause the equipment or the results of that conversion to be located in the space that Bellsouth has reserved for its own future needs; and 3) that due to the location of the virtual collocation arrangement the converted arrangement does not limit BellSouth's ability to secure its own equipment and facilities; (4) any changes to the arrangement can be accommodated by existing power, HVAC, and other requirements; (5) that under normal circumstances the conversion be handled by BellSouth in 60 calendar days (this is the same interval previously approved by the Commission for cageless collocation); and (6) that the interim application fee for such conversion from virtual to physical be $1,000 (the normal physical collocation application fee is $3850; however, the costs of many of the tasks/functions that comprise that fee are not applicable to in place conversion), until such time as BellSouth shall file with this Commission a cost study for the conversion of virtual collocation to physical collocation and same is adopted by this Commission.

Issue 12: What is the appropriate definition of "currently combines" pursuant to FCC Rule 51.315(b)?

BellSouth: Based on the FCC ruling on the definition in its UNE Remand Order. BST believes that the Commission should not ignore the FCC's findings and they urge the Commission to refrain from ordering otherwise until the Eighth Circuit rules on this issue. (Tr. At 102-103; 168-169). But, BellSouth acknowledges that on this issue the Commission had ordered that "currently combined" means "ordinarily combined" within BellSouth's network in Docket No. 10692-U and in Docket No. 10767-U. BellSouth respectfully request that this Commission not extend the foregoing decision in light of the pending Eight Circuit case as well as BellSouth's appeal of the "ordinarily combined" aspect of the decision in Docket No. 10692-U.

Intermedia: The Commission should require BellSouth to provide Intermedia with access to combinations of UNEs that are already physically combined and typically combined.

Staff Recommendation: The Staff would recommend that the Commission remain consistent with its decision in recent dockets that BellSouth is obligated to provide UNE combinations to Intermedia as provided in Docket No. 10692-U and Docket No. 10767-U.

Issue 13: Should BellSouth be required to: (a) provide access to enhanced extended links ("EELs") at UNE rates; and (b) allow Intermedia to convert existing special access services to EELs at UNE rates?

BellSouth: (a) The FCC declined to define the EEL as a separate network element in its UNE Remand Order. (Para. 478). Therefore, except to the extent where currently combined elements in BellSouth's network that comprise an EEL are located, BellSouth currently has no obligation to provide CLECs with the EEL. (b) Until the UNE Remand Order (Para. 494; November 24, 1999 Supplemental Order, Para. 4) is complete, the FCC has made clear that carriers may not

convert special access services to combinations of unbundled network elements unless the carrier uses combinations of network elements to provide significant amount of local exchange service, in addition to exchange access service to a particular customer. (Nov. 24, 1999 Supplemental Order Paras. 2 & 4)(Tr. At 38).

Intermedia: BellSouth is obligated by law to provide access to EELs, and to allow the conversion of special access service to EELs, at UNE rates.

Staff Recommendation: The Staff would recommend that the Commission remain consistent with its decision in recent dockets that BellSouth is obligated to provide EELs to Intermedia as provided in Docket No. 10692-U and Docket No. 10767-U.

Issue 18: Should BellSouth be required to provide access on an unbundled basis in accordance with, and as defined in, the FCC's UNE Remand Order, to the following: Subissue 18(c): packet switching capabilities?

BellSouth: The FCC empowered the State Commissions to unbundle specific network elements used to provide frame relay (e.g. packet switching), but only to the extent that a competing carrier convinces the State Commission that it is impaired without access to those elements. There is absolutely no evidence indicating that Intermedia is impaired in its packet switching capabilities; therefore, this Commission should reject Intermedia's request to require BellSouth access to packet switching on an unbundled basis.

Intermedia: The Commission should require BellSouth to provide access to packet switching capabilities, including frame relay elements, at UNE rates.

Staff Recommendation: Intermedia has not demonstrated that it is impaired; thus, BellSouth is not required to provide packet switching capabilities to Intermedia on an unbundled basis unless all four of the conditions in Rule 51.319(c)(5) are met.

Issue 22: Should BellSouth be required to offer nondiscriminatory access to interoffice transmission facilities in accordance with, and as defined in, the FCC's UNE Remand Order?

BellSouth: BellSouth agrees to provide nondiscriminatory access to interoffice facilities in accordance with the FCC's UNE Remand Order. BellSouth requests that this Commission adopt the rates submitted as BellSouth Exhibit 2 as the appropriate TELRIC-based rates for these facilities.

Intermedia: BellSouth is required by law to provide access to all types of unbundled transport at cost-based rates.

Staff Recommendation: The Staff recommends that BellSouth provide access to interoffice transmission facilities in accordance with the FCC's UNE Remand Order at the Interim Rates

filed by BellSouth in this docket, until such time as this Commission establishes permanent rates for such services. Such interim rates shall be subject to true-up.

Issue 25: Should BellSouth be required to furnish access to the following as UNEs: (i) User to Network Interface ("UNI"); (ii) Network-to-Network Interface ("NNI") and (iii) Data Link Control Identifiers ("DLCI"), at Intermedia-specified committed information rates ("CIR")?

BellSouth: Each of the elements (UNI, NNI, DLCI, and CIR) is a part of frame relay packet switching. Like in Issue 18(c) the FCC declined to unbundle the packet switching functionality, except in limited circumstances. These circumstances don't apply so BellSouth request that this Commission finds that BellSouth isn't required to provide access to these elements at TELRIC-based rates.

Intermedia: The Commission should require BellSouth to provide access to packet switching capabilities, including frame relay elements, at UNE rates.

Staff Recommendation: See Issue 18(c). Intermedia has not demonstrated that it is impaired; thus, BellSouth is not required to provide packet switching capabilities to Intermedia on an unbundled basis unless all four of the conditions in Rule 51.319(c)(5) are met.

Issue 26: Should parties be allowed to establish their own local calling areas and assign numbers for local use anywhere within such areas, consistent with applicable law?

BellSouth: BellSouth believes that Intermedia should use its NPA/NXXs in such a way that BellSouth can distinguish local traffic from intraLATA toll traffic and interLATA toll traffic for BellSouth originated traffic. BellSouth is indifferent to the manner in which Intermedia defines its local calling areas for its own end users. Intermedia must designate a "home" local tandem for its NPA/NXX codes and interconnect at that tandem.

Intermedia: Intermedia should be allowed to assign its numbering resources and establish its calling areas as it sees fit.

Staff Recommendation: The Staff recommends that Intermedia be allowed to assign its NPA/NXX codes in accordance with the establishment of its local calling areas, provided that it furnish the necessary information to BellSouth and all other telecommunication carriers that they may identify local and toll traffic and provide for the proper routing and billing of calls.

Issue 29: In the event Intermedia chooses multiple tandem access ("MTA"), must Intermedia establish points of interconnection at all BellSouth access tandems where Intermedia's NXXs are "homed"?

BellSouth: The CLEC must interconnect with BellSouth's network at each access tandem where the CLEC's NPA/NXX codes home. All telecommunications carriers, including BellSouth, must know where Intermedia's NPA/NXX codes are homed. If not, required translations and routing of calls will not be possible and calls will not be completed.

Intermedia: Intermedia should not be required to establish points of interconnection at each and every BellSouth access tandem in the event it chooses multiple tandem access.

Staff Recommendation: The Staff would recommend that the Commission require Intermedia to interconnect with BellSouth's network at each access tandem where its NPA/NXX codes home. The homing of the NPA/NXX codes will be as directed by the Commission in Issue # 26 in this Arbitration.

Issue 30: Should Intermedia be required to: (a) designate a "home" local tandem for each assigned NPA/NXX; and (b) establish points of interconnection to BellSouth access tandems within the LATA on which Intermedia has NPA/NXXs homed?

BellSouth: (a) Intermedia must establish one or more of the BellSouth local tandems as a home local tandem for its NPA/NXXs and establish interconnection to the BellSouth local tandem(s) on which Intermedia homed its NPA/NXXs. (b) Intermedia may interconnect its network to BellSouth's network at one or more access tandems in the LATA for delivery and receipt of its access traffic.

Intermedia: Intermedia should not be required to designate a "HOME" local tandem for each assigned NPA/NXX and to establish points of interconnection to each access tandem where NPA/NXXs are homed.

Staff Recommendation: The Staff would recommend that the Commission require Intermedia to interconnect with BellSouth's network at each access tandem where its NPA/NXX codes home. The homing of the NPA/NXX codes will be as directed by the Commission in Issue # 26 in this Arbitration.

Issue 31: For purposes of compensation, how should IntraLATA Toll Traffic be defined?

BellSouth: IntraLATA toll traffic is defined as any telephone call that is not local or switched access per this Agreement. (Tr. at 49)

Intermedia: The term "IntraLATA Toll Traffic" should not be defined in the parties' agreement to exclude data calls. Intermedia proposes that "IntraLATA Toll Traffic" be defined as "all basic intraLATA message service calls other than Local Traffic."

Staff Recommendation: The Staff would recommend that the Commission adopt Intermedia's definition of "IntraLATA Toll Traffic", i.e. "all basic intraLATA message service calls other than Local Traffic."

Issue 32: How should "Switched Access Traffic" be defined?

BellSouth: Switched Access Traffic is as defined in the BellSouth Access Tariff. Additionally, IP telephony traffic will be considered switched access traffic. (Tr. at 50). IP telephony is simply a method of completing a telephone call and is a telecommunications service. The word

"Internet" in Internet Protocol telephony refers to the name of the protocol; it does not mean that the service necessarily uses the World Wide Web and has nothing to do with the transmission medium.

Intermedia: BellSouth's definition of "Switched Access Traffic" must be rejected because, among other things, IP telephony is not access traffic. IP telephony is an information service.

Staff Recommendation: The Staff recommends that the Commission adopt Intermedia's definition of "Switched Access Traffic", i.e. "Switched Access Traffic is defined as telephone calls requiring local transmission or switching services for the purpose of the origination or termination of Telephone Toll Service. Switched Access Traffic includes the following types of traffic: Feature Group A, Feature Group B, Feature Group D, 800/888 access and 900 access and their successors or similar Switched Exchange Access Services." However, Staff recommends that the Commission defer ruling on the issue of whether IP telephony is subject to access charges until it has had an opportunity to consider the issue further. While the FCC has not made any definitive rulings on the issue, it did suggest in its April 10, 1998 Report to Congress that some forms of IP Telephony might be telecommunications services rather than information services.

[Under federal law, "Telecommunications services" means "offering of telecommunications for a fee directly to the public . . . regardless of the facilities used." 47 U.S.C. § 153(46). "Telecommunications" means "the transmission between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." 47 U.S.C. § 153(43). "Information services" means "a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications . . . but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. § 153(20).]

Issue 33: Should BellSouth and Intermedia be liable to each other for lost switched access revenues due to lost or damaged billing data?

BellSouth: BellSouth is willing to accept Intermedia's proposed language with one exception: BellSouth does not wish to place a cap on the liabilities of the parties. (Tr. at 54)

Intermedia: In the event of a lost of data, both parties must cooperate to reconstruct the lost data and, where reconstruction is not possible, use a reasonable estimate of the lost data. In the event the estimated billing is not accepted for payment by the affected Access Service Customer(s), the responsible party will be liable to the other party for any resulting lost revenue up to a maximum of $10,000 in the aggregate and in any one-month period.

Staff Recommendation: The Staff would recommend that the Commission adopt Intermedia's proposed language as noted above with the removal of the cap on the liabilities as requested by BellSouth.

Issue 37: Should all framed packet data transported within a VC that originate and terminate within a LATA be classified as local traffic?

BellSouth: BellSouth proposed the following language to Intermedia:

> Frame Relay framed packet data is transported within Virtual Circuits ("VC"). If all the data packets transported within a VC originate and terminate within the LATA, then for purposes of establishing interconnections between the Parties, such traffic will be treated the same as local circuit switched traffic ("Local VC"). This traffic will not be treated as Local Traffic for any other purpose under this Agreement, including but not limited to reciprocal compensation. (Tr. at 56)

Intermedia: IntraLATA data packets traversing a virtual circuit are local traffic and subject to reciprocal compensation. Intermedia further believes that there is a great deal of local frame relay traffic in Georgia, particularly because of the size of the Atlanta local calling area. Intermedia has proposed that BellSouth's definition be utilized minus the last sentence and that the Commission require the Parties to consult with each other and arrive at an acceptable arrangement for the treatment of local frame relay traffic, submitting the result to the Commission on a date certain, perhaps 30 (calendar) days from the decision. If this is not possible, both parties should be required to submit separate recommendations in writing within 5 (calendar) days thereafter.

Staff Recommendation: The Staff would recommend that the Commission adopt Intermedia's position on this issue.

Issue 38: If there are no VCs on a frame relay interconnection facility when it is billed, should the parties deem the Percent Local Circuit Use to be zero?

BellSouth: The appropriate PLCU for frame relay interconnection facilities, where there are no Virtual Circuits, should be zero. In the alternative, BellSouth offered to apply the same PLCU to all Local VCs in a given LATA, even if there are no Virtual Circuits on a particular frame relay interconnection facility when it is initially turned up for service.

Intermedia: The PLCU should be 100%. Any other percentage could unreasonable impose higher rates on Intermedia, even though BellSouth would not be incurring higher costs in providing the facility.

Staff Recommendation: The Staff would recommend that the Commission adopt BellSouth's alternative and apply the same PLCU to all Local VCs in a given LATA, even if there are no Virtual Circuits on a particular frame relay interconnection facility when it is initially turned up for service.

Issue 39: What are the appropriate charges for the following: (a) interconnection trunks between the Parties' frame relay switches; (b) frame relay network-to-network interface

points; (c) permanent virtual circuit ("PVC") segments (i.e., Data Link Connection Identifier ("DLCI") and Committed Information Rates ("CIR"); (d) requests to change a PVC segment or PVC service order record?

BellSouth: Each of the items listed above in this issue are components of Frame Relay. (Tr. at 122). As discussed under Issues 18(c) and 25, BellSouth is not required to unbundle packet switching under Section 251 of the Act, or by any FCC Order (*Id.*). The appropriate charge for all of the components listed above are found in BellSouth's Interstate Access Tariff. (Tr. at 57)

Intermedia: The Commission should require BellSouth to provide access to packet switching capabilities, including frame relay elements, at UNE rates.

Staff Recommendation: See Issues 18(c) and 25. Intermedia has not demonstrated that it is impaired; thus, BellSouth is not required to provide packet switching capabilities to Intermedia on an unbundled basis unless all four of the conditions in Rule 51.319(c)(5) are met. In the event these four conditions are met, Intermedia shall pay the Access Tariff charge, with a true-up, until such time the Commission sets UNE rates.

Issue 48: Should the parties adopt the performance measures, standards and penalties imposed by the Texas Public Utility Commission on Southwestern Bell Telephone?

BellSouth: There is absolutely no reason that this Commission should disregard the well-established performance measurements adopted in Georgia for an entirely new set of guidelines set forth by the Texas Public Utility Commission.

Intermedia: The Commission should consider adoption of additional measures and enforcement provisions to ensure BellSouth's performance.

Staff Recommendation: The Staff would recommend that the Commission direct that the parties incorporate the performance measures, standards, and penalties to be set by the Commission in Docket 7892-U.

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. P-55, SUB 1178

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Petition of BellSouth Telecommunications, Inc. For Arbitration of Interconnection Agreement with Intermedia Communications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	)) RECOMMENDED) ARBITRATION ORDER)

HEARD IN: Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina, on February 23, 2000.

BEFORE: Commissioner Sam J. Ervin, IV, Presiding, and Commissioners William R. Pittman and Robert V. Owens, Jr.

APPEARANCES:

FOR BELLSOUTH TELECOMMUNICATIONS, INC.:

Edward L. Rankin, III, General Counsel - North Carolina, BellSouth Telecommunications, Inc., Post Office Box 30188, Charlotte, North Carolina 28230

A. Langley Kitchings, General Attorney, BellSouth Telecommunications, Inc., 675 West Peachtree Street, Suite 4300, Atlanta, Georgia 30375-0001

FOR INTERMEDIA COMMUNICATIONS, INC.:

Henry C. Campen, Jr. and Layth S. Elhassani, Parker, Poe, Adams & Bernstein, L.L.P., First Union Capitol Center, Suite 1400, 150 Fayetteville Street Mall, Raleigh, North Carolina 27602-0389

Jonathan E. Canis and Ronald J. Jarvis, Kelley, Drye & Warren, L.L.P., 1200 19th Street, N.W., Suite 500, Washington, D.C. 20036

FOR THE USING AND CONSUMING PUBLIC:

Lucy E. Edmondson and Kendrick C. Fentress, Staff Attorneys, Public Staff - North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4326

BY THE COMMISSION: This arbitration proceeding is pending before the North Carolina Utilities Commission pursuant to Section 252(b) of the Telecommunications Act of 1996 (TA96 or the Act) and Section 62-110(f1) of the North Carolina General Statutes. On December 7, 1999,

BellSouth Telecommunications, Inc. (BellSouth) filed a Petition for Arbitration of Interconnection Agreement with Intermedia Communications, Inc. (Intermedia) in this docket which initiated this proceeding. By its Petition, BellSouth requested that the Commission arbitrate certain terms and conditions with respect to interconnection between itself as the petitioning party and Intermedia.

The purpose of this arbitration proceeding is for the Commission to resolve the issues set forth in the Petition and Responses. 47 U.S.C.A. Section 252(b)(4)(C). Under the Act, the Commission shall ensure that its arbitration decision meets the requirements of Section 251 and any valid Federal Communications Commission (FCC) regulations pursuant to Section 252. Additionally, the Commission shall establish rates according to the provisions in 47 U.S.C.A. Section 252(d) for interconnection, services or network elements, and shall provide a schedule for implementation of the terms and conditions by the parties to the agreement. 47 U.S.C.A. Section 252(c).

Pursuant to Section 252 of TA96, the FCC issued its First Report and Order in CC Docket Numbers 96-98 and 95-185 on August 8, 1996 (Interconnection Order). The Interconnection Order adopted a forward-looking incremental costing methodology for pricing unbundled network elements (UNEs) which an incumbent local exchange company (ILEC) must sell new entrants, adopted certain pricing methodologies for calculating wholesale rates on resold telephone service, and provided proxy rates for State Commissions that did not have appropriate costing studies for UNEs or wholesale service. Several parties, including this Commission, appealed the Interconnection Order and on October 15, 1996, the United States Court of Appeals for the Eighth Circuit issued a stay of the FCC's pricing provisions and its "pick and choose" rule pending the outcome of the appeals.

The July 18, 1997 ruling of the Eighth Circuit, as amended on rehearing October 14, 1997, was largely in favor of state regulatory commissions and local phone companies and adverse to the FCC and potential competitors, primarily long distance carriers. The Eight Circuit held that 47 U.S.C.A. Sections 251 and 252 "authorize the state commissions to determine the prices an incumbent LEC may charge for fulfilling its duties under the Act." The Court of Appeals also vacated the FCC's "pick and choose rule." Iowa Utilities Board v. FCC, 120 F.3d 753 (8th Cir. 1997).

On January 25, 1999, the United States Supreme Court entered its Opinion in AT&T Corp. v. Iowa Utilities Board, 119 S.Ct. 721 (1999). The Supreme Court held, in pertinent part, that (1) the FCC has jurisdiction under Sections 251 and 252 of the Act to design a pricing methodology and adopt pricing rules; (2) the FCC's rules governing unbundled access are, with the exception of Rule 319, consistent with the Act; (3) it was proper for the FCC in Rule 319 to include operator services and directory assistance, operational support systems, and vertical switching functions such as caller I.D., call forwarding, and call waiting within the features and services that must be provided by competitors; (4) the FCC did not adequately consider the Section 251(d)(2) "necessary and impair" standards when it gave requesting carriers blanket access to network elements in Rule 319; (5) the FCC reasonably omitted a facilities-ownership requirement on requesting carriers; (6) FCC Rule 315 (b), which forbids ILECs to separate already-combined network elements before leasing them to competitors, reasonably interprets Section 251(c)(3) of the Act, which establishes the duty to provide access to network elements on nondiscriminatory rates, terms, and conditions and in a manner that allows requesting carriers to combine such elements; and (7) FCC Rule 809 (the "pick and choose" rule), which tracks the pertinent language in Section 252(i) of the Act almost exactly, is not only a reasonable interpretation of the Act, it is the most readily apparent. The Supreme Court remanded the cases back to the Eighth Circuit Court of Appeals for proceedings consistent with its opinion.

On June 10, 1999, the Eighth Circuit Court of Appeals entered an Order on remand in response

to the Supreme Court's decision which, in pertinent part, reinstated FCC Rules 501-515, 601-611, and 701-717 (the pricing rules), Rule 809 (the "pick and choose" rule), and Rule 315(b) (ILECs shall not separate requested network elements which are currently combined). The Eighth Circuit also vacated FCC Rule 319 (specific unbundling requirements). The Court set a schedule for briefing and oral argument of those issues which it did not address in its initial opinion because of its ruling on the jurisdictional issues. The Court also requested the parties to address whether it should take any further action with respect to FCC Rules 315(c) - (f) regarding unbundling requirements. Iowa Utilities Board v. FCC, F.3d (Order Filed June 10, 1999).

On December 7, 1999, concurrent with filing its Petition for Arbitration, BellSouth filed the testimony of Alphonso J. Varner and W. Keith Milner.

On January 3, 2000, Intermedia filed an Answer and New Matter along with an Issues Matrix in response to BellSouth's Petition for Arbitration. Intermedia also filed the affidavit and testimony of J. Carl Jackson, Jr.

On January 7, 2000, BellSouth filed a Motion for Extension of Time to file its rebuttal testimony. Intermedia filed in opposition of BellSouth's Motion for Extension of Time in part on January 11, 2000, on the ground that BellSouth had prior notice of the new matters raised in Intermedia's Answer and New Matter. On January 12, 2000, the Commission issued an Order Allowing Extension of Time to File Rebuttal Testimony.

On January 12, 2000, the Commission issued an Order Setting Hearing in the matter for Wednesday, February 23, 2000.

On January 13, 2000, BellSouth filed a Motion seeking to resolve certain issues in the arbitration by addressing them in generic proceedings already pending before the Commission. Specifically, BellSouth sought to resolve issues concerning the definition of and/or rates for collocation and certain network capabilities that Intermedia wanted BellSouth to unbundle. On January 20, 2000, Intermedia filed a Motion in Opposition to BellSouth's Motion to Resolve Issues. On February 1, 2000, the Commission issued an Order Granting Motion to Resolve Issues which provided that the issues identified by BellSouth as pertaining to generic dockets on the issues of UNE rates, collocation, and performance measures should be considered in Docket Nos. P-100, Sub 133d, P-100, Sub 133j, and P-100, Sub 133k, respectively.

Also, on January 13, 2000, BellSouth filed the affidavit of Patrick C. Finlen.

On January 31, 2000, BellSouth filed the rebuttal testimony and exhibits of David A. Coon, D. Daonne Caldwell, W. Keith Milner, and Alphonso J. Varner. BellSouth also filed under seal Exhibit AJV-3, Exhibit DDC-1, and three CD-ROMs.

On February 9, 2000, BellSouth filed revised Caldwell Exhibit DDC-2 and revised Varner Exhibit AJV-1.

On February 9, 2000, the Public Staff filed its Notice of Intervention in the docket.

On February 17, 2000, Intermedia and BellSouth filed their Witness Lists and Estimated Cross-Examination Times.

On February 17, 2000, BellSouth filed revised Caldwell Exhibit DDC-1 and Varner Exhibit AJV-1.

On February 17, 2000, Intermedia filed a Motion for Acceptance of Late Filed Exhibits concerning the issue of reciprocal compensation for Intermedia's switch as a tandem switch.

On February 18, 2000, BellSouth filed a Supplemental Motion to Resolve Issues. With this Motion, BellSouth sought to supplement BellSouth's prior Motion to Resolve Issues. Specifically, BellSouth omitted an issue, Issue 18, from its previous Motion to have certain issues considered in the generic UNE docket. Intermedia did not oppose this Motion as long as the Commission would consider the issue in Docket No. P-100, Sub 133d.

Also, on February 18, 2000, Intermedia filed a Motion for Acceptance of Supplemental Testimony of J. Carl Jackson, Jr., his Supplemental Testimony and Exhibits.

On February 21, 2000, the Public Staff filed its Estimated Cross-Examination Times. Also on that day, BellSouth and Intermedia filed a revised Joint Issues Matrix.

On February 22, 2000, BellSouth filed its proprietary CD ROMs.

On February 22, 2000, BellSouth filed the rebuttal testimony and exhibits of Alphonso J. Varner.

This matter came on for hearing on February 23, 2000. Pursuant to a request from the Parties, the hearing was continued until 2:30 p.m. At the commencement of the hearing, all the issues had been deferred, withdrawn, or settled, except Issues 2(a), 3, 18, 22, 31, 32, 33, 37, 38, and 45. The Commission then heard the Parties' Motion to decide Issue 2(a), which pertains to the definition of local traffic for purposes of the Parties' reciprocal compensation obligations under Section 251 (b)(5) of the Act on the record without further testimony. The Parties requested that the Commission take administrative notice of the records of the ICG Telecom Group, Inc./BellSouth, ITC^DeltaCom/BellSouth and Time Warner Telecom of North Carolina, L.P./ BellSouth arbitrations in Docket Nos. P-582, Sub 6, P-500, Sub 10, and P-472, Sub 15, respectively. That Motion also asked that the Parties be allowed to brief the issue further. The Commission allowed the Motion.

The Commission also allowed BellSouth's February 18, 2000, Motion to Defer an Additional Issue, Issue 18, to a generic proceeding.

BellSouth presented the testimony of Alphonso J. Varner, (Direct, Rebuttal, and Supplemental Rebuttal). Intermedia presented the testimony of J. Carl Jackson, Jr. (Direct and Supplemental Direct). The rebuttal testimony of D. Daonne Caldwell was entered into the record by stipulation.

On February 25, 2000, BellSouth and Intermedia filed a Corrected Motion Regarding Inter-Carrier Compensation.

On February 29, 2000, the Commission issued an Order Seeking Late-Filed Exhibits pertaining to Issue 3, whether Intermedia should be compensated for end office, tandem and transport elements for purposes of reciprocal compensation. This Order requested that Intermedia submit on or before March 6, 2000: (1) a description of the relevant switches and associated technology necessary to

provide service; (2) the number and location of customers, if available; and (3) any other information relevant to the Company's capability and intent to serve. In response, Intermedia submitted supplemental exhibits on March 6, 2000. On March 10, 2000, BellSouth filed a Reply to Intermedia's exhibits.

On March 1, 2000, BellSouth filed the redacted direct and rebuttal testimony of Alphonso J. Varner. BellSouth also withdrew Exhibit AJV-4, the direct and rebuttal testimony of W. Keith Milner, and the rebuttal testimony and exhibits of David A. Coon.

On March 3, 2000, Intermedia filed the redacted and revised testimony of J. Carl Jackson, Jr.

On March 6, 2000, Intermedia filed its confidential Supplemental Exhibits concerning issue 3.

On March 10, 2000, BellSouth filed its Reply to Intermedia's March 6, 2000 Supplemental Exhibits.

On May 2, 2000, BellSouth filed a Notice that Matrix Issue No. 45 had been resolved by the Parties.

A glossary of the acronyms referenced in this Order is attached hereto as Appendix A.

WHEREUPON, based upon a careful consideration of the entire record in this arbitration proceeding, the Commission now makes the following

FINDINGS OF FACT

1. Dial-up Internet Service Provider (ISP) traffic is subject to an interim intercarrier compensation mechanism at the same rate and in the same manner as reciprocal compensation for local traffic. Such rate should be subject to true-up at such time as the Commission has ruled pursuant to the FCC's subsequent Order on the subject.

2. For reciprocal compensation purposes, Intermedia should be compensated at BellSouth's tandem interconnection rate.

3. It is appropriate to adopt BellSouth's proposed language and proposed rates for interoffice transport for inclusion in the Interconnection Agreement, but allow for a true-up of the rates if the Commission adopts different permanent prices for interoffice transport in Phase I of its generic UNE proceeding in Docket No. P-100, Sub 133d.

4. The Commission declines to adopt the definitions for IntraLATA Toll Traffic proposed by either BellSouth or by Intermedia. The Parties are encouraged to continue to negotiate an appropriate definition that would be consistent with the Commission's conclusions set forth in Finding of Fact No. 7.

5. The definition of "switched access traffic" as proposed by Intermedia should be included in the Agreement. The Commission declines to require a definition of switched access traffie that specifically includes Internet Protocol (IP) telephony at this time.

6. The Commission finds it appropriate to adopt Intermedia's proposed language concerning

lost switched access revenues due to lost or damaged billing data, but declines to require the inclusion of a clause requiring liability for lost switched access revenues resulting from lost or damaged billing data. Therefore, the last three sentences of Intermedia's proposed language which reference lost revenues or a liability cap of $10,000, should be excluded from the Agreement.

7. Reciprocal compensation should be paid for the local portion of framed packet data transported within a Virtual Circuit (VC) that originates and terminates within a Local Access and Transport Area (LATA). BellSouth and Intermedia are directed to propose a mechanism to provide for such compensation. Such proposal should be a joint proposal, if possible, and should include a description of and basis for the proposal. The proposal(s) should take into consideration that, while intraLATA frame relay circuits can be considered local for the purposes of physical installation and interconnection, the traffic occurring over the facilities can and probably will be local and intraLATA toll.

8. When there are no VCs on a frame relay interconnection facility when it is billed, the Parties should deem the Percent Local Circuit Use (PLCU) to be zero.

9. Matrix Issue No. 45 ("Should the Interconnection Agreement specifically state that the Agreement does not address or alter either Party's provision of Exchange Access Frame Relay Service or InterLATA Frame Relay Service?") has been resolved by the Parties and it has been withdrawn from this arbitration.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 1

MATRIX ISSUE NO. 2(a): Should the definition of "Local Traffic" for the purposes of the Parties' reciprocal compensation obligations under Section 251(b)(5) of TA96 include ISP traffic?

POSITIONS OF PARTIES

BELLSOUTH: No. The FCC's Declaratory Ruling, confirmed unequivocally that the FCC has, will retain, and will exercise jurisdiction over ISP traffic. In short, the FCC determined that ISP traffic is interstate traffic, not local traffic. Under the provisions of the Act and FCC Rules, only local traffic is subject to reciprocal compensation obligations. Thus, reciprocal compensation is not applicable to ISP-bound traffic. However, BellSouth recognizes that the Commission has established an intercarrier compensation mechanism by its decisions in Docket Nos. P-582, Sub 6 and P-472, Sub 15 and has agreed to incorporate that mechanism into the Parties' Interconnection Agreement in this docket.

INTERMEDIA: Yes. The definition of local traffic should include traffic that originates from or is carried to an Enhanced Service Provider (ESP) or ISP. This issue was arbitrated in the ICG Telecom Group, Inc. (ICG) Arbitration, and the FCC has not made any changes which should alter the Commission's conclusion there. In addition, the FCC's Declaratory Ruling was recently (March 24, 2000) vacated by the United States Court of Appeals for the District of Columbia Circuit (D. C. Circuit), and therefore BellSouth may no longer rely upon the Declaratory Ruling to support its position that ISP traffic is jurisdictionally interstate. Until the FCC adopts a rule of prospective application, reciprocal compensation is appropriate for calls originated by BellSouth's end users to ISPs served by Intermedia. Without payment of reciprocal compensation, Intermedia will not receive compensation at all until the FCC adopts a prospective compensation rule at some indefinite point in the future.

PUBLIC STAFF: Yes. The law and rules governing this hotly disputed issue are confusing and often contradictory. Section 251(b)(5) of TA96 requires that interconnecting parties "establish telecommunications." 47 CFR § 51.701(a) restricts reciprocal compensation to "local telecommunications traffic." The FCC determined that the calls were nonlocal, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic, 14, FCC Rcd 3689, 3690 (¶ 1) (1999). Despite this determination, the FCC stated that parties may voluntarily negotiate reciprocal compensation in their interconnection agreements, and that state commissions may find that reciprocal compensation for calls to ISPs is appropriate. Id. at 3703-05 (¶¶ 24-25).

On March 24, 2000, the D.C. Circuit vacated this ruling and remanded it to the FCC in Bell Atlantic Companies v. FCC, F.3d , 2000 WL 273383 (D.C. Cir. March 24, 2000). If the FCC determines calls to ISPs are intrastate, then the Commission's jurisdiction over this issue should not be affected. However, even if the FCC deems such calls to be interstate, it is not a foregone conclusion that such a ruling would supersede a state commission's authority over arbitration of interconnection agreements. See also, Southwester Bell Telephone Co. v. Public Utility Commission of Texas, F.3d , 2000 WL 332062, n. 2 (5th Cir. March 30, 2000).

This Commission first considered the issue of whether calls to ISPs were subject to reciprocal compensation in Docket No. P-55, Sub 1027. The Commission determined that the Interconnection Agreement between US LEC of North Carolina, Inc. (US LEC) and BellSouth did not distinguish calls to ISPs from other local traffic. The Commission also determined that a call terminates when delivered to the local exchange number of the ISP.

Since that ruling, BellSouth has been a party to arbitration in three Interconnection Agreements and has asked the Commission in each proceeding to determine that calls to ISPs are not local traffic subject to reciprocal compensation. The Commission has issued Orders in each docket determining that calls to ISPs, for the purpose of reciprocal compensation, are local traffic. BellSouth has not presented adequate justification in this case for the Commission to depart from its previous rulings on this issue. As such, the Parties are due reciprocal compensation for calls to ISP customers.

DISCUSSION

Students of the reciprocal compensation issue will recall that the Commission first considered the issue of whether calls to ISPs were subject to such compensation in Docket No. P-55, Sub 1027, where the Commission determined that such traffic was local. Subsequently, the FCC on February 26, 1999, issued its Declaratory Ruling finding such traffic to be interstate. However, the FCC stated that the parties could voluntarily negotiate reciprocal compensation for such calls in their interconnection agreements and state commissions could find reciprocal compensation for calls to ISPs to be appropriate. The FCC also stated that it would issue a subsequent Order to provide guidance as to the implementation of its Declaratory Ruling.

This Commission in subsequent arbitrations has provided for reciprocal compensation for ISP traffic at the same rate as that for local traffic generally -- i.e., at the sum of certain UNE rates. However, out of deference to the FCC's ruling, the Commission has characterized this as an "interim intercarrier compensation mechanism," rather than categorizing the traffic as "local" (or as "nonlocal," for that matter). Moreover, the Commission has also provided that the rate applicable to ISP traffic will be subject to true-up at such time as the Commission has implemented the FCC's

premised subsequent ruling. This true-up does not apply to local traffic subject to reciprocal compensation, generally.

Into this rather complicated mix has come the ruling by the D.C. Circuit on March 24, 2000, where the Court found the reasoning applicable to the "one-call theory" in the FCC's Declaratory Ruling inadequate, vacated the Order, and sent the matter back to the FCC for further consideration.

In the short term, it would certainly appear that the D.C. Circuit ruling undercuts those who maintain that ISP traffic is not local. In the longer term, however, the matter is less clear. Should the FCC be able to fortify and explicate its Declaratory Ruling better, it may very well ultimately prevail -- and things will be on the same track they were before the March 24, 2000, D.C. Circuit ruling.

So, in view of these considerations, how should the Commission proceed? There are really only two practical alternatives. One would be to stay the course in line with its previous decision -- that is, an ISP rate for intercarrier compensation that is identical to the general reciprocal compensation rate but subject to eventual true-up. The other would be to consider ISP traffic to be explicitly local and have it subject to the general reciprocal compensation rate, but not subject to eventual true-up but, at most, to prospective adjustment depending on how the issue sorts itself out on the federal level.

The Commission concludes that this first alternative, an ISP rate for intercarrier compensation that is identical to the general reciprocal compensation rate but subject to eventual true-up, is preferable for several reasons. First, in this docket, BellSouth has already agreed to incorporate the original mechanism decided upon in previous arbitrations into this one. These filings were received after the March 24, 2000, D.C. Circuit decision, but BellSouth has chosen not to make an issue of it. Second, to change the ruling would probably require revisiting previous cases. Third, there is no pressing practical reason to revisit the issue in light of the March 24, 2000, D.C. Circuit decision. The implementation of a true-up is a contingent event. It will only happen at such time as the FCC has issued its follow-up ruling and this Commission has acted upon it. If the FCC is unable to have its Declaratory Ruling sustained, then obviously there will be no follow-up ruling and, hence, no true-up. If, on the other hand, the FCC prevails, there will be a mechanism already in place to provide for the true-up.

CONCLUSIONS

The Commission concludes that dial-up ISP traffic is subject to an interim intercarrier compensation mechanism at the same rate and in the same manner as reciprocal compensation for local traffic. Such rate should be subject to true-up at such time as the Commission has ruled pursuant to the FCC's subsequent Order on the subject.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 2

MATRIX ISSUE NO. 3: Should Intermedia be compensated for end office, tandem, and transport elements, for purposes of reciprocal compensation?

POSITIONS OF PARTIES

BELLSOUTH: No. If a call is not handled by a switch on a tandem basis, it is not appropriate to pay reciprocal compensation for the tandem switching function. BellSouth will pay the tandem interconnection rate only if Intermedia's switches are actually performing the local tandem switching

functions and providing the same geographic coverage. Intermedia is seeking to be compensated for the cost of equipment it does not own and for functionality it does not provide. Therefore, Intermedia's request for tandem switching compensation when tandem switching is not performed should be denied.

INTERMEDIA: Yes. FCC Rule 51.711(a)(3) requires that where the interconnecting carrier's switch serves a geographic area comparable to that served by the ILEC's tandem switch, the interconnecting carrier is entitled to receive compensation at the tandem interconnection rate. Consequently, BellSouth should be required to pay reciprocal compensation to Intermedia for end office, tandem, and transport elements. Intermedia's switches in the Charlotte and Raleigh metropolitan areas serve areas geographically comparable to those served by BellSouth's tandem switches in those areas.

PUBLIC STAFF: No. Intermedia has failed to show that its switches provide tandem switching functions when terminating calls from BellSouth's end users and has failed to show that its switches provide service to areas comparable to those served by BellSouth's local tandem switches.

DISCUSSION

BellSouth explained that a tandem switch connects one trunk to another trunk and is an intermediate switch or connection between the switch where a telephone call originates and the switch which terminates the call. BellSouth maintained that an end-office switch is connected to a telephone subscriber and allows the call to be originated or terminated. BellSouth stated that if Intermedia's switch is an end-office switch, then it is handling calls that originate from or terminate to customers served by that local switch, and thus Intermedia's switch is not providing a tandem function.

BellSouth argued that although this Commission has considered this issue before in the BellSouth/ICG arbitration, and concluded that ICG was entitled to the tandem switching rate, that case involved different facts than those produced here. BellSouth contended that in this proceeding Intermedia could not tell this Commission where its customers are located. As such, BellSouth believes that there is no showing that Intermedia's switches serve geographic areas comparable to BellSouth's. In BellSouth's opinion, the evidence in the record does not support Intermedia's contention that its switches provide the transport element. Further, it is BellSouth's position that the Act does not contemplate that compensation for transporting and terminating local traffic should be symmetrical when one party does not actually use the network facility for which it seeks compensation. Thus; BellSouth opined that Intermedia is not entitled to tandem switching compensation when tandem switching is not performed.

Intermedia witness Jackson stated that Intermedia's switches in the Charlotte and Raleigh metropolitan areas serve geographic areas comparable to those served by BellSouth's tandem switches in those areas. Intermedia asserted that its network design is entirely different than BellSouth's. Intermedia explained that instead of using a multiplicity of switches to cover an area, Intermedia uses a single switch to cover the same area. With respect to the Raleigh LATA, witness Jackson testified that Intermedia serves areas of both GTE South Incorporated's (GTE's) and Sprint Communications Company, L.P.'s (Sprint's) territory which are not served by BellSouth. Witness Jackson testified that while Intermedia does not have a ubiquitous network like that of BellSouth, Intermedia could purchase, lease, or build facilities to serve its customers.

In response to the Commission's February 29, 2000 Order, Intermedia submitted additional

information on March 6, 2000, concerning its service area and the functionality of its switches. With respect to the issue of geographic comparability, Intermedia submitted a list of its customers by location and type of service; a listing of the Company's collocations, including collocations in GTE offices; a snapshot of incoming traffic from Raleigh and Charlotte exchange areas; county maps depicting current and future rate centers in and around Raleigh and Charlotte; and Company promotional materials. Intermedia contended that the customer information it submitted shows a sizeable number of customers in a widely dispersed area in and around both Charlotte and Raleigh. Further, Intermedia contended that the snapshot of incoming traffic it submitted shows incoming calls from a large number of exchanges in and around both cities, and that the rate center maps and promotional materials also demonstrate a capability and intent to serve a large geographical area.

With respect to the functionality issue, Intermedia submitted information from the manufacturer of its two North Carolina switches which describes the technology inherent in the switches used by Intermedia. Intermedia also included diagrams and narratives describing the trunk topology of its two North Carolina switches and call diagrams depicting the functions performed by its switches. Intermedia witness Jackson testified that "The [Intermedia] switches perform the functions of a tandem, such as remote traffic aggregation, and the functions of end offices switches, such as providing dial tone. Due to this different network design concept, Intermedia's single switches have to perform all of the relevant functions, including the function BellSouth assigns to its tandem switches." Intermedia contended that the materials from the manufacturer of Intermedia's switches demonstrate that the Nortel DMS 500 switch employed by Intermedia performs both end office and tandem switching functions. Intermedia asserted that the diagrams submitted by Intermedia support witness Jackson's testimony that the Intermedia switch performs the traffic aggregation function of a BellSouth tandem switch.

BellSouth did not file objections to Intermedia's Exhibits filed March 6, 2000, nor did BellSouth seek an evidentiary hearing. On March 10, 2000, BellSouth filed a reply to Intermedia's exhibits filed on March 6, 2000. BellSouth stated that Intermedia had failed to demonstrate that it incurs any functional costs that would justify BellSouth paying Intermedia the tandem interconnection rate. BellSouth refuted Intermedia's Exhibits, point by point, and argued that nothing in the submitted material indicates that Intermedia's local switches perform tandem functions in terminating local traffic. BellSouth also contended that Intermedia does not provide tandem switching of local traffic between BellSouth and GTE switches, that Intermedia has inappropriately labeled Intermedia's collocation sites as Intermedia end-office switches, that Intermedia inflated its number of end users by repeating the same customer numerous times by listing each individual service to which the customer subscribes, and that Intermedia has only three collocation sites for the Raleigh LATA and two collocation sites for all of the Charlotte LATA, indicating a very limited number of customers for a very small geographic area.

The additional information filed by Intermedia on March 6, 2000, in response to the Commission's February 29, 2000 Order seeking late-filed exhibits, and BellSouth's response of March 10, 2000, to Intermedia's exhibits are hereby allowed in evidence in this proceeding as late-filed exhibits.

The Public Staff contended that although Intermedia provided information in its March 6, 2000 filing which demonstrates that Intermedia's switches have the capability of functioning as tandem switches, the issue before the Commission is whether Intermedia's switches, in terminating traffic from BellSouth's customers to Intermedia's end users, not merely have the capability of performing, but actually perform, tandem switching functions.

The Public Staff further contended that based upon the information provided by Intermedia in its March 6, 2000 filing, Intermedia does not have switches in the ILEC's end offices where it collocates. Since traffic can be switched only through the use of a switch, the Public Staff questioned how Intermedia can claim that it performs switching functions at its collocation facilities. The Public Staff stated that there is insufficient evidence in the record to support a finding that Intermedia may be providing tandem switching functions.

The Public Staff stated that Intermedia has not shown, for the calls in question, that either its switch in Charlotte or its switch in Raleigh performs the basic switch trunk function of connecting trunks to trunks. The Public Staff believes that since the record fails to support Intermedia's claim that its switches perform a trunk-to-trunk switching function for these calls, the Commission should conclude that they do not operate as local tandem switches and Intermedia is not entitled to receive tandem switching compensation for those calls. It is the Public Staff's opinion that performance of the tandem switching function in terminating calls is a necessary, but not sufficient, condition alone to qualify those calls for tandem switching compensation.

The Public Staff argued that, contrary to Intermedia's contentions, whether the switches are capable of serving an area comparable to those served by BellSouth's local tandems is not determinative of this issue. The Public Staff conceded that any end office with sufficient line capacity is capable of serving a huge area, certainly as large as the areas served by BellSouth's tandems, although perhaps inefficiently. The Public Staff stated that the capacity to serve a large area clearly does not make each large capacity end-office switch a tandem switch and that this view comports with the language of the FCC's Rule 51.711(a)(3) and the explanatory language of Paragraph 1090.

The Public Staff argued that it is necessary that the areas served by Intermedia's switches be comparable to the areas served by BellSouth's tandems, in order for traffic delivered to Intermedia for termination to be eligible for tandem switching compensation. The Public Staff remarked that each Intermedia switch could actually serve a third of the geographic area of North Carolina. However, the Public Staff argued that if the tandem switching function is not actually performed by those switches in terminating traffic from BellSouth to Intermedia's customers, Intermedia should not be compensated for tandem switching.

The Public Staff claimed that there is ample evidence in the record to discern whether Intermedia's switches serve comparable areas to BellSouth's local tandem switches. The Public Staff stated that according to the maps filed with BellSouth witness Varner's Supplemental Rebuttal testimony, BellSouth's local tandem switches in the Raleigh LATA serve numerous wire centers. According to the Public Staff, Intermedia's March 6, 2000 filing, made on a confidential basis, indicates that its switch in Raleigh serves only a few of the areas that are served by either of the BellSouth local tandem switches in the Raleigh LATA. Additionally, the Public Staff noted that Intermedia's Charlotte switch serves only a few of the areas that are served by either of BellSouth's local tandem switches in the Charlotte LATA.

Further, the Public Staff contended that Intermedia did not present any evidence regarding new technologies analogous to those suggested by the FCC which would qualify the traffic terminated to those switches as being eligible for tandem compensation.

All Parties appear to agree that Intermedia should receive reciprocal compensation for end-office switching, tandem switching, and common transport if it provides such functions. The Parties also

concur that Intermedia provides end-office switching and common transport. The Parties, however, disagree on whether Intermedia should receive reciprocal compensation for tandem switching.

The pertinent authority governing the issue of reciprocal compensation for tandem switching is found in FCC Rule 51.711(a)(3) and Paragraph 1090 of the FCC's First Report and Order.

Rule 51.711(a)(3) states:

> Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate.

Paragraph 1090 of the First Report and Order states:

> We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states may establish transport and termination rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end office switch. In such event, states shall also consider whether new technologies (e.g., fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination via the incumbent LEC's tandem switch. Where the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the interconnecting carrier's additional costs is the LEC tandem interconnection rate.

The Commission concluded, in *Petition of ICG Telecom Group, Inc. for Arbitration of its Interconnection Agreement with BellSouth Telecommunications, Inc.,* Docket No. P-582, Sub 6, that ICG had met its burden of proof in regard to both geographic coverage and similar functionality.

The Commission concluded in *Petition by ITC^DeltaCom Communications, Inc. (DeltaCom) for Arbitration of Interconnection Agreement with BellSouth Telecommunications, Inc.,* Docket No. P-500, Sub 10, that DeltaCom had met its burden of proof that its switches cover comparable areas to that covered by BellSouth's switches and that, for reciprocal compensation purposes, DeltaCom is entitled to compensation at BellSouth's tandem interconnection rate. In the DeltaCom Order, the Commission discussed more extensively its belief that the language in the FCC's Rule 51.711 and the attendant discussion in Paragraph 1090 clearly contemplate that exact duplication of the ILEC's network architecture is not necessary in order for the competing local provider (CLP) to be eligible to receive reciprocal compensation at the tandem switching rate. The Commission also indicated that it believes that the language in the FCC's Order treats geographic coverage as a proxy for equivalent functionality, and that the concept of equivalent functionality is included within the requirement that the equipment utilized by both Parties covers the same basic geographic area.

Based on the exhibits filed by Intermedia on March 6, 2000, including the maps, the description

of Intermedia's Nortel DMS 500 switches and associated technology, and the current listing of Intermedia's customers in North Carolina by location and type of service, the Commission believes that Intermedia has met its burden of proof that its switches cover a comparable geographic area to that covered by BellSouth's switches, and that, for reciprocal compensation purposes, Intermedia is entitled to compensation at BellSouth's tandem interconnection rate.

CONCLUSIONS

The Commission concludes that, for reciprocal compensation purposes, Intermedia should be compensated at BellSouth's tandem interconnection rate.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 3

MATRIX ISSUE NO. 22: Should BellSouth be required to provide nondiscriminatory access to interoffice transmission facilities, including dark fiber, DS1, DS3 and OCn levels, and shared transport, in accordance with, and as defined in, the FCC's UNE Remand Order and should BellSouth's proposed rates be subject to true-up?

POSITIONS OF PARTIES

BELLSOUTH: No. BellSouth agreed that it is required to provide nondiscriminatory access to interoffice transmission facilities and has proposed language which it believes is consistent with Section 51.319(d) of the FCC's Rules promulgated by its UNE Remand Order and with Intermedia's proposed language. BellSouth further believes that the rates it proposed for interoffice transmission facilities are Total Element Long Run Incremental Cost (TELRIC)- based and should not be subject to true-up if later modified by the Commission.

INTERMEDIA: Yes. Intermedia believes that under the FCC's UNE Remand Order, interoffice transport must be provided to CLPs at TELRIC rates. Intermedia argued that the rates proposed by BellSouth should be adopted as interim rates subject to true-up when the Commission establishes permanent rates in Docket No. P-100, Sub 133d.

PUBLIC STAFF: Yes. The Public Staff recommended that the Commission adopt BellSouth's proposed language regarding this issue. The Public Staff further recommended that the Commission approve BellSouth's proposed rates for inclusion in this Agreement, but that the rates be subject to true-up after the Commission establishes rates in the Docket No. P-100, Sub 133d proceeding.

DISCUSSION

The Parties do not dispute that BellSouth must provide unbundled access to interoffice transport at TELRIC-based rates. The Parties do dispute whether the BellSouth-proposed TELRIC rates should be subject to true-up after the Commission sets permanent prices in Docket No. P-100, Sub 133d for interoffice transport.

BellSouth argued in its Proposed Order that it has agreed to provide nondiscriminatory access to interoffice facilities in accordance with the FCC's UNE Remand Order and that BellSouth has, in fact, proposed the following language to Intermedia, which BellSouth believes is consistent with Section 51.319(d) of the FCC's Rules promulgated by its UNE Remand Order:

"BellSouth shall provide nondiscriminatory access, in accordance with FCC Rule 51.311 and Section 251(c)(3) of the Act, to interoffice transmission facilities on an unbundled basis to Intermedia for the provision of a telecommunications service at the rates set forth in this Attachment.

Interoffice transmission facility network elements include:

A) Dedicated transport, defined as BellSouth's transmission facilities, including all technically feasible capacity-related services including, but not limited to, DS1, DS3 and OCn levels, dedicated to a particular customer or carrier, that provide telecommunications between wire centers or switches owned by BellSouth, or between wire centers and switches owned by BellSouth and Intermedia;
B) Dark Fiber transport, defined as BellSouth's optical transmission facilities without attached multiplexing, aggregation, or other electronics; and
C) Shared transport, defined as transmission facilities shared by more than one carrier, including BellSouth, between end office switches, between end office switches and tandem switches, and between tandem switches, in BellSouth's network.

BellSouth shall:

A) Provide Intermedia exclusive use of interoffice transmission facilities dedicated to a particular customer or carrier, or shared use of the features, functions, and capabilities of interoffice transmission facilities shared by more than one customer or carrier;
B) Provide all technically feasible transmission facilities, features, functions, and capabilities that Intermedia could use to provide telecommunications services;
C) Permit, to the extent technically feasible, Intermedia to connect such interoffice facilities to equipment designated by Intermedia, including but not limited to, Intermedia's collocated facilities; and
D) Permit, to the extent technically feasible, Intermedia to obtain the functionality provided by BellSouth's digital cross-connect systems in the same manner that BellSouth provides such functionality to interexchange carriers."

BellSouth argued in its Proposed Order that Intermedia does not oppose BellSouth's proposed rates and that Intermedia witness Jackson on cross-examination admitted that Intermedia is **not** contesting that BellSouth's proposed rates are, in fact, TELRIC-based. BellSouth stated in its Proposed Order that the only issue Intermedia now contests is whether those rates should be subject to a true-up. As BellSouth witness Varner stated on cross- examination, "The basic point of contention is whether or not these rates, once the Commission approves rates in this arbitration, whether those rates will be subject to true-up or not. We don't agree that those rates would be subject to true-up. That's the issue that's before the Commission." BellSouth argued in its Proposed Order that since its proposed rates are TELRIC-based and are not interim rates, the Commission should not true-up the rates.

Intermedia witness Jackson stated in cross-examination that, "It's my understanding that obviously we believe those ought to be on a TELRIC-based rate schedule or cost basis. I think our point on that is that in the interim until those rates are approved that we're looking for -- if we use those rates, that we would like to have a true-up at the end of that period of time, if should this Commission decide that those rates are well over priced or to your advantage if they were way underpriced. So I think the true-up was the issue from our standpoint at this time." Intermedia commented in its Proposed Order that the Commission has consistently held that interim rates are subject to true-up upon adoption of permanent rates. Intermedia noted that as recently as March 30, 2000, in the Order Setting Procedural Schedules in Docket No. P-100, Sub 133d, the Commission announced that it would adopt interim line sharing rates, subject to true-up upon adoption of permanent rates. Intermedia also stated in its Proposed Order that the Commission's March 13, 2000 Order Adopting Permanent UNE Rates in Docket No. P-100, Sub 133d is another example of the Commission ordering the true-up of interim rates once permanent rates are established. Intermedia recommended in its Proposed Order that the Commission adopt the rates proposed by BellSouth for interoffice transmission, subject to true-up once the Commission adopts permanent rates in Docket No. P-100, Sub 133d.

The Public Staff stated in its Proposed Order that BellSouth's proposed language on this issue is substantially similar to Intermedia's proposed language in the Agreement. However, the Public Staff stated that BellSouth's proposed language refers to rates for interoffice facilities that are to be included in the Agreement while Intermedia's proposed language does not. The Public Staff stated that in this arbitration, BellSouth has proposed rates for dedicated transport, dark fiber, and shared transport for inclusion in the Agreement for interoffice facilities as shown in BellSouth witness Varner's Exhibit AJV-1. According to the Public Staff, the Parties agree that BellSouth has an obligation under the law to provide Intermedia access to interoffice transmission facilities at TELRIC-based prices, but Intermedia objects to BellSouth's proposed inclusion of rates in the Agreement if those rates are not subject to true-up. The Public Staff stated that BellSouth is seeking the Commission's approval of its proposed rates for interoffice facilities on a permanent basis in this arbitration. The Public Staff stated that BellSouth witness Varner testified that if the Commission approved different rates in its Docket No. P-100, Sub 133d proceeding, then BellSouth and Intermedia could amend their Interconnection Agreement to reflect the rate changes from that time forward. The Public Staff recommended that the Commission adopt BellSouth's proposed language and proposed rates for inclusion in the Agreement, but allow for a true-up of the rates after the Commission establishes rates in the Docket No. P-100, Sub 133d proceeding.

The Commission notes that in its March 30, 2000 Order Setting Procedural Schedules in the UNE docket, the Commission concluded that interoffice transmission facilities including dedicated transport, dark fiber, and shared transport would be considered in Phase I of the Commission's generic UNE proceeding. The Commission also notes that in said Order, the Commission concluded that there was not enough evidence at that point in time for the Commission to know which, if any, of the proposed new UNEs would ultimately be determined to be, in fact, UNEs. Therefore, the Commission found it appropriate to deny requests for the Commission to establish interim rates for any new UNEs, with the exception of line sharing.

In this arbitration docket, the Parties agree that BellSouth must provide unbundled access to interoffice transport at TELRIC-based rates. Therefore, the Commission believes that it is reasonable and appropriate for the interoffice transport rates agreed to by the Parties in this arbitration proceeding to be considered interim and subject to true-up if the Commission adopts different

permanent prices for interoffice transport in its generic UNE proceeding. The Commission finds it appropriate to accept the recommendation of Intermedia and the Public Staff by adopting BellSouth's proposed language and proposed rates for interoffice transport for inclusion in the Interconnection Agreement, but allowing for a true-up of the rates if the Commission adopts different permanent prices for interoffice transport in Phase I of its generic UNE proceeding in Docket No. P-100, Sub 133d.

CONCLUSIONS

The Commission concludes that it is appropriate to adopt BellSouth's proposed language and proposed rates for interoffice transport for inclusion in the Interconnection Agreement, but allow for a true-up of the rates if the Commission adopts different permanent prices for interoffice transport in Phase I of its generic UNE proceeding in Docket No. P-100, Sub 133d.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 4

MATRIX ISSUE NO. 31: For purposes of compensation, how should IntraLATA Toll Traffic be defined?

POSITIONS OF PARTIES

BELLSOUTH: IntraLATA Toll Traffic should be defined as any telephone call that is not local or switched access per the Parties' Agreement.

INTERMEDIA: IntraLATA Toll Traffic should be defined broadly, to include not merely the use of one type of equipment, such as analog circuit switches, but should also encompass nonlocal traffic that is carried over facilities that employ new technologies, such as data or frame relay traffic over packet switching equipment. The Act makes no distinction between voice and data traffic. In the FCC's Advanced Services Order in CC Docket No. 98-147, the FCC clearly states that "for purposes of determining the interconnection obligation of carriers, the Act does not draw a regulatory distinction between voice and data services." (Paragraph 47). ILECs have the same obligations to competing carriers with respect to data traffic, including frame relay traffic, as they do for voice traffic.

PUBLIC STAFF: The definitions propounded by both BellSouth and Intermedia are insufficient in themselves in determining whether they include or exclude frame relay traffic. Both definitions lack specificity and clarity. Due to an insufficient record, the Public Staff recommends that the Commission not adopt either Party's proposal.

DISCUSSION

BellSouth's proposed language for inclusion in the Interconnection Agreement is as follows:

> **IntraLATA Toll Traffic is defined as any telephone call that is not local or switched access per this Agreement.** (Proposed Interconnection Agreement, Attachment 3, §6.7.1).

In the Proposed Interconnection Agreement, Attachment 3, Section 6 deals with interconnection compensation. On cross-examination, witness Varner testified that a "telephone call" is defined as "a

basic voice connection between two customers". Therefore, under BellSouth's definition, only voice traffic would be considered as intraLATA toll traffic. Witness Varner testified that BellSouth defines intraLATA toll traffic in this manner to exclude data services, such as frame relay, from this definition. Further, witness Varner stated that what is considered as local and toll for frame relay is stated in the part of the Agreement that deals with frame relay.

In the Proposed Interconnection Agreement, Attachment 3, Section 6.7.2, the Parties have agreed that they will compensate each other for intraLATA toll traffic originated by one Party and terminated on the other Party's network. Consequently, as stated in BellSouth's Proposed Order, the effect of adopting BellSouth's proposed language would be to exclude nonvoice intraLATA traffic from reciprocal compensation obligations. Further discussion on BellSouth's proposal that frame relay traffic be excluded from the requirements of reciprocal compensation is, subsequently, provided in the Evidence and Conclusions for Finding of Fact No. 7 _ Matrix Issue No. 37.

Intermedia's proposed language for inclusion in the Interconnection Agreement is as follows:

> **IntraLATA Toll Traffic is defined as all basic intraLATA message services calls other than Local Traffic.** (Proposed Interconnection Agreement, Attachment 3, §6.7.1).

In its Post-Hearing Brief, Intermedia stated that BellSouth seeks to define intraLATA toll traffic in a manner that specifically excludes messaging or data, and only includes voice traffic. Intermedia argued that the law makes no distinction between voice and data for interconnection purposes. Intermedia witness Jackson testified that Intermedia's definition would ensure that toll traffic cannot be limited to traffic that uses one type of equipment, such as analog circuit switches, but will include nonlocal traffic carried over facilities that employ new technologies, such as packet switching. In support of its position, Intermedia relies upon the FCC's August 7, 1998, Advanced Services Order in Docket No. 98-147, which states in pertinent part:

> We agree with ALTS that the interconnection obligations of section 251 of the Act apply equally to facilities and equipment used to provide data transport functionality and voice functionality. . . . For purposes of determining the interconnection obligation of carriers, the Act does not draw a regulatory distinction between voice and data services. In particular, the Commission drew no such distinction in the *Local Competition Order*, when it required incumbent LECs to offer interconnection with competitors for the transmission and routing of telephone exchange and exchange access traffic. Thus, the interconnection obligations of incumbent LECs apply to packet-switched as well as circuit-switched services. . . . We therefore grant the ALTS request that we declare that the interconnection obligations of sections 251(a) and 251(c)(2) apply to incumbents' packet-switched telecommunications networks and the telecommunications services offered over them. (Paragraphs 46, 47, and 48).

During cross-examination, BellSouth witness Varner acknowledged that BellSouth had previously made the argument to the FCC that Congress did not intend for Section 251 to apply to new technology that was deployed after 1996. The FCC rejected BellSouth's argument in the Advanced Services Order. Specifically, in the Advanced Services Order, the FCC states:

> We reject BellSouth's argument that Congress intended that section 251(c) not apply to new technology not yet deployed in 1996. Nothing in the statute or legislative history indicates that it was intended to apply only to existing technology. Moreover, Congress

was well aware of the Internet and packet-switched services in 1996, and the statutory terms do not include any exemption for those services. (Paragraph 49).

Nevertheless, witness Varner contended that while the parts of Section 251 dealing with interconnection do apply to voice and data services, other parts of Section 251 do not apply to advanced services, such as the unbundling requirements of Section 251. Witness Varner further opined that reciprocal compensation is different than interconnection.

Intermedia believes that the FCC made it clear that intraLATA toll traffic includes both voice and data traffic, and that no legal distinction can be made between them. In its Proposed Order, Intermedia stated that the Act and the FCC's Advanced Services Order provide no basis for a distinction between voice and data traffic. Thus, Intermedia contended that Intermedia's proposed definition is appropriate as it includes data messaging in the category of intraLATA toll traffic, and does not distinguish between voice and data traffic.

The Public Staff stated that it is unclear from the evidence what the importance is of including or excluding frame relay traffic in the definition of intraLATA toll traffic. The Public Staff asserted that BellSouth has not explained the need for excluding frame relay traffic from the definition, nor has Intermedia attempted to explain why frame relay traffic should be included. The Public Staff concluded that the definitions propounded by both BellSouth and Intermedia are insufficient in themselves to determine whether they include or exclude frame relay traffic. Due to an insufficient record, the Public Staff recommended that the Commission not adopt either Party's proposed definition.

The basic difference between the positions of BellSouth and Intermedia on this issue appears to center on whether frame relay traffic is included or excluded in the definition of intraLATA toll traffic for purposes of compensation. The Commission agrees with the Public Staff that neither Party has adequately explained why their respective proposed definition for intraLATA toll traffic is appropriate. Furthermore, neither Party's proposed definition is sufficiently clear in its composition to determine whether it includes or excludes frame relay traffic. Consequently, neither Party's proposed definition should be adopted.

CONCLUSIONS

The Commission declines to adopt either the definition proposed by BellSouth or by Intermedia. Furthermore, due to an insufficient record, the Commission declines to develop an alternative definition. Instead, the Commission encourages the Parties to continue to negotiate an appropriate definition that would be consistent with the Commission's conclusions set forth in the Evidence and Conclusions for Finding of Fact No. 7.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 5

MATRIX ISSUE NO. 32: How should "Switched Access Traffic" be defined?

POSITIONS OF PARTIES

BELLSOUTH: Switched Access Traffic should be defined in accordance with BellSouth's access tariff and should include IP telephony.

INTERMEDIA: Switched Access Traffic should be defined as telephone calls requiring local transmission or switching services for the purpose of the origination or termination of Telephone Toll Service, including Feature Groups A, B, and D, 800/888 access, and 900 access (and their successors or similar Switched Exchange Access Services).

PUBLIC STAFF: The Commission should not object to an agreement by BellSouth and Intermedia to specifically define switched access traffic in the Agreement as it has been specified in BellSouth's Access Tariff. Further, the Commission should decline to require a definition of switched access traffic that specifically includes IP telephony.

DISCUSSION

BellSouth witness Varner stated that because switched access traffic is already defined in BellSouth's Access Tariff, there is no need for an additional definition in the Interconnection Agreement. Because Intermedia insisted upon such a definition, however, BellSouth proposed the following language:

> Switched Access Traffic is as defined in the BellSouth Access Tariff. Additionally, IP Telephony traffic will be considered switched access traffic.

Witness Varner, under cross-examination, stated that there is nothing in this local Interconnection Agreement that discusses, determines, or affects the way in which BellSouth engages in a joint provision of access service so it is really a definition without a purpose. However, he stated that BellSouth would be willing to put the same definition of switched access traffic that is in the tariff into the Agreement.

Witness Varner explained that it is important to include IP telephony in the definition to avoid confusion. Due to the increasing use of IP technology mixed with traditional analog and digital technology to transport long distance telephone calls, BellSouth believes that it is important to specify that such traffic is switched access traffic rather than local traffic.

Intermedia witness Jackson testified that the essential difference between the Parties is that Intermedia believes that "switched access traffic" should be defined in the Parties' agreement. Intermedia argued that BellSouth's tariff language changes from time to time, and referring to its tariff allows BellSouth to define this crucial term any way it wishes, perhaps in ways that Intermedia may consider adverse.

In addition, Intermedia stated that it does not believe that it is appropriate for BellSouth to attempt unilaterally to assign a regulatory status to "IP Telephony." In its Post-Hearing Brief, Intermedia stated that the treatment of IP telephony should not be determined on a piecemeal basis, from state to state, agreement to agreement, but should await a determination from the FCC.

The Public Staff stated that it does not think the Commission should object to an arrangement by BellSouth and Intermedia to specifically define switched access traffic in the Agreement as it has been specified in BellSouth's Access Tariff. The Public Staff stated that even though it does not necessarily disagree with BellSouth's position that toll calls completed using the technology embodied in IP telephony should be treated similarly to other toll traffic with respect to switched access, the Commission should decline to require a definition of switched access traffic that

specifically includes IP telephony. The Public Staff maintained that this issue is best addressed in a setting in which all interexchange carriers (IXCs) and other affected carriers have notice and in which the procedures for determining billable minutes are fully explored.

On April 27, 2000, upon the request of the Commission Staff, BellSouth filed a letter with attached tariff pages which provided a description of Switched Access Service and associated Feature Groups as defined in BellSouth's intrastate Access Services Tariff. This letter with attached tariff pages is hereby allowed in evidence in this proceeding as a late-filed exhibit.

Also, on April 27, 2000, Intermedia filed a letter in response to BellSouth's filing which stated that the Access Services Tariff which BellSouth cited did not include a definition of switched access traffic, and, therefore, the only clear option is Intermedia's suggested language for the definition of switched access traffic. This letter is hereby allowed in evidence in this proceeding as a late-filed exhibit.

There is only a fine distinction between switched access ***traffic*** and switched access ***service***. Generally, switched access service is ordered from the tariff and switched access traffic is what one sends over the switched access service. The tariff pages submitted by BellSouth are clearly to provide "switched access service." Even though it is unclear from the record what the importance is of having a definition of switched access traffic contained in the Parties' local Interconnection Agreement, the definition offered by Intermedia would seem to be more appropriate since it appears to list the same services as those listed in BellSouth's intrastate Access Tariff under its Switched Access Service Section.

Both Intermedia and the Public Staff expressed reservations about whether IP telephony should be included in a definition of switched access traffic in this proceeding. Intermedia was of the opinion that such a definition should await a determination from the FCC; the Public Staff believes that the Commission should decline to require such a definition until the issue is more fully addressed in a setting involving all affected parties. The Commission believes that due to the considerable uncertainty as to how this type of telephony should be defined, the Commission should decline to require a definition of switched access traffic that specifically includes IP telephony at this time.

CONCLUSIONS

The Commission concludes that the definition of "switched access traffic" as proposed by Intermedia should be included in the Agreement. Further, the Commission declines to require a definition of switched access traffic that specifically includes IP telephony at this time.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 6

MATRIX ISSUE NO. 33: Should BellSouth and Intermedia be liable to each other for lost switched access revenues due to lost or damaged billing data?

POSITIONS OF PARTIES

BELLSOUTH: No and if yes, then no cap. BellSouth argued that since this issue deals with switched access revenues, it is not appropriate for arbitration under Section 252 of TA96. BellSouth stated that Interconnection Agreements arbitrated under Section 252 should govern local interconnection terms and conditions, not switched access issues. However, BellSouth is willing to

accept Intermedia's proposed language with one exception: BellSouth does not wish to place a cap on the liabilities of the Parties.

INTERMEDIA: Yes. Intermedia maintained that the Parties' Interconnection Agreement should provide that each Party is liable to the other for lost or damaged billing data. Intermedia argued that the Parties' liability should be capped at $10,000 per episode.

PUBLIC STAFF: No. The Public Staff argued that because the Parties must negotiate and settle this issue should it arise, there is already a mechanism in place to resolve disputes. The Public Staff stated that there is not a need for a liability cap as proposed by Intermedia.

DISCUSSION

The only area of contention between the Parties concerning this issue is whether there should or should not be a cap on the liabilities of the Parties. As Intermedia described in its Brief, BellSouth and Intermedia provide services jointly to third parties, and as a result, each Party must be responsible for the maintenance of billing records that will allow the other Party to obtain any revenues due to it for providing that service. Intermedia further explained that occasionally, mistakes in compiling this billing information occur and that Intermedia originally proposed that the Parties be mutually liable for lost or damaged billing data, however, that liability should be limited by a cap. Intermedia stated in its Brief that BellSouth has refused to limit liability. Intermedia concluded in its Brief that this issue is an area ripe for disagreement that could escalate into an issue before the Commission and that putting a liability cap of $10,000 per episode on lost or damaged billing data is prudent in these circumstances.

BellSouth witness Varner stated in his rebuttal testimony that BellSouth has advised Intermedia that it is agreeable to Intermedia's proposed language, except that BellSouth does not wish to place a cap on the liabilities of the Parties. BellSouth argued in its Proposed Order that its switched access revenues are substantial and that it must rely on accurate information from CLPs such as Intermedia in order to accurately bill the appropriate IXCs and vice-versa. BellSouth witness Varner stated on cross-examination that a Party would lose switched access revenues due to lost or damaged billing records when the data, for whatever reason, was not available for the Party to properly bill the customer. BellSouth stated in its Proposed Order that Intermedia's proposed cap of $10,000 is unreasonable since BellSouth's switched access revenues in North Carolina amount to millions of dollars annually. Therefore, BellSouth recommended that the Commission reject Intermedia's proposed cap of $10,000, as unreasonable.

Intermedia argued in its Proposed Order that this issue involves the general terms and conditions of the Parties' Interconnection Agreement. Intermedia stated that the losses at issue here would occur when one Party causes the other Party's billing data either to be lost or damaged, and the other Party is unaware of its customers having incurred the corresponding charges. Intermedia maintained in its Proposed Order that once the billing period has passed, the billing party generally cannot recover the lost charges from its customers. Intermedia stated that in this proceeding it has proposed a means for recovering at least a part of the estimated damages lost from the negligent party. Intermedia recommended that the Commission conclude that each Party should be liable to the other for losses it causes the other Party to incur by losing or damaging billing data but that liability for such losses under the Parties' Interconnection Agreement shall be capped at $10,000 per episode. Intermedia argued in its Proposed Order that although its choice for a cap of $10,000 per episode is somewhat arbitrary, BellSouth has not suggested a better one. Intermedia argued that its proposal would

minimize both Parties' exposure to unlimited and unquantifiable losses. Intermedia witness Jackson stated on cross-examination that Intermedia has not been as wedded to the actual dollar amount of the cap as it was to coming up with a reasonable cap based on good business practice to ensure that no Party is overly damaged for issues that may be beyond the Party's control. Intermedia witness Jackson also clarified on cross-examination that the situation that is described in this issue is limited to situations where cooperative efforts between the Parties to reconstruct the billing data have failed for whatever reason.

The Public Staff argued in its Proposed Order that there is no need for a liability cap. The Public Staff argued that since the Parties must negotiate and settle the issue should it arise, there is already a mechanism in place to resolve disputes. The Public Staff maintained that it is equitable to require the liable party to provide adequate compensation for damages it has caused. The Public Staff recommended that the Commission decline to require the inclusion of a liability cap for lost or damaged switched access revenues.

The Commission notes that Intermedia witness Jackson testified that the situation that is described in this issue is limited to situations where cooperative efforts between the Parties to reconstruct the billing data have failed for whatever reason. Intermedia's proposed language as reflected in Exhibit 1 of BellSouth's Petition for Arbitration filed on December 7, 1999 reads:

> "In the event of a loss of data, both Parties shall cooperate to reconstruct the lost data and shall make best efforts to do so within 48 hours. If such reconstruction is not possible, the Parties shall use a reasonable estimate of the lost data, based on twelve (12) months of prior usage data; provided that if twelve (12) months of prior usage data is not available, the Parties shall base the estimate on as much prior usage data that is available; and further provided, however, that if reconstruction is required prior to the availability of at least three (3) months of prior usage data, the Parties shall defer such reconstruction until three (3) months of prior usage data is available. If the estimated billing is not accepted for payment by the affected Access Services Customer(s), the responsible Party shall be liable to the other Party for any resulting lost revenue up to a maximum of $10,000 in the aggregate in any one (1) month period. Lost revenue may be a combination of revenues that could not be billed to the End Users and associated Access Service revenues. Lost revenue will be calculated by subtracting the amount actually paid by the affected Access Services Customer(s) from the estimated billing derived pursuant to the process set forth in this section." (Proposed Interconnection Agreement, Attachment 3, Section 6.8.6, pages 18-19).

Also, the Commission notes that BellSouth's proposed Interconnection Agreement with Intermedia filed as Exhibit I to its December 7, 1999 Petition for Arbitration has a Liability and Indemnification section [See pages 5-6 of the General Terms and Conditions - Part A].

The Commission believes that it would be more appropriate to adopt Intermedia's proposed language outlined above, but removing the last three sentences referencing lost revenues or the liability cap of $10,000. The language to be included in the Agreement would require the Parties to make cooperative efforts to reconstruct billing data using their best efforts. Thus, the Commission declines to require the inclusion of a clause requiring liability for lost switched access revenues

resulting from lost or damaged billing data.

CONCLUSIONS

The Commission finds it appropriate to adopt Intermedia's proposed language concerning lost switched access revenues due to lost or damaged billing data, but declines to require the inclusion of a clause requiring liability for lost switched access revenues resulting from lost or damaged billing data. Therefore, the Commission finds it appropriate to require the Parties to delete the last three sentences of Intermedia's proposed language which reference lost revenues or a liability cap of $10,000.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7

MATRIX ISSUE NO. 37: Should all framed packet data transported within a VC that originates and terminates within a LATA be classified as local traffic?

POSITIONS OF PARTIES

BELLSOUTH: While BellSouth agrees that all framed packet data transported within a VC that originates and terminates within a LATA should be classified as local traffic for the purposes of establishing interconnection between the Parties, BellSouth contends that frame relay traffic originated and terminated in the LATA should not be subject to reciprocal compensation. BellSouth's rationale is that there is a need to distinguish between voice traffic and frame relay traffic. Voice traffic travels in a connection between at least two points and can be measured in minutes of use, while frame relay utilizes packet switching, where packets or "bursts" of information are sent in groups. Since there is no continuous connection, a minutes of use measurement is inappropriate.

INTERMEDIA: Frame relay and other data traffic originated and terminated within the same LATA should be considered local traffic. Thus, such traffic should be subject to reciprocal compensation. However, the underlying issue of the measurement of such traffic has not been addressed. Thus, the Parties should submit late-filed exhibits outlining their proposals for measurement and compensation of frame relay and other data traffic for reciprocal compensation purposes.

PUBLIC STAFF: The record indicates that both Parties recognize that reciprocal compensation would apply to this traffic. The FCC had clearly recognized that packet switching differs from traditional local circuit switching. See Third Report and Order and Fourth Further Notice of Proposed Rulemaking CC Docket No. 96-98, November 5, 1999, fn. 592. However, there is insufficient information in this record to establish an appropriate mechanism for reciprocal compensation. The Parties (preferably jointly) should be directed to prepare such a mechanism. The proposal(s) should include a description of and basis for the proposal and should reflect that, while intraLATA frame relay circuits can be considered local for the purpose of physical installation and interconnection, the traffic occurring over the facilities can and probably will be both local and intraLATA toll.

DISCUSSION

The Commission notes that Section 251(c) of TA96, which requires reciprocal compensation, does not differentiate between voice and data services. Indeed, the FCC in its August 7, 1998, Advanced Services Order rejected a BellSouth contention that Section 251(c) does not apply to technology which was not deployed at the time of the enactment of TA96.

BellSouth had conceded that intraLATA traffic transported by frame relay should be classified as local for the purposes of establishing interconnections. BellSouth witness Varner appeared to recognize that local traffic transported via frame relay is subject to reciprocal compensation.

Nevertheless, BellSouth is surely right in its contention that not all such intraLATA traffic is in fact local and that the nature of packet switching is such that application of a straight minutes-of-use arrangement is questionable.

The Commission believes that it is clear that reciprocal compensation should be paid for the local portion of framed packet data transported within a VC that originates and terminates within a LATA. However, there is a dearth of evidence as to what the appropriate design and level for such compensation should be. BellSouth witness Varner speculated as to a "bill and keep" arrangement, but Intermedia made no firm proposal.

CONCLUSIONS

The Commission concludes that reciprocal compensation should be paid for the local portion of framed packet data transported within a VC that originates and terminates within a LATA. BellSouth and Intermedia are directed to propose a mechanism to provide for such compensation. Such proposal should be a joint proposal, if possible, and should include a description of and basis for the proposal. The proposal(s) should take into consideration that, while intraLATA frame relay circuits can be considered local for the purposes of physical installation and interconnection, the traffic occurring over the facilities can and probably will be local and intraLATA toll. Such proposal(s) is/are required to be filed with the Commission no later than July 13, 2000.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 8

MATRIX ISSUE NO. 38: If there are no VCs on a frame relay interconnection facility when it is billed, should the Parties deem the PLCU to be zero?

POSITIONS OF PARTIES

BELLSOUTH: Yes. BellSouth proposes a PLCU of zero if there are no VCs on a frame relay interconnection facility when it is billed.

INTERMEDIA: No. Intermedia argued that the PLCU on newly installed frame relay interconnection trunks should be 100% until such time as traffic begins to flow over those trunks (the point at which VCs are turned up on the trunks). Intermedia stated that after the trunks are turned up, the Parties' established cost allocation formula should apply.

PUBLIC STAFF: Yes. The Public Staff recommended that until Intermedia begins to use the frame relay trunks, the PLCU should be deemed to be 0%.

DISCUSSION

BellSouth stated in its Proposed Order that this issue concerns the cost of frame relay interconnection facilities after the facilities are ordered, but before a customer begins to utilize them. BellSouth stated that ordinarily, Intermedia would order facilities, BellSouth would then install the

facilities, and then BellSouth would bill Intermedia for the facilities. BellSouth stated that at some future point, Intermedia would begin to use the facilities that it ordered. BellSouth maintained that after traffic begins to flow over the interconnection facilities, Intermedia then advises BellSouth what percentage of the traffic is expected to be local, and BellSouth reimburses Intermedia for a portion of the trunk charges based on the PLCU. BellSouth stated, however, that prior to traffic flowing over these trunks, there are two compelling reasons why the PLCU should be zero: (1) BellSouth's experience indicates that the predominant use of these types of facilities is for interLATA traffic since frame relay is generally used for high speed exchange of large amounts of data; and (2) Intermedia controls when traffic begins to flow over the facilities and BellSouth should not be forced to incur charges until Intermedia begins to flow traffic over the facilities. BellSouth argued in its Proposed Order that it is clear that the appropriate PLCU for frame relay interconnection facilities, where there are no VCs (i.e. there is no traffic flowing over the facilities), should be zero.

BellSouth witness Varner stated in his rebuttal testimony that BellSouth's position is that, if there are no VCs on a frame relay interconnection facility when it is billed, then the PLCU should be zero (and therefore BellSouth would not reimburse Intermedia for any trunk charges) and that Intermedia's position is that the PLCU should be 100% in this situation (and therefore BellSouth would have to reimburse Intermedia for half of the trunk charges). BellSouth witness Varner explained in his rebuttal testimony that once frame relay traffic is flowing over the trunks, Intermedia advises BellSouth of the PLCU (i.e., what percentage of that traffic is local) and BellSouth reimburses Intermedia for a portion of the interconnection trunk charges based on the PLCU. Witness Varner provided an example in his rebuttal testimony wherein if the PLCU is 10%, then BellSouth reimburses Intermedia for 5% of the charges (PLCU . 2).

Intermedia stated in its Proposed Order that this issue involves the cost of interconnection trunks between the Parties' frame relay networks. Intermedia maintained that when it orders frame relay interconnection trunks from BellSouth, Intermedia pays a nonrecurring charge and a recurring charge. Intermedia stated that when traffic begins to flow over these trunks, Intermedia advises BellSouth of the percentage of the traffic which is local (the PLCU). Intermedia stated that the Parties evenly split the recurring cost associated with local traffic over these trunks and if the PLCU is 100%, each Party is responsible for half the cost; BellSouth would reimburse Intermedia for half the recurring charge for these trunks. Intermedia maintained that there is no cost sharing for interLATA frame relay traffic over these trunks, and Intermedia bears all of this cost. Intermedia stated in its Proposed Order that BellSouth witness Varner's own testimony is that this issue arises under very limited circumstances. Intermedia argued that once traffic begins to flow over these trunks, there is an established formula for cost allocation that is not in dispute. Intermedia maintained that there is no evidence in the record about what percentage of frame relay traffic is local versus interLATA. Intermedia recommended in its Proposed Order that the Commission find that its proposal is the most reasonable resolution of the issues since presumably the period after the trunks are installed but before they are turned up is short and it is reasonable that during this period of time the equal cost sharing arrangement proposed by Intermedia is appropriate.

Intermedia argued in its Brief that it is asking this Commission to find that the Parties should equally share the cost of establishing and maintaining frame relay interconnection arrangements when there is no objective measure of how these expenses should be resolved. Intermedia stated that the frame relay interconnection arrangement benefits BellSouth's customers and Intermedia's customers that want to exchange data traffic. Intermedia maintained that this type of arrangement is made for the exchange of data traffic, and as BellSouth witness Varner conceded during cross-examination, there must be a BellSouth customer on the other end of the connection to make it sensible; therefore,

Intermedia asserted that BellSouth, Intermedia, and both Parties' customers benefit from the service. Further, in its Brief, Intermedia argued that in the event an existing arrangement does not have any traffic for a given billing cycle, why should BellSouth be able to nearly double the charge to Intermedia when BellSouth's cost of providing the service to Intermedia remains constant. Intermedia stated that finding that the PLCU should be zero during this time of no traffic would be a windfall to BellSouth solely for maintaining a mutually beneficial interconnection arrangement.

Intermedia witness Jackson stated in his direct testimony that any other conclusion where the PLCU is not 100% could unreasonably impose higher rates on Intermedia, even though BellSouth was not incurring higher costs in providing the facility. During cross-examination, witness Jackson stated that he did not know what the percentages would be between local and interLATA traffic over frame relay but that he would assume that there would be both types of traffic. Further, witness Jackson admitted on cross-examination that it is up to Intermedia and its customer when the circuit is turned up.

The Public Staff argued in its Proposed Order that the uncontested evidence in this case is that most of the traffic carried over frame relay trunks is not local. The Public Staff maintained that it would, therefore, be unrealistic for the Commission to adopt the position advocated by Intermedia. The Public Staff stated that, in effect, Intermedia appears to be seeking more favorable terms when no traffic is being carried over the trunks than when traffic does flow. The Public Staff argued that Intermedia controls the use of the trunks and can alleviate the situation. Therefore, the Public Staff recommended that the Commission conclude that until Intermedia begins to use the frame relay trunks, the PLCU should be deemed to be 0%.

Although there is no specific evidence in the record of the percentage of local traffic which typically flows over frame relay interconnection facilities, the Commission believes that the record of evidence generally supports BellSouth's contention that the predominant use of these types of facilities is for interLATA traffic since frame relay is generally used for high speed exchange of large amounts of data. Additionally, the Commission agrees with BellSouth that it is up to Intermedia when traffic begins to flow over these facilities. Based on this, the Commission believes that it is not reasonable for BellSouth to be expected to reimburse Intermedia during this time when no traffic is flowing over the facilities. Adopting Intermedia's position that the PLCU should be 100% during this time would obligate BellSouth to reimburse Intermedia for 50% of the facilities although there is no traffic flowing over the facilities. Therefore, the Commission finds that it is appropriate for the PLCU for frame relay interconnection facilities, where there are no VCs (i.e. there is no traffic flowing over the facilities), to be zero.

CONCLUSIONS

The Commission concludes that when there are no VCs on a frame relay interconnection facility when it is billed, the Parties should deem the PLCU to be zero.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 9

MATRIX ISSUE NO. 45: Should the Interconnection Agreement specifically state that the Agreement does not address or alter either Party's provision of Exchange Access Frame Relay Service or InterLATA Frame Relay Service?

DISCUSSION

Since the filing of Proposed Orders by BellSouth and Intermedia, BellSouth filed a letter with the Commission on May 2, 2000, stating that the Parties have resolved this issue. The Parties agreed that the language that had been suggested by BellSouth in the Proposed Interconnection Agreement, Attachment 3, Section 7.9.6, should be stricken. The Parties have requested that this issue be withdrawn from this arbitration.

CONCLUSIONS

The Commission acknowledges that this issue has been resolved by the Parties. Consequently, the Commission finds it appropriate to allow the Parties' request that the matter be withdrawn from arbitration.

IT IS, THEREFORE, ORDERED as follows:

1. That BellSouth and Intermedia shall prepare and file a Composite Agreement in conformity with the conclusions of this Order not later than July 28, 2000. Such Composite Agreement shall be in the form specified in paragraph 4 of Appendix A in the Commission's August 19, 1996 Order in Docket Nos. P-140, Sub 50, and P-100, Sub 133, concerning arbitration procedure (Arbitration Procedure Order).

2. That BellSouth and Intermedia shall file a proposed mechanism to provide that reciprocal compensation is paid for the local portion of framed packet data transported within a VC that originates and terminates within a LATA no later than July 13, 2000.

3. That, not later than July 13, 2000, a party to the arbitration may file objections to this Order consistent with paragraph 3 of the Arbitration Procedure Order.

4. That, not later than July 13, 2000, any interested person not a party to this proceeding may file comments concerning this Order consistent with paragraphs 5 and 6, as applicable, of the Arbitration Procedure Order.

5. That, with respect to objections or comments filed pursuant to decretal paragraphs 3 or 4 above, the party or interested person shall provide with its objections or comments an executive summary of no greater than one and one-half pages, single-spaced or three pages, double-spaced containing a clear and concise statement of all material objections or comments. The Commission will not consider the objections or comments of a party or person who has not submitted such executive summary or whose executive summary is not in substantial compliance with the requirements above.

6. That parties or interested persons submitting Composite Agreements, objections or comments shall also file those Composite Agreements, objections or comments, including the executive summary required in decretal paragraph 5 above, on an MS-DOS formatted 3.5-inch computer diskette containing noncompressed files created or saved in WordPerfect format.

7. That the exhibits filed by Intermedia on March 6, 2000, in response to the Commission's February 29, 2000 Order, and BellSouth's reply of March 10, 2000, to Intermedia's exhibits be, and the same are hereby, admitted in evidence as late-filed exhibits.

8. That the description of Switched Access Service and associated Feature Groups as defined in BellSouth's intrastate Access Services Tariff filed in a letter from BellSouth on April 27, 2000, and the response of Intermedia to this letter, be, and the same are hereby, admitted in evidence in this proceeding as late-filed exhibits.

ISSUED BY ORDER OF THE COMMISSION.

This the 13th day of June, 2000.

NORTH CAROLINA UTILITIES COMMISSION
Gail L. Mount, Deputy Clerk

bc061200.01

Appendix A

GLOSSARY OF ACRONYMS
Docket No. P-55, Sub 1178

Act	Telecommunications Act of 1996
ALTS	Association for Local Telecommunications Services
BellSouth	BellSouth Telecommunications, Inc.
CLP	Competing Local Provider
Commission	North Carolina Utilities Commission
DeltaCom	ITC^DeltaCom Communications, Inc
ESP	Enhanced Service Provider
FCC	Federal Communications Commission
GTE	GTE South Incorporated
ICG	ICG Telecom Group, Inc.
ILEC	Incumbent Local Exchange Company (Carrier)
Intermedia	Intermedia Communications, Inc.
IP	Internet Protocol
ISP	Internet Service Provider
IXC	Interexchange Carrier
LATA	Local Access and Transport Area
LEC	Local Exchange Company (Carrier)
PLCU	Percent Local Circuit Use
Public Staff	Public Staff-North Carolina Utilities Commission
Sprint	Sprint Communications Company, L.P.
TA96	Telecommunications Act of 1996
TELRIC	Total Element Long Run Incremental Cost
UNE	Unbundled Network Element

US LEC	US LEC of North Carolina Inc.
VC	Virtual Circuit

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. P-582, SUB 6

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Petition by ICG Telecom Group, Inc. For Arbitration of Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252 (b) of the Telecommunications Act of 1996	ORDER RULING ON OBJECTIONS, REQUEST FOR CLARIFICATION, RECONSIDERATION, AND COMPOSITE AGREEMENT

BEFORE: Jo Anne Sanford, Chair; and Commissioners Robert V. Owens, Jr. and Sam J. Ervin, IV

BY THE COMMISSION: On November 4, 1999, the Commission entered its Recommended Arbitration Order (RAO) in this docket. As part of that Order, the Commission made the following

FINDINGS OF FACT

1. The parties should, as an interim inter-carrier compensation mechanism, pay reciprocal compensation for dial-up calls to Internet Service Providers (ISPs) at the rate the parties have agreed upon for reciprocal compensation for local traffic and as finally determined by this Order, subject to true-up at such time as the Commission has ruled pursuant to future Federal Communications Commission (FCC) consideration of this matter.

2. ICG Telecom Group, Inc.'s (ICG's) Charlotte switch serves an area comparable to that served by BellSouth Telecommunications, Inc.'s (BellSouth's) Charlotte tandem switch and ICG's switch also provides the same functionality as that provided by BellSouth's tandem switch. For reciprocal compensation purposes, ICG is entitled to compensation at the tandem interconnection rate (in addition to the other appropriate rates) where its switch serves a geographic area comparable to that served by BellSouth's tandem switch.

3. The Commission declines to decide at this time whether BellSouth should be required to commit to provisioning the requisite network buildout and necessary support. The Commission encourages BellSouth and ICG to continue to negotiate on this issue. Further, the Commission notes that since a similar provision is found in BellSouth's Revised Statement of Generally Available Terms (SGAT) and at least one interconnection agreement, it would appear reasonable for a similar provision to be voluntarily included in the BellSouth/ICG interconnection agreement.

4. The issue of performance measurements and liquidated damages has been, in essence, withdrawn from the arbitration and accordingly is not in need of resolution in this docket. Further, the Commission will create a new docket, Docket No. P-100, Sub 133k, and issue an Order in that docket establishing the generic docket and requesting that the industry, the Public Staff, the Attorney General, and any other interested parties form a Task Force to attempt to agree on all potential issues concerning performance measurements and enforcement mechanisms. Further, the Commission will issue an Order in Docket No. P-100, Sub 133i (AT&T's Petition for Third-Party Testing) stating that

the Commission is investigating performance measurements in a generic docket as a first step, but will keep the third-party testing docket open for future consideration.

On December 6, 1999, BellSouth filed its Objections and Request for Clarification and Reconsideration with an additional letter filed on December 14, 1999, correcting the citations referenced in its Objections and Request for Clarification and Reconsideration. BellSouth stated in its Objections and Request for Clarification and Reconsideration that it seeks clarification and reconsideration concerning: (1) the interim inter-carrier compensation plan adopted by the Commission for ISP traffic; and (2) the Commission's determination that ICG is entitled to reciprocal compensation at BellSouth's tandem interconnection rate. BellSouth stated that it seeks clarification of the RAO on two points. First, BellSouth stated that it desires confirmation that any compensation paid pursuant to the interim inter-carrier compensation plan will be trued-up retroactively to the effective date of the Interconnection Agreement resulting from this Arbitration in accordance with the mechanism established by the FCC and the Notice of Proposed Rulemaking (CC Docket 99-68). Second, BellSouth stated that it seeks clarification that the true-up will be triggered, and based on, an effective order by the FCC in CC Docket 99-68 which ensures the most expeditious resolution of this issue for all competing local providers (CLPs) and incumbent local exchange companies (ILECs) operating under the Commission's interim inter-carrier compensation plan. Finally, BellSouth requested the Commission to reconsider its position on the interim inter-carrier compensation rates for ISP-bound traffic and consider an alternative for the payment of those rates and to reconsider its conclusion that ICG is entitled to reciprocal compensation at the tandem interconnection rate.

On December 14, 1999, ICG filed a letter confirming its intentions to file on or before December 21, 1999, a response to BellSouth's Objections and Request for Clarification and Reconsideration.

On December 22, 1999, ICG filed its Opposition to BellSouth's Objections and Request for Clarification and Reconsideration. ICG maintained that BellSouth's filing is nothing more than a rehash of arguments already considered and rejected by the Commission. ICG further maintained that BellSouth's request for clarification is unclear. ICG concluded that neither of the requested clarifications is in any way necessary.

On January 3, 2000, the Public Staff filed its Response to Request for Reconsideration. The Public Staff stated that the single issue it wished to address concerned whether ICG should be compensated for tandem switching. The Public Staff stated that it did not address this issue in its Proposed Order in this docket, however, it now believes that the Commission should reconsider and reverse its finding on this issue on the grounds that ICG failed to demonstrate that its switch provides the tandem function in terminating a call delivered to it by the LEC.

On January 10, 2000, ICG filed its Reply to the Public Staff's Response. ICG maintained that the Commission correctly concluded that FCC Rule 51.117 provides a single criterion for tandem rate eligibility and that though not required, the record demonstrates that ICG's switch functions as a tandem. ICG recommended that the Commission deny BellSouth's Request for Reconsideration.

On January 20, 2000, the Commission issued an Order Regarding Maps. The Commission required ICG and BellSouth to submit as late-filed exhibits a map showing ICG's network with relevant switches in North Carolina overlaid against the geographic area which BellSouth's tandem switch serves and the number of BellSouth central offices ICG is presently collocated in within North Carolina by no later than January 23, 2000.

On January 20, 2000, BellSouth filed the Final Order of the Florida Public Service Commission in its ICG/BellSouth arbitration docket.

On February 7, 2000, BellSouth filed its maps in response to the Commission's January 10, 2000 Order. ICG also filed its maps in response to the Order on February 7, 2000.

On February 14, 2000, ICG filed a Notice of Supplemental Authority which included decisions of the Alabama and Georgia Public Service Commissions.

On February 14, 2000, ICG filed a letter to protest the letter filed by BellSouth with its maps stating that BellSouth used its transmittal letter as an opportunity to present its arguments on the tandem rate eligibility issue.

Discussions and Commission conclusions regarding the issues raised by BellSouth in its Objections and Request for Clarification and Reconsideration follow. These matters are addressed below by reference to the specific Findings of Fact which coincide with those findings set forth in the Commission Order entered in this docket on November 4, 1999, which are the subject of said Objections and Request for Clarification and Reconsideration.

FINDING OF FACT NO. 1: Until the FCC adopts a rule with prospective application, should dial-up calls to ISPs be treated as if they were local calls for the purposes of reciprocal compensation?

INITIAL COMMISSION DECISION

The Commission concluded that the parties should, as an interim inter-carrier compensation mechanism, pay reciprocal compensation for dial-up calls to ISPs at the rate the parties have agreed upon for reciprocal compensation for local traffic and as finally determined by the Commission's Order in this docket, subject to true-up at such time as the Commission has ruled pursuant to future FCC consideration of this matter.

COMMENTS/OBJECTIONS

BELLSOUTH: BellSouth has asked the Commission for clarification or reconsideration of the following:

1. Confirmation that any compensation paid pursuant to the interim inter-carrier compensation mechanism will be trued-up retroactively to the effective date of the Interconnection Agreement resulting from this Arbitration. BellSouth requested clarification on this point because of the dual true-up referenced by the Commission in its RAO _ (1) an interim true-up based on the establishment of final unbundled network element (UNE) rates and (2) a final true-up based on the upcoming FCC decision. BellSouth believes that the reciprocal compensation rates should be trued-up once the Commission establishes rates in the UNE docket without regard to any action from the FCC.

2. Clarification regarding the procedure that the parties are to utilize to effectuate the true-up. BellSouth argued that the true-up should be triggered and based upon an effective Order by the FCC. Theoretical alternative dates would be when the FCC decision is released, or as the

Commission has implied, after Commission action pursuant to that Order.

3. Reconsideration of the interim-carrier compensation rates for ISP-bound traffic and consideration of an alternative for payment of those rates. BellSouth noted that the Commission had established interim inter-carrier compensation rates at the same level as reciprocal compensation rates for local traffic but, in light of the fact that the interim inter-carrier compensation plan adopted here will be the template for other agreements, BellSouth argued that the rates paid for ISP-bound traffic should reflect the longer holding times associated with ISP-bound traffic. Specifically, BellSouth stated it is willing to accept the 20-minute call duration originally proposed by ICG in this Arbitration. This would yield a minute of use (MOU) total rate of $0.0022806.

BellSouth also requested that the Commission reconsider its ruling regarding payment and allow BellSouth to make payments pursuant to the plan in an interest-bearing escrow account. BellSouth cited substantial risk that it would be unable to recover those funds at final true-up, especially from smaller CLPs.

ICG: ICG urged the Commission to reject BellSouth's request that it modify the inter-carrier compensation rates for ISP-bound traffic based on an average call length (ACL) factor of 20 minutes. ICG argued that the costs it incurs for delivering calls to BellSouth customers are the same regardless of whether the called party is an ISP and thus there is no basis for a different compensation rate. ICG also chided BellSouth for attempting to insert new data in this proceeding purporting to show that the flow of compensation would be one-sided on a statewide basis by citing evidence in another proceeding (BellSouth/Time Warner, Docket No. P-472, Sub 15). Finally, ICG also maintained that BellSouth had not presented the Commission with a workable, alternative compensation mechanism.

ICG further noted that the 20-minute ACL proposal had been originally submitted by ICG itself in response to the Commission's Order seeking alternative approaches to compensation, but that the ICG proposal assumed that the proposed rate would be applied to all calls, not just ISP-bound calls. Moreover, ICG had noted that it had not done a study of actual call lengths and that the 20-minute figure was an "overly conservative" estimate of actual call lengths. In any event, the Commission rejected the ACL proposal. BellSouth is also using the new costs/rates which it proposed in the UNE docket, but these are final rates and not in effect yet. ICG further stated that ISP-bound calls are indistinguishable from other calls; thus there is not a reliable way to identify them.

With respect to BellSouth's requests for clarification, ICG expressed puzzlement. To the extent that BellSouth is asking whether the true-up will be to the final UNE rates and will occur when the FCC issues its final ruling, this would appear consistent with the Order. The true-up, however, should not occur upon the effective date of the FCC Order, since the Commission has made it plain that subsequent proceedings to implement the FCC ruling will be needed.

ICG emphatically rejected BellSouth's proposal that the payments be held in escrow as the Commission did in its original ruling.

PUBLIC STAFF: The Public Staff did not address this issue in its Response to Request for Reconsideration.

DISCUSSION

There are two major issues for consideration. The first is BellSouth's request for an alternative

inter-carrier compensation mechanism based on a 20-minute ACL rather than one based on the sum of certain UNE rates. The other is BellSouth's request for clarification.

With respect to the first item, the Commission sees no reason to depart from the decision that it has already made on this matter. It is, to say the least, ironic for BellSouth to propose what in essence was a tentative proposal, later withdrawn, originally made by ICG in response to the Commission's request for "creative thinking" on inter-carrier compensation. Apparently, the merits of this proposal became obvious to BellSouth only after its own proposal was rejected. Meanwhile, the merits have become less persuasive to ICG, since it extensively critiqued the deficiencies of the ACL proposal in its reply to BellSouth. This only fortifies the Commission's belief that it would be on the right track to stand by an interim mechanism that is relatively simple and straight forward and tracks the reciprocal compensation rates applicable to other calls.

With respect to BellSouth's request for clarification regarding the inter-carrier compensation rates for ISP-bound traffic, the Commission makes the following clarification:

1. There is to be a first true-up applicable to all traffic subject to reciprocal compensation when the interim UNE rates become final UNE rates. However, if the final UNE rates are effective before the Interconnection Agreement becomes effective, then the final UNE rates will apply, and no such true-up will be necessary. The true-up will be retroactive to the effective date of the Interconnection Agreement resulting from this Arbitration.

2. There is to be a second true-up applicable to ISP-bound traffic at such time as the Commission has issued an Order setting up a permanent inter-carrier compensation mechanism for ISP-bound traffic. The true-up will be retroactive to the effective date of the Interconnection Agreement resulting from this Arbitration.

Finally, with respect to BellSouth's request that BellSouth be allowed to make payments into an interest-bearing escrow account rather than to the CLPs, the Commission finds it appropriate to reject this proposal for the reasons originally set out in the RAO.

CONCLUSIONS

The Commission upholds and reaffirms its original decision in this regard. Further, the Commission finds it appropriate to clarify the true-up process as outlined above.

FINDING OF FACT NO. 2: For purposes of reciprocal compensation, should ICG be compensated for end office, tandem, and transport elements of termination where ICG's switch services a geographic area comparable to the area served by BellSouth's tandem switch?

INITIAL COMMISSION DECISION

The Commission concluded that ICG's Charlotte switch serves an area comparable to that served by BellSouth's Charlotte tandem switch and ICG's switch also provides the same functionality as that provided by BellSouth's tandem switch. For reciprocal compensation purposes, the Commission found that ICG is entitled to compensation at the tandem interconnection rate (in addition to the other appropriate rates) where its switch serves a geographic area comparable to that served by BellSouth's tandem switch.

COMMENTS/OBJECTIONS

BELLSOUTH: BellSouth contended that in its RAO, the Commission relied heavily on FCC *Rule* 51.711(a)(3), and failed to consider the FCC's *discussion* of Rule 51.711, which sets forth a two-prong test that must be satisfied prior to a CLP being entitled to reciprocal compensation at the ILEC's tandem interconnection rate. BellSouth noted that, in its discussion, the FCC identified two requirements that ICG, or any CLP, must satisfy in order to be compensated at the tandem interconnection rate: (1) the CLP's network must perform functions similar to those performed by the ILEC's tandem switch; and (2) the CLP's switch must serve a geographic area comparable to the geographic area served by the ILEC.

BellSouth stated that ICG failed to satisfy the first prong of the FCC's two-prong test because ICG's network does not actually perform functions similar to those performed by BellSouth's tandem switch. While ICG's switch may be capable of performing tandem switching functions when connected to end office switches, capability is not the test. Throughout the testimony, ICG repeatedly concluded that ICG's switch "performs the same functionality as the BellSouth tandem switch and end office switch combined." ICG, however, did not offer any evidence to support a conclusion that the ICG switch actually performs functions similar to BellSouth's tandem switch.

BellSouth contended that the only evidence presented by ICG concerning switch functionality revolved around a network diagram attached to witness Starkey's direct testimony. (Starkey direct, at page 22 - diagram 3.) Based on ICG's network diagram, it is clear that: (1) ICG does not interconnect end offices or perform trunk-to-trunk switching, but rather performs line-to-trunk or trunk-to-line switching; (2) to the extent ICG has a switch in North Carolina, it performs only end-office switching functions and does not switch BellSouth's traffic to another ICG switch; and (3) based on the information provided, ICG's switch does not provide other centralization functions, namely call recording, routing of calls to operator services, and signaling conversion for other switches, as BellSouth's tandems do and as required by the FCC's rules.

BellSouth argued that while ICG witness Starkey insists that ICG's switch performs the same functions as a BellSouth tandem switch, the network design included in witness Starkey's testimony shows that each of ICG's collocation arrangements serve only as an intermediate point in ICG's loop plant. Without specific information from ICG to the contrary, the "piece of equipment" in ICG's collocation cage appears to be nothing more than a Subscriber Loop Carrier, which is part of loop technology and provides no "switching" functionality. ICG's switch is not providing a transport or tandem function, but is switching traffic through its end office for delivery of traffic from that switch to the called party's premises. No switching is performed in these collocation arrangements. These lines are simply long loops transported to ICG's switch; they are not trunks. Long loop facilities do not quality as facilities over which local calls are transported and terminated as described by the Telecommunications Act of 1996 (TA96) and therefore are not eligible for reciprocal compensation.

BellSouth stated that other state commissions have rejected arguments that a CLP's switch performs the same functions as a tandem switch. BellSouth specifically referenced orders by the Florida Public Service Commission which concluded that "...MCI is not entitled to compensation for transport and tandem switching unless it actually performs each function." Order No. PSC-97-0294-FOF-TP, Docket 962121-TP, at 1011 (March 14, 1997), and also Order No. PSC-96-1532-FOF-TP, Docket No. 960838-TP, at 4 (December 16, 1996) which concluded that "...evidence in the record does not support MFS' position that its switch provides the transport element; and the Act does not

contemplate that the compensation for transporting and terminating local traffic should be symmetrical when one party does not actually use the network facility for which it seeks compensation."

BellSouth argued that even assuming ICG's switch performs the same functions as BellSouth's tandem switch, there is no evidence in the record that ICG's switch serves a geographic area comparable to BellSouth's tandem switch. BellSouth pointed out there is a distinction between actually serving and being capable of serving. BellSouth stated that, in fact, other than generally referencing ICG switches, there is no record evidence that ICG has a switch in North Carolina.

BellSouth contended that when it attempted to determine the number of customers ICG has in North Carolina, ICG conveniently refused, claiming that such information was proprietary. BellSouth stated that ICG also failed to identify where the unknown number of customers are located - information that is essential to support a finding that ICG's switch serves a comparable geographic area. BellSouth contended that under no set of circumstances could ICG seriously argue in such a case that its switch services a comparable geographic area to BellSouth. See Decision 99-09-069, In Re: Petition of Pacific Bell for Arbitration of an Interconnection Agreement with MFS/WorldCom, Application 99-03-047, at 15-16 (September 16, 1999) California Public Service Commission (finding "unpersuasive" MFS's showing that its switch served a comparable geographic area when many of MFS's ISP-bound customers were actually collocated with MFS's switch.)

BellSouth contended that ICG failed to make a showing that its network performs functions similar to those performed by BellSouth's tandem switch and that its switch serves a geographic area comparable to BellSouth's. For these reasons, BellSouth argued that the Commission should reconsider its decision and deny ICG's request for reciprocal compensation at the tandem interconnection rate.

ICG: ICG contended that the Commission's determination that ICG is entitled to reciprocal compensation at BellSouth's tandem interconnection rate is supported by the evidence of record. In response to BellSouth's claim that the Commission failed to consider the FCC's discussion of Rule 51.711, specifically, that the Commission failed to address both parts of the FCC's two-prong test, ICG contended that the Commission did consider BellSouth's contention that Rule 51.711 contains a two criterion test _ and squarely rejected it. The Commission expressly held that the FCC "requires only that a CLP's switch serve a geographic area comparable to that served by an ILEC's tandem to qualify for the tandem termination rates." The Commission should summarily reject BellSouth's attempt to re-argue a point on which the Commission has clearly, and correctly, ruled.

ICG further argued that the only relevant criterion is whether ICG's switch serves a geographic area comparable to that served by BellSouth's tandem. BellSouth simply refuses to recognize that the evidence it claims to be nonexistent is amply spread throughout the record and that it is totally consistent with the Commission's findings and conclusions on this issue. ICG witnesses Starkey and Schonhaut presented evidence demonstrating that ICG's switch serves a comparable geographic area to that served by BellSouth's tandem switch.

ICG contended that the record evidence is uncontroverted. BellSouth has not so much as suggested, much less proven, that the geographic area served by its tandem switch is not comparable to the area served by ICG's switch. Nor did BellSouth introduce any evidence whatsoever and did not cross-examine ICG's witnesses on this point.

ICG further contended that the record in this proceeding clearly demonstrates that ICG's switch also provides the same functionality as BellSouth's tandem. As ICG witness Starkey testified: "ICG's switching platform transfers traffic amongst discrete network nodes that exist in the ICG network for purposes of serving groups of its customers in exactly the same fashion that [BellSouth's] tandem switch distributes traffic."

ICG argued that BellSouth misses the point of Rule 51.711. BellSouth essentially argues that ICG's switch cannot meet the tandem switching definition because ICG's switch does not route traffic between other ICG switches. Rule 51.711 contemplates that a single CLP switch will serve the same function in the CLP's network that a tandem and multiple serving central office switches serve in the ILEC's network. The rule would be rendered meaningless if CLPs were required to duplicate the ILEC's network architecture in order to qualify for the tandem rate. The FCC made clear that in constructing their networks CLPs may opt to use new technologies that were unavailable when the ILEC's networks were designed: "... states shall ... consider whether new technologies (e.g. fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and, thus, whether some or all calls terminating on the new entrant's network should qualify for the tandem rate." ICG contended that its fiber ring is precisely the sort of new technology the FCC had in mind when it adopted Rule 51.711.

In its Reply to the Public Staff's Response to Request for Reconsideration, ICG restated that Rule 51.711 of the FCC rules provides a single criterion for tandem rate eligibility _ whether the competing carrier's switch serves an area comparable to that of the ILEC's tandem switch. ICG maintained that the Commission thus correctly rejected the Public Staff's argument that, in order to qualify for the tandem rate, Rule 51.711 requires a competing carrier to also demonstrate that its switch provides functionality similar to that provided by the incumbent's tandem switch.

ICG maintained that Rule 51.711 speaks for itself and is unambiguous. If a competing carrier is able to make the geographic showing, it is entitled to the tandem rate, regardless of whether it is able to make the functionality showing.

ICG suggested that the Public Staff's Response should be disregarded and that BellSouth's Request should be denied. As noted in ICG's Opposition to BellSouth's Request, ICG's evidence that the ICG switch serves an area comparable to that served by the BellSouth tandem is uncontroverted in the record.

ICG also contended that even though it is not required, the record demonstrates that ICG's switch functions as a tandem. ICG explained that its witness Starkey offered detailed testimony explaining the configuration of ICG's network and specifically addressed the switch functionality issue. Witness Starkey testified that ICG's network consists of a Lucent 5ESS switch which performs both Class 4 and Class 5 functions, SONET nodes collocated at BellSouth end offices and in ICG on-network buildings, and a fiber optic ring.

ICG contended that the fact that ICG's network incorporates collocated SONET nodes instead of Class 5 central office switches, as BellSouth witness Varner pointed out in his direct testimony, is irrelevant. This difference in architecture between the two networks is a result of the technology each carrier has chosen in an effort to best serve its particular customer base. Witness Starkey testified:

> At the time the majority of the ILEC network was built, switches were very limited

in the number of individual lines they could service and copper plant was the most expensive portion of the network to deploy. Therefore, ILECs chose to trade switching costs for copper plant costs by deploying greater numbers of switches and shorter copper loops. However, with the advent of relatively inexpensive fiber optic transport facilities and the enormous switching capacity available in today's switching platforms, the economics of the switch/transport tradeoff have changed.

As witness Starkey further explained in his testimony, ICG's network consists of a centrally-located host switch (defined in the Local Exchange Routing Guide (LERG) as a combination Class 4/Class 5 switch) that supports other, individual switching nodes that are collocated either in BellSouth central offices or in customer locations. ICG's fiber optic ring connects these discrete switching nodes within its network and transfers traffic amongst those nodes. This is exactly the function that BellSouth's tandem switch serves in the BellSouth network. The fact that ICG is not required to place fully-featured Class 5 switches in each collocation does not detract from the fact that the ICG network performs exactly the same function as the BellSouth network; it simply uses a different architecture to accomplish the same tasks. This is exactly what the FCC envisioned in paragraph 1090 of the Local Competition First Report and Order when it directed state commissions to "...consider whether new technologies (e.g. fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem...."

ICG stated that the arguments of the Public Staff and BellSouth are premised on the faulty assumption that competing carriers must mimic the incumbents' network to qualify for the tandem interconnection rate. ICG believes that tandem rate eligibility depends solely on geographic service area comparability as expressly provided in Rule 51.711. However, even if the Commission were to conclude that functionality is a second requirement, the Commission could not conclude that identical functionality is the standard. The often quoted paragraph 1090 from the Local Competition First Report and Order expressly contemplates that competing carriers will employ different network architectures than those used by incumbents. In that Order, the FCC notes that new technologies may "perform functions similar - not identical - to those performed by incumbents' tandem switches."

ICG contended that the Public Staff is mistaken in its belief that ICG relies on the fact that its switch serves as a point of interconnection for interexchange carriers (IXCs) and an access point for operator services to establish the tandem status of ICG's switch. These two functions are included in a general description of tandem functionality. Witness Starkey testified that the ICG switch performs nearly all of the functions included in the tandem definition included in the LERG. Indeed, the LERG definition provides that a switch is defined as a tandem if it performs one or more of a list of functions. Witness Starkey testified that the ICG switch performed "nearly all" of the functions enumerated in the LERG. ICG reiterated, however, that no FCC rule or order makes inclusion of a switch in the LERG a requirement for tandem rate eligibility.

In conclusion, ICG stated it has met its burden of proving that its Charlotte switch serves an area comparable to that of BellSouth's tandem. ICG asserted that the record evidence on this issue is uncontroverted, and there is no basis to disturb the Commission's conclusion.

PUBLIC STAFF: The Public Staff did not address this issue in its Proposed Order. However, in its Response to Request for Reconsideration, the Public Staff stated that it now believes that the Commission should reconsider and reverse its finding on this issue on the grounds that ICG failed to demonstrate that its switch provides the tandem function in terminating a call delivered to it by a LEC.

The Public Staff indicated that by reading Paragraph 1090 of the FCC's First Report and Order in CC Docket No. 96-98, FCC 96-325, 11 FCC Rcd 15499, as a whole, and as an indication of the FCC's intent in promulgating Rule 51.711, it is clear that the functionality of the interconnecting carrier's network must be considered for the purpose of determining whether the carrier should be compensated for tandem switching. The FCC specifically directs the states to consider whether new technologies (e.g., fiber ring or wireless networks) perform functions similar to those performed by an ILEC's tandem switch. If the only requirement were that the interconnecting carrier's switch serve an area comparable to the LEC's tandem switch, any consideration of the new technologies would be completely irrelevant.

The Public Staff contended that ICG's fiber ring is apparently a means of connecting its switch to its customers. Fiber rings can also be used to interconnect end office switches and to reroute traffic in the event that an interoffice circuit is cut. Such is the case with BellSouth. ICG's ring, on the other hand, does not extend between switches, but between ICG customers, and between ICG customers and the ICG switch from which dial tone is provided. Under normal circumstances, in the termination of a call delivered to ICG by BellSouth, the ICG ring does not perform a function even remotely similar to that of a tandem switch. It actually serves as the loop between the ICG switch, where end office switching is done, and the ICG customer. Tandem switching, if it was involved, would occur at the other end of the circuit, even before the call reached the end office from which dial tone is provided.

The Public Staff stated that ICG's assertions that its switch qualifies as a tandem because it serves as a point of interconnection for traffic to and from IXCs, and as ICG's access point for operator services for its customers are not persuasive. Even if these are considered tandem functions for some purposes, they have no bearing on the issue at hand unless they are actually employed in the process of terminating calls delivered to ICG by BellSouth. Since they are not so employed, they do not qualify ICG for tandem switching and transport compensation.

The Public Staff recommended that the Commission reconsider and reverse Finding of Fact No. 2 and Ordering Paragraph No. 2 of the RAO dated November 4, 1999.

The Public Staff also suggested that the Commission consider this issue in conjunction with its deliberations in the pending arbitration between BellSouth and ITC^DeltaCom in Docket No. P-500, Sub 10.

DISCUSSION

The difference in the positions of the parties appears to be due to ambiguity between the language in the FCC's discussion of this issue, Paragraph 1090, and the language in the FCC's Rule 51.711.

ICG's position is that the only relevant criterion is whether ICG's switch serves a geographic area comparable to that served by BellSouth's tandem as stated in Rule 51.711(a)(3). However, even if that is the only requirement, ICG believes that its switch performs the same functionality as BellSouth's tandem switch as discussed in Paragraph 1090 of the FCC's First Report and Order.

BellSouth's position is that the discussion of Rule 51.711 which addresses functionality must be considered as well as Rule 51.711(a)(3) and that ICG does not meet either requirement.

The Public Staff's position supports that of BellSouth.

Paragraph 1090 of the First Report and Order states:

> We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states may establish transport and termination rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end-office switch. *In such event, states shall also consider whether new technologies (e.g., fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination via the incumbent LEC's tandem switch.* (Emphasis added) Where the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the interconnecting carrier's additional costs is the LEC tandem interconnection rate. (First Report and Order, CC Docket 96-98, Paragraph 1090) (August 6, 1996).

Rule 51.711(a)(3) states:

> Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate.

On February 7, 2000, ICG and BellSouth filed maps in response to a Commission Order. BellSouth filed a map depicting the geographic coverage of BellSouth's local access and transport area (LATA) tandem switch and a map depicting BellSouth's local tandem switch in the Charlotte area. ICG filed a map showing ICG's Charlotte serving area. These maps are hereby allowed in evidence in this proceeding as late-filed exhibits.

The Commission is unpersuaded by the arguments of BellSouth and the Public Staff in this matter. The Commission believes, based on the evidence in the record, including the maps filed by the parties on February 7, 2000, that ICG has met its burden of proof that its switch serves a comparable geographic area to that served by BellSouth's tandem switch for the Charlotte serving area. Although such information may be both useful and relevant, the Commission can find no basis for BellSouth's argument that the location of actual customers is essential to support a finding that ICG's switch serves a geographic area comparable to the area served by BellSouth's tandem switch in either Paragraph 1090 or Rule 51.711 of the FCC's First Report and Order. The Commission believes that the testimony of ICG witness Starkey was more cogent and convincing than that of BellSouth witness Varner and that witness Starkey clearly demonstrated that the technologies employed by ICG's network provide functions that are the same as or similar to the functions performed by BellSouth's tandem switch and, in fact, meet both the criteria discussed in the parties' filings.

Since we are persuaded that ICG has demonstrated both geographic and functional capability in this case, we believe that it is unnecessary at this time to decide the question of whether both criteria must be satisfied in order for a CLP such as ICG to receive compensation at the tandem

interconnection rate for reciprocal compensation purposes.

CONCLUSIONS

The Commission upholds and reaffirms its original decision and concludes that for reciprocal compensation purposes, based on the fact that ICG's Charlotte switch serves an area comparable to that served by BellSouth's Charlotte tandem switch and provides functionality the same as or similar to that provided by BellSouth's tandem switch, ICG is entitled to compensation at the tandem interconnection rate.

The Commission strongly advises parties involved in future arbitrations where inclusion of the tandem switch element for reciprocal compensation purposes is an issue to file maps showing their serving areas as compared to that of the ILEC serving area, along with substantial testimony including a description of the switch(es) and associated technology necessary to provide service; the number and location of customers, if available; and any other information relevant to capability or intent to serve.

IT IS, THEREFORE, ORDERED as follows:

1. That the Composite Agreement submitted by BellSouth and ICG is hereby approved, subject to such modifications as may be required by this Order.

2. That BellSouth and ICG shall revise the Composite Agreement in conformity with the provisions of this Order and shall file the revised Composite Agreement for review and approval by the Commission not later than 15 days from the date of this Order. Should no revisions be necessary to the Composite Agreement, the parties shall so advise the Commission not later than 15 days from the date of this Order.

3. That the Commission will entertain no further comments, objections, or unresolved issues with respect to issues previously addressed in this arbitration proceeding.

4. That the maps filed in this docket by BellSouth and ICG on February 7, 2000, be, and the same are hereby, admitted in evidence as late-filed exhibits.

ISSUED BY ORDER OF THE COMMISSION.

This the 1st day of March, 2000.

NORTH CAROLINA UTILITIES COMMISSION
Geneva S. Thigpen, Chief Clerk

bc030100.01

Alabama Public Service Commission

Orders

In the Matter of:	**) DOCKET 27069**
Petition by ICG Telecom Group, Inc. for Arbitration of Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	)
	)
	)
	)
	)
	)
	)

FURTHER ORDER

BY THE COMMISSION:

On or about November 30, 1999, ICG Telecom Group, Inc. (ICG) filed a Request for Extension of Time for Filing a Final Interconnection Agreement in the above Docketed Arbitration with BellSouth Telecommunications, Inc. (BellSouth). ICG requested that the Commission permit the parties to file a final interconnection agreement by January 17, 2000 instead of November 30, 1999 as required by the provisions of the Commission's Telephone Rule T-28. ICG represented that the additional time requested would permit it and BellSouth to complete ongoing arbitrations in other states and thereby allow for the drafting of a master interconnection agreement. ICG represented that BellSouth had been notified of its request and had agreed that the extension requested would work to the benefit of both parties.

On or about December 10, 1999, BellSouth filed a Motion for Reconsideration of the Commission's

November 10, 1999, Final Order on Arbitration in this cause. In light of BellSouth's Motion and the anticipated response thereto from ICG, it appears that the appropriate course of action is to indefinitely suspend the time for the filing of the final interconnection agreement in this cause until such time as the Commission by order directs.

IT IS, THEREFORE, ORDERED BY THE COMMISSION, That the parties to this cause need not file a final interconnection agreement until advised to do so by order of the Commission.

IT IS FURTHER ORDERED BY THE COMMISSION, That jurisdiction in this cause is hereby retained for the issuance of any further order or orders as may appear to be just and reasonable in the premises.

IT IS FURTHER ORDERED, That this Order shall be effective as of the date hereof.

DONE at Montgomery, Alabama, this 22nd day of December, 1999.

ALABAMA PUBLIC SERVICE COMMISSION

Jim Sullivan, President

Jan Cook, Commissioner

George C. Wallace, Jr., Commissioner

ATTEST: A True Copy

Walter L. Thomas, Jr., Secretary

Press the Back Arrow to Return to the Search

Return to PSC Home - http://www.psc.state.al.us/index.htm

Alabama Public Service Commission Orders

In the Matter of:	**) DOCKET 27069**
Petition by ICG Telecom Group, Inc. for Arbitration of Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	)
	)
	)
	)
	)
	)
	)

FINAL ORDER ON ARBITRATION

BY THE COMMISSION:

HEARD : Wednesday August 11, 1999, Commission Hearing Room 904, RSA Union Building, 100 North Union Street, Montgomery, Alabama

BEFORE: The Honorable John A. Garner- Arbitration Facilitator, Mr. David House - Arbitrator, and Jimmy B. Pool, Esq.- Arbitrator

APPEARANCES:

On behalf of ICG Telecom Group, Inc.:

Edgar C. Gentle, III, Esq.

G. Nicole Mapp, Esq.

Gentle, Pickens & Eliason

Colonial Bank Building, Suite 1500

1928 First Avenue North

Birmingham, Alabama 35203

Albert H. Kramer, Esq.

Jacob S. Farber, Esq.

Dickstein, Shapiro, Morin & Oshinsky

2100 L Street, N.W.

Washington, D.C. 20037-1526

On behalf of BellSouth Telecommunications, Inc.

D. Owen Blake, Jr., Esq.

BellSouth Telecommunications, Inc.

3196 Highway 280 South

Room 304N

Birmingham, Alabama 35243

A. Langley Kitchings, Esq.

E. Earl Edenfield, Jr., Esq.

675 Peachtree Street,

Atlanta, Georgia 30375

I. INTRODUCTION/BACKGROUND

This arbitration proceeding is pending before the Alabama Public Service Commission (the "Commission") pursuant to Section 252(b) of the Telecommunications Act of 1996 (the "Act"). This proceeding was initiated by ICG Telecom Group, Inc.'s ("ICG") filing of a *Verified Petition For*

Arbitration of an Interconnection Agreement with BellSouth Telecommunications, Inc. ("BellSouth") *Pursuant to Section 252(b) of the Telecommunications Act of 1996* (the "Petition") on May 27, 1999. In said Petition, ICG requested that the Commission arbitrate certain terms and conditions with respect to an interconnection agreement between itself as the petitioning party, and BellSouth. On June 21, 1999, BellSouth filed its *Verified Response to ICG's Petition For Arbitration* (the "Response").

In accordance with the Commission's Telephone Rule T-26(C), the Commissioners appointed The Honorable John A. Garner, Administrative Law Judge, as Arbitration Facilitator, and Mr. David House, Public Utilities Auditor III, and Jimmy B. Pool, Esq. as Arbitrators in this Matter (collectively the "Arbitration Panel" or "Panel").

On July 1, 1999, ICG and BellSouth submitted a Joint Motion to Establish a Procedural Schedule. Through a Procedural Ruling issued on July 16, 1999, the Arbitration Panel set forth a discovery schedule, established a Status Conference to be held on July 23, 1999, and ordered the Arbitration hearing to begin on August 9, 1999. On July 8, 1999, a discovery conference was held during which oral presentations concerning outstanding discovery disputes were heard. An Oral Ruling resolving the outstanding discovery disputes was entered on July 9, 1999. The findings rendered in the July 9, 1999 Oral Ruling were ratified by a written ruling issued on July 16, 1999.

On July 23. 1999 the Status Conference was held as scheduled. In an effort to reduce the number of controverted issues, the parties engaged in informal mediation

immediately following the Status Conference. The mediation was conducted by Ms. Judy McLean, Director of the Commission's Advisory Division.

By agreement of the Arbitration Panel and the parties, the Arbitration hearing was continued until August 11, 1999, to permit the continuation of an informal Mediation session conducted by Ms. McLean. As a result of the mediation efforts of Ms. McLean, and the parties, the list of Issues requiring arbitration was reduced from twenty-six (26) to five (5). At the outset of the Arbitration hearing, ICG and BellSouth submitted to the Arbitration Panel a *Statement of Partial Settlement* in which the parties informed the Panel that they had resolved all but the following Issues:

1. Until the FCC adopts a rule with prospective application, should dial-up calls to Internet service providers (ISPs) be treated as if they were local calls for purposes of reciprocal compensation?

2. For purposes of reciprocal compensation, should ICG be compensated for end office, tandem and transport elements of termination where ICG's switch serves a geographic area comparable to the area served by BellSouth's tandem switch?

3. Should BellSouth be required to commit to provisioning the requisite network buildout and necessary support when ICG agrees to enter into a binding forecast of its traffic requirements in a specified period?

4. Should BellSouth be required to provide the "Enhanced Extended Link" as a UNE combination (EEL)?

5. Should volume and term discounts be available for UNEs?

At the August 11, 1999 hearing, ICG offered the testimony of Michael Starkey, President of the telecommunications consulting firm of Quantitative Solutions, Inc.; Philip Jenkins, ICG's Senior Director - Engineering and Operations for the Southeast Region; Bruce Holdridge, Vice President of Government Affairs for ICG Communications, Inc.; and Cindy Schonhaut, Executive Vice President for Government and Corporate Affairs for ICG Communications, Inc. BellSouth offered the testimony of Alphonso Varner, the company's Senior Director for State Regulatory.

At the conclusion of the August 11, 1999 hearing, the parties indicated a preference to submit post-Arbitration hearing briefs. In order to accommodate the filing of those briefs, the parties orally agreed on the record at the August 11, 1999 proceeding to jointly extend the statutory deadline for the Commission's decision in this matter as set forth at 47 U.S.C. §252(b)(4)(C). Both parties submitted simultaneous post-Arbitration hearing briefs.

The Arbitration Panel issued its Arbitration Panel Recommendation and Proposed Order Regarding Interconnection Agreement (the Arbitration Panel's Recommendation) on October 13, 1999. The Arbitration Panel's Recommendation set forth recommendations for the resolution of the issues set forth in the Petition and Response which remained open.

Pursuant to the Commission's Telephone Rule T-26, the Arbitration Panel's Recommendation was served on the parties to the Arbitration as well as all parties on the Commission's Telecommunications service list. Although Telephone Rule T-26(I)(2) allows interested parties who were not parties to the Arbitration to file comments concerning the Arbitration Panel's Recommendation within 10 days, and allows the parties to the Arbitration to submit replies to those comments and any exceptions to the Arbitration Panel's Recommendations in a subsequent 10 day period, the Arbitration Panel accompanied the service of its Recommendation with a Procedural Ruling requiring initial comments to be submitted no later than October 22, 1999. The Procedural Ruling required that reply comments/exceptions by the parties be filed no later than October 28, 1999. As set forth in the Procedural Ruling, the modification of the comment cycles was necessary to accommodate the rendering of a decision by the Commission in this matter at the November 1, 1999 meeting of the Commission.

The Commission received comments from the following interested non-parties: GTE South, Incorporated (GTE); e.spire Communications, Inc. (e.spire); AT&T Communications of the South Central States, Inc. (AT&T); Sprint Communications Company, L.P. (Sprint); a joint filing by Hyperion Communications, Inc./KMC Telecom, Inc.; and a joint filing from MCI WorldCom, Inc./ITC DeltaCom Telecommunications, Inc. In addition, BellSouth and ICG each submitted reply comments/exceptions. The Commission also received a recommendation concerning the findings, conclusions and recommendations of the Arbitration Panel from the Commission's Advisory Division.

After careful consideration of the entire record in this matter including the post-Arbitration hearing briefs filed by the parties, the Arbitration Panel's Recommendation, the comments of the parties and interested non-parties, and the recommendation of the Advisory Division, we render the findings and conclusions set forth below. Due to the fact that we largely concur with the findings, conclusions and recommendations of the Arbitration Panel, we have for the most part adopted the Arbitration Panel's Recommendation as our final Order in this cause. Our specific findings and conclusions as to each

issue are, however, specifically set forth.

II. FINDINGS AND CONCLUSIONS

ISSUE NO. 1: UNTIL THE FCC ADOPTS A RULE WITH PROSPECTIVE APPLICATION, SHOULD DIAL-UP CALLS TO INTERNET SERVICE PROVIDERS ("ISPs") BE TREATED AS IF THEY WERE LOCAL CALLS FOR PURPOSES OF RECIPROCAL COMPENSATION (PETITION ISSUES 1 AND 8).

The ICG Position

ICG argues that while the FCC found in its *Declaratory Ruling and Notice of Proposed Rulemaking in CC Docket 96-98*, released on February 26, 1999 (the FCC's "*ISP Declaratory Ruling*"), that ISP traffic is mostly interstate in nature, the FCC stated that, until a federal rule is adopted concerning inter-carrier compensation for ISP-bound calls, state commissions have the authority in an arbitration to conclude that reciprocal compensation is an appropriate compensation mechanism. Notwithstanding the jurisdictional nature of ISP-bound calls, ICG argues that the Commission has the authority to set a rate for this traffic by virtue of its 47 U.S.C. §252 authority over interconnection agreements which extends to both intrastate and interstate matters.

ICG points out that the FCC has treated ISP-bound traffic as local for purposes of interstate access charges and in fact stated in the *ISP Declaratory Ruling* that this treatment would suggest that reciprocal compensation is due for such traffic. According to ICG, the FCC has made it clear that the question regarding ISP traffic is not whether compensation will be provided, but what rate of compensation is appropriate.

ICG maintains further that public policy supports payment of reciprocal compensation for ISP-bound traffic. ICG notes that ISPs are an important market segment for competing local exchange carriers ("CLECs") and a segment of the local exchange market that is well on its way toward effective competition. ICG represents that an elimination of its ability to recover its costs for transport and delivery of BellSouth-originated calls to ICG-served ISPs will negatively affect the development of local competition. Starkey, Tr. pp. 53-54.

ICG argues that requiring carriers to pay reciprocal compensation for the transport and delivery of ISP-bound calls is economically efficient. According to ICG, BellSouth should be economically indifferent as to whether BellSouth incurs the transport and delivery costs directly or through a reciprocal compensation arrangement with ICG because BellSouth's rates for transport and delivery are based upon BellSouth's underlying costs. Starkey, Tr. pp. 59-60.

ICG alleges that BellSouth's recommendation for addressing ISP traffic pending adoption of a federal rule is unreasonable. Specifically, ICG asserts that BellSouth's proposal that carriers track ISP traffic and retroactively apply whatever rate is ultimately adopted by the FCC would deprive ICG of compensation for services it provides now, thereby ignoring the time value of money. Schonhaut, Tr. p. 315.

ICG further asserts that there is no guarantee as to when the FCC will adopt a federal rule governing inter-carrier compensation for ISP-bound traffic. ICG contends that the FCC has indeed indicated that it may leave this issue to the states to decide. ICG further stresses that there is the possibility, if not the likelihood, that the FCC rule will be prospective in a way that permanently deprives ICG of

compensation for traffic carried in the interim between this Commission's ruling and the FCC's ruling. Schonhaut, Tr. p. 311.

The BellSouth Position

According to BellSouth, the FCC's February 26, 1999 *ISP Declaratory Ruling* affirmed that the FCC has, and will, retain jurisdiction over ISP-bound traffic. BellSouth maintains that the FCC has now conclusively established that ISP-bound traffic is non-local interstate traffic due to the fact that most calls to ISPs terminate at distant exchanges in other states as opposed to local exchanges. Since the 47 U.S.C. §251(b)(5) obligation to pay reciprocal compensation has been interpreted by the FCC to apply only to traffic that originates and terminates within the local exchange, BellSouth concludes that interstate ISP traffic is not subject to reciprocal compensation. Given that conclusion, BellSouth urges that there is no basis for requiring a compensation mechanism for ISP-bound traffic in an arbitration conducted pursuant to 47 U.S.C. §252 since that section of the Act only gives state commissions jurisdiction over areas within the scope of 47 U.S.C. §251. Varner, Tr. p. 397.

BellSouth further argues that while the FCC's *ISP Declaratory Ruling* appears to give states authority to create an interim compensation mechanism pending adoption of a federal rule governing that subject, the interim authority granted states by the FCC is being challenged in court. If this challenge is successful, BellSouth contends that the Commission could find that it does not have even interim authority to implement a compensation mechanism for ISP traffic. BellSouth accordingly urges that it would be a wasted effort for the Commission to undertake the establishment of an interim compensation mechanism for ISP traffic under such circumstances. Even if the Commission's interim authority to impose an interim ISP compensation mechanism withstands challenge, BellSouth points out that it will only be valid until the FCC adopts a federal rule.

BellSouth further argues that the Commission should not require reciprocal compensation for ISP-bound traffic under any circumstances because ISP-bound traffic is interstate "access" traffic which is not subject to reciprocal compensation. BellSouth accordingly contends that a portion of the rates that ISPs pay ICG for their monthly business service should be shared with BellSouth as "access" revenues. Varner Tr. p. 421-422.

If, in spite of the aforementioned arguments, the Commission determines that it has jurisdiction to implement an interim inter-carrier compensation mechanism and that such a mechanism is warranted for ISP-bound traffic, BellSouth urges the implementation of the mechanism proposed by BellSouth witness Varner. Tr. pp. 395-396. The mechanism proposed by Mr. Varner would require the parties to track ISP-bound calls originating on their respective networks on a going-forward basis and to abide by any final and non-appealable FCC ruling on the issue of inter-carrier compensation for ISP calls. Any inter-carrier compensation mechanism established by the FCC would apply retroactively from the date of the interconnection agreement entered between ICG and BellSouth. The parties would be required to "true up" any compensation due for ISP-bound calls based on the FCC's final, non-appealable ruling.

The Arbitration Panel's Discussion of Issue No. 1

The fact that both ICG and BellSouth devoted the major portion of their respective post-Arbitration hearing briefs to a discussion of the treatment of ISP-bound traffic is demonstrative of the critical importance of this issue to each party. The issue is also of critical importance to the Commission given its potential impact on the development of competition in this state. The decision reached on

ISP-bound traffic in this proceeding will have a broad impact on the issue in Alabama generally because this case will establish precedence concerning future treatment of ISP-bound traffic.

Our analysis concerning this issue logically begins with an assessment of our jurisdictional authority concerning compensation for ISP-bound traffic in light of the FCC's February 26, 1999 *ISP Declaratory Ruling*. BellSouth is correct in pointing out that the FCC, in that ruling, concluded that ISP-Bound traffic is jurisdictionally mixed and appears to be largely interstate. BellSouth is also correct in noting that the FCC concluded that since ISP traffic is jurisdictionally non-local interstate traffic, the reciprocal compensation obligations of 47 U.S.C. §251(b)(5) do not cover inter-carrier compensation for ISP-bound traffic. From that, however, BellSouth improperly concludes that state commissions do not have authority to address reciprocal compensation for ISP-bound calls in 47 U.S.C. §252 arbitration proceedings since that section of the Act only gives state Commissions jurisdiction over areas within the scope of 47 U.S.C. §251. What BellSouth casually and improperly discounts is the fact that the FCC specifically recognized the authority of state Commissions under 47 U.S.C. §252 to determine inter-carrier compensation for ISP-bound traffic and to impose reciprocal compensation obligations in arbitration proceedings in the absence of a federal rule to the contrary.

By way of background, the FCC specifically recognized in its *ISP Declaratory Ruling* that while ISP-bound traffic is jurisdictionally interstate, the FCC will continue, as it has in the past, to discharge its interstate regulatory obligations regarding ISP-bound traffic by treating that traffic as though it is local. The FCC also specifically recognized that in light of its continued policy of exempting ISP-bound traffic from the imposition of access charges, it has created something of an inter-carrier compensation void for ISP-bound traffic by finding in the *ISP Declaratory Ruling* that such traffic is largely interstate and, therefore, not subject to the reciprocal compensation obligations of 47 U.S.C. §251(b)(5). Given that void, the FCC recognized that the establishment of a rule governing inter-carrier compensation for ISP-bound traffic would serve the public interest. The FCC concluded, however, that the record it had before it in the *ISP Declaratory Ruling* proceeding was insufficient for the adoption of such a rule. The FCC accordingly issued a Notice of Proposed Rulemaking concerning the promulgation of such an inter-carrier compensation rule for ISP-bound traffic.

For purposes of this arbitration, it is important to note that the FCC specifically held that prior to the establishment of a federal rule governing inter-carrier compensation for ISP-bound traffic, state Commission's could determine in arbitration proceedings that reciprocal compensation should be paid for ISP-bound traffic. In arriving at that conclusion in its *ISP Declaratory Ruling*, the FCC reasoned that:

> "Section 252 imposes upon state commissions the statutory duty to approve voluntarily-negotiated interconnection agreements and to arbitrate interconnection disputes. As we observed in the *Local Competition Order*, state commission authority over interconnection agreements pursuant to §252 "extends to both interstate and intrastate matters." Thus, the mere fact that ISP-bound traffic is largely interstate does not necessarily remove it from the Section 251/252 negotiation and arbitration process. However, any such arbitration must be consistent with governing federal law. While to date the Commission has not adopted a specific rule governing the matter, we note that our policy of treating ISP-bound traffic as local for purposes of interstate access charges would, if applied in the separate context of reciprocal compensation, suggest that such compensation is due for that traffic." *Id. at & 25.*

* * *

> "As we stated previously, the Commission currently has no rule addressing the specific issue of inter-carrier compensation for ISP-bound traffic. In the absence of a federal rule, state Commission's that have had to fulfill their statutory obligation under §252 to resolve interconnection disputes between incumbent LECs and CLECs have had no choice but to establish an inter-carrier compensation mechanism and to decide whether and under what circumstances to require the payment of reciprocal compensation. Although reciprocal compensation is mandated under section 251(b)(5) only for the transport and termination of local traffic, neither the statute nor our rules prohibit a state Commission from concluding in an arbitration that reciprocal compensation is appropriate in certain instances not addressed by section 251(b)(5), so long as there is no conflict with governing federal law. A state commission's decision to impose reciprocal compensation obligations in an arbitration proceeding--or a subsequent state Commission decision that those obligations encompass ISP-bound traffic--does not conflict with any Commission rule regarding ISP-bound traffic." *Id. at & 26.*

We note that this Commission has previously had occasion to consider the FCC's *ISP Declaratory Ruling* and its impact on the Commission's jurisdiction concerning ISP-bound traffic. In an Order entered on March 4, 1999 in Docket 26619, the Commission held that it had jurisdiction to determine the reciprocal compensation obligations of the parties to the agreements under review in that proceeding concerning ISP-bound traffic. The Commission further found that the exercise of that jurisdiction was totally consistent with the FCC's *ISP Declaratory Ruling.* Similarly, in an Order on Reconsideration entered in that same proceeding on June 21, 1999, the Commission specifically noted the FCC's recognition at & 24 and & 26 of its *ISP Declaratory Ruling*

that state Commission's have wide latitude to decide the issue of payment for ISP-bound traffic pursuant to existing interconnection agreements or through arbitrations.

We also note that some 16 other state commissions have addressed the issue of whether reciprocal compensation should apply to ISP-bound traffic since the FCC issued its *ISP Delcaratory Ruling.* Of those 16 state commission's that have rendered decisions on the merits of the applicability of reciprocal compensation to ISP-bound traffic, 15 have upheld the application of reciprocal compensation to such traffic. Three additional states have decided to withhold the issuance of a final ruling concerning inter-carrier compensation for ISP-bound traffic until the FCC further addresses the issue. To date, only one state has expressly declined to require reciprocal compensation for ISP-bound traffic.

In addition to the aforementioned state commission's, all four of the federal courts that have issued decisions addressing appeals of state commission decisions requiring reciprocal compensation for ISP-bound traffic after the release of the FCC's *ISP Declaratory Ruling* have upheld the determinations of the applicable state commissions. The four courts include the United States Court of Appeals for the Seventh Circuit and three district courts. including the Federal District Court for the Middle District of Alabama.

The opinion of the Seventh Circuit upholding a decision of the Illinois Commerce Commission which required the payment of reciprocal compensation for ISP-bound traffic pursuant to existing

interconnection agreements is particularly enlightening. Specifically, the Seventh Circuit Court stated that "[The] FCC could not have made clearer its willingness--at least until the time a [FCC] rule is promulgated--to let state Commissions make the call. We see no violation of the Act in giving such deference to state Commissions; in fact the Act specifically provides state Commissions with an important role to play in the field of interconnection agreements".

Although the Seventh Circuit's opinion in *Illinois Bell* involved the review of an Illinois Commerce Commission decision interpreting existing interconnection agreements, we see little or no distinction in the applicability of the Seventh Circuit's reasoning to post-*ISP Declaratory Ruling* arbitration proceedings conducted pursuant to 47 U.S.C. §252. It is apparent that the FCC envisioned state action concerning the applicability of inter-carrier compensation for ISP-bound traffic in such arbitrations pending the promulgation of a federal rule and even thereafter. In fact, the FCC specifically noted at & 30 of the *ISP Declaratory Ruling* the following:

> "We tentatively conclude that, as a matter of federal policy, the inter-carrier compensation for this interstate telecommunications traffic should be governed prospectively by interconnection agreements negotiated and arbitrated under sections 251 and 252 of the Act. Resolution of failures to reach agreement on inter-carrier compensation for interstate ISP-bound traffic then would occur through arbitrations conducted by state Commissions, which are appealable to federal district courts." *Id.*

Having determined that the Commission has the appropriate jurisdiction to address the issue of inter-carrier compensation of ISP-bound traffic and to in fact require that such compensation be paid in the form of reciprocal compensation, our analysis now turns to an assessment of whether it is prudent to exercise that jurisdiction at this juncture. BellSouth urges that since the FCC'S *ISP Declaratory Ruling* is currently subject to a court challenge, states could find that they do not have the authority to create even an interim compensation arrangement. BellSouth further asserts that even if the states do have the authority, such authority is valid only until the FCC completes its rulemaking on the subject. Therefore, any effort devoted by this Commission to establishing interim compensation arrangements for ISP-bound traffic would likely be wasted effort. Varner, Tr. p. 394. For the reasons set forth in more detail below, we reject BellSouth's arguments in favor of inaction.

It is apparent from our analysis thus far that the FCC envisioned and, in fact encouraged, continued state action concerning the determination of inter-carrier compensation for ISP-bound traffic. The mere fact that the FCC's *ISP Declaratory Ruling* is currently subject to a legal challenge does not in and of itself render the determinations of the FCC in that ruling void. To be sure, the determinations made by the FCC in the *ISP Declaratory Ruling* represent controlling federal law on the issue until such time as a court of competent jurisdiction determines otherwise. The Commission, therefore, has a duty and responsibility to exercise the authority it currently has, at least until such time as a federal rule is implemented.

One of the major factors which dictates immediate action on the issue of inter-carrier compensation for ISP-bound traffic is the fact that the FCC has indicated that any federal rule governing that issue which is ultimately promulgated in the future, will have prospective application only. It accordingly appears that if the Commission does not take action to require compensation for calls to ISPs, ICG will never be compensated for the calls it delivers to ISPs during the interim period between the approval of an interconnection agreement between ICG and BellSouth and the time the FCC adopts a federal rule governing that subject. Schonhaut, Tr. p. 311. This problem will only be exacerbated if

the FCC does not act quickly to implement a federal inter-carrier compensation rule governing ISP-bound traffic. As noted by ICG witness Schonhaut, it took the FCC almost 2 years (20 months) to respond to the June, 1997 request for clarification that led to the issuance of its *ISP Declaratory Ruling* in February of 1999. *Id.*

In light of the concerns set forth immediately above, we do not find merit in BellSouth's fall-back proposition that the parties simply track ISP-bound traffic until such time as the FCC promulgates its federal rule and apply any compensation mechanism adopted by the FCC retroactively. As discussed in more detail below, it is undeniable that ICG will incur costs in terminating traffic to its ISP customers which originates from BellSouth customers. It would be entirely inconsistent with the competitive principles underlying the Act not to provide ICG with some mechanism to recover those costs as they are incurred. The immediate need for such a mechanism is only heightened given the delay which may well transpire before a federal rule is finally promulgated by the FCC for prospective application. The Commission's failure to implement such a mechanism in the interconnection agreement between ICG and BellSouth at this juncture would likely preclude ICG from competing for ISP customers and ultimately from competing for other types of customers as well. Starkey, Tr. pp. 53-54.

Having arrived at the conclusion that the Commission has the jurisdiction to establish inter-carrier compensation for ISP-bound traffic (including reciprocal compensation) and that said jurisdiction should be exercised in this arbitration proceeding, the question now becomes what type of inter-carrier compensation is most appropriate for ISP-bound traffic. Our analysis of that inquiry turns or further consideration of the FCC's *ISP Declaratory Ruing* and the concept of cost recovery. More particularly, our analysis centers on a determination of the costs ICG incurs in terminating traffic that is originated on BellSouth's network and terminates to ISP end user customers of ICG, as well as the recovery of those costs.

ICG asserts that the costs it incurs in delivering a call bound for an ISP customer do not differ from those generated by calls bound for other types of ICG customers. In fact, ICG argues that ISP-bound calls are functionally identical to local voice calls which are subject to reciprocal compensation. According to ICG witness, Starkey, a "ten minute call originated on the BellSouth network and directed to the ICG network travels exactly the same path, requires the use of exactly the same facilities and generates exactly the same level of costs regardless of whether that call is dialed to an ICG local residential customer or to an ISP provider. Tr. p. 56. ICG asserts that it is, therefore, irrelevant that once the call reaches the ISP it continues on to its ultimate destination of an Internet web site.

While ICG incurs no costs for the component of the call not on its network, it is the portion of the call that is carried on ICG's facilities that is relevant. According to ICG, that segment of the call is identical to any local call in terms of how ICG's network is used. ICG, therefore, asserts that there is no basis for treating ISP-bound calls differently than calls to any other local exchange customer when the costs to deliver the calls made to the residential customer and the ISP customer are identical. ICG asserts that if the Commission does not require reciprocal compensation for ISP-bound calls, ICG will not receive any compensation for calls to ISPs and will be unable to recover its costs of delivering calls to ISP customers on behalf of end users served by BellSouth. Schonhaut, Tr. p. 307.

ICG further argues that reciprocal compensation for ISP-bound traffic is economically efficient and should be required in this arbitration. More particularly, ICG asserts that reciprocal compensation is cost based and imposes the costs of delivering traffic on the cost causer--the carrier whose subscriber

initiates the call. ICG, therefore, maintains that in an efficiently functioning market, BellSouth should be economically indifferent as to whether it incurs the cost to deliver an ISP-bound call on its own network or whether it incurs that cost through a reciprocal compensation rate paid to ICG.

In support of its economic indifference theory, ICG argues that calls which originate on the BellSouth network and are delivered to a BellSouth-served ISP, and calls that are originate on the BellSouth network and terminate to ICG-served ISPs travel very similar paths. According to ICG, the only difference will be that when the ISP is an ICG customer, ICG performs the switching function to deliver the call to the ISP. In such a scenario, BellSouth avoids the switching costs and ICG incurs them. ICG asserts that if BellSouth has accurately established its terminating reciprocal compensation rate based on its own costs of delivering the call, BellSouth should be economically indifferent to whether a call that originates on its network is delivered to a BellSouth customer or to an ICG customer. In the first instance, BellSouth will incur the

cost of delivering the call via its own switch. In the second, BellSouth will incur that cost via a cost-based rate paid to ICG for delivering the call. Starkey, Tr. pp. 59-60.

In addition to the legal arguments previously discussed, BellSouth counters the ICG arguments in favor of reciprocal compensation as an appropriate inter-carrier compensation mechanism with a strained claim that the Commission should not require reciprocal compensation for ISP-bound traffic because such traffic is interstate "access" traffic for which reciprocal compensation does not apply. Varner, Tr. p. 401.

The premise of BellSouth's "access" traffic argument is that ISP-bound traffic should be treated as "access" traffic for which the revenues generated must be shared between the local exchange carriers involved in originating and terminating the traffic. Under BellSouth's proposal, the LEC serving-and therefore billing-the ISP would treat the ISP's payments for business services purchased out of the serving carriers local exchange tariff as "access" revenue and share it with the other carrier. Varner, Tr. pp. 421-422.

In evaluating the appropriateness of requiring reciprocal compensation as the appropriate inter-carrier compensation mechanism for ISP-bound traffic in this proceeding, we find BellSouth "access" traffic arguments to be misplaced and totally contrary to prevailing regulatory mandates. The FCC has repeatedly emphasized that it has since 1983 treated ISP-bound traffic as though it were local and continues to do so. The FCC's *ISP Declaratory Ruling* is in fact replete with references to this continued practice:

> "Although the Commission has recognized that enhanced service providers (ESPs), including ISPs. use interstate access services, since 1983 it has exempted ESPs from the payment of certain interstate access charges. Pursuant to this exemption, ESPs are treated as end users for purposes of assessing access charges, and the Commission permits ESPs to purchase their links to the public switched telephone network (PSTN) through intrastate business tariffs rather than through interstate access tariffs. Thus, ESPs generally pay local business rates and interstate subscriber line charges for their switched access connections to the local exchange company's central offices. In addition, incumbent LEC expenses and revenues associated with ISP-bound traffic traditionally have been characterized as intrastate for separations purposes. ESPs also pay the special access surcharge when purchasing special access lines under the same conditions as those applicable

to end users. In the *Access Charge Reform Order* the Commission decided to maintain the existing price and structure pursuant to which ESPs are treated as end users for the purpose of applying access charges. Thus the Commission continues to discharge its interstate regulatory obligations by treating ISP-bound traffic as though it were local." *Id.* at & 5.

* * *

"As explained above, under the ESP exemption LECs may not impose access charges on ISPs; therefore, there are no access revenues for interconnecting carriers to share. Moreover the Commission has directed states to treat ISP traffic as if it were local by permitting ISPs to purchase their PSTN links through local business tariffs." *Id.* at & 9.

* * *

"Our determination that at least a substantial portion of dial-up ISP-bound traffic is interstate does not, however, alter the current ESP exemption. ESPs, including ISPs, continue to be entitled to purchase their PSTN links through intrastate (local) tariffs rather than through interstate access tariffs." *Id.* at & 20.

* * *

"The Commission's treatment of ESP traffic dates from 1983 when the Commission first adopted a different access regime for ESPs. Since then, the Commission has maintained the ESP exemption pursuant to which it treats ESPs as end users under the access charge regime and permits them to purchase their links to the PSTN through intrastate local business tariffs rather than through interstate access tariffs. As such, the Commission discharged its interstate regulatory obligations through the application of local business tariffs. Thus, although recognizing that it was interstate access, the Commission has treated ISP-bound traffic as though it were local. In addition, incumbent LECs have characterized expenses and revenues associated with ISP-bound traffic as intrastate for separations purposes." *Id.* at & 23.

It is abundantly clear from the above references that ISPs purchase monthly local exchange service much like any other local exchange customer. As local exchange customers, ISPs do not pay access charges and neither ICG nor BellSouth can force ISPs to pay switched access charges for access to their networks. Thus, there are no access revenues for interconnecting carriers to share. Clearly, ISP-bound traffic is not subject to an access charge regulatory framework but rather is treated as local exchange traffic for regulatory purposes.

Having rejected BellSouth's "access" traffic arguments, we find merit in ICG's arguments regarding the similarities between local exchange traffic and ISP-bound traffic. In fact, we are persuaded that calls over local exchange carrier (LEC) facilities to ISPs appear functionally equivalent to local voice calls which are subject to reciprocal compensation. Since the same network facilities and functions are utilized to complete both types of calls, it is axiomatic that the costs to deliver them are identical. We find that those identical costs dictate that the rates associated with recovering those costs should also be identical. We accordingly find that reciprocal compensation should apply to ISP-bound traffic

just as it does to local voice traffic.

We are also persuaded that reciprocal compensation is economically efficient because it is cost based and imposes the cost of delivering traffic on the carrier whose subscriber causes the cost by initiating the call. We further believe that reciprocal compensation based on the elemental rates of transport, end office, and tandem switching adopted on August 25, 1998 in our *UNE Pricing Docket* and equaling $.00351 per minute is the most reasonable and appropriate interim inter-carrier compensation mechanism we can require. The adoption of such a rate ensures that BellSouth will incur the same costs as it would if the calls in question were delivered to a BellSouth-served ISP.

We further believe that adopting a TELRIC-based compensation mechanism is more likely to be consistent with the federal rule which will ultimately be adopted by the FCC. Such a mechanism certainly appears to be consistent with the FCC's traditional treatment of ISP-bound traffic and ISPs generally. It further appears that such an interim mechanism is consistent with the provisions of the FCC's *ISP Declaratory Ruling* as set forth above. Perhaps most importantly, however, the interim inter-carrier compensation mechanism required herein appears to be the most reasonable means of ensuring that ISP-bound traffic does not become a class of traffic for which there is no mechanism of cost recovery.

The Conclusion of the Arbitration Panel as to Issue No. 1

Based on the foregoing discussion, the Arbitration Panel concluded that, pending the adoption of a federal rule by the FCC, dial-up calls to ISPs should be subject to reciprocal compensation. The Panel further found that the reciprocal compensation rate for such traffic should be based on the elemental rates of transport, end office and tandem switching adopted in the Commission's *UNE Pricing Docket Docket* and equaling $.00351 per minute. The Arbitration Panel specifically rejected the BellSouth position that the parties track ISP traffic pending the establishment of a federal rule and retroactively apply any mechanism ultimately adopted by the FCC to such traffic.

The Findings and Conclusions of the Commission as to Issue No. 1

We concur with the Arbitration Panel's conclusion that pending the adoption of a federal rule by the FCC, dial-up calls to ISPs should be subject to reciprocal compensation. We further concur with the reasoning relied upon by the Arbitration Panel in reaching that recommendation. It is, however, the belief of the Commission that the public interest would be best served by requiring that the interim inter-carrier compensation required herein be subject to retroactive "true-up" once the FCC issues its final federal rule governing inter-carrier compensation for ISP-bound calls and said rule becomes effective. More specifically, we adopt the recommendation of the Advisory Division that the compensation herein ordered for ISP-bound traffic be retroactively "trued-up" to the level of inter-carrier compensation ultimately adopted by the FCC.

In order to prepare for the eventuality of a "true-up" of the interim inter-carrier compensation ordered herein for ISP-bound traffic, we hereby instruct the parties to track all ISP-bound calls and their duration effective immediately upon the approval and implementation of the interconnection agreement which will result from this Arbitration. Once the FCC issues its anticipated federal rule governing inter-carrier compensation for ISP-bound traffic and said rule becomes effective, that rule will prospectively govern the compensation to be paid by the parties to this proceeding for ISP-bound traffic. Similarly, the compensation ordered to be paid in this proceeding for ISP-bound traffic will be retroactively "trued-up" to the FCC mechanism from the effective date of the interconnection

agreement that results from this Arbitration. If through that retroactive "true-up" process any funds are found to be owing by one party to the other, the party owing such funds shall submit them to the opposite party within thirty (30) days of the completion of the "true-up" process.

IT IS SO ORDERED BY THE COMMISSION.

ISSUE NO. 2: FOR PURPOSES OF RECIPROCAL COMPENSATION SHOULD ICG BE COMPENSATED FOR END OFFICE, TANDEM AND TRANSPORT ELEMENTS OF TERMINATION WHERE ICG's SWITCH SERVES A GEOGRAPHIC AREA COMPARABLE TO THE AREA SERVED BY BELLSOUTH's TANDEM SWITCH (PETITION ISSUE 7).

The ICG Position

According to ICG, FCC Rule 51.711 requires that where the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent local exchange carrier ("ILEC"), the appropriate rate for the interconnecting carrier's additional cost is the incumbent's tandem interconnection rate. To be eligible for this rate, the FCC requires only that the interconnecting carrier's switch serve the same geographical area as the incumbent's switch. ICG asserts that the record indicates that this is the case for ICG's switch in Alabama. Starkey, Tr. pp. 72, 102 Moreover, ICG maintains that its switch performs the same functionality as the BellSouth tandem switch. In fact, ICG contends that its Lucent 5ESS switching platform meets the definition and performs the same functions identified in the Local Exchange Routing Guide ("LERG") for a tandem office and for a Class 4/5 switch.

The BellSouth Position

BellSouth's position regarding this issue is that if a call is not handled by a switch on tandem basis, it is not appropriate to pay reciprocal compensation for the tandem switching function. BellSouth accordingly maintains that it will pay the tandem

interconnection rate if ICG's switch is identified in the LERG as a tandem. Varner, Tr. p. 413.

A tandem switch connects trunks and is an intermediate connection between an originating telephone call location and the final destination of the call. If ICG's switch is an end office switch, it is handling calls that originate or terminate to customers served by that local switch and is not a tandem switch. According to BellSouth, ICG is thus seeking compensation for equipment it does not own and functionality it does not provide.

BellSouth also asserts that the evidence in the record does not support ICG's position that it provides the transport elements. BellSouth maintains that the Act does not contemplate that the compensation for transporting and terminating local traffic should be symmetrical when one party does not actually provide the network facility for which it seeks compensation. BellSouth accordingly urges the Commission to deny ICG's request for tandem switching compensation when tandem switching is not performed.

The Arbitration Panel's Discussion of Issue No. 2

The FCC's Rule 51.711 expressly states that where the interconnecting carrier's switch serves a

geographic area comparable to that served by the ILEC's tandem switch, the appropriate interconnection rate for the interconnecting carrier is the tandem interconnection rate. We find nothing in the record to controvert ICG's claim that its switch is geographically comparable to BellSouth's tandem switch. BellSouth does not in fact argue the issue of geographic comparability, but instead argues distinctions in functional equivalency which are not requirements of the aforementioned FCC Rule. Varner, Tr. pp. 413-415. Even if FCC Rule 51.711 is read to include functional equivalency requirements as BellSouth seems to suggest, we find that ICG has demonstrated the requisite functional equivalency by introducing evidence

that its Lucent 5ESS switch meets the definition of a tandem switch in the Local Exchange Routing Guide. Starkey, Tr. pp. 105-108.

The Conclusion of the Arbitration Panel as to Issue No. 2

Based on the foregoing discussion, the Arbitration Panel concluded that ICG's switch serves an area geographically comparable to that served by BellSouth's tandem switch and provides functionality comparable to that provided by BellSouth's tandem switch. The Arbitration Panel therefore concluded that ICG is entitled to reciprocal compensation at the tandem interconnection rate which is comprised of (1) tandem switching; (2) transport between the BellSouth tandem and its end office switches and (3) end office switching. The established TELRIC-based rates for these elements equals $.00351 per minute pursuant to the Commission's *UNE Pricing Docket.*

The Findings and Conclusions of the Commission as to Issue No. 2

The Commission concurs with the findings and conclusions of the Arbitration Panel concerning this issue. We accordingly adopt the findings and conclusions of the Arbitration Panel in that regard as our own.

IT IS SO ORDERED BY THE COMMISSION.

ISSUE NO. 3: SHOULD BELLSOUTH BE REQUIRED TO COMMIT TO PROVISIONING THE REQUISITE NETWORK BUILDOUT AND NECESSARY SUPPORT WHEN ICG AGREES TO ENTER INTO A BINDING FORECAST OF ITS TRAFFIC REQUIREMENTS IN A SPECIFIED PERIOD (PETITION ISSUE 11).

The ICG Position

ICG points out that it relies on BellSouth end office trunks to deliver traffic to ICG's switch. These trunks are usually BellSouth's responsibility to provision and administer. ICG provides BellSouth with quarterly traffic forecasts to assist BellSouth in planning for facilities to handle traffic between their networks. BellSouth is under no obligation to add more end office trunks even though ICG's forecasts may indicate that additional trunking is necessary. Jenkins, Tr. pp. 235-236. ICG wants the option of requiring BellSouth to provision additional end office trunks dictated by ICG's forecast. In exchange, ICG will agree to pay BellSouth for any trunks which are not fully utilized as indicated by the forecast. i.e., a take or pay agreement.

ICG maintains that under its proposal, BellSouth will not assume any risk for additional trunks that are underutilized. ICG in fact asserts that it will assume all of the risk. If this provision is ordered by the Arbitration Panel, ICG expects to use it sparingly.

ICG asserts that BellSouth has agreed to a binding forecast mechanism on at least two prior occasions in Alabama. ICG further maintains that BellSouth's revised Statement of Generally Available Terms and Conditions ("SGAT") filed with the Commission in September 1998 contains a binding forecast provision which largely mirrors the arrangement ICG requests. Also, in the interconnection agreement between BellSouth and KMC Telecom II, BellSouth agreed to a binding forecast provision similar to that requested by ICG.

The BellSouth Position

BellSouth asserts that although it is continuing to analyze the possibility of providing binding forecasts and has not foreclosed the idea, BellSouth can not be ordered to agree to binding forecasts because there is no requirement that it do so pursuant to 47 U.S.C. §251. Varner, Tr. p. 416. BellSouth accordingly argues that pursuant to 47 U.S.C. §252(c), binding forecasts are not properly subject to arbitration. According to BellSouth, the binding forecast provision of BellSouth's September 1998 SGAT provides that neither party is required to enter into a binding forecast.

The Arbitration Panel's Discussion of Issue No. 3

The threshold question regarding this issue is whether the Commission has jurisdiction to require a binding forecast provision in a 47 U.S.C. §252 arbitration as requested by ICG. BellSouth is correct in pointing out that there is not a specific provision of 47 U.S.C. §251 which requires ILECs to enter binding forecasts. The relevant inquiry, however, is not whether there is any direct reference to binding forecast in 47 U.S.C. §251, but whether requiring binding forecasts is consistent with

the general interconnection obligations of ILECs as set forth in that section of the Act. As noted below, we believe the answer to that inquiry is yes.

Pursuant to 47 U.S.C. §251(c)(2)(C), incumbent LECs are required to provide interconnection with requesting carriers that is at least equal in quality to that provided by the local exchange carrier to itself. ICG's binding forecast proposal clearly relates to interconnection and is designed to ensure that such interconnection is provided to ICG on a non-discriminatory basis. ICG's proposal, therefore, falls well within the parameters of 47 U.S.C. §251 and the Commission's authority pursuant to that section.

We note that BellSouth normally has the financial responsibility for the facilities which ICG seeks to make subject to binding forecasts. Under the proposal put forth by ICG, however, ICG will be required to pick up all or part of the cost for those facilities by either (1) paying BellSouth one-twelfth of the tariffed price for the forecasted plant, as a binding forecast fee, if the binding forecast trunks are used; or (2) paying BellSouth one-hundred-percent of the tariffed price for the forecasted plant if the trunks are not used. Jenkins, Tr. pp. 234-236. Clearly, ICG's proposal protects BellSouth from assuming unreasonable or unnecessary risk. We accordingly find that ICG's proposal is a just and reasonable basis for the parties to negotiate the details of a binding forecast arrangement.

The Conclusion of the Arbitration Panel as to Issue No. 3

Based on the foregoing, the Arbitration Panel concluded that it, and therefore the Commission, had jurisdiction under the provisions of 47 U.S.C. §§251 and 252 to require BellSouth to include a binding forecast provision in its interconnection agreement with ICG. The Arbitration Panel

accordingly found that BellSouth should be required to include in its interconnection agreement with ICG a provision which requires the parties to negotiate in good faith the specific terms and conditions of binding forecasts.

The Findings and Conclusions of the Commission as to Issue No. 3

The Commission concurs with the findings and conclusions of the Arbitration Panel concerning this issue. We accordingly adopt the findings and conclusions of the Arbitration Panel in that regard as our own.

IT IS SO ORDERED BY THE COMMISSION.

ISSUE NO. 4: SHOULD BELLSOUTH BE REQUIRED TO PROVIDE THE "ENHANCED EXTENDED LINK" (EEL) AS A UNE COMBINATION (PETITION ISSUE 4).

The ICG Position

ICG asserts that the provisioning of EELs as UNEs at the DS-0 and DS-1 level will act to extend the range of ICG's ability to serve customers, thus permitting ICG to bring the benefits of competition to a much broader base of Alabama businesses and customers than ICG is currently able to serve. ICG asserts that the FCC's Rule 51.315(b) makes clear that if BellSouth currently combines loop and transport, BellSouth must make loop and transport available as a UNE combination at UNE prices.

ICG asserts that the FCC's September 15, 1999 *News Release*, issued in FCC Docket 99-238, makes clear that the Commission has the authority to require BellSouth to combine the loop and transport UNEs comprising the EEL under 47 U.S.C. §251. Even to the extent that the EEL is not an existing combination within BellSouth's network, ICG asserts that the Commission should require BellSouth to make the EEL available to ICG and other competitors. ICG maintains that the Commission has the authority under 47 U.S.C. §251 (c)(3) of the Act to order such UNE combinations. ICG urges the Commission to use its authority to require BellSouth to provide EELs. ICG maintains that the EEL is an efficient mechanism for bringing the benefits of competition to Alabama because it will allow ICG and other CLECs to serve customers without having to be collocated in a particular customer's serving central office.

ICG also argues that the EEL should be offered at the TELRIC-based UNE prices established by the Commission. According to ICG, the total price charged by BellSouth for the EEL should be the sum of (1) the TELRIC rate for an unbundled loop; (2) the TELRIC rate for a cross-connect of appropriate capacity; and (3) the TELRIC rate for unbundled interoffice dedicated transport. BellSouth should not be permitted to impose any charge for combining the individual elements.

ICG contends that the Commission has already awarded the EEL to ITC^DeltaCom Communications, Inc. in its interconnection agreement with BellSouth. ICG requires the same service in order to compete.

The BellSouth Position

BellSouth argues that the EEL is nothing more than a combination of three separate UNE's which replicates private line and/or special access services. Varner, Tr. p. 393. BellSouth further argues that at the time of the August 11, 1999 hearing, there was no FCC rule requiring BellSouth to provide

such a UNE combination and that BellSouth should not, therefore, be ordered to provide such a combination of UNEs in this proceeding. Varner, Tr. p. 376.

Absent an FCC order, however, BellSouth will, on a voluntary basis, provide EELs through "Professional Services Agreements." BellSouth asserts that since those offers are separate and apart from any obligations under 47 U.S.C. §§251 and 252, there is no requirement that the EEL be provided at TELRIC rates. Therefore, the EEL is offered at prices approximating retail.

The Arbitration Panel's Discussion of Issue No. 4

The combination of UNEs has been one of the more contentious issues arising from the passage of the Act and the rules originally promulgated by the FCC to implement the requirements of the Act. The rules governing UNE combinations originally promulgated by the FCC in its *Local Competition Order* have their genesis in 47 U.S.C. §251(c)(3) which imposes on incumbent LECs:

> "[T]he duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this Section and §252. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service."

Pursuant to the above provisions, the FCC adopted its Rule 51.315(b) which prohibits incumbent LECs from separating UNEs combined in their networks. The FCC also adopted its Rule 51.315(c)–(f) which requires incumbent LECs to combine previously uncombined elements

The FCC reasoned that the only way to give meaning to the requirement that incumbent LECs "shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements" was to interpret it as compelling the incumbent LECs to do the combining for the benefit of the requesting carriers. The FCC rejected the concept of requiring the requesting carrier to do the combining itself as impossible because it found that "new entrants lacked the facilities and information about the incumbent's network necessary" to do the combining. The FCC, therefore, reasoned that "we do not believe it is possible that Congress, having created the opportunity to enter the local telephone markets through the use of unbundled elements, intended to undermine that opportunity by imposing technical obligations on requesting carriers that they might not be able to readily meet."

FCC Rules 51.315(b) and 51.315(c)-(f) were subsequently vacated by the United States Court of Appeals for the Eighth Circuit which found that 47 U.S.C. §251(c)(3) could not be read to levy a duty on incumbent LECs to do the actual combining of elements. The Eighth Circuit's decision regarding FCC Rule 51.315(b) was, however, reversed by the United States Supreme Court. In reversing the Eighth Circuit, the Supreme Court held that the FCC's interpretation of §251(c)(3) was "entirely rational, finding its basis in §251(c)(3)'s nondiscrimination requirement." According to the Supreme Court, Rule 51.315(b) was designed to prevent incumbent LECs from imposing "wasteful costs" on requesting carriers and that it was "well within the bounds of the reasonable for the [FCC] to opt in favor of ensuring against an anti-competitive practice."

Although the Supreme Court's ruling clearly validated FCC Rule 51.315(b) and the Eighth Circuit subsequently reinstated that Rule, there remained some uncertainty regarding the impact of the rule due to the Supreme Court's decision to vacate the FCC's Rule 51.319 on the grounds that the FCC had not adequately considered the "necessary" and "impair" standards of 47 U.S.C. §251(d)(2) in establishing its Rule 319 list of UNEs. FCC Rule 51.319 establishes the network elements that must be provided on an unbundled basis and, therefore, cannot be "uncombined" pursuant to Rule 51.315 (b) if they are already combined in the ILEC's network.

In its *News Release* issued on September 15, 1999, the FCC summarized a yet to be released order addressing the reestablishment of the Rule 319 list of UNEs. The FCC specifically noted therein that "[p]ursuant to §51.315(b) of the Commission's Rules, incumbent LECs are required to provide access to combinations of loop, multiplexing/concentrating equipment and dedicated transport" – the components of the EEL- if they are currently combined."

Based on the foregoing, the Commission can and should require BellSouth to provision the EEL at the DS-O and DS-1 levels where it currently combines those loops with transport within its network. Reinstated FCC Rule 51.315(b) mandates such a result given the FCC's specific statements concerning the EEL in its efforts to reinstate the Rule 51.319 list of UNEs. Such a result is entirely consistent with controlling law and the principles of efficient competition.

Even though the FCC's Rule 51.315(c)-(f) requiring ILECs to combine previously uncombined elements remains vacated at present, we nonetheless find that BellSouth must, for a reasonable cost-based fee, combine the UNEs comprising the EEL for ICG in situations where those elements currently are not combined in the BellSouth network. We find support for this proposition not only from the Supreme Court's discussion of the FCC's reasoning which undergirded the reinstatement of FCC Rule 51.315(b) in *AT&T Corp.*, but also from the Act generally at 47 U.S.C. §252.

In reinstating FCC Rule 51.315(b), the Supreme Court placed great emphasis on the FCC's reliance on 47 U.S.C. §251(c)(3) and the FCC's pro-competitive logic in general. Had FCC Rule 51.315(c)-(f) been before the Supreme Court in *AT&T Corp.*, we are quite sure that the Supreme Court's logic in reinstating FCC Rule 51.315(b) would have clearly dictated reinstatement of Rule 51.315(c)-(f). Such a result would be logical because the same nondiscrimination requirement that undergirds Rule 51.315(b)'s requirement that combined elements not be separated also underlies the requirement that the incumbent LECs must combine elements for requesting carriers which is codified in FCC Rule 51.315 (c)-(f). Thus, in light of the Supreme Court's decision in *AT&T Corp.*, there is ample authority for the proposition that under 47 U.S.C. §251(c)(3), incumbent LECs can be required to combine UNEs for requesting carriers.

Regardless of the current status of FCC Rule 51.315(c)-(f), the Commission has independent authority pursuant to 47 U.S.C. §252 to order EEL combinations on its own. More particularly, 47 U.S.C. §252(c)(1) states that "[i]n resolving by arbitration ... any open issues and imposing conditions on the parties to the agreement, a state commission shall ... ensure that such resolution and conditions meet the requirements of §251, including the regulations prescribed by the [FCC] pursuant to §251." It is important to note that while the FCC's implementing regulations are included among the factors that state commissions must consider in implementing 47 U.S.C. §251, the Act plainly contemplates that the state's authority under 47 U.S.C. §251 is not restricted to applying the FCC's rules. To the contrary, states are free to act as they see fit to give substance to 47 U.S.C. §251 so long as they are not in conflict with the FCC's rules.

We arrived at the conclusion that the EEL must be provided to ICG by BellSouth even in situations where the elements comprising the EEL are not currently combined in the BellSouth network only after carefully undertaking the "necessary" and "impair" analysis embraced by the Supreme Court in *AT&T Corp.* Among other things, we considered the alternative methods and/or facilities available to ICG for the provisioning of the functions that could be achieved by the EEL in circumstances where the network elements comprising the EEL are not presently combined in the BellSouth network. As part of that analysis, we assessed whether in those circumstances ICG has alternative methods of providing the functionality achieved by the EEL without the imposition of undue financial burden or a degradation of service.

From the foregoing analysis, we determined that the EEL is the only efficient mechanism currently available to ICG for bringing the benefits of competition to Alabama businesses and consumers because it will allow ICG to serve customers without having to be collocated in the BellSouth Central Office serving that particular customer. Widespread availability of the EEL will thus enable ICG to serve, and bring the benefits of competition, to a much broader base of Alabama end users than it is currently able to. The EEL is necessary to provide service, particularly in less dense residential areas where collocation is not feasible. In such instances, the unavailability of the EEL would certainly "impair" ICG's ability to provide service because there is no other source for this access.

Further, if the EEL is made available only in circumstances where the UNEs comprising it are already combined in the BellSouth network, ICG will be forced to incur the unnecessary and duplicative costs associated with collocating in the BellSouth Central Offices where ICG has customers and BellSouth does not currently combine the elements comprising the EEL. Such a scenario is cost prohibitive and requires ICG to unnecessarily duplicate the public switched telephone network through widespread collocation. Holdridge, Tr. p 277 We find such a result unacceptable and counterproductive to the development of competition in this state. We accordingly hold that BellSouth must make the EEL available to ICG even in situations where the elements comprising the EEL are not currently combined in the BellSouth network.

The Conclusion of the Arbitration Panel as to Issue No. 4

Based on the foregoing discussion, the Arbitration Panel found BellSouth's arguments that the EEL should be provided outside the context of the Act and at prices approximating retail services meritless. The Arbitration Panel majority further found that the EEL must be made available to ICG by BellSouth regardless of whether the elements comprising the EEL are currently combined in the BellSouth network. In all cases, the Arbitration Panel found that EEL should be provided by BellSouth at the TELRIC-based UNE prices established by the Commission in the *UNE Pricing Docket*, and at the DS-O and DS-1 levels. Specifically, the Arbitration Panel concluded that the total price charged by BellSouth for the EEL should be precisely the sum of the Commission established TELRIC rates for: (1) an unbundled loop; (2) a cross-connect of appropriate capacity; and (3) unbundled interoffice dedicated transport.

The Arbitration Panel noted that BellSouth should not be permitted to impose any charge for combining the individual elements set forth above where they are already combined in the BellSouth network. However, the Arbitration Panel concluded that BellSouth should be entitled to the impose a reasonable, cost-based fee for combining the elements which comprise the EEL in situations where those elements are not currently combined in the BellSouth network. The Arbitration Panel recommended that the parties be required to submit cost studies establishing such a fee such as soon

as possible, but no later than sixty (60) days following the Order of the Commission adopting the Arbitration Panel's recommendation in that regard. The Arbitration Panel noted that the Commission should act expeditiously on the establishment of such a combination fee or "glue charge." Until the establishment of such a fee by the Commission or an agreement among the parties concerning such a fee, the Arbitration Panel held that BellSouth should not be required to combine the elements comprising the EEL where those elements are not currently combined in the BellSouth network.

The Findings and Conclusions of the Commission as to Issue No. 4

We fully concur with the findings and conclusions of the Arbitration Panel with regard to the provision of the EEL by BellSouth when the elements comprising the EEL are already combined in BellSouth's network. The FCC's long-awaited order regarding UNEs was released on November 5, 1999. As anticipated, the FCC's *UNE Order* prohibits incumbent LECs such as BellSouth from separating loop and transport elements where they are currently combined. We accordingly hold that based on the FCC's *UNE Order* and the reasoning relied on by the Arbitration Panel, BellSouth must provide the EEL to ICG in situations where the elements comprising the EEL are currently combined in the BellSouth network.

The provision of the EEL by BellSouth in situations where it is currently combined in the BellSouth network shall be in accordance with the parameters established by the FCC in its November 5, 1999 *UNE Order*. Further, the EEL shall be provided at the TELRIC-based UNE prices established by the Commission in the *UNE Pricing Docket* and at the DS-0 and DS-1 levels. Specifically, the total price charged by BellSouth for the EEL shall be precisely the sum of the Commission-established TELRIC rates for: (1) an unbundled loop; (2) a cross connect of appropriate capacity; and (3) unbundled interoffice dedicated transport.

With regard to the provision of the EEL in circumstances where the elements comprising it are not already combined in the BellSouth network, the Commission majority, consisting of Commission President Sullivan and Commissioner Cook, does not concur with the findings and conclusions of the Arbitration Panel. To the contrary, the Commission majority adopts the recommendation of the Advisory Division and finds that it would be unwise to require an incumbent LEC such as BellSouth to combine network elements that are not currently combined in its network since that issue is still pending before the Eighth Circuit. BellSouth is not, therefore, required to provide the combination of loop, multiplexing/concentrating equipment, and dedicated transport where those elements are not currently combined in the BellSouth network. However, in the event that the Eighth Circuit subsequently determines that incumbent LECs must indeed combine UNEs, including the loop, multiplexing/concentrating equipment, and dedicated transport where they are not currently combined in the incumbent LEC's network, the Commission majority finds that BellSouth must, from the effective date of such a requirement, combine UNEs for ICG in a manner consistent with any such requirement so implemented.

It should be noted that Commissioner Wallace dissented from the Commission majority and voted to accept the Arbitration Panel majority's recommendation that BellSouth be required to combine the elements comprising the EEL even in instances where those elements are not currently combined in the BellSouth network. Commissioner Wallace does, however, concur with the notion that BellSouth must be required to provide the EEL where it is not currently combined in the BellSouth network in the event that the Eighth Circuit subsequently determines that ILECs such as BellSouth must do so.

IT IS SO ORDERED BY THE COMMISSION.

ISSUE NO. 5: SHOULD VOLUME AND TERM DISCOUNTS BE AVAILABLE FOR UNEs (PETITION ISSUE NO. 6).

The ICG Position

ICG asserts that when it commits to purchase a large volume of UNE's, BellSouth benefits because it is able to use its facilities more efficiently, and its costs per UNE go down. ICG represents that when BellSouth refuses to pass on any of those benefits to ICG, not only does ICG not gain the benefits of economy that is has generated for BellSouth through its volume purchases, it faces a more efficient

BellSouth in the marketplace wherein BellSouth can offer lower prices to its retail customers. Starkey, Tr. p. 120.

ICG further contends that when ICG and BellSouth agree to provision UNEs over long terms, BellSouth benefits through little or no volatility of demand, and therefore, experiences little or no risk. According to ICG the result is that BellSouth can more efficiently utilize its resources and decrease the likelihood of stranded investment. *Id.*

ICG asserts that BellSouth should pass the above described saving and/or economies on to ICG. ICG contends that it is within the authority of the Commission to require BellSouth to do so.

The BellSouth Position

BellSouth argues that neither the Act nor any FCC order or rule requires volume and term discount pricing for UNEs. Varner, Tr. p. 412. BellSouth also maintains that the UNE recurring rates that ICG will pay are cost-based in accordance with the requirements of §252(d) and are derived using least-cost, forward looking technology consistent with the FCC's rules. Furthermore, BellSouth argues that its non-recurring rates already reflect any economies involved when multiple UNEs are ordered and provisioned at the same time. *Id.*

BellSouth additionally contends that the TELRIC-based prices for UNEs set by the Commission already incorporate the savings inherent in volume and term purchases because they are calculated on future plant utilization and network costs, not current utilization and network costs. BellSouth also asserts that its obligations to provide statewide average loop prices precludes its ability to pass through savings associated with volume purchases in a particular locality. BellSouth maintains that the basis upon which ICG seeks volume and term discounts would require the Commission to rethink the pricing methodology adopted in its *UNE Pricing Docket*. According to BellSouth, the cost methodology employed by the Commission in that proceeding is compliant with the provisions of the Act and the rules of the FCC. BellSouth, therefore,

concludes that there is no reason to reconsider the cost methodology employed by the Commission in that proceeding.

The Arbitration Panel's Discussion of Issue No. 5

We conclude that the Commission clearly has jurisdiction to require volume and term discounts for UNEs pursuant to 47 U.S.C. §252. In particular, 47 U.S.C. §252(d)(1) dictates that prices for UNEs shall be established on the basis of cost and in a non-discriminatory manner.

While we concur with the basic premise of ICG's argument that UNE prices must reflect cost savings attributable to UNE volume and term purchases, we note that there are various methods of achieving this result. The Panel finds that the method which will most benefit overall competition in Alabama is to consider any cost savings from increased UNE purchase volumes in establishing overall UNE rates. This is the method that would most ensure that smaller CLECs are not disadvantaged.

We note at this juncture that the Commission previously determined UNE prices generically in its *UNE Pricing Docket*. We, therefore, conclude that arguments concerning cost savings from increased UNE purchase volumes and extended term commitments must be addressed generically in the context of that previously established Docket. We, therefore, recommend that ICG petition the Commission for reconsideration of the previous findings entered in the *UNE Pricing Docket* if it feels that the existing UNE prices do not generically incorporate cost savings resulting from increased UNE purchase volumes and term commitments.

The Conclusion of the Arbitration Panel as to Issue No. 5

Based on the foregoing, the Arbitration Panel concluded that any cost savings resulting from increased UNE purchase volumes and extended term commitments must be addressed generically in the context of the Commission's *UNE Pricing Docket*. The Arbitration Panel, therefore, recommend that ICG Petition the Commission for reconsideration of the previous findings entered in the *UNE Pricing*

Docket if it feels that the UNE prices established therein do not generically incorporate cost savings resulting from increased UNE purchase volumes and term commitments.

The Findings and Conclusions of the Commission as to Issue No. 5

The Commission concurs with the findings and conclusions of the Arbitration Panel concerning this issue. We accordingly adopt the findings and conclusions of the Arbitration Panel in that regard as our own.

IT IS SO ORDERED BY THE COMMISSION.

IT IS FURTHER ORDERED BY THE COMMISSION, That jurisdiction in this cause is hereby retained for the issuance of any further order or orders as may appear to be just and reasonable in the premises.

IT IS FURTHER ORDERED, That this Order shall be efective as of the date hereof.

DONE at Montgomery, Alabama this 10th day of November, 1999.

ALABAMA PUBLIC SERVICE COMMISSION

Jim Sullivan, President

Jan Cook, Commissioner

George C. Wallace, Jr., Commissioner

ATTEST: A True Copy

Walter L. Thomas, Jr., Secretary

Press the Back Arrow to Return to the Search

Return to PSC Home - http://www.psc.state.al.us/index.htm

c. Analysis and Findings Page 53

2. Access to Call-Related Database through Commercial SS7 Provider Page 55

b. Positions of the Parties Page 56

i. MediaOne Page 56

ii. Bell Atlantic Page 56

c. Analysis and Findings Page 57

3. Direct Trunking Threshold Level Page 58

a. Introduction Page 58

b. Positions of the Parties Page 59

i. MediaOne Page 59

ii. Greater Media Page 60

iii. Bell Atlantic Page 61

c. Analysis and Findings Page 62

4. Reciprocal Compensation Applicability Page 64

a. Introduction Page 64

b. Position of the Parties Page 65

i. MediaOne Page 65

ii. Bell Atlantic Page 65

c. Analysis and Findings Page 65

D. Tandem Transit Service Page 66

1. Introduction Page 66

2. Positions of the Parties Page 67

a. MediaOne Page 67

b. Bell Atlantic Page 69

3. Analysis and Finding Page 72

a. Bell Atlantic's obligation to provide tandem transit service Page 72

b. MediaOne's obligation to establish reciprocal local traffic exchange arrangements Page 74

c. Appropriate threshold for direct trunking Page 75

d. Appropriate time period to establish direct trunking Page 77

E. Network Maintenance and Management Standards Page 79

1. Outage Repair Standard Page 79

a. Introduction Page 79

b. Positions of the Parties Page 79

i. MediaOne Page 79

ii. Bell Atlantic Page 80

c. Analysis and Findings Page 80

F. Joint Network Configuration and Management Standards Page 81

1. Scope of the Joint Grooming Process Page 81

a. Introduction Page 81

b. Positions of the Parties Page 82

i. MediaOne Page 82

ii. Bell Atlantic Page 82

c. Analysis and Findings Page 83

2. Forecasting Requirements for Trunk Provisioning Page 84

a. Introduction Page 84

b. Positions of the Parties Page 85

i. MediaOne Page 85

ii. Bell Atlantic Page 86

c. Analysis and Findings Page 87

G. Unbundled Access Page 89

1. Extent of Obligation to Provide UNEs Page 89

a. Introduction Page 89

b. Positions of the Parties Page 90

i. Bell Atlantic Page 90

ii. MediaOne Page 90

c. Analysis and Findings Page 91

2. Bona Fide Request Applicability/Available Network Elements Page 93

a. Introduction Page 93

b. Positions of the Parties Page 93

i. MediaOne Page 93

ii. Bell Atlantic Page 94

c. Analysis and Findings Page 96

H. Local Number Portability Page 97

1. Introduction Page 97

2. Description of the Porting Process Page 98

3. Need for Performance Standards and Remedies Page 99

a. Positions of the Parties Page 99

i. MediaOne Page 99

ii. Bell Atlantic Page 100

b. Analysis and Findings Page 101

4. Standards to be Established for Local Number Portability (Performance Criteria) Page 102

a. Introduction Page 102

b. Positions of the Parties Page 103

i. Bell Atlantic Page 103

ii. MediaOne Page 105

c. Analysis and Findings Page 106

5. Appropriate Threshold Page 107

a. Introduction Page 107

b. Positions of the Parties Page 108

i. Bell Atlantic Page 108

ii. MediaOne Page 108

c. Analysis and Findings Page 109

6. Appropriate Penalties Page 110

a. Introduction Page 110

b. Positions of the Parties Page 110

i. Bell Atlantic Page 110

ii. MediaOne Page 112

c. Analysis and Findings Page 113

I. Dialing Parity Page 114

1. Introduction Page 114

2. Positions of the Parties Page 114

a. MediaOne Page 114

b. Bell Atlantic Page 115

3. Analysis and Findings Page 115

c. Analysis and Findings Page 53

2. Access to Call-Related Database through Commercial SS7 Provider Page 55

b. Positions of the Parties Page 56

i. MediaOne Page 56

ii. Bell Atlantic Page 56

c. Analysis and Findings Page 57

3. Direct Trunking Threshold Level Page 58

a. Introduction Page 58

b. Positions of the Parties Page 59

i. MediaOne Page 59

ii. Greater Media Page 60

iii. Bell Atlantic Page 61

c. Analysis and Findings Page 62

4. Reciprocal Compensation Applicability Page 64

a. Introduction Page 64

b. Position of the Parties Page 65

i. MediaOne Page 65

ii. Bell Atlantic Page 65

c. Analysis and Findings Page 65

D. Tandem Transit Service Page 66

1. Introduction Page 66

2. Positions of the Parties Page 67

a. MediaOne Page 67

b. Bell Atlantic Page 69

3. Analysis and Finding Page 72

a. Bell Atlantic's obligation to provide tandem transit service Page 72

b. MediaOne's obligation to establish reciprocal local traffic exchange arrangements Page 74

c. Appropriate threshold for direct trunking Page 75

d. Appropriate time period to establish direct trunking Page 77

E. Network Maintenance and Management Standards Page 79

1. Outage Repair Standard Page 79

a. Introduction Page 79

b. Positions of the Parties Page 79

i. MediaOne Page 79

ii. Bell Atlantic Page 80

c. Analysis and Findings Page 80

F. Joint Network Configuration and Management Standards Page 81

1. Scope of the Joint Grooming Process Page 81

a. Introduction Page 81

b. Positions of the Parties Page 82

i. MediaOne Page 82

ii. Bell Atlantic Page 82

c. Analysis and Findings Page 83

2. Forecasting Requirements for Trunk Provisioning Page 84

a. Introduction Page 84

b. Positions of the Parties Page 85

i. MediaOne Page 85

ii. Bell Atlantic Page 86

c. Analysis and Findings Page 87

G. Unbundled Access Page 89

1. Extent of Obligation to Provide UNEs Page 89

a. Introduction Page 89

b. Positions of the Parties Page 90

i. Bell Atlantic Page 90

ii. MediaOne Page 90

c. Analysis and Findings Page 91

2. Bona Fide Request Applicability/Available Network Elements Page 93

a. Introduction Page 93

b. Positions of the Parties Page 93

i. MediaOne Page 93

ii. Bell Atlantic Page 94

c. Analysis and Findings Page 96

H. Local Number Portability Page 97

1. Introduction Page 97

2. Description of the Porting Process Page 98

3. Need for Performance Standards and Remedies Page 99

a. Positions of the Parties Page 99

i. MediaOne Page 99

ii. Bell Atlantic Page 100

b. Analysis and Findings Page 101

4. Standards to be Established for Local Number Portability (Performance Criteria) Page 102

a. Introduction Page 102

b. Positions of the Parties Page 103

i. Bell Atlantic Page 103

ii. MediaOne Page 105

c. Analysis and Findings Page 106

5. Appropriate Threshold Page 107

a. Introduction Page 107

b. Positions of the Parties Page 108

i. Bell Atlantic Page 108

ii. MediaOne Page 108

c. Analysis and Findings Page 109

6. Appropriate Penalties Page 110

a. Introduction Page 110

b. Positions of the Parties Page 110

i. Bell Atlantic Page 110

ii. MediaOne Page 112

c. Analysis and Findings Page 113

I. Dialing Parity Page 114

1. Introduction Page 114

2. Positions of the Parties Page 114

a. MediaOne Page 114

b. Bell Atlantic Page 115

3. Analysis and Findings Page 115

J. Coordinated Service Arrangements Page 115

1. Coordinated Repair Calls and Business Procedures Page 116

a. Introduction Page 116

b. Positions of the Parties Page 116

i. MediaOne Page 116

ii. Bell Atlantic Page 117

c. Analysis and Findings Page 117

2. Customer Proprietary Network Information Audits Page 118

a. Introduction Page 118

b. Positions of the Parties Page 119

i. Bell Atlantic Page 119

ii. MediaOne Page 119

c. Analysis and Findings Page 120

3. Unauthorized Carrier Changes and Customer Authorization Page 120

a. Introduction Page 120

b. Positions of the Parties Page 120

i. MediaOne Page 120

ii. Bell Atlantic Page 121

c. Analysis and Findings Page 121

K. Directory Services Arrangements Page 122

1. Operator Services and Directory Assistance Transport Page 122

a. Introduction Page 122

b. Positions of the Parties Page 123

i. MediaOne Page 123

ii. Bell Atlantic Page 123

c. Analysis and Finding Page 124

L. Contractual Issues Page 125

1. Termination of Agreement Page 125

a. Introduction Page 125

b. Positions of the Parties Page 125

i. Bell Atlantic Page 125

ii. MediaOne Page 126

c. Analysis and Findings Page 128

2. Compliance with Laws Page 129

a. Introduction Page 129

b. Positions of the Parties Page 129

i. MediaOne Page 129

ii. Bell Atlantic Page 129

c. Analysis and Findings Page 130

M. Billing and Payment Dispute Amounts Page 131

1. Introduction Page 131

2. Positions of the Parties Page 131

a. MediaOne Page 131

b. Bell Atlantic Page 132

3. Analysis and Findings Page 133

N. Grant of License and Indemnification Page 134

1. Introduction Page 134

2. Positions of the Parties Page 134

a. MediaOne Page 134

b. Bell Atlantic Page 135

3. Analysis and Findings Page 135

O. Audits Page 139

1. Introduction Page 139

2. Positions of the Parties Page 139

a. MediaOne Page 139

b. Bell Atlantic Page 140

3. Analysis and Findings Page 140

VI. ORDER Page 142

I. INTRODUCTION

This arbitration proceeding is held pursuant to the Telecommunications Act of 1996, 47 U.S.C. § 252 ("Act"). The proceeding is a consolidated arbitration between MediaOne Telecommunications of Massachusetts, Inc. ("MediaOne") and New England Telephone and Telegraph Company d/b/a/ Bell Atlantic-Massachusetts ("Bell Atlantic"). A portion of the proceeding (as described below) has been consolidated with D.T.E. 99-52, an arbitration between Greater Media Telephone, Inc. ("Greater Media") and Bell Atlantic, in order to address similar issues.

Bell Atlantic is an incumbent local exchange carrier ("ILEC"), as defined by the Act, within the Commonwealth of Massachusetts. MediaOne and Greater Media are both facilities-based[1] competitive local exchange carriers ("CLECs"). MediaOne has been offering residential local exchange service to customers in eastern Massachusetts since September 1998, under a negotiated interconnection agreement approved by the Department on December 2, 1998.[2] Greater Media is arbitrating its initial interconnection agreement with Bell Atlantic and is not currently providing telecommunications services. Greater Media is in the process of completing its network design, and plans to provide local exchange and other telecommunications services, initially in the Worcester area.

II. PROCEDURAL HISTORY

On April 22, 1999, both MediaOne and Bell Atlantic filed Petitions for Arbitration pursuant to Section 252(b) of the Act.[3] The MediaOne petition was docketed as D.T.E. 99-42 and the Bell

Atlantic petition was docketed as D.T.E. 99-43. The Arbitrator[4] consolidated the two Petitions for Arbitration ("MediaOne/Bell Atlantic Arbitration") on May 6, 1999. On May 17, 1999, MediaOne and Bell Atlantic filed Responses to the Initial Petitions ("Responses"). On May 27, 1999, the Department held a procedural conference and technical session.

On June 4, 1999, Greater Media[5] filed a Motion for Partial Consolidation of Arbitration proposing that the Department consolidate six issues included in the Greater Media arbitration petition with the MediaOne/Bell Atlantic Arbitration. The six issues are: (1) Rate Demarcation Point Definition, (2) Interpretation and Construction, (3) Geographic Relevance, (4) Physical Architecture, (5) Trunk Group Connections and Ordering, and (6) Network Interface Device. On June 9, 1999, the Arbitrator granted Greater Media's Motion for Partial Consolidation stating that the issues involved common questions of law and fact. The Arbitrator also accepted a request by the parties that should a consolidated issue be resolved between MediaOne and Bell Atlantic (but not Greater Media), that issue would continue to be investigated, and decided, in the Greater Media Arbitration. Since the consolidation ruling, Bell Atlantic and MediaOne have resolved the Rate Demarcation Point and the Network Interface Device issues.

On June 18, 1999, the parties submitted prefiled direct testimony, and on June 24, 1999, rebuttal testimony was filed. On June 28, June 29, and July 8, 1999, the Department conducted arbitration hearings at its offices. In support of its proposal, MediaOne presented the testimony of David Kowolenko, its director of telecommunications, regarding interconnection and performance standards, incentives for local number portability ("LNP"), and certain trunk forecasting issues; and the testimony of Gerry Coe, its service interconnection manager, regarding transit traffic. Bell Atlantic presented Jeffrey A. Masoner, Bell-Atlantic's vice-president, interconnection services (adopting the prefiled testimony of John E. Howard); Donald E. Albert, its network services director of competitive local exchange carrier implementation; Alice Shocket, a Bell Atlantic senior analyst, interconnection services, on the issues of interconnection, transit service, and porting metrics; and Ken Garbarino, its director of operations regulatory requirements, on the issue of porting standards and remedies. Greater Media presented the testimony of Dr. Francis R. Collins, president of CCL Corporation, who addressed interconnection and physical architecture issues, and trunk group ordering. The parties also filed Position Statements which addressed issues generally not discussed in testimony.

The parties submitted initial briefs on July 16, 1999, including proposed findings of fact and conclusions of law, and reply briefs on July 22, 1999. The record consists of 17 exhibits, 52 record request responses, and responses to all discovery requests filed in this proceeding.[6]

III. OUTSTANDING PROCEDURAL ISSUES

A. MediaOne Motion for Interlocutory Order

On June 10, 1999, MediaOne filed with the Department a Motion for Interlocutory Order ("Motion"). In its Motion, MediaOne requested that the Department issue an interlocutory order resolving a dispute between itself and Bell Atlantic regarding the relationship between the interconnection agreement that is the subject of this arbitration, and Bell Atlantic's Interconnection Tariff No. 17.[7] On June 18, 1999, Bell Atlantic filed an Opposition to MediaOne's Motion. Also on June 18, 1999, Greater Media filed a "Position Statement on the Issue of Interpretation and Construction of Proposed Interconnection Agreement in Light of MediaOne's Motion" ("Position Statement").

The Arbitrator issued a Ruling on MediaOne's Motion on July 30, 1999 ("Ruling"). In her Ruling, the Arbitrator reaffirmed the Department's rule of interpretation as stated in Resale Tariff, D.T.E. 98-15, at 13 (Phase I) (1998) ("Resale Tariff"), and applied it to govern the relationship between the interconnection agreements which are the subject of this arbitration and tariffs approved or to be filed by the parties (Ruling at 5). The Arbitrator outlined the rules regarding this relationship as follows: (1) the interconnection agreement entered into by the parties generally controls the relationship of the parties; (2) the parties have the ability to choose to incorporate terms of a tariff, and that choice should be specified in the interconnection agreement; (3) the parties may elect to purchase services under tariff that are not otherwise in an interconnection agreement; (4) in the event of a conflict between provisions of a tariff and the interconnection agreement, the interconnection agreement controls; and (5) where the Department orders a local exchange carrier ("LEC") to include certain terms in a tariff, either through an arbitration proceeding or other proceeding, Department-ordered provisions control (id.).

B. Motions for Clarification of Arbitrator's Ruling

MediaOne, Greater Media, and Bell Atlantic each filed, on August 4, 1999, motions for clarification with respect to various components of the Ruling.[8] MediaOne seeks clarification as to whether the first sentence of Bell Atlantic's proposed Section 2.2 should be included in the interconnection agreement (MediaOne Motion for Clarification at 2). Although the Ruling did not explicitly provide that this first sentence[9] should not be included in the interconnection agreement, MediaOne argues that it does not comport with the Ruling and, therefore, seeks clarification on this matter (id.). Moreover, MediaOne requests the Department to determine that MediaOne's proposed first sentence for Section 2.2 is in fact consistent with the Ruling and should be included in the interconnection agreement (id. at 2-3).

MediaOne also requests clarification of the Arbitrator's ruling that the terms and conditions of an interconnection agreement will be superseded when the Department orders a LEC to include certain terms in a tariff, either through an arbitration proceeding or other proceeding. MediaOne contends that this ruling may have the effect of violating its due process rights by denying it adequate notice of an investigation that would substantially and specifically affect it (id. at 3). Consequently, MediaOne requests that the Department define more fully the scope and intent of this portion of the Ruling (id.).

In its motion for clarification, Greater Media argues that it is unclear whether the Arbitrator intended to resolve Greater Media's dispute with Bell Atlantic about the language governing the interpretation and construction of their interconnection agreement (Greater Media Motion for Clarification at 3). Greater Media asserts that the Ruling did not specifically address Greater Media's proposed interconnection agreement language for Section 2.2, which it argues is consistent with the Ruling, and that it would be erroneous to treat the Ruling as resolving the issue (id. at 3-4). With respect to the Ruling's determination that Department-ordered provisions supersede conflicting interconnection agreement provisions, Greater Media seeks clarification that an "other proceeding" does not include the Department's review of a tariff filed by Bell Atlantic without a prior order of the Department either (1) requiring such a filing or (2) requiring the specific terms and conditions included by Bell Atlantic in such a tariff filing (id. at 4). Lastly, Greater Media argues that even after the guidance contained in the Ruling, ambiguities exist in Bell Atlantic's proposed Section 2.2 language and that Greater Media's proposed language is clear and should be adopted (id. at 5).

Bell Atlantic seeks to clarify the effect of the Ruling on Bell Atlantic's proposed language in Sections

2.2 and 20 (Bell Atlantic Motion for Clarification at 2). Furthermore, Bell Atlantic requests clarification of the status of incorporating the relevant tariff provisions into the MediaOne interconnection agreement and the "open" issues requiring Department resolution in this Order (id.). Bell Atlantic argues that in the Ruling, the Arbitrator implies that other than the removal of the language providing the specific prevails over the general, the remainder of that section and all of Section 20 are acceptable[10] (id. at 3). Finally, Bell Atlantic argues that if the three sections cited by MediaOne as open (i.e., Sections 11.7, 11.9, and 19) remain unresolved, the Department should adopt Bell Atlantic's proposed language for those sections (id. at 3-4).[11]

C. Standard of Review

Clarification of previously issued orders may be granted when an order is silent as to the disposition of a specific issue requiring determination in the order, or when the order contains language that is so ambiguous as to leave doubt as to its meaning. Boston Edison Company, D.P.U. 92-1A-B at 4 (1993); Whitinsville Water Company, D.P.U. 89-67-A at 1-2 (1989). Clarification does not involve reexamining the record for the purpose of substantively modifying a decision. Boston Edison Company, D.P.U. 90-335-A at 3 (1992), citing Fitchburg Gas & Electric Light Company, D.P.U. 18296/18297, at 2 (1976).

D. Analysis and Findings

The Department grants in part and denies in part the motions for clarification. We agree that in certain respects the Ruling is ambiguous, creating doubt as to the Ruling's meaning and the Department's intent. To clarify, we reiterate our finding, set forth in our Resale Tariff Order, that the Act established a preference for negotiated, as opposed to arbitrated, agreements. See Resale Tariff, at 13-14. In that Order, we determined that a benefit of this preference is that subsequently adopted resale tariffs may not supersede the negotiated terms and conditions of an existing resale agreement unless the parties mutually agree otherwise. Id. at 14. We found that arbitrated terms and conditions should be treated differently: "Where parties have sought [an arbitration], the Department-arbitrated provisions in the tariff shall supersede corresponding provisions in the existing resale agreements between those parties," and "any future Department-arbitrated changes to the resale discount will govern and supersede existing interconnection agreements." Id.

While the subject matter of the Resale Tariff Order concerned resale exclusively, we find that the policy set forth in that Order is sound and applicable to the interconnection matters covered by Tariff No. 17. Department-arbitrated provisions included in a tariff, resale or otherwise, shall supersede corresponding arbitrated provisions in interconnection agreements between those parties. See Resale Tariff at 14. However, we further clarify that the Department in certain circumstances may explicitly direct that a tariff provision supercede negotiated provisions on the same subject matter (see, Collocation Order, D.T.E. 98-58 (1999)). This does not mean that a negotiated provision in MediaOne's interconnection agreement, for example, would be superseded by a corresponding provision from a subsequent Department arbitration of a different carrier's interconnection agreement. We decline to incorporate Greater Media's suggested language with respect to what is an "other proceeding," as contained in the Ruling (see Greater Media Motion for Clarification at 4). Our Order makes clear that the Department-ordered provisions contained in Department-approved tariffs shall supersede corresponding arbitrated provisions in interconnection agreements, and that there may be circumstances where the Department explicitly requires that a tariff provision supercede negotiated provisions on the same subject matter.

The Arbitrator directed the parties, which the Department determines to include Greater Media in addition to MediaOne and Bell Atlantic, to incorporate language in their interconnection agreements that comports with the Ruling. Specifically, the Arbitrator determined that the following Bell Atlantic proposed phrase in Section 2.2 should not be included: "the specific shall prevail over the more general" (Ruling at 5). In its motion for clarification, Bell Atlantic agreed to delete that phrase from both its MediaOne and Greater Media interconnection agreements (Bell Atlantic Motion for Clarification at 3). However, Bell Atlantic, MediaOne, and Greater Media remain unclear about which party's proposed language for Section 2.2 should be approved by the Department (id. at 3; MediaOne Motion for Clarification at 2-3; Greater Media Motion for Clarification at 3-5).

MediaOne argues that the first sentence of Bell Atlantic's proposed Section 2.2 should be deleted and replaced with the first sentence of MediaOne's proposal filed on June 8, 1999 (MediaOne Motion for Clarification at 2). We agree with MediaOne that Bell Atlantic's first sentence, provided above in footnote 9, involves a general incorporation by reference, and is inconsistent with the specific incorporation favored by the Department in this instance. Therefore, that wording does not comport with the Ruling and shall be removed from Section 2.2 (see id.). MediaOne's proposed first sentence for Section 2.2, "The Agreement governs the provisions of all services or facilities provided hereunder unless the Parties have specifically referenced an applicable provision of their Tariff in this Agreement, in which case the referenced Tariff provision applies," accurately reflects the Department's policy that tariffs do not supersede the corresponding negotiated rates, terms, and conditions of interconnection agreements unless the parties mutually agree that the tariff does so or may do so (see id.; Resale Tariff at 14). Therefore, the first sentence of Section 2.2 of the MediaOne/Bell Atlantic interconnection agreement shall use MediaOne's proposed sentence, referred to above.

But for disputing Bell Atlantic's proposed first sentence in Section 2.2, MediaOne does not argue against incorporating the remainder of Bell Atlantic's proposal, as amended by the Ruling (see MediaOne Motion for Clarification at 2-3). However, the Department finds that the rest of Section 2.2 should also reflect Department policy, clarified above, with respect to terms and conditions of Department-approved tariffs superseding corresponding arbitrated terms and conditions of interconnection agreements. Therefore, we approve the following language for Section 2.2, which other than the new first and last sentences, Bell Atlantic proposed in exhibit B of its Petition:

The Agreement governs the provisions of all services or facilities provided hereunder unless the Parties have specifically referenced an applicable provision of their Tariff in this Agreement, in which case the referenced Tariff provision applies. Subject to the terms set forth in Section 20 regarding rates and charges, if any provision of this Agreement and an applicable tariff cannot be reasonably construed or interpreted to avoid conflict, the provision contained in this Agreement shall prevail.

If any provision contained in this main body of the Agreement and any Schedule or Exhibit hereto cannot be reasonably construed or interpreted to avoid conflict, the provision contained in the main body of the Agreement shall prevail. The fact that a condition, right, obligation, or other term appears in this Agreement but not in any such Tariff or in such Tariff but not in this Agreement, shall not be interpreted as, or be deemed grounds for finding, a conflict for purposes of this Section 2. Terms and conditions of Department-approved tariffs (which are derived from a Department arbitration or other

proceeding) shall supersede corresponding arbitrated terms and conditions of this Agreement. Terms and conditions of Department-approved tariffs (which are derived from a Department arbitration or other proceeding) shall supersede corresponding negotiated terms and conditions of this Agreement upon explicit direction of the Department.

As mentioned above, the Department confirms in this Order that the Arbitrator's

finding - - that Bell Atlantic's proposed phrase, "the specific shall prevail over the more general," should not be included in the interconnection agreement - - applies to both MediaOne's and Greater Media's interconnection agreements. Greater Media argues that the Department should adopt Greater Media's proposed Section 2.2 and not Bell Atlantic's version (as amended by the Ruling) (Greater Media Motion for Clarification at 3-4). Greater Media's Section 2.2 language provides that the rates and charges set forth in Exhibit A to the agreement are subject to the continuing jurisdiction of the Department and may be modified if ordered or authorized by the Department (see Greater Media Position Statement at 13). Its proposal contains language that the parties agree to expeditiously modify any such ordered or authorized rate or charge (id.). We note that Greater Media's proposal was similar to that initially proposed by MediaOne in its petition, but that MediaOne later modified its language, bringing it closer to that which we adopted above.

In its motion for clarification, Greater Media implicitly argues that the Department must adopt its language because it is "consistent with the statement in the [Ruling] that the parties should incorporate language into their interconnection agreements which comports with the [Ruling]" whereas Bell Atlantic's proposal is inconsistent (see Greater Media Motion for Clarification at 3-4). We find that the Section 2.2 language we approve today for the MediaOne/Bell Atlantic interconnection agreement is consistent with both the Ruling and the clarification of that ruling provided in this Order. While we do not decide that Greater Media's proposal is inconsistent with the Ruling, we do find that the new MediaOne/Bell Atlantic Section 2.2 is a more accurate representation of Department policy.

We note that Greater Media's proposal for Section 2.2, contained in its June 18, 1999 Position Statement, differs from the version it filed with its petition on May 10, 1999. Moreover, in its Position Statement, Greater Media requests that we use identical language for Sections 2.2 and 20. Again, we note that its proposed language for Section 20, contained in its Position Statement and which is not the subject of MediaOne's Motion, differs from its proposed language for Section 20 contained in its petition. We find that Greater Media's proposed language for Section 2.2 contained in its Position Statement is more appropriate for discussion on Section 20 because it applies specifically to "rates and charges." Section 2.2 concerns the interpretation and construction of the entire interconnection agreement, not just rates and charges therein. Moreover, we decline to address the substance of Greater Media's proposed Section 20 in this context (i.e., granting the motions for clarification) because that section was not the subject of MediaOne's Motion (see MediaOne Motion for Clarification at 1). In sum, we direct Greater Media and Bell Atlantic to include language identical to that which we approved above for Section 2.2 of their interconnection agreement.

According to Bell Atlantic, the last issue we must address in our clarification of the Ruling is what effect the Ruling has on Section 20 of the interconnection agreement (see Bell Atlantic Motion for Clarification at 3-4). Again, we decline to provide such clarification in this context. As noted by Bell Atlantic in its motion for clarification, Department precedent provides that it will "grant clarification

of previously issued orders when an order is silent as to the disposition of a specific issue requiring determination in the order . . ." (citation omitted). MediaOne's Motion requested an interlocutory order only on Section 2.2 (see MediaOne Motion for Clarification at 1). Since the Arbitrator was not asked in her initial Ruling to render a determination on Section 20 cited by Bell Atlantic in its motion for clarification, we find it inappropriate to address this matter here. Therefore, this part of Bell Atlantic's and Greater Media's motion for clarification is denied.

B. MediaOne Motion to Strike

1. MediaOne's Motion to Strike

On July 30, 1999, MediaOne filed a Motion to Strike the affidavit of Donald E. Albert ("Motion to Strike"). The affidavit, which was appended to Bell Atlantic's reply brief, addressed Bell Atlantic's costs of establishing a mid-span fiber meet[12] interconnection.[13] MediaOne requests that the Department strike the affidavit because the affidavit purports to present statements of fact that are not on the record and have not been subject to cross-examination or rebuttal (Motion to Strike at 2). MediaOne asserts that Bell Atlantic submitted the affidavit without notice to the parties, without a motion, and without good cause shown, ignoring the Department's procedures and rules governing admission of evidence and the ground rules of this arbitration (id.). MediaOne argues that if the affidavit is admitted into evidence, MediaOne will be prejudiced by its admission and be denied its rights to due process (id.).

2. Bell Atlantic's Opposition

On August 2, 1999, Bell Atlantic filed its Opposition to MediaOne's Motion to Strike the affidavit of Donald E. Albert ("Opposition"). In its Opposition, Bell Atlantic argues that MediaOne wrongly proposes to strike Mr. Albert's affidavit, and maintains that MediaOne's argument to prohibit the inclusion of the cost data as evidence is without merit and must be dismissed (Opposition at 2). Bell Atlantic contends that Mr. Albert's affidavit was in direct response to MediaOne's new "compromise" proposal presented for the first time in MediaOne's Initial Brief, filed after the record was closed (id.).

Bell Atlantic asserts that it must be allowed to respond to MediaOne's new proposal, since the proposal contains cost consequences for Bell Atlantic in its interconnection arrangement with MediaOne and in possible interconnection arrangements with other CLECs (id.). Bell Atlantic claims that the new proposal conflicts with the earlier testimony of MediaOne's witness, and that this conflict would have significant consequences for Bell Atlantic (id., citing Bell Atlantic Reply Brief at 10-12). Bell Atlantic insists that denying Bell Atlantic the opportunity to address this conflict, by presenting the facts in Mr. Albert's affidavit, is "patently unfair" (id. at 3).

Bell Atlantic maintains that MediaOne's new proposal is another attempt on MediaOne's part to impose it own notion of an interconnection arrangement on Bell Atlantic (id.). Bell Atlantic asserts that, under the new proposal, it would incur significant transportation cost to carry traffic to MediaOne's interconnection points, which could average a ten mile distance from Bell Atlantic tandem offices (id. at 3-4, citing Bell Atlantic Reply Brief at 10). Bell Atlantic refers to Mr. Albert's testimony regarding the total additional equipment cost of $1.5 million for MediaOne's demand for mid-span meet interconnection arrangements and contends that this cost could be multiplied many times if other CLECs demand the same mid-span interconnection arrangements (id. at 4).

Bell Atlantic maintains that MediaOne's demand for solely mid-span meet interconnection

arrangements is actually a retreat to MediaOne's original position, which Bell Atlantic did not respond to, because, during the proceeding, MediaOne's representations no longer included this demand (id.). Bell Atlantic argues that MediaOne cannot bring forth its new compromise proposal for mid-span interconnection arrangements at such a late date and request that Bell Atlantic be denied its response to the proposal without unduly prejudicing Bell Atlantic (id. at 4-5).

3. Analysis and Findings

Throughout this proceeding, the Department encouraged the parties to negotiate to resolve their differences. The Department has in the past noted that the Act evinces a preference for negotiated agreements. Resale Tariff Order at 13 (Phase I) (1998). We support the parties efforts at resolving as many of the terms and conditions of their agreement themselves as they can (see Section V.I., infra). To the extent that the parties were able to resolve certain issues, this effort was successful, and we do not review the parties' resolution in this proceeding. However, to the extent that parties were unable to resolve certain issues, the Department is required to make a determination on the unresolved issues. 47 U.S.C. § 252(b)(4).

Those determinations must be based on record evidence in this proceeding. Where a party shifted positions in this proceeding after the record had closed, it ran the risk that there would be no record evidence to support its new position, and therefore the Department might have no evidence on which to base a finding in its favor. Here, the parties continued to negotiate after the close of hearings, and on some issues, changed position after the close of the record.

Bell Atlantic states that it filed its affidavit is in response to MediaOne's "new" proposal included for the first time in its brief (Opposition at 2). According to Bell Atlantic, this new proposal included the following provisions: (1) MediaOne's proposal to establish mid-span meets at each Bell Atlantic tandem; (2) MediaOne's proposal to use mid-span meet as its sole interconnection arrangement; and (3) MediaOne's proposal to establish mid-span meets at an average of 10 miles from each tandem. Finally, Bell Atlantic also contends that MediaOne's proposal conflicts with the testimony of MediaOne's witness (Opposition at 2-4).

Regarding whether these provisions are first presented on brief, MediaOne indicated in its Petition that it intended to interconnect via mid-span meets or entrance facilities (MediaOne Petition at 18). The parties had discussed the "footprint" proposal prior to briefing (Exh. MediaOne-3, at 5). Thus, MediaOne's proposal to establish mid-span meets at each tandem did not appear for the first time on brief. However, with respect to the distance from the tandem, both MediaOne and Bell Atlantic proposed a specific maximum mileage for the distance from the tandem switch for a mid-span meet arrangement in their briefs (see MediaOne Brief at 15; Bell Atlantic Brief at 28). At the time of the hearings, MediaOne's proposal was to locate its mid-span meet within Bell Atlantic's tandem serving area (Exh. MediaOne-3, at 5). Thus, the specific mileage proposals are new on brief. Regarding the last point, MediaOne had testified that it would want the mid-span meet as close as possible to the tandem office to be able to control as much as its network as possible (Tr. 2, at 283). However, MediaOne's witness did not specify a distance at that time.

Bell Atlantic attempted to put evidence into the record, after it closed, on the cost of the electronics and equipment needed for a "typical" mid-span meet arrangement (Bell Atlantic Reply Brief at Affidavit of Donald E. Albert). However, we cannot tell if this submittal bases its cost estimates on the distance of a mid-span meet from the tandem office. The affidavit simply identifies the costs as those of a "typical" mid-span meet. Therefore, the affidavit addresses the issue of the cost to Bell

Atlantic of MediaOne's proposal to establish mid-span meets in the footprint of Bell Atlantic tandem serving areas, which was the subject of cross examination at the hearings. As such, Bell Atlantic's affidavit responded to the subject of mid-span meets that was discussed at the hearings, and not to new information presented by MediaOne for the first time on brief.

There is no evidence on the record regarding specific distances from the tandem switch for the mid-span meet arrangements. There is no evidence on the record quantifying the cost of a mid-span meet. On the record before us, we cannot determine whether Bell Atlantic's quarter mile distance, or MediaOne's average ten mile proposal is reasonable. Both proposals are unsupported by the record.

To the extent that any party argued a new position on brief that was unsupported by evidence taken in this proceeding, the Department may not accept those positions. To the extent that a party attempted to introduce new evidence on brief, that purported evidence is stricken from the record, in compliance with the Department's procedural rules, prior decisions, and the Ground Rules in this arbitration.(14)

Accordingly, the Motion to Strike of MediaOne is granted. Where applicable, we note in the Order parties' positions that were made after the close of the record and which are not supported by evidence.

IV. STANDARD OF REVIEW

Section 252(c) of the Act sets out the standards for arbitrations by state commissions. 47 U.S.C. § 252(c). Section 252(c) states, in relevant part, that a state commission shall

(1) ensure that such resolution and conditions meet the requirements of section 251, including the regulations prescribed by the [Federal Communications Commission ("FCC")] pursuant to section 251;

(2) establish any rates for interconnection, services, or network elements according to [section 252 (d).]

Section 251(c)(2) of the Act defines the obligations for ILECs to interconnect with other carriers. Each ILEC has the duty

to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network -- (A) for the transmission and routing of telephone exchange service and exchange access; (B) at any technically feasible point within the carrier's network; (C) that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; and (D) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirements of [section 251] and section 252.

Furthermore, § 252(e)(3) provides that "nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of an agreement, including

requiring compliance with intrastate telecommunications service quality standards and requirements."

V. UNRESOLVED ISSUES

A. Statement Regarding Compliance with Section 251 of the Act

1. Introduction

The parties disagree whether to include wording indicating that the terms of the interconnection agreement satisfy Bell Atlantic's obligations to provide interconnection under

§ 251 of the Act. The language proposed by Bell Atlantic is as follows:

Whereas Sections 251 and 252 of the Communications Act of 1934 as amended by the Telecommunications Act of 1996 have specific requirements for interconnection, unbundled Network Elements and resale service and the Parties intend that this Agreement meet these requirements.

2. Positions of the Parties

a. MediaOne

MediaOne gives several reasons why it cannot agree, at the time that it signs its interconnection agreement, that the terms of the interconnection agreement will satisfy Bell Atlantic's obligations under the Act (MediaOne Brief at 8). First, MediaOne argues that it is not MediaOne's obligation to make that determination, but the obligation of the Department and the FCC (id.). Second, it is impossible for MediaOne to determine at the time of signing the interconnection agreement whether Bell Atlantic's performance will in fact comply with § 251 (id.). Third, MediaOne asserts that Bell Atlantic has taken positions in the negotiations which MediaOne contends are not in compliance with the Act (id.). Fourth, MediaOne cites FCC regulations which prohibit demands that a party attest that its obligations under the Act are being satisfied by the interconnection agreement (id. at 9, citing 47 C.F.R. § 51.301(c)(2)).

b. Bell Atlantic

Bell Atlantic explains that the purpose of its proposed section on compliance with § 251 obligations, which it states is standard language for its interconnection agreements, is to recognize the parties' obligations to provide services in compliance with the Act (Bell Atlantic Brief at 12). Bell Atlantic complains that it is disingenuous for MediaOne to assert its rights under the Act, and then to refuse to acknowledge that the specific arrangements which it is insisting upon satisfy Bell Atlantic's obligations under the Act (id. at 13). Finally, Bell Atlantic argues that MediaOne's position fails to recognize the fact that a fully executed and implemented interconnection agreement would, by definition, meet § 251 requirements (id. at 13-14).

3. Analysis and Findings

MediaOne is correct that one of the Department's obligations under the Act, when reviewing a final interconnection agreement, is to make a determination that the interconnection agreement meets the

requirements of § 251 of the Act. See 47 U.S.C. § 252(c)(1). In addition, the FCC regulations cited by MediaOne, and not addressed by Bell Atlantic, make it clear that "demanding that a requesting telecommunications carrier attest that an agreement complies with all provisions of the Act, federal regulations, or state law" is a violation of the duty of an ILEC to negotiate in good faith. 47 C.F.R. § 51.301(c)(2). See also NYNEX/MFS Intelenet Interconnection Agreement, D.P.U. 96-72, at 18 (1996). In D.P.U. 96-72, the Department stated that "[a]lthough the Department does not believe that approval of [a similar provision to that at issue here] in any way predetermines the issue of [Bell Atlantic's] satisfaction of its obligations under Sections 251 and 271, such approval may give the impression of a Department finding on the issue." Granted, Bell Atlantic's proposed provision does not require that MediaOne attest that the interconnection agreement complies with *all* provisions of the Act. However, it does suggest that MediaOne in a lesser way acknowledges that the agreement meets the requirements of Section 251. Therefore, the language regarding compliance with Section 251 shall be removed from the interconnection agreement.

B. Interconnection and Physical Architecture

1. Points of Interconnection/Geographic Relevance/Physical Architecture

a. Introduction

In order for customers of two different local exchange carriers to call each other, the network facilities of the carriers need to be interconnected. The FCC has defined interconnection under § 251 (c)(2) of the Act as the physical linking of two networks for the mutual exchange of traffic. Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 FCC Rcd 15499 (1996) ("Local Competition Order") at ¶ 176. The carriers must physically interconnect at a location where they hand off traffic to one another, and also must designate a point on their respective networks where each assumes responsibility for transport and termination of traffic from the other carrier. The Act requires the carriers to establish reciprocal compensation arrangements for the transport and termination of local traffic. 47 U.S.C. § 251(b)(5).

The parties disagree on several fundamental issues concerning how to interconnect their respective networks. These issues (and the corresponding sections in the proposed interconnection agreement) are: Points of Interconnection (Section 4.2.3), Geographic Relevance (Section 4.2.4), and Physical Architecture (Sections 4.3.1, 4.3.5, 4.3.9). The Department will address these sections together, since each relates to the parties' positions on interconnection issues and pertains to the other sections. Combining these sections results in a more coherent discussion and analysis.

Certain definitions are important to this discussion of interconnection issues. Bell Atlantic's interconnection agreements revolve around the concepts of Points of Interconnection ("POI") and Interconnection Points ("IP"). Bell Atlantic defines the POI as the physical point or points on local exchange carriers networks at which those networks interconnect (Bell Atlantic Brief at 16-17).[15] By contrast, according to Bell Atlantic, the IP is a specific point designated by each carrier on its respective network from which the terminating carrier provides the transport (and termination) to complete a local call (Bell Atlantic Brief at 17; Exh. BA-MA-7, at 5). In Bell Atlantic's proposal, reciprocal compensation charges are based and applied upon the designation of the IP (Exh. BA-MA-7, at 5). Bell Atlantic explains that POIs and IPs may be the same point; however, this is not always the case as illustrated by MediaOne's mid-span meet IP in Lawrence, Massachusetts (Exh. BA-MA-7, at 6).

In MediaOne's network, its current POI is its mid-span fiber meet near Bell Atlantic's Lawrence tandem switch (Exh. MediaOne-3, at 4). MediaOne also designates its IP as the same point as the POI under this arrangement (Exh. MediaOne-3, at 4). However, Bell Atlantic's IPs for the exchange of local traffic are located either at the end office(16) or at the access tandem(17) serving that particular end office (Exh. BA-MA-7, at 5). Bell Atlantic would define the POI between its network and MediaOne's network as the mid-span meet in Lawrence and its IP as either the Lawrence Tandem or the relevant Bell Atlantic end office that is connected to and serviced by that tandem (Tr. 2, at 235-236).

Greater Media plans to designate its POI and IP as the same point on its network, at either its proposed switch in Worcester, or at a mid-span meet (Greater Media Brief at 18).

The parties' positions on interconnection issues focus primarily on (1) the specific method of interconnection, (2) the number of interconnection points MediaOne and Greater Media will establish, and (3) the locations of the IPs. Below, we first describe Bell Atlantic's interconnection proposals for MediaOne and Greater Media. We then describe interconnection proposals made by MediaOne and Greater Media to Bell Atlantic. After describing the parties' critiques of each other's proposals, we analyze and resolve the open issues.

b. Bell Atlantic Proposals

The basis of Bell Atlantic's interconnection proposal is the proposition that the parties should exchange local traffic with each other within a reasonable geographic proximity to the terminating end user customer, defined by Bell Atlantic as a "geographically relevant point" (Bell Atlantic Brief at 15). According to Bell Atlantic, each party would be responsible for the transport to and from the geographically relevant point, and once traffic is delivered to an IP, reciprocal compensation charges would apply (id. at 15, 18).

i. MediaOne

Bell Atlantic's proposal to MediaOne includes the following provisions: 1) both Parties mutually agree on the establishment of mid-span arrangement(s) within a twelve month transition period from the execution of the new interconnection agreement(18) (Bell Atlantic Brief at 29; Tr. 2, at 344); 2) the mid-span arrangements will be located at or near each Bell Atlantic tandem(19) (Bell Atlantic Brief at 29; Tr. 2, 332); 3) during the twelve month transition period, Bell Atlantic would provide transport (20) at no charge from MediaOne's existing mid-span arrangement in Lawrence to all other relevant Bell Atlantic IPs (Bell Atlantic Brief at 29; Tr. 2, at 332); 4) Bell Atlantic would limit the traffic volumes eligible for free transport during the twelve month transition period (Bell Atlantic Brief at 29; Tr. 2, at 332); 5) once the volume of traffic delivered by MediaOne for termination to a specific Bell Atlantic end office exceeds a threshold of one DS-1,(21) MediaOne would provision direct trunks on the mid-span meet facilities to that end office and bypass the tandem switch(22) (Bell Atlantic Brief at 29; Tr. 2, at 365-366); 6) both parties would apply an equal and symmetrical reciprocal compensation rate of $.008 per minute of use (Bell Atlantic Brief at 29; Exh. BA-MA-8, at 6); and 7) Bell Atlantic would provide mid-span meet arrangements as a method of interconnection as long as the location and terms of the mid-span meet are mutually agreed upon by the parties (Exh. BA-MA-7, at 15).

ii. Greater Media

Bell Atlantic's proposal to Greater Media is almost identical to the one approved by the Department in the Cablevision Lightpath, Inc. ("CLI")/Bell Atlantic interconnection agreement[23] (Bell Atlantic Brief at 31). This interconnection agreement includes the following provisions: 1) Bell Atlantic's IP would be the terminating Bell Atlantic end office serving that Bell Atlantic customer (id. at 31); 2) the Greater Media IP would be the Greater Media Collocation site(s) established at or near each Bell Atlantic tandem(s)[24] (id. at 32; Tr. 2, at 332); 3) Greater Media would establish an initial IP at a collocation[25] site at the Bell Atlantic tandem in that LATA (Bell Atlantic Brief at 32); 4) Bell Atlantic would provide to Greater Media, at no additional charge, for an interim period, transport from the Bell Atlantic tandem IP to the other Bell Atlantic tandems in the LATA[26] (id. at 32; Tr. 2, at 332); 5) after the earlier of 24 months[27] following initial exchange of traffic to the other Bell Atlantic tandems, or ii) the date by which the volume of Greater Media traffic serving other end offices connected to other Bell Atlantic tandems exceeds a DS1 facility,[28] Greater Media will have two options. Greater Media could either compensate Bell Atlantic for the transport from the initial Bell Atlantic IP to other Bell Atlantic tandem IPs in the LATA, or Greater Media could establish an IP at the other Bell Atlantic tandem IP (Bell Atlantic Brief at 32-33; Tr. 2, at 366).

c. MediaOne Proposal

MediaOne's proposal to Bell Atlantic contains the following provisions: 1) it will establish additional IPs in the "footprint"[29] of each Bell Atlantic tandem within one year from the effective date of the new interconnection agreement (MediaOne Brief at 11; Exh. MediaOne-3, at 5); 2) MediaOne will establish mid-span meets at its IPs located within the "footprint" of each of Bell Atlantic's six tandems (MediaOne Brief at 15; Exh. MediaOne-3, at 5-6; Tr. 2, at 278); 3) if it is unable to agree with Bell Atlantic on the location of a mid-span meet, MediaOne would have the right to select the precise location of the additional IPs (MediaOne Brief at 15; Exh. MediaOne-3, at 6); 4) during the twelve-month transition period to establish the additional IPs, Bell Atlantic would not charge MediaOne for transport between MediaOne's POI in Lawrence and Bell Atlantic's IPs for all trunks currently in place (MediaOne Brief at 13; Tr. 2, at 297-298); 5) transport charges would apply for any incremental trunks added during this period (MediaOne Brief at 13); 6) a direct trunk group volume threshold of three DS-1s worth of traffic would apply before MediaOne would be responsible to build out a direct trunk connection to a Bell Atlantic end office (MediaOne Brief at 13; Exh. MediaOne-3, at 11); 7) the blended[30] reciprocal compensation rate of $.008 would apply for all Bell Atlantic originated traffic that would be terminated by MediaOne instead of the higher tandem rate of $.021, [31] if Bell Atlantic adopts MediaOne's ten mile proposal; otherwise, the tandem rate would apply (MediaOne Brief at 13; Tr. 2, at 271); and 7) the parties would agree to undertake commercially reasonable efforts and be bound by a time frame to establish additional IPs (MediaOne Brief at 13).

d. Greater Media Proposal

Greater Media proposes to define its IP as the point closest to the Bell Atlantic customers to which it is directing calls where Greater Media interconnects with Bell Atlantic (Exh. GMT-2, at 7). Greater Media's proposal to Bell Atlantic includes the following: 1) Greater Media will designate its POIs and IPs with Bell Atlantic as the same location where Greater Media has a switch or remote switching module, which may be at the Worcester Tandem location or at a mid-span meet (Greater Media Brief

at 5; Exh. GMT-2, at 8; Tr. 2, at 206, 209); 2) Greater Media would not be required to establish more than one IP/POI in each LATA -- eliminating from Section 4.2.2.1 the phrase "in each NPA" would accomplish this point (Greater Media Brief at 5; Exh. GMT-2, at 8); and 2) Greater Media would eliminate Bell Atlantic's entire proposed section on geographic relevance (Greater Media Brief at 5). Greater Media also proposes that when it expands to western Massachusetts, it will add an IP in the Western LATA (Exh. GMT-2, at 8).

Greater Media would modify Bell Atlantic's proposal, which incorporates terms from the CLI/Bell Atlantic interconnection agreement, by eliminating the requirement that it interconnect through collocation at the Bell Atlantic tandem (Greater Media Brief at 5). Greater Media proposes that it be permitted to interconnect at any technically feasible point, including, but not limited to, mid-span meet arrangements (id. at 5).

e. Positions of the Parties

i. Bell Atlantic

Bell Atlantic contends that its proposals to both MediaOne and Greater Media are in full compliance with the requirements of the Act and the FCC's Local Competition Order[32] (Bell Atlantic Brief at 15). Bell Atlantic's proposal provides that when either CLEC assigns telephone numbers representing a geographic area and rate center,[33] the CLECs should permit Bell Atlantic to deliver its traffic to each CLEC within a reasonable geographic proximity to the area represented by the CLEC customers' telephone numbers (id. at 19). Bell Atlantic claims that it is reasonable to assume that if the CLEC has active telephone numbers in a Bell Atlantic rate center to which calls are terminating, the CLEC also has or leases facilities in that geographic area (id. at 20). Bell Atlantic argues that if the CLEC imposes a network architecture that does not provide for geographically relevant IPs, the additional transport costs to haul the CLEC's traffic to all of Bell Atlantic's tandems from a single IP would be substantial (id. at 20, 25). Furthermore, Bell Atlantic maintains that such transport costs were not considered in developing the existing reciprocal compensation rates (id. at 25; Bell Atlantic Reply Brief at 13 n.7).

Bell Atlantic contends that MediaOne's footprint proposal, which would allow MediaOne to locate its mid-span meet IPs anywhere within the serving area of the tandem, is too broad (Bell Atlantic Brief at 26). Under MediaOne's footprint proposal, Bell Atlantic maintains that MediaOne would still be able to locate its IPs in locations that have little or no relation to where its customers originate or terminate calls, thereby shifting substantial transport costs to Bell Atlantic (id. at 27). Further, Bell Atlantic maintains that the FCC has found that, in the case of new market entrants requesting interconnection with the ILEC, it is reasonable to require each party to bear a reasonable portion of the economic costs of that arrangement and that state commissions are in a better position to determine the appropriate distance an incumbent LEC should be required to build out facilities for meet point arrangements (Bell Atlantic Reply Brief at 9, citing Local Competition Order at ¶ 553).

Bell Atlantic contends that the FCC, by requiring that a "requesting carrier that wishes a 'technically feasible' but expensive interconnection would ... be required to bear the cost of that interconnection, including a reasonable profit", recognizes that CLECs cannot locate their IPs at arbitrary points (id. at 8, citing Local Competition Order at ¶ 199). Bell Atlantic argues that its geographic relevance proposal is consistent with this requirement (id.). Bell Atlantic states that the 12-month transition period would be acceptable to it as long as MediaOne agreed to a reasonable traffic volume limitation during the 12-month period (Bell Atlantic Brief at 26).

Lastly, Bell Atlantic contends that MediaOne's attempt to impose both the type of interconnection arrangement and the location of that arrangement on Bell Atlantic is unreasonable and unacceptable (id. at 27). Bell Atlantic insists it is not refusing to provide a meet point interconnection, but it is requesting that a mid-span arrangement be mutually selected by the parties and agreed to in writing (id. at 35-36). Bell Atlantic argues that the mutual agreement of the location of the mid-span meet is important because it allows Bell Atlantic to manage and control its network costs (id. at 27). Bell Atlantic claims that a mid-span meet should take into consideration where Bell Atlantic has fiber available because the ILEC is not required to construct facilities regardless of the cost or location (Bell Atlantic Reply Brief at 11). Moreover, Bell Atlantic insists that MediaOne's efforts to preclude Bell Atlantic from even furnishing its own facilities and collocating at MediaOne's end office switch are unreasonable (Bell Atlantic Brief at 36).

Bell Atlantic maintains that Greater Media's proposal to establish only a single switch as its POI and IP would force Bell Atlantic to incur extensive additional transport costs to deliver local traffic from every exchange in the LATA to Greater Media (Bell Atlantic Reply Brief at 14). Bell Atlantic argues that such a result would be inefficient and unfair (id.).

Bell Atlantic responds to Greater Media's contention that it would need to make major capital investment in switching equipment if it had to comply with the geographic relevance provision proposed by Bell Atlantic by noting that Greater Media is only required to provide a hand-off of traffic to Bell Atlantic at a geographically relevant IP[34] (id. at 7).

Bell Atlantic contends that its proposal to Greater Media, which contains almost identical terms as the interconnection arrangement in the CLI/Bell Atlantic Agreement, addresses Greater Media's concerns as a new market entrant (Bell Atlantic Brief at 31, 33). Bell Atlantic claims that its proposed interconnection arrangement allows Greater Media to avoid increased capital costs until its customer base warrants additional capital investment by not requiring it to establish multiple IPs in a LATA (id. at 33). Bell Atlantic explains that allowing a CLEC to establish its IP close to but not at a geographically relevant point is a significant compromise because Bell Atlantic would incur added costs to transport calls to Greater Media's initial IP (id.). Bell Atlantic claims that the proposal allows the parties to share transport costs and is reasonable (Bell Atlantic Reply Brief at 14).

Bell Atlantic claims that Greater Media's concern about sharing of transport costs would be resolved by Greater Media collocating at a single Bell Atlantic tandem in the LATA initially (Bell Atlantic Brief at 33). Greater Media would only provide transport to and from its collocation site at the Bell Atlantic tandem, Bell Atlantic purports, while Bell Atlantic would provide most of the transport until Greater Media expands its network to other local calling areas (id.).

Lastly, Bell Atlantic argues that Greater Media's request to insert language in section 4.3.1 of the agreement that would not limit Greater Media's interconnection possibilities exclusively to collocation, has already been agreed to by the parties and included in Section 4.4[35] (id. at 34). Bell Atlantic insists that while Greater Media has already agreed in one section of the agreement (Section 4.4) to negotiate alternative interconnection arrangements with Bell Atlantic, it should not be allowed to confuse another section of the agreement (Section 4.3.1) by seeking additional interconnection options other than those already negotiated in that section (id. at 34-35).

ii. MediaOne

Although MediaOne contends that the Act does not require it to establish additional IPs within Bell Atlantic's tandem serving areas, MediaOne is willing to undertake this "expensive" task to address Bell Atlantic's concerns about excess transport costs (MediaOne Brief at 14). MediaOne maintains that the FCC has found that a requesting carrier may chose any method of technically feasible interconnection and that meet point arrangements (its preferred method of interconnection) are, in general, technically feasible (MediaOne Brief at 10). MediaOne states that the FCC has also found that an incumbent LEC's interconnection obligations may require it to build out its facilities to accommodate these meet point arrangements (MediaOne Brief at 10, citing Local Competition Order at ¶ 553). In addition, MediaOne points out that the FCC has specifically stated that "CLECs should be allowed to choose 'the most efficient points at which to exchange traffic with the incumbent LECs', thereby lowering' the competing carriers' costs' of transport and termination of traffic" (MediaOne Brief at 11, citing Local Competition Order at ¶ 172). MediaOne notes that nowhere in the FCC's discussions of the incumbent LECs' interconnection obligations does it require CLECs to establish multiple interconnection points (MediaOne Brief at 10). Based upon these FCC statements, MediaOne argues that it is reasonable and not unduly expensive to require Bell Atlantic to interconnect via mid-span fiber meet and to pay for half the build-out expense (i.e., the portion of the fiber construction costs from the tandem to the mid-span meet IP) for each new mid-span meet IP (MediaOne Brief at 15).

MediaOne claims that although the FCC has stated that if a carrier requests a technically feasible, but expensive interconnection, that carrier would be required to "bear the cost of that interconnection, plus a reasonable profit", this qualification would not apply to MediaOne's proposal (MediaOne Brief at 10). MediaOne explains that the reason for the additional interconnection costs associated with establishing the supplementary mid-span meets at Bell Atlantic's tandems is to address Bell Atlantic's concerns about transport costs associated with MediaOne's original proposal[36] (MediaOne Brief at 10).

MediaOne argues that it should ultimately have the final decision on the location of its IP if the parties cannot agree (MediaOne Brief at 11; Tr. 2, at 296). However, MediaOne states that it intends to establish an iterative, collaborative process to decide upon the best location for any mid-span meet IPs (Tr. 2, at 294-296). MediaOne explains that it needs to have some certainty that, if the parties cannot agree to a particular location within a reasonable time frame, MediaOne can make the decision to support and proceed with its business initiatives (MediaOne Brief at 11). Moreover, MediaOne states that Bell Atlantic's objection to the meet point location is based only on issues of technical feasibility which violates Bell Atlantic's obligation to interconnect with MediaOne at any technically feasible point (MediaOne Brief at 11-12).

iii. Greater Media

Greater Media argues that Bell Atlantic has improperly tried to force Greater Media to establish IPs in each NPA in each LATA in which Greater Media has customers (Greater Media Brief at 18). Greater Media claims that the permissible points of interconnection should be, as the Act and the FCC provide, at any technically feasible point in the network, including mid-span meets, remote switching modules or remote network nodes[37](Greater Media Brief at 17). Greater Media contends that if these interconnection points are not made available, Greater Media would be forced to emulate Bell Atlantic's network through costly construction of additional IPs and /or leasing arrangements (i.e., leasing facilities from Bell Atlantic, a third party, or collocating) (Greater Media Brief at 18).[38] Likewise, Bell Atlantic's proposal under Section 4.2.2.1, requiring Greater Media to designate at least

one IP in each area code in each LATA in which it has customers, would also be burdensome and further require Greater Media to replicate Bell Atlantic's network architecture (Greater Media Proposed Findings of Fact and Conclusions of Law at 9).

In addition, Greater Media states that it "opposes the inclusion of Bell Atlantic's

geographic relevance provision" (Greater Media Brief at 19). Greater Media indicates that initially it only plans to serve the 21 communities in the Worcester area ("Worcester Cluster"), that receive cable television service from its affiliate Greater Media Cable (Greater Media Brief at 19). Greater Media maintains that although this area would not conform exactly to Bell Atlantic's "geographically relevant" proposal, it is not that much larger and does not justify construction of additional switching investment (Exh. GMT-2, at 5, 8). Greater Media argues that establishing these additional IPs would constitute an economic barrier to market entry for Greater Media and an obstacle to vigorous competition (Greater Media Brief at 3-4). Greater Media states that even though Bell Atlantic has modified its original position and would allow Greater Media to designate a remote switching module as a Greater Media-IP[39], Greater Media states that Bell Atlantic's language on establishing multiple IPs in the LATA is too restrictive (Greater Media Brief at 18).

Greater Media asserts that while Bell Atlantic's compromise proposal, based upon language included in the CLI/Bell Atlantic interconnection agreement, is an improvement over Bell Atlantic's original proposal, it is still unfavorable in comparison to Greater Media's original position for two reasons (Greater Media Brief at 22-23). First, Greater Media claims that it would incur the expense and delay of collocating at Bell Atlantic's tandem offices in each LATA[40] (Greater Media Brief at 23). Greater Media claims that collocating at Bell Atlantic tandem offices requires Greater Media to incur substantial nonrecurring and recurring costs and provisional delays (Greater Media Brief at 4). Greater Media also states that Bell Atlantic's collocation requirement is not reciprocal in that Bell Atlantic would not have to collocate at Greater Media's switch and, thus, also incur collocation costs (Greater Media Brief at 5). Second, Greater Media states that it would be required to pay all the costs of transport between its switches and the Bell Atlantic tandems (Greater Media Brief at 4).

Finally, Greater Media argues that the reciprocal compensation scheme of § 251(b)(5) does not presuppose that CLECs will have the same network architecture as ILECs (Greater Media Reply Brief at 9). According to Greater Media, if an inequity exists because of these different network architectures as asserted by Bell Atlantic, they should be addressed through the costing of the reciprocal compensation rates under § 252(d)(1) (id.). Greater Media notes that the "expensive interconnection" referenced in the Local Competition Order at ¶ 199 when a CLEC requests a specific method of interconnection that causes the ILEC to incur additional costs in order to effectuate interconnection with that CLEC, in which case the CLEC pay for the costs associated with interconnection based upon just and reasonable rates (id. at 10).

f. Analysis and Findings

Our analysis of the points of interconnection, geographic relevance, and physical architecture issues will proceed as follows. First, we consider Bell Atlantic's obligation to provide technically feasible interconnection. Second, we analyze Bell Atlantic's proposal that the CLECs establish additional IPs, or pay for Bell Atlantic's transport costs. Third, we address Bell Atlantic's obligation to provide the CLECs with a reasonable accommodation of interconnection and the effect of that obligation on mid-span meet build out costs. Finally, we consider the appropriate reciprocal compensation rate to be paid by the parties.

i. Bell Atlantic's obligation to provide technically feasible interconnection

Section 251 (c)(2)(b) of the Act states that it is the duty of each incumbent local exchange carrier "to provide for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network -- (2) at any technically feasible point within the carrier's network." 47 U.S.C. § 251(c)(2).

The FCC elaborated on the Act's language regarding technical feasibility by stating that "the Act does not permit [ILECs] to deny interconnection or access to unbundled elements for any reason other than a showing that it is not technically feasible." Local Competition Order at ¶ 206. "We conclude that, under sections 251(c)(2) and 251(c)(3), any requesting carrier may choose any method of technically feasible interconnection or access to unbundled elements at a particular point. Section 251(c)92) imposes an interconnection duty at any technically feasible point; it does not limit that duty to a specific method of interconnection or access to unbundled elements." Id. at ¶ 549. See also ¶ 550.

In its Local Competition Order, the FCC found that the term technically feasible refers solely to technical and operational concerns rather than economic, space, or site limitations. Id. at ¶ 198. The definition of "technical feasibility" states that "a determination of technical feasibility does not include consideration of economic, accounting, billing, space, or site concerns, ..." 47 C.F.R. § 51.5. The FCC found that "the 1996 Act bars consideration of costs in determining a 'technically feasible' point of interconnection or access." Local Competition Order at ¶ 199.

Regarding proof of technical feasibility, the FCC stated that pre-existing interconnection or access at a particular point evidences the technical feasibility of interconnection or access at substantially similar points. Id. at ¶ 198. The FCC's interconnection rules state that "[an ILEC] that denies a request for interconnection at a particular point must prove to the state commission that interconnection at that point is not technically feasible". 47 C.F.R. § 51.305 (e); see also Local Competition Order at ¶ 198, 205, 554.

Therefore, consistent with the requirements of the Act and the FCC's guidelines, the Department finds as a threshold matter that Bell Atlantic must provide MediaOne and Greater Media with requested interconnection unless Bell Atlantic can prove to the Department that the requested interconnection is not technically feasible.

MediaOne is requesting a mid-span meet arrangement as its preferred method of interconnection. Greater Media has not chosen a particular method of interconnection, but it has requested the ability to choose among several options, including mid-span meet, and interconnection at remote network nodes and remote switching modules. Bell Atlantic does not argue that a mid-span meet arrangement is not technically feasible, but raises questions about the cost of mid-span meet interconnection. However, the FCC has indicated that meet point arrangements[41] are technically feasible, and also indicated that cost is not a factor to be considered when determining technical feasibility. Local Competition Order at ¶¶ 199, 553. In the Local Competition Order, the FCC observed "other methods of technically feasible interconnection ... such as meet point interconnection, ... must be available to new entrants upon request. ... we believe such arrangements are technically feasible." Id. at ¶ 553. Therefore, the Department finds that because a mid-span meet arrangement is technically feasible, Bell Atlantic must provide this method of interconnection to MediaOne and Greater Media. Bell

Atlantic cannot condition this type of interconnection, as it claims, on the mutual agreement of the parties, or on the availability of facilities. See Id. at ¶ 199.

Regarding Greater Media's request that we require Bell Atlantic to allow it to interconnect at remote network nodes and remote switching modules, the Department approves Greater Media's requested language that Greater Media may specify methods of interconnection at any of Bell Atlantic's IPs, and any other technically feasible interconnection point. However, we cannot make a determination on the record before us whether interconnection at remote network nodes and remote switching modules is technically feasible. The FCC did not make a finding on these particular methods of interconnection, so such a determination must by made by the Department if the parties do not agree. Once Greater Media is operating, it may request its preferred method of interconnection from Bell Atlantic. Should Bell Atlantic deny the requested interconnection method, Bell Atlantic would be required to prove to us at that time that Greater Media's request is not technically feasible. Therefore, a determination of technical feasibility would be made at that time.

ii. Additional IPs and Transport Costs

Bell Atlantic argues that the FCC has stated that "the requesting carrier must bear the cost of the interconnection" and therefore Bell Atlantic should not have to pay for transport costs between its IPs (at the end office or tandem locations) and the IPs designated by MediaOne (its mid-span meet in Lawrence) and Greater Media (possibly a mid-span meet). In support of its position, Bell Atlantic maintains that MediaOne or Greater Media must either (1) establish IPs near Bell Atlantic's IPs, or (2) bear the cost of transport to their respective IPs.

Regarding Bell Atlantic's request that the Department approve its proposal to require MediaOne and Greater Media to provide IPs at or near each of Bell Atlantic's tandems, neither the Act nor the FCC's rules requires MediaOne or any CLEC to interconnect at multiple points within a LATA to satisfy an incumbent's preference for geographically relevant interconnection points. See Id. at ¶¶ 198-199.

Therefore, we find that a CLEC may designate a single IP for interconnection with an incumbent even though that CLEC may be serving a large geographic area that encompasses multiple ILEC tandems and end offices.[42] There is no requirement or even preference under federal law that a CLEC replicate or in a lesser way mirror an ILEC's network. Indeed, the Act created a preference for CLECs to design and engineer in the most efficient way possible, which Congress envisioned could be markedly different than the ILECs networks. Id. at ¶ 172. We find that MediaOne's existing mid-span meet IP in Lawrence satisfies its obligation under federal law for interconnecting with Bell Atlantic.[43] In addition, Greater Media's proposal to establish one IP per LATA also satisfies its interconnection obligation.

Regarding Bell Atlantic's argument that if MediaOne and Greater Media do not establish "geographically relevant" IPs, they would be obligated to pay Bell Atlantic's transport costs,[44] Bell Atlantic has pointed to nothing in the Act or FCC rules requiring CLECs to pay the transport costs that Bell Atlantic will incur to haul its traffic between Bell Atlantic's IP and the meet point. The FCC envisioned both carriers paying their share of the transport costs to haul traffic to the meet point under the interconnection rules. Bell Atlantic's cite to the FCC's language regarding "expensive interconnection" is not on point because the FCC there was referring to interconnection costs -- not transport costs.[45]

Bell Atlantic is correct that "to the extent [ILECs] incur costs to provide interconnection or access under sections 251(c)(2) or 251(c)(3), [ILECs] may recover such costs from requesting carriers." Local Competition Order at ¶ 200. However, ¶ 200 refers to the cost of establishing and maintaining an interconnection arrangement for a CLEC, not to transport costs. Transport and termination costs within a local service area are covered by the reciprocal compensation rates under § 252(d)(2). Local Compensation Order at ¶ 1034. Traffic originating or terminating outside of the applicable local area would be subject to interstate and intrastate access charges. Id. at ¶ 1035.

iii. Bell Atlantic's obligation to make a reasonable accommodation for interconnection and the effect of that obligation on mid-span meet build out costs

The FCC has stated that ILECs must make a reasonable accommodation for interconnection. Local Competition Order at ¶ 202. "We further conclude that the obligations imposed by sections 251(c)(2) and 251(c)(3) include modifications to [ILEC] facilities to the extent necessary to accommodate interconnection ..." Id. at ¶ 198.

That is, use of the term "feasible" implies that interconnecting or providing access to a LEC network element may be feasible at a particular point even if such interconnection or access requires a novel use of, or some modification to, [ILEC] equipment ... Congress intended to obligate the [ILEC] to accommodate the new entrant's network architecture ... Consistent with that intent, the [ILEC] must accept the novel use of, and modification to, its network facilities to accommodate the interconnector or to provide access to unbundled elements.

Id. at ¶ 202.

Furthermore, the FCC's definition of "technically feasible" states that "the fact that an [ILEC] must modify its facilities or equipment to respond to such request does not determine whether satisfying such request is technically feasible." 47 C.F.R. § 51.5. Therefore, Bell Atlantic must make a reasonable accommodation for interconnection, which may include some modifications to its facilities.

The FCC has specific rules for accommodation of interconnection in the meet point arrangement context. Bell Atlantic is required to make "some" buildout or a "limited" buildout of facilities as a reasonable accommodation for interconnection. The FCC has stated "although the creation of meet point arrangements may require some build out of facilities by the [ILEC], we believe such arrangements are within the scope of the obligations imposed by sections 251(c)(2) and 251(c)(3) ... the limited build-out of facilities from that point may then constitute an accommodation of interconnection. In a meet point arrangement, each party pays its portion of the costs to build out the facilities to the meet point." Local Competition Order at ¶ 553. The FCC based this position on the following reasoning: "In this situation, the [ILEC] and the new entrant are co-carriers and each gains value from the interconnection arrangement." Id.

What constitutes a reasonable accommodation is based, at least in part, on the distance of the build out. The FCC stated "[r]egarding the distance from an [ILEC's] premises that an incumbent should be

required to build out facilities for meet point arrangements, we believe that the parties and state commissions are in a better position than the [FCC] to determine the appropriate distance that would constitute the required reasonable accommodation of interconnection." Id. at ¶ 553.

Therefore the Department must determine whether a particular build out distance constitutes a reasonable accommodation of interconnection. The record in this matter indicates that the expenses of a mid-span meet build out will likely vary from project to project (IR-BA-M1-1-5). Until the Department has a record of a particular build out and the associated costs, we cannot make the determination whether those costs constitute a reasonable accommodation of interconnection and must therefore be borne by Bell Atlantic. At such time as the parties establish a new mid-span meet, and to the extent they are unable to agree on cost sharing, the parties may come before the Department with the actual figures for a particular build out. At that time, the Department would determine whether a particular build out constitutes a "reasonable accommodation of interconnection."

iv. Reciprocal Compensation Rate

Regarding the parties' dispute on the appropriate rate to be paid for reciprocal compensation, the Department addressed this issue in its Consolidated Arbitrations, Phase 4 Order. In that Order, the Department stated that "the appropriate rate for the carrier other than the [ILEC] is the [ILEC's] tandem interconnection rate." Consolidated Arbitrations, D.P.U./D.T.E. 96-73/74, 96-75, 96-80/81, 96-94-Phase 4, at 70, (1996), ("Consolidated Arbitrations"), citing 47 C.F.R. § 51.711(a)(3). The parties have presented us with no reason to deviate from this position.(46) Therefore, the reciprocal compensation rate to be paid between the parties is the tandem rate. The other remaining issue - direct trunking - is discussed in Section V.C.3., supra.

2. Interconnection Activation Dates

a. Introduction

MediaOne and Bell Atlantic disagree on the appropriate interconnection activation date for IPs when MediaOne expands its services into a new LATA. The interconnection activation date is the date when a CLEC may begin exchanging traffic between its network and Bell Atlantic's network.

b. Positions of the Parties

i. MediaOne

MediaOne contends that Bell Atlantic must agree to commit to establish firm interconnection activation dates for IPs in each LATA (MediaOne Brief at 16). MediaOne agrees with Bell Atlantic that standard intervals should apply for the purchase of interconnection facilities and collocation (id., citing Exh. M-4, at 2-3). However, if the interconnection is by mid-span meet, MediaOne proposes interconnection activation dates no sooner than 60 days and no later than 120 days, after receipt by Bell Atlantic of a trunk order (id.). MediaOne contends that it needs the deadline to ensure that Bell Atlantic will follow through on its commitment to implement MediaOne's network configuration plan (id.). Without such a time commitment, MediaOne contends that it will be unable to implement any plan to expand its services and service territory within a particular time frame (id., citing Tr. 2, at 316; Exh. M-4, at 3). MediaOne argues that while not all details of a mid-span meet arrangement can be identified in advance, the parties can still agree on a general time frame (id.). Finally, MediaOne

argues that Bell Atlantic's proposal on activation dates violates its obligation to provide interconnection on terms and conditions that are just and reasonable (id.).

ii. Bell Atlantic

Rather than agree on a specific time interval in the agreement, Bell Atlantic proposes that MediaOne and Bell Atlantic agree on an activation date within ten business days from the date Bell Atlantic receives MediaOne's transport orders (facilities orders and routing information) for interconnection in a new LATA (Bell Atlantic Brief at 40-41, citing Exh. BA-MA-7, at 16). Bell Atlantic contends that that activation date should be no earlier than 60 days after Bell Atlantic receives the necessary information (id. at 40). Bell Atlantic states that this is consistent with language contained in approved interconnection agreements (id.). Bell Atlantic argues that a firm date to complete all interconnection orders is not feasible because it ignores the fact that activation will be determined by the method of interconnection selected and Bell Atlantic's overall interconnection activity at the time MediaOne submits its facilities orders and routing information to Bell Atlantic (id.). Bell Atlantic also contends that interconnection activations are affected by standard provisioning intervals for interconnection facilities and collocation, and are also contingent on the availability of facilities (id. at 40-41). Finally, Bell Atlantic contends that a decision by MediaOne to purchase transport facilities from a third party could also affect the timing of interconnection activation (id.).

c. Analysis and Findings

We agree with MediaOne that its ability to make its service expansion plans is hindered by Bell Atlantic's refusal to establish, in the interconnection agreement, an overall date certain by which MediaOne can expect the interconnection process to be complete. Unless a CLEC knows with certainty when its interconnection with Bell Atlantic will be operational, it cannot finalize sales and marketing, and operational support planning, which are critical components to any business plan.

We recognize that certain facilities provisioning and collocation are governed by timetables established under the Department's wholesale performance standards. See Consolidated Arbitrations, Phase 3-B (1998). However, Bell Atlantic's proposed language would give Bell Atlantic too much discretion over the timing of mid-span meet interconnections, by not requiring a deadline for activating MediaOne's trunks. We believe MediaOne's proposed language better balances the parties' interests, in that it gives MediaOne a date certain for activation while giving Bell Atlantic flexibility to complete the activation on any date within a period between 60 to 120 days after receipt of an error-free trunk order. Therefore, we find that the interconnection activation date for a mid-span meet arrangement shall be no sooner than 60 days, and no later than 120 days, after receipt of the associated trunk order. The 120 days should be ample time for the parties to work out the various technical and other issues. In addition, with four months advance notice, Bell Atlantic should be able to plan properly for the availability of facilities for mid-span meets.[47] If MediaOne decides to purchase transport facilities from a third party, MediaOne shall use reasonable efforts to ensure that the third-party provider does not unreasonably delay Bell Atlantic's efforts to complete the interconnection by the deadline.

3. Collocation at MediaOne Site

a. Introduction

The issue in dispute is whether MediaOne is required under the Act to provide collocation at

MediaOne's facilities for Bell Atlantic to interconnect with MediaOne.

b. Positions of the Parties

i. MediaOne

MediaOne argues that as a CLEC, it has no obligation under § 251(c) of the Act to provide Bell Atlantic with collocation at its facilities (MediaOne Reply Brief at 7). MediaOne contends that Bell Atlantic can interconnect with MediaOne through an entrance facility leased from MediaOne or a mid-span meet arrangement (MediaOne Brief at 17). In addition, MediaOne argues that CLECs have the obligation under § 251(a) of the Act to interconnect with other carriers directly or indirectly without any specific interconnection method defined, and this obligation is met by providing the above-mentioned methods of interconnection (MediaOne Reply Brief at 7).

ii. Bell Atlantic

Bell Atlantic contends that MediaOne should be required to allow Bell Atlantic to collocate at MediaOne's facilities so that Bell Atlantic may terminate traffic to MediaOne using Bell Atlantic's own facilities (Bell Atlantic Brief at 37-38). Bell Atlantic argues that in the absence of the option to collocate, Bell Atlantic is forced to build a mid-span meet arrangement or to purchase transport from MediaOne (id.). Bell Atlantic claims that its inability to collocate at MediaOne's facilities hinders efficient interconnection by Bell Atlantic (id.). In addition, Bell Atlantic maintains that MediaOne is not fulfilling its broad obligations under Section 251(a) of the Act, which places a duty on all carriers to "interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers" (Bell Atlantic Reply Brief at 17, citing 47 U.S.C. § 251(a)).

c. Analysis and Findings

MediaOne has a general duty as a telecommunications carrier under §251(a) of the Act to interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers. 47 U.S.C. § 251(a). However, the specific obligation to provide collocation applies only to ILECs, such as Bell Atlantic, not to MediaOne. 47 U.S.C. § 251(c)(6).[48] Therefore, we conclude that MediaOne is not required by the Act to offer Bell Atlantic collocation at its facilities.

However, as we noted earlier, § 252(e)(3) provides that "nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of an agreement, including requiring compliance with intrastate telecommunications service quality standards and requirements." Therefore, we do have authority under state law to consider whether to require MediaOne to offer collocation to Bell Atlantic, but we will not do so because such a requirement would conflict with MediaOne's right to interconnect with Bell Atlantic at any technically feasible location its chooses.

C. Transmission and Routing of Telephone Exchange Service Traffic

1. Monitoring of Trunk Traffic/Prevention of Blocking

a. Introduction

Currently, Bell Atlantic establishes one-way trunk groups from its network to a CLEC network;

CLECs also establish one-way trunks from their networks to Bell Atlantic's network (RR-DTE-22). Both the CLECs and Bell Atlantic are responsible for monitoring their respective one-way trunk groups for blocking[49] (id.). Bell Atlantic provides trunk group connections at either a DS-1 or DS-3 level (RR-DTE-20). When a DS-1 trunk facility becomes blocked during the busy hour, the parties disagree about whether they must commit to (1) a notification requirement for trunk blocking, and (2) a specific period for remedying trunk blocking on trunk groups between Bell Atlantic and MediaOne.

b. Positions of the Parties

i. MediaOne

MediaOne proposes that both parties notify one another within seven days after a party determines that the Common Channel Signaling ("CCS") busy hour equivalent[50] of a DS-1 has been exceeded in a trunk group (MediaOne Brief at 19). In addition, MediaOne proposes that the parties also commit to remedying the problem by adding trunks or establishing new direct trunk groups within 15 days after trunk blocking to reduce the blocking of calls between the two networks (id.). MediaOne argues that 15 days is a reasonable period of time to remedy a blocking situation, balancing the costs to correct the blocking situation with the inconvenience to the customers of both parties (id.). According to MediaOne, it is imposing a reasonable requirement, on both itself and on Bell Atlantic, to ensure that the public is not adversely affected by blocking for a long period of time (id. at 19-20). MediaOne also argues that the trunk provisioning metrics in Bell Atlantic's performance standards, as established in the Consolidated Arbitrations, do not apply here because they were not established to address the specific issues of trunk requests associated with a blocking situation, but to address trunk requests made in the regular course of business and to ensure the parity of provisioning required by the Act (id. at 20).

ii. Bell Atlantic

Bell Atlantic argues that MediaOne's proposed notification requirements for trunk blocking are unreasonable and have no factual basis (Bell Atlantic Reply Brief at 18). In addition, Bell Atlantic asserts that the 15-day interval proposed by MediaOne is too short because it does not account for the different courses of corrective action upon which the parties might decide (e.g., augment an existing trunk group, build a new trunk group, install additional transport facilities, add switching capacity) and, at any rate, is not appropriate for any of those actions (id. at 19).

In describing its trunk monitoring process, Bell Atlantic states that it collects trunking data and analyzes them on a monthly basis (RR-DTE-22). Bell Atlantic asserts that its proposal, described below, addresses MediaOne's timing issues, including a 15-day notice provision, and balances the need for maintaining adequate trunking with the availability of underlying trunk facilities (Bell Atlantic Reply Brief at 18-19).

Bell Atlantic proposes to monitor its final trunk groups carrying traffic to the CLECs based on actual traffic data and to analyze the data, after each monthly reporting period, to determine if final trunk groups are exceeding their engineered blocking design (id. at 19). Bell Atlantic proposes to investigate the causes for trunk groups that exceed their engineered blocking design (id.). When it determines trunk capacity relief is required, it will contact MediaOne within 15 business days after the end of the month to initiate trunk group additions or the creation of new end office trunk groups (id.). Bell Atlantic argues that its proposal to notify MediaOne within 15 days after the end of the month and to negotiate a suitable course of corrective action is reasonable and appropriate (id.).

Bell Atlantic argues that MediaOne's proposal expands the current standards for trunk provisioning, as set forth in the Consolidated Arbitrations, by adding new language (Bell Atlantic Brief at 46). According to Bell Atlantic, MediaOne's proposal differs significantly from the current standard trunk installation interval of 18 business days applicable to long distance carriers and CLECs for an addition to an existing trunk group of 192 or fewer trunks (id.). All other trunk activity is based on negotiated intervals (id.). Bell Atlantic states that the current trunk installation intervals should apply to MediaOne (id.).

c. Analysis and Findings

As an initial matter, we note that both parties recognize their obligation to monitor, engineer, and maintain their dedicated trunk groups for delivering traffic from their network to the other carrier. Moreover, the carriers agree that they are responsible for ordering additional trunk capacity to prevent trunk blocking on their respective networks when traffic on either carrier's network exceeds a certain level. However, the parties disagree on how quickly a carrier should notify the other carrier about blocking and respond to trunk provisioning requests.

As noted by MediaOne, the Department's existing performance standards relate only to provisioning new trunks under normal circumstances and do not address the more urgent situation of network blocking. See Consolidated Arbitrations, Phase 3-B (1998). Bell Atlantic's proposal, summarized above, addresses the process for augmenting final trunk groups, but does not provide a specific time period for corrective action after blocking occurs on the carrier's network. Blocking is an issue that goes beyond the normal competitive concerns of carriers; it may have serious customer service impacts. Therefore, the Department finds that we must establish specific time intervals for interconnection trunk provisioning in a blocking situation in order to minimize any inconvenience to the public resulting from blocking.

When traffic on a carrier's network exceeds the blocking threshold (i.e., the CCS busy hour equivalent of a DS-1) and that carrier can remedy the blocking itself, we direct the carrier to provision additional trunks within fifteen days of when the problem first develops (i.e., when the blocking threshold is exceeded). The carrier is also required to notify the other carrier of the blocking occurrence and corrective action when the new trunks are installed and made operational.

In situations where the remedy requires that new trunks be provisioned by one carrier to another, we believe Bell Atlantic's proposal is inadequate. Under that proposal, Bell Atlantic would gather and analyze data on blocking on its network on a monthly basis, with the analysis being completed at the end of each month. This part of the process, we find, is reasonable.(51) However, after determining blocking, Bell Atlantic would have 15 days to notify MediaOne of the problem and begin negotiating a solution. Bell Atlantic should not need 15 days to notify MediaOne and begin working on fixing the problem. Notification and preliminary discussions with MediaOne should occur immediately (i.e., within two business days after the last day of the month). Moreover, the current 18-day trunk provision interval is inadequate for these types of more urgent situations. Reflecting the increased urgency of a blocking situation, Bell Atlantic should provision additional trunks and correct the blocking situation within 15 days of discovering the problem (i.e., within 15 days of completing its monthly analysis). The two-day notification deadline is subsumed within the 15-day provisioning interval. Since Bell Atlantic's ability to meet the 15-day deadline may be affected, to some extent, by MediaOne's cooperation, we direct MediaOne to assist Bell Atlantic in the process.(52)

2. Access to Call-Related Database through Commercial SS7[53] Provider

a. Introduction

The FCC observed in its Local Competition Order that "[a]ccess to signaling systems continues to be a critical element to providing competing local exchange and exchange access service," and therefore LECs should provide nondiscriminatory access on an unbundled basis to signaling systems to CLECs. Local Competition Order at ¶¶ 482, 479. The FCC found that access to call-related databases [54] is crucial to CLECs' entry into the local exchange market and concluded that "ILECs should provide nondiscriminatory access on an unbundled basis to their call-related databases for the purpose of switch query and database response through SS7 network." Id. at ¶ 484. The parties disagree whether Bell Atlantic has an obligation to provide access to call-related databases at a parity level when MediaOne chooses to use a commercial third-party SS7 provider, instead of directly interconnecting their own Common Channel Signaling facilities to Bell Atlantic.[55]

b. Positions of the Parties

i. MediaOne

MediaOne argues that Bell Atlantic has an obligation under the Act to provide CLECs with access and updates to call-related databases at parity to what Bell Atlantic provides to itself (MediaOne Brief at 21). MediaOne proposes wording that would allow either party to use a commercial SS7 provider and permit that party to gain access "to the same databases as would have been accessible if [that party] had connected directly to the other Party's CCS network" (MediaOne Petition at Attachment 2, Template, Section 17.0). MediaOne acknowledges that it is the commercial SS7 provider that dictates the service MediaOne receives, not Bell Atlantic, but that Bell Atlantic does, nonetheless, have control over the type of access it provides to the third party, and when it makes the access available (MediaOne Brief at 21).

ii. Bell Atlantic

Bell Atlantic argues that it can provide CLECs with access to its call-related databases and associated signaling necessary for the routing and completion of CLEC traffic at parity only for CLECs that (1) interconnect with Bell Atlantic's own Common Channel Interoffice Signaling facilities, and (2) establish an interconnection agreement with Bell Atlantic or purchase out of Bell Atlantic's tariffs (Bell Atlantic Reply Brief at 20-21). Bell Atlantic contends that if MediaOne chooses to access Bell Atlantic's database through a commercial third-party SS7 provider, Bell Atlantic cannot guarantee access at a parity level (Bell Atlantic Brief at 50).

Bell Atlantic argues that under MediaOne's proposal, Bell Atlantic would become a "middle man," as Bell Atlantic would have a business relationship with MediaOne under its interconnection agreement and a separate business relationship with the SS7 provider under a separate contract or tariff (RR-DTE-11; IR DTE-BA-1-9). As a "middle man," Bell Atlantic contends that it cannot be responsible for the quality of service that MediaOne receives from the SS7 provider (Bell Atlantic Reply Brief at 21). Bell Atlantic also claims that due to third-party interconnection agreements, the speed of the interconnection arrangement, and the performance level of the SS7 provider's network, Bell Atlantic cannot dictate to the third-party provider the level of service it is providing to MediaOne (id.).

Furthermore, Bell Atlantic argues that it has no obligation under the Act to provide a CLEC with access to its databases on a parity basis if the CLEC employs a third-party SS7 provider (id.).

c. Analysis and Findings

For the reasons cited below, we find that Bell Atlantic's obligation to provide access to databases at parity does not change even if MediaOne chooses to use a third-party provider. First, the Act requires ILECs to provide requesting carriers "nondiscriminatory access to databases and associated signaling necessary for call routing and completion" as a checklist item for receiving approval to provide in-region interLATA services under Section 271. 47 U.S.C.

§ 271(c)(2)(B)(i). Nowhere in the Act, the FCC's rules, or relevant court precedent, do we find that this requirement is conditioned upon the CLEC using the ILEC as the provider, rather than a third party commercial provider.

Second, MediaOne is free to contract with a different SS7 provider rather than interconnecting its own Common Channel Interoffice Signaling facilities to Bell Atlantic. We agree with MediaOne that Bell Atlantic does not have control over the level of service MediaOne's vendor provides to MediaOne. However, Bell Atlantic certainly has control over the quality of service it provides to MediaOne's vendor.(56) That service quality must be at parity to what Bell Atlantic provides to itself. 47 U.S.C. § 251(c)(2)(C). Finally, although Bell Atlantic raises technical arguments about why it cannot provide parity to MediaOne unless MediaOne interconnects with Bell Atlantic and takes Bell Atlantic's SS7 service, there is no record evidence to support those claims. Therefore, we find that Bell Atlantic is obligated to provide access to call-related databases to MediaOne's commercial SS7 provider at parity to what Bell Atlantic provides itself.(57)

3. Direct Trunking Threshold Level(58)

a. Introduction

Bell Atlantic argues that the capacity of its tandem switches is beginning to exhaust. Bell Atlantic contends that the exhaust is caused by an unrestricted volume of CLEC local traffic delivered to Bell Atlantic end offices through Bell Atlantic's tandem switches(59) (which are not designed for such purpose but rather for switching excess traffic from direct end office trunks). In order to prevent further tandem capacity exhaust, Bell Atlantic proposes that there should be a limit on the amount of traffic between Bell Atlantic's end offices and CLECs switches. Further, Bell Atlantic maintains that CLECs should be required to establish direct trunks between Bell Atlantic's end offices and CLECs' end offices once traffic volumes reach a threshold level. The parties disagree on the appropriate direct trunking threshold and the period of time over which traffic volumes should be measured to determine whether the threshold level has been met.

b. Positions of the Parties

i. MediaOne

MediaOne argues that as a new carrier experiencing substantial traffic fluctuations, it requires a higher direct trunking threshold level to take into consideration these fluxuations and therefore proposes to establish direct trunking to Bell Atlantic's end office once MediaOne's traffic volume

reaches the equivalent of three DS-1s, as measured over three consecutive months (MediaOne Proposed Findings of Fact and Conclusions of Law at 3). MediaOne argues that Bell Atlantic's network design principles, that recommend direct trunking when traffic reaches the DS1 level, don't apply to MediaOne (MediaOne Reply Brief at 9). MediaOne argues that Bell Atlantic's witness acknowledged during hearings that it would be reasonable to set a period of time instead of one point in time for measuring traffic volumes to establish this threshold (MediaOne Reply Brief at 10; Tr. 2, at 349). On a related issue, MediaOne requests that Bell Atlantic's transport and termination bundled rate for direct trunks be unbundled since MediaOne will not be buying transport from Bell Atlantic when it establishes direct trunking (MediaOne Brief at 12).

In response to Bell Atlantic's claims that the exhaust of Bell Atlantic's tandem switches is due to an increase in CLEC traffic routed over them, MediaOne provides two reasons why Bell Atlantic's analysis is wrong (MediaOne Reply Brief at 10-11). First, MediaOne argues that the data show an increase in the number of trunks over a 14 month-period but do not reflect the total percentage of trunks that are attributable to CLEC traffic (id.). MediaOne claims that it cannot compare CLEC-trunk demand with total trunk demand over Bell Atlantic's tandem switches from the data that Bell Atlantic has provided (id. at 11). Second, MediaOne argues that the data do not show why the three DS-1 level is "excessive" (id. at 11). According to MediaOne, its proposal of a three DS-1 threshold, for three consecutive months, addresses both Bell Atlantic's concern about excessive levels of traffic through its tandem and MediaOne's concern about ensuring that it has enough trunks to meet its planning and growth needs (id. at 11).

ii. Greater Media

While Greater Media also argues that Bell Atlantic's one DS-1 direct trunking threshold is unreasonable, Greater Media contends that a DS-3 threshold, which represents 672 simultaneous calls, or, in the alternative, a level of 15 DS-1s, which represents 360 simultaneous calls is appropriate (Greater Media Brief at 26-27). In addition, Greater Media claims that Bell Atlantic's argument that a DS-1 level is consistent with its internal network design rules has not been supported by any written evidence (id. at 27). Furthermore, Greater Media believes that Bell Atlantic has not shown why Greater Media's proposal would be detrimental to Bell Atlantic's network (id.). Greater Media argues that Bell Atlantic's revised position to require end office direct trunking when Greater Media experiences a DS-1 level of traffic for three consecutive months is arbitrary (Greater Media Reply Brief at 12). Greater Media claims that "it would be equally appropriate for the Department to average the three year term of the proposed interconnection agreement with three months and afford Greater Media a period of 19½ months of consecutive traffic at DS-1 level" (id.).

iii. Bell Atlantic

Bell Atlantic argues that if the traffic volume between a Bell Atlantic end office and a

CLEC's switch exceeds a DS-1 threshold level, the CLEC should be required to build direct trunking to Bell Atlantic's end office (Bell Atlantic Brief at 47). First, Bell Atlantic claims, "[t]andem switches are generally engineered to switch overflow traffic from direct end office high usage trunk groups. They are not engineered or designed to handle the major portion of local traffic that is carried over the Public Switched Network" (Exh. BA-MA-3, at 9; Bell Atlantic Brief at 47). Second, Bell Atlantic maintains that the DS-1 threshold has been used for more than ten years as the threshold for Bell Atlantic's own network to establish direct end office trunks in order to maximize efficiency (Tr. 1, at 40; Exh. BA-MA-3, at 10; Bell Atlantic Brief at 47).

Bell Atlantic claims that the need for a DS-1 threshold is shown by the 59 percent increase in tandem trunks for CLECs to Bell Atlantic's tandems from April 27, 1998 through June 25, 1999 (RR-DTE-3; Bell Atlantic Brief at 47). According to Bell Atlantic, routing excessive volumes of traffic through Bell Atlantic's tandem switch instead of relying on direct trunking between end offices results in additional tandem switching and trunking capacity, thereby causing Bell Atlantic unnecessary costs and network inefficiency (Bell Atlantic Brief at 48).

c. Analysis and Findings

As an initial matter, Bell Atlantic's evidence that CLECs have created the tandem exhaust problem is inconclusive, but Bell Atlantic has persuaded us that CLECs are a significant contributing factor. Bell Atlantic presented evidence of its recent addition of two new access tandems in 1999 as proof that a tandem exhaust problem exists.(60) During hearings, Bell Atlantic stated that the exhaust problem at its access tandems is attributed to a combination of demand for actual trunk termination, the circuits that are physically terminated on the tandems, and the calls that are placed over those trunks (Tr. 1, at 19). Bell Atlantic provided evidence that over 66,000 trunks, or 59 percent, of the increase in tandem trunks from April 1998 through June 1999, was attributable to CLEC trunking requirements(61) (RR-DTE-3). Bell Atlantic did not provide evidence on the other element of tandem exhaust: the volume of CLEC calls routed through the tandem to another CLEC, as measured by the ratio of CLEC tandem transit minutes of use to total tandem minutes of use. Moreover, Bell Atlantic's witness testified that the increase in trunk terminations had a larger effect on its current tandem exhaust problem than increased traffic volume (Tr. 1, at 20). Therefore, we conclude that CLEC trunk terminations were a significant factor in the current tandem exhaust situation, though certainly not the only factor. Because of other potential causes of tandem exhaust, it is not clear whether Bell Atlantic's proposal to limit CLEC use of its tandems will correct the tandem exhaust problem.

In addition, we are reluctant to rely on Bell Atlantic's economic break point study as proof of the appropriate threshold for direct trunking. Bell Atlantic claims that although its analysis of the break-even point for direct trunking was completed roughly 10 years ago, the analysis is still applicable because current technology has influenced the tradeoff between direct trunking costs and tandem switching costs making it more economical for Bell Atlantic to establish direct trunks when traffic is less than one DS-1.

Consequently, we find that some limit on the amount of traffic that a CLEC may route through a tandem switch is appropriate to address the exhaust of those tandems. However, the DS-1 standard, which represents 24 simultaneous calls, would penalize new entrants that experience traffic fluctuations during the early stages of their development. We agree with MediaOne that a level of three DS-1s, which represents 72 simultaneous calls, is a more reasonable cap for MediaOne and Greater Media. We think that the three DS-1 standard will significantly improve Bell Atlantic's tandem exhaust situation. We reject Greater Media's DS-3 or 15 DS-1 thresholds (which represent 672 and 360 simultaneous calls, respectively) because under either standard Bell Atlantic's tandem could be severely burdened with significant levels of traffic, not just from MediaOne and Greater Media but also other CLECs,(62) before direct trunking would be required.

In addition, the Department finds that to account for fluctuations in traffic volumes for new carriers, the three DS-1 standard should apply when the carriers' traffic exceeds the level for three consecutive months. Indeed, Bell Atlantic's own witness recognized the importance of a period of time, rather than a single point in time, to measure traffic volumes to account for fluctuations in new carrier

traffic (MediaOne Reply Brief at 10; Tr. 2, at 349). We believe that three consecutive months will serve as an appropriate period for evening out fluctuations.

4. Reciprocal Compensation Applicability

a. Introduction

In MCI WorldCom, D.T.E. 97-116-C (1999), the Department found that Bell Atlantic was no longer required to pay reciprocal compensation to CLECs for Internet Service Provider ("ISP")-bound traffic. See also In re: Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, Declaratory Ruling (rel. Feb. 26, 1999) ("Internet Traffic Order"); Inter-Carrier Compensation for ISP-Bound Traffic, CC Docket No. 99-68, Notice of Proposed Rulemaking (rel. Feb. 26, 1999) ("NPRM"). In addition, the Department found that if traffic sent by one LEC to another exceeds a 2:1 terminating-to-originating traffic ratio, the excess is presumed to be ISP traffic. The Department concluded that "Bell Atlantic-Massachusetts shall not be required to make reciprocal compensation payments, in excess of the 2:1 traffic ratio, beginning with any payments made or to be made after (and including payments undisbursed as of) February 26, 1999." D.T.E. 97-116-C at 41. The parties to this arbitration dispute two issues concerning our MCI WorldCom Order: (1) whether they may audit each other's traffic to determine if it is ISP-bound traffic, even though the traffic imbalance is less than 2:1; and (2) whether, if such an audit is conducted, reciprocal compensation is due for traffic found to be ISP-bound traffic.

b. Position of the Parties

i. MediaOne

MediaOne argues that the Department's Order in D.T.E. 97-116-C concluded that unless the traffic imbalance ratio between two parties exceeds a terminating-to-originating traffic ratio of 2:1, the traffic should not be regarded as ISP-bound traffic and reciprocal compensation should apply (MediaOne Brief at 18-19). MediaOne contends that there is no need to conduct a traffic study when the traffic imbalance ratio is below 2:1 (id.). But, according to MediaOne, the parties may audit traffic once the traffic imbalance reaches the 2:1 ratio to identify whether any portion of the traffic in excess of 2:1 ratio is ISP-bound traffic (id.).

ii. Bell Atlantic

Bell Atlantic claims that the Department's MCI WorldCom Order allows it to conduct a traffic study to identify ISP-bound traffic regardless of whether the 2:1 imbalance exists (Bell Atlantic Reply Brief at 17-18). Bell Atlantic further contends that if that study reveals that certain traffic is ISP-bound, Bell Atlantic should not have to pay reciprocal compensation for that traffic (id. at 18).

c. Analysis and Findings

As noted above, we found in MCI WorldCom that Bell Atlantic was required to pay reciprocal compensation for traffic where a CLEC's terminating-to-originating traffic ratio was less than 2:1. The Department, however, was very clear in MCI WorldCom that Bell Atlantic was not required to make payments in excess of the 2:1 ratio unless CLECs could rebut the presumption that such traffic was not ISP-bound traffic. D.T.E. 97-116-C at 28, n.31 ("this 2:1 proxy is rather like a rebuttable presumption, allowing any carrier to demonstrate adduce [sic] evidence in negotiations, or ultimately

arbitration, that its terminating traffic is not ISP-bound, even if it is in excess of the 2:1 proxy"). Although not stated explicitly, the Order also created a corresponding rebuttable presumption that CLEC traffic is local traffic if the CLEC's traffic imbalance is less than 2:1. If Bell Atlantic is able to rebut that presumption, it does not have to pay reciprocal compensation for traffic that is shown to be ISP-bound. It is reasonable to allow Bell Atlantic, if it so chooses, to conduct an audit of CLEC traffic to make such a determination.

D. Tandem Transit Service

1. Introduction

Tandem transit service is a service provided by Bell Atlantic to CLECs who do not directly interconnect with one another but whose facilities do connect to the same Bell Atlantic tandem switch (MediaOne Brief at 21). The service allows CLECs to terminate traffic on each others' networks without directly interconnecting with each other; instead the CLECs only have to interconnect at the same tandem location with Bell Atlantic (Bell Atlantic Brief at 53). Tandem transit service would allow a facilities-based CLEC more rapid entry into the local exchange market and minimizes overall interconnection costs. This service does not involve the origination or termination of traffic to a Bell Atlantic customer (Bell Atlantic Brief at 53). Bell Atlantic currently applies a transit charge to the originating CLEC for Bell Atlantic's cost of switching these calls to the terminating CLEC in addition to any other charges assessed by the terminating carrier to Bell Atlantic for terminating the calls (id.).

Under Bell Atlantic's proposal to MediaOne, it will route transit traffic from MediaOne to the terminating CLEC via Bell Atlantic's tandem provided that both CLECs are connected to the same Bell Atlantic tandem and the level of terminating traffic between those carriers does not exceed one DS1 trunk capacity (Bell Atlantic Brief at 53). When traffic exceeds one DS1 on average for three consecutive months, MediaOne would be required to establish direct end office trunk groups with minor overflow going through the tandem (Bell Atlantic Brief at 53). Bell Atlantic states that MediaOne would have up to 180 days to negotiate an interconnection agreement with the CLEC to which it sends transit traffic (id. at 53-54). If an agreement is not reached in that time frame, Bell Atlantic would have the right to block traffic between MediaOne and that CLEC (MediaOne Proposed Findings of Fact and Conclusions of Law at 8).

2. Positions of the Parties

- MediaOne

MediaOne maintains that although the Act does not expressly address tandem transit traffic, Bell Atlantic's refusal to transit CLEC-to-CLEC traffic through tandem switches would impliedly violate Section 251(c)(2) of the Act (MediaOne Brief at 23-24). Moreover, MediaOne claims that the FCC's rules implementing the "pick and choose" provision under Section 252(i) of the Act[63] would apply, and MediaOne could elect to use the tandem transit provision in the Bell Atlantic/AT&T interconnection agreement (MediaOne Brief at 26). MediaOne notes that none of the three exceptions established by the FCC to using the pick-and-choose provision would apply here (MediaOne Brief at 26). Specifically, the third exception, which allows an ILEC to make a particular interconnection available "for a reasonable period of time" after state commission approval would not pertain to MediaOne (MediaOne Brief at 27). MediaOne states that Bell Atlantic signed the AT&T agreement only 15 months ago and has also entered into agreements that did not contain a restriction on tandem transit as late as December 1998 (MediaOne Brief at 27). MediaOne contends that it will exercise its

right to incorporate the tandem transit traffic provision of the AT&T agreement in its agreement, if the Department does not approve MediaOne's proposal on tandem transit traffic (MediaOne Brief at 31).

According to MediaOne, Bell Atlantic's proposed DS-1 trunk limitation on tandem transit service applies to only one of the 49 interconnection agreements Bell Atlantic currently has in place(64) (MediaOne Brief at 22). MediaOne argues that while Bell Atlantic has presented evidence illustrating that it engineers its network in Massachusetts in accordance with the DS1 trunk standard it has proposed for tandem transit traffic, Bell Atlantic has not presented evidence that that standard is appropriate for any CLEC, in general, or for MediaOne's network in particular (MediaOne Proposed Findings of Fact and Conclusions of Law at 8).

MediaOne explains that its proposal provides for the following: (1) MediaOne will begin the process of implementing direct trunks to another CLEC once it originates a volume of traffic to that CLEC sufficient to fill three DS-1 circuits for three consecutive months; (2) the proposal will take effect twelve months after the effective date of the interconnection agreement; (3) Bell Atlantic must provide MediaOne with the necessary information to identify the CLECs with whom MediaOne exchanges traffic and the volumes of that traffic(65) (MediaOne Proposed Findings of Fact and Conclusions of Law at 8). According to MediaOne, since nothing in the Act requires CLECs to negotiate interconnection agreements, MediaOne cannot agree to a specific time line for negotiating interconnection with other CLECs once the three DS-1 threshold is met (MediaOne Brief at 30).

MediaOne states that it appreciates the problem Bell Atlantic is trying to resolve by limiting the volume of traffic transiting its tandems. MediaOne contends that its compromise provision gives Bell Atlantic a meaningful opportunity to limit the amount of CLEC-to-CLEC traffic routed through its tandem switches while maintaining MediaOne's ability to plan its network in a reasonable fashion (MediaOne Brief at 31).

b. Bell Atlantic

Bell Atlantic claims that tandem transit service is a voluntary offering, tendered on a transitional basis, to assist start-up CLECs in completing calls in the short-term until they are able to complete their own interconnection arrangements with other CLECs (Bell Atlantic Brief at 54). Bell Atlantic argues that it is under no legal obligation under the Act or the FCC rules to provide this service (id.). Bell Atlantic states that Section 251(c)(2) of the Act requires that Bell Atlantic, as an incumbent, must provide interconnection with its network "for the facilities and equipment of any requesting telecommunications carrier" (id.). Bell Atlantic explains that because the FCC defined the term "interconnection" under this section specifically as "the physical linking of two networks for the mutual exchange of traffic," the requirement would not apply to transit service which does not involve the mutual exchange of traffic between Bell Atlantic and any CLEC, including MediaOne (id. at 55).

In addition, Bell Atlantic argues that transit service is not available for the "pick and choose" provision under Section 252(i) of the Act because that provision only allows a carrier to pick and choose services, network elements and interconnection as required under Section 251 of the Act, and that tandem transit service is not required by the Act (Bell Atlantic Reply Brief at 22). Moreover, Bell Atlantic argues that a carrier's right under the "pick and choose" section of the Act is not unlimited; an individual interconnection, service or network element may only be available for a reasonable period of time after the approved agreement is available for public inspection (id. at 22-23). Bell

Atlantic argues that the AT&T agreement was approved on May 18, 1998, and the reasonable period of time for making the provisions available for adoption by other carriers may have expired (id.). Bell Atlantic also claims that if the "pick and choose" rule were to apply to transit service, MediaOne would be required to take all integrally-related sections of the interconnection agreement (Bell Atlantic Reply Brief at 23 n.11).

According to Bell Atlantic, its proposed DS-1 trunk limitation only requires CLECs to establish direct trunks when Bell Atlantic believes it is economically efficient to do so (i.e., when calling volumes exceed a DS1 of trunk capacity) (Bell Atlantic Brief at 56). Bell Atlantic explains that its tandem transit restriction is designed to ensure that non-Bell Atlantic traffic originating from CLECs does not cause network congestion or exhaust Bell Atlantic's tandems (id.). Bell Atlantic claims that evidence of tandem exhaustion is illustrated by its need to increase trunk capacity by adding two new tandems in 1999 (id.). Bell Atlantic argues that when a DS1 threshold of transit traffic, on average, is met for three consecutive months, CLECs should be required to establish direct, end office trunk group connections between the two CLECs, with only minor overflow going through the tandems (id. at 57). Lastly, Bell Atlantic contends that adopting a DS-1 threshold would maximize trunking efficiency, reduce tandem network costs, and be consistent with Bell Atlantic's longstanding "economic breakpoint" for network engineering design standards[66] (id.). Bell Atlantic insists that the three DS1 threshold recommended by MediaOne would overburden its tandem switches, especially if applied to all CLECs and would be costly and inefficient (Bell Atlantic Reply Brief at 23).

Concerning reciprocal compensation agreements, Bell Atlantic claims that MediaOne would force Bell Atlantic into a "middle man" role and would not permit Bell Atlantic to recover from MediaOne any charges assessed by a terminating carrier (Bell Atlantic Brief at 55). Bell Atlantic claims that if MediaOne and another CLEC have not agreed upon a mutually acceptable billing arrangement, Bell Atlantic should not be required to continue to route transit traffic (id.). Bell Atlantic insists that requiring MediaOne to reach a reciprocal local traffic exchange arrangement with other CLECs in a 180-day period is reasonable in light of the 160-day period required under the Act for negotiating an interconnection agreement (id. at 55-56).

Regarding MediaOne's request that Bell Atlantic identify the CLECs with which MediaOne exchanges traffic, according to Bell Atlantic, it is unable to give MediaOne the requested SS7 originating point codes,[67] which identify CLECs with whom MediaOne exchanges traffic, because those codes are lost during tandem transit service; Bell Atlantic does not - and cannot - retain that data (id. at 58). Moreover, Bell Atlantic argues that MediaOne does not need the originating point codes for billing purposes because Bell Atlantic bills the originating CLEC and then remits payment to MediaOne (id.).

3. Analysis and Finding

a. Bell Atlantic's obligation to provide tandem transit service

Neither the Act nor the FCC's rules specifically address tandem transit traffic, and the parties are unable to cite any precedent on point from other jurisdictions. Thus, the issue of whether Bell Atlantic has an obligation to provide tandem transit service appears to be an issue of first impression.

Both parties point to Section 251(c)(2) as support for their positions. That Section states that ILECs have:

[t]he duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network ... for the transmission and routing of telephone exchange service ....

The FCC defined the term "interconnection" under this section as "the physical linking of two networks for the mutual exchange of traffic." Local Competition Order at ¶ 176. Bell Atlantic contends that this definition proves that Section 251(c)(2) does not apply to its tandem transit service since tandem transit service does not involve the mutual exchange of traffic between Bell Atlantic and any CLEC. However, we conclude that the above definition is not dispositive of the question, because it does not indicate whether such traffic exchange must include an ILEC as one of the exchanging parties.

The Act is silent on this issue, and the FCC definition provides limited guidance on this point. In Section 251(c), Congress manifested an intent to promote local exchange competition by imposing obligations on incumbent carriers to provide access to their networks to new entrants (for a fee) so that entrants could provide telecommunications services without having to duplicate the incumbent's ubiquitous network. See e.g., § 251(c)(2)(B) (duty to allow interconnection at any technically feasible point); § 251(c)(3) (duty to provide access to network elements); § 251(c)(6) (duty to provide collocation for interconnection or access to unbundled network elements). In light of the above, we find that Section 251(c)(2) requires, not just permits, Bell Atlantic to make available to new entrants its network for the purpose of allowing new entrants to exchange traffic with other CLECs without having to interconnect with each and every CLEC.[68], [69]

However, Bell Atlantic's obligation is not absolute. Bell Atlantic should not be required to provide this service indefinitely for a given CLEC. Tandem transit service should, generally speaking, only be made available as a transition service until a CLEC sufficiently expands its business as demonstrated by increased levels of traffic (see discussion supra), to warrant direct interconnection to other CLECs. At that time, CLECs should cease using Bell Atlantic's transit service and establish direct trunks to those CLECs with which it originates or terminates substantial traffic.

b. MediaOne's obligation to establish reciprocal local traffic exchange arrangements

Before discussing what level of traffic justifies direct trunking, we must first address two related issues: (1) Bell Atlantic's requirement that CLECs using Bell Atlantic's tandem transit service must enter into reciprocal local traffic exchange arrangements with other CLECs within 180 days of first using the service or Bell Atlantic may terminate the transit arrangement; and (2) MediaOne's request for information to identify CLECs with whom it must establish reciprocal local traffic exchange arrangements. We find Bell Atlantic's proposal to terminate transit arrangements unilaterally to be unreasonable. While we are sensitive to Bell Atlantic's argument about serving as a "middle man" for compensation for CLECs exchanging traffic, Bell Atlantic should not have the ability to avoid its interconnection obligation based on a CLEC's inability to establish reciprocal compensation

agreements in a timely manner. Therefore, the Department directs the parties to negotiate additional reasonable incentives (e.g., increased charges) that may be applied to MediaOne if it has not established a reciprocal compensation agreement with other carriers within 180-days of the start of tandem transit service.

Second, we accept Bell Atlantic's evidence that it is not possible at this time for Bell Atlantic to provide originating point code information to MediaOne. However, Bell Atlantic testified that it does retain billing information (Tr. 1, at 167). We accept MediaOne's request for information from Bell Atlantic to identify the CLECs with whom it exchanges traffic.

c. Appropriate threshold for direct trunking

The parties disagree as to the appropriate threshold for direct trunking. MediaOne proposes a three DS1 threshold; Bell Atlantic proposes a threshold of one DS1.

As an initial matter, we have found that Bell Atlantic's evidence that CLECs have created the tandem exhaust problem is inconclusive, but Bell Atlantic has persuaded us that CLECs are a significant contributing factor (see Section V.C.3., above). We concluded that CLEC trunk terminations were a significant factor in the current tandem exhaust situation, though certainly not the only factor. Because of other potential causes of tandem exhaust, it is not clear whether Bell Atlantic's proposal to limit CLEC use of its tandems will correct the tandem exhaust problem.

In addition, we are reluctant to rely on Bell Atlantic's economic break point study as proof of the appropriate threshold for direct trunking. Bell Atlantic claims that although its analysis of the break-even point for direct trunking was completed roughly 10 years ago, the analysis is still applicable because current technology made it more economical for Bell Atlantic to establish direct trunks when traffic is less than one DS-1 (Tr. 1, at 76).

However, there are several weaknesses with Bell Atlantic's use of this study. First, this study was completed over 10 years ago and we cannot determine if the assumptions used are current because Bell Atlantic states that the study is not available (IR-MediaOne-BA-2-10).[70] This study was based on assumptions derived from NYNEX's network and associated calling volumes, and would not have taken into account differences between NYNEX's more mature network and the network of a start-up CLEC with varying calling volumes. Second, while technology may have made it more economical to establish direct trunks at a lower calling volume threshold, the costs this study is predicated upon involve trunking costs from a Bell Atlantic end office to another Bell Atlantic end office. Direct trunking costs from one CLEC switch to another CLEC switch may differ significantly from Bell Atlantic's costs because of the difference in distance between CLEC switches compared to the distance between Bell Atlantic end-office switches. Other potential differences include additional and higher costs for obtaining necessary rights-of-way as well as potential lack of available facilities that might not have existed at the time the study was completed. Therefore, we find that applying the economic break point study based on NYNEX's network to all CLECs is not appropriate.

MediaOne presented evidence regarding the burden it would face if the Department adopted Bell Atlantic's DS-1 proposal. MediaOne described the steps involved in establishing direct trunking with another CLEC to support its argument that the three DS-1 level is more appropriate. Before establishing direct trunks to another CLEC, MediaOne must: (1) monitor traffic volumes before concluding a significant volume of traffic exists between its network and another CLECs; (2) sign an interconnection agreement with that CLEC (complicated by the fact that the other CLEC may not be

required under its contract with Bell Atlantic to establish direct trunking with other CLECs); and (3) arrange for the facilities between its network and the other CLEC's network, which may not be readily available (Tr. 1, at 106-109).

The Department has determined, above, that Bell Atlantic has an obligation to provide tandem transit service until such time as MediaOne generates a level of traffic that warrants migration to direct interconnection with other CLECs. Bell Atlantic proposes to impose restrictions on this obligation by limiting MediaOne's traffic over the tandem transit service to one DS-1 level of volume. However, Bell Atlantic's support for this limitation is flawed, and we decline to accept it. MediaOne, on the other hand, has presented support for its contention that the restriction proposed by Bell Atlantic would have an adverse effect on it. In light of the burdensome nature of Bell Atlantic's proposed limitation, we find that Bell Atlantic has not sufficiently justified its proposed tandem traffic limitation, and we reject it. Accordingly, we accept MediaOne's proposed three DS-1 limitation on tandem transit traffic.

d. Appropriate time period to establish direct trunking

Although we agree with MediaOne's proposed three DS-1 standard, we reject its proposed timeline for establishing direct trunks with CLECs once the traffic threshold is attained. MediaOne proposes the following: 1) an initial 12-month waiting period to allow traffic to stabilize; 2) once traffic remains above the threshold level for three consecutive months at the end of the initial 12-month stabilization period, then MediaOne would be required to establish an interconnection agreement with the CLEC; and (3) once MediaOne establishes an interconnection agreement with the CLEC, it would have time to build and activate the trunks (MediaOne Brief at 29-30). Assuming MediaOne needed six months to establish an interconnection agreement with the CLEC, this process could take more than two years from when traffic volumes initially exceed the three DS-1 threshold. We find that period to be excessive and unresponsive to the need for MediaOne to move this CLEC-to-CLEC traffic from Bell Atlantic's network to the CLECs' networks. The Department recognizes that MediaOne's traffic patterns will vary during the start-up phase in its development. However, six months should be adequate for MediaOne to determine whether the traffic volumes are stable or whether they continue to vary significantly. We agree that three consecutive months worth of traffic should be used in order to rule out anomalous months. If, at the end of the initial six-month stabilization period, traffic volumes have exceeded the threshold for three consecutive months, MediaOne would be required to begin planning for building direct trunks, including starting to negotiate an interconnection agreement. There are no federal deadlines for negotiating CLEC-to-CLEC interconnection agreements. We believe six months is more than adequate for negotiation of these agreements, which gives MediaOne longer than the 160-day negotiation period allowed under the Act for ILEC/CLEC interconnection agreements. Lastly, the Department agrees with MediaOne that it should be allowed time to establish direct trunks so as to provide for adequate time for planning and implementation. However, MediaOne's six month proposal is not supported by the record. However, Bell Atlantic's witness testified that Bell Atlantic's standard interval to establish brand new trunk groups is 60 days (Tr. 1, at 82). Therefore, we find that MediaOne shall have 60 days beginning from the effective date of an interconnection agreement with another CLEC to establish direct trunks.

E. Network Maintenance and Management Standards

1. Outage Repair Standard

a. Introduction

Section 9.5 of the Agreement addresses the appropriate procedures that the parties follow in the event of a service outage or issuance of a trouble report.(71) While the parties agree on most aspects of this process, they disagree on two points: (1) whether there should be specific deadlines for correcting outages and other service problems raised in trouble reports; and (2) whether the parties should exchange "escalation" lists (i.e., lists that indicate which employees at each company are responsible for fixing service problems, including those more senior (either in title or responsibility) employees to whom a carrier could "escalate" matters if the problem has not been corrected in a timely fashion).

b. Positions of the Parties

i. MediaOne

MediaOne proposes that each party provide the other with time frames and escalation lists in the event of an outage or trouble, and plan and coordinate repair procedures (RR-DTE-23). MediaOne states that this requirement is not burdensome to either party but provides the other with necessary information to ensure that troubles and outages are efficiently resolved (id.). MediaOne argues that Bell Atlantic's CLEC Handbook(72) does not provide the necessary level of detail to ensure that troubles are handled in a timely and coordinated fashion (id.).

ii. Bell Atlantic

Bell Atlantic argues that the parties should follow Bell Atlantic's standard procedures for isolating and clearing the outage or trouble, as described in the CLEC Handbook, and that the parties may agree to modify those procedures periodically based on experience with comparable interconnection agreements with other carriers (Bell Atlantic Brief at 59-60). Bell Atlantic notes that although these standard procedures do not include time frames, the CLEC Handbook does state that UNE trouble reports for CLECs are placed in the same work queues as Bell Atlantic's trouble reports, and priorities are set based on service impact and type of service, without regard to the carrier (IR-MediaOne-BA-2-27). Bell Atlantic argues that inclusion of wording requiring the parties' exchange of escalation lists is unwarranted since it is already provided for in Bell Atlantic's CLEC Handbook (Bell Atlantic Brief at 60).

c. Analysis and Findings

Bell Atlantic's standard procedures for isolating and clearing troubles, as set forth in its CLEC Handbook, describe the roles and responsibilities of Bell Atlantic and CLECs; information on how to use Bell Atlantic's repair system and electronic interface to enter trouble reports; the process from the diagnosis of a trouble to its repair; and, when necessary, the coordination of activities between Bell Atlantic and CLECs. CLEC Handbook, Vol. III, § 8.0 Trouble Administration. MediaOne claims that the CLEC handbook does not provide the necessary detail to ensure that troubles are handled in a timely and coordinated fashion. We disagree and find that the referenced Bell Atlantic standard procedures in the CLEC Handbook provide detailed information needed in the event of an outage or trouble.

We also disagree with MediaOne's suggestion that the parties share time frames and escalation lists. If Bell Atlantic was forced to set specific time frames for repairs with MediaOne that are different

than those guaranteed to other CLECs, Bell Atlantic may be forced to favor MediaOne and MediaOne's customers over its own or other CLECs' customers. MediaOne's proposal goes beyond what is necessary to ensure parity. In addition, we believe that MediaOne has the ability to assess incident-based payments[73] to Bell Atlantic, as defined in Bell Atlantic's performance standards compliance filing, and these payments give Bell Atlantic the appropriate incentive to ensure that MediaOne's customers receive service at parity with service Bell Atlantic provides to itself, and that troubles are resolved in a timely manner. In summary, we find that Bell Atlantic's "first-in, first-out" procedure for repair is fair. Finally, because escalation lists are provided in the CLEC handbook, we conclude that MediaOne's proposal to add wording requiring the parties to exchange escalation lists is unnecessary.

F. Joint Network Configuration and Management Standards

1. Scope of the Joint Grooming Process

a. Introduction

The joint grooming process is designed to enable parties to assemble the appropriate technical experts to determine jointly the most efficient interconnection architecture and point of interconnection based on forecasted and actual traffic patterns, existing facilities, the location of interconnection points, and scheduling concerns of a particular interconnection agreement (see Bell Atlantic Brief at 61). The parties disagree whether the existing joint grooming process and plan should be incorporated into the new interconnection agreement, and amended as necessary, or whether the parties should develop a new joint grooming process and plan.

b. Positions of the Parties

i. MediaOne

MediaOne asserts that it currently has a joint grooming process in place with Bell Atlantic as part of its existing interconnection agreement, which was cooperatively developed by the parties (MediaOne Brief at 31). MediaOne proposes that the current joint grooming process and plan remain in place and be amended, as necessary, for any inconsistencies between the former process and the new interconnection agreement (id.). MediaOne maintains that it is concerned that important rules at the heart of the entire interconnection agreement contained in the joint grooming process would not be in place at the commencement of the new interconnection agreement if a new process has to be developed (id.). In response to Bell Atlantic's concerns that the existing joint grooming process may be inconsistent with the new interconnection agreement, MediaOne suggests the inclusion of wording in the interconnection agreement providing that in the event of a conflict between the existing plan and the terms of the new interconnection agreement, the terms of the new interconnection agreement prevail (id.).

ii. Bell Atlantic

Bell Atlantic maintains that a joint grooming process is an interactive, not static, process that should materially change as conditions warrant (e.g., as traffic volumes increase, traffic patterns change, capacity is reached, or the need to interconnect at additional interconnection points arises) (Bell Atlantic Brief at 61). According to Bell Atlantic, the existing joint grooming process that was developed under the parties' first interconnection agreement contains provisions that are either

duplicative or inconsistent with the proposed interconnection agreement

(RR-DTE-7). In addition, using the existing plan as the starting point in developing a new plan would mean that either party could use the current provisions to try and undercut the provisions of the new interconnection agreement (id.). Bell Atlantic states that though both parties may agree to use some language from the existing plan in the course of developing the new joint grooming process, both parties should start from a blank piece of paper and build a plan based upon the terms and conditions established by the new interconnection agreement (id.).

c. Analysis and Findings

We agree with MediaOne that the joint grooming plan establishes rules for development and growth of the network that will change over the term of the interconnection agreement. In order to provide the parties with rules relating to this growth and development, a joint grooming plan should be in place when the parties begin to operate under the new interconnection agreement (see MediaOne's Proposed Findings of Fact and Conclusions of Law at 9-10). Bell Atlantic has not provided a deadline by which a new joint grooming process will be in place, nor has it indicated what rules will govern in the interim.

We share MediaOne's concern that if the parties adopt Bell Atlantic's proposal, there would be no plan in place once they begin operating under the new interconnection agreement. Consequently, we agree that the existing plan should remain in effect, to the extent that it does not conflict with any provisions of the new interconnection agreement. The existing plan can be updated as the parties agree is necessary, and replaced when a new plan is developed. In order to address Bell Atlantic's concern, we direct the parties to include language providing that in the event of a conflict between the old joint grooming plan and the terms of the new interconnection agreement, the terms of the new interconnection agreement prevail.

2. Forecasting Requirements for Trunk Provisioning

a. Introduction

Forecasting for trunk provisioning by MediaOne allows Bell Atlantic to plan and prepare adequately for demand for trunks that deliver traffic from Bell Atlantic to MediaOne.[74] The parties disagree on several provisions relating to trunk forecasting. Specifically, the parties disagree when MediaOne's first trunk forecast should be required and whether Bell Atlantic can condition provisioning of trunks on its capacity constraints and the proven accuracy of MediaOne's forecasts in the past. The parties also disagree whether MediaOne should be required to provide Bell Atlantic with additional demand management forecasts relating to UNEs by wire center[75], interconnection, and resale products. In addition, Bell Atlantic proposes to disconnect "underutilized" trunks after a certain period of time. The parties also dispute how long Bell Atlantic may monitor its trunk group usage before disconnecting "underutilized" trunks.

b. Positions of the Parties

i. MediaOne

MediaOne proposes that it will provide its initial forecasting for trunks covering a two-year period, to be updated as needed but no less frequently than quarterly, within 120 days from the effective date of

the interconnection agreement, instead of 90 days as proposed by Bell Atlantic (MediaOne Brief at 32). MediaOne does not believe that 90 days is a reasonable period given the network reconfiguration involved in implementing Bell Atlantic's IP proposal (id.). MediaOne argues that while it can provide forecasts for both inbound and outbound traffic based on reasonable engineering criteria, the forecasts should be taken only as an estimate, and their inaccuracy should not be used against MediaOne (Exh. MediaOne-4, at 6). Additionally, MediaOne disagrees with Bell Atlantic's attempt to condition the provisioning of trunks on capacity constraints because it contends Bell Atlantic has an obligation under the Act to provide interconnection unless it is technically infeasible (MediaOne Proposed Findings of Fact and Conclusions of Law at 10).

As to additional forecast requirements, MediaOne claims that its forecasts will provide the information necessary for Bell Atlantic to plan trunk group availability, and argues that demand forecasts by wire center of UNEs, interconnection, and resale products proposed by Bell Atlantic are neither reasonable nor necessary (MediaOne Brief at 32). In particular, MediaOne argues that it would not be able to provide UNE forecasts by wire center with any type of accuracy (id. at 32-33).

MediaOne also argues that Bell Atlantic should wait 180 days to review the utilization levels of trunk groups that Bell Atlantic provisions to MediaOne based on MediaOne's forecasts before disconnecting underutilized trunks (id. at 34). MediaOne's witness testified that within a 30-day period, a trunk group can go from 25 percent to 80 percent utilization and that the 90-day period does not consider the type of traffic fluctuation that MediaOne faces as a new carrier (Exh. MediaOne-4, at 7). In addition, MediaOne states that prior to disconnecting trunks, MediaOne should have the opportunity to explain the need to keep the trunk groups (MediaOne Brief at 34). MediaOne agrees that after the initial 180 day period, it should be financially responsible for any trunk group in excess of four DS-1s that Bell Atlantic determines is underutilized, and also liable for disconnected trunks retroactive to the start date of the 180 day period (MediaOne Proposed Findings of Fact and Conclusions of Law at 11).

ii. Bell Atlantic

Bell Atlantic states that its provisioning proposal is a standard requirement (Bell Atlantic Brief at 63). Bell Atlantic argues that MediaOne should provide an initial traffic forecast covering a two-year period within 90 days of the effective date of the interconnection agreement (id. at 62). Bell Atlantic's proposal conditions trunk provisioning on several factors: (1) that such forecast is based on reasonable engineering criteria, (2) there are no capacity constraints, and (3) MediaOne's previous forecasts have proven to be reliable and accurate (Bell Atlantic Proposed Interconnection Agreement Section 10.4.1; Bell Atlantic Brief at 63). Bell Atlantic claims that in order to prepare for the demand that MediaOne will generate, MediaOne should provide a demand management forecast that includes, but is not limited to, the expected needs for service volumes by wire center for UNEs, interconnection and resale products (Bell Atlantic Brief 66-67).

Bell Atlantic proposes to monitor traffic on each trunk group for a period of 90 days; at the end of that period, Bell Atlantic could disconnect trunks if they were not warranted by the actual traffic volume experienced. After the initial 90 days, regardless of whether the trunks were adequately utilized,[76] up to four DS-1s would be maintained at Bell Atlantic's expense, and MediaOne would be held financially responsible for the excess DS-1s (Bell Atlantic Brief at

64-65). Bell Atlantic states that MediaOne would have the option to maintain those underutilized trunks but MediaOne would be financially responsible (Bell Atlantic Proposed Findings of Fact and

Conclusions of Law at 14). Bell Atlantic argues that MediaOne could, at any time during the 90-day period, request Bell Atlantic to disconnect the excess facilities to avoid further charges (id. at 65). Furthermore, Bell Atlantic proposes that any time after the 90-day period, if MediaOne requests Bell Atlantic to disconnect trunks, MediaOne would be financially responsible for the disconnected trunks retroactive to the start of the 90-day period through the date such trunks are disconnected (id. at 64-65).

Bell Atlantic argues that MediaOne's counterproposal of a 180-day period is too long and is unsubstantiated because MediaOne is not a new company without experience but, rather, has been providing telecommunications services in Massachusetts for more than one year (Bell Atlantic Reply Brief at 25).

c. Analysis and Findings

We find that MediaOne's request for 120 instead of 90 days to produce an initial forecast covering a two-year period has merit. Given the possible adoption of MediaOne's compromise proposal to establish additional IPs, it is reasonable to allow MediaOne the additional 30 days to produce an initial forecast that would reflect this network configuration. Regarding the conditions on trunk provisioning proposed by Bell Atlantic, the Act permits exemptions to ILEC interconnection obligations only when the ILEC demonstrates technical infeasibility. Local Competition Order at ¶199. Because of the Act's narrow exemption, we need only examine whether Bell Atlantic's proposed conditions meet this "technical infeasibility" test. While we agree with Bell Atlantic that it will initially rely on MediaOne for MediaOne's forecasts for inbound and outbound traffic, we are not convinced that this desire for accuracy of MediaOne's forecasts is a sufficient reason for limiting Bell Atlantic's obligation to provide interconnection. We conclude that MediaOne's proposal of providing Bell Atlantic with traffic forecasts based on reasonable engineering criteria, to be updated no less than quarterly, should assure Bell Atlantic that MediaOne's forecasts remain reasonably current. Therefore, Bell Atlantic cannot condition the provisioning of trunks on the proven accuracy of MediaOne's past forecasts.

We also find that, in general, Bell Atlantic may not condition trunk provisioning on capacity constraints. As long as MediaOne and other CLECs provide reasonably accurate forecasts, Bell Atlantic should be able to plan adequately for additional capacity. However, if Bell Atlantic can demonstrate to the Department that MediaOne's forecasts are substantially inaccurate over a sustained period of time, Bell Atlantic may petition the Department for relief. Bell Atlantic will have the burden of demonstrating that such relief is warranted.

Regarding the question of whether MediaOne is required to provide Bell Atlantic with its forecast on interconnection-related products by wire center, we find that such additional forecasting detail should be provided. CLECs cannot have it both ways. If they do not want to be held to the accuracy of their forecasts, then Bell Atlantic must have some additional mechanism on which to base its capacity planning. On its face, such additional information would appear to be useful in further determining for what additional facilities Bell Atlantic may need to prepare. Although MediaOne argues that it cannot provide this information, we do not find that claim to be credible. Such information is crucial for any CLEC in developing a business plan.

We find merit in MediaOne's argument that it is a new carrier facing an unpredictable growth pattern and as such, Bell Atlantic should wait 180 days to review the utilization level of trunk groups by MediaOne. MediaOne has been providing service for only about one year. Until MediaOne becomes

more established and experiences more consistent growth patterns, we find that 180 days is appropriate.

Lastly, MediaOne has requested that it be given the opportunity to substantiate its continued need to keep trunks that Bell Atlantic has identified as underutilized. We find this request to be reasonable. Bell Atlantic's definition of underutilization is arbitrary, and MediaOne should be given the opportunity to demonstrate why MediaOne believes that the trunks are necessary in the future, before Bell Atlantic disconnects those trunks.

G. Unbundled Access

1. Extent of Obligation to Provide UNEs

a. Introduction

In response to a remand decision from the United States Supreme Court, the FCC is reconsidering its list of seven UNEs that ILECs must offer to CLECs. In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket Nos. 96-98, 95-185, Second Further Notice of Proposed Rulemaking, April 8, 1999. As a result of that decision, Bell Atlantic may no longer be required under federal law to provide certain UNEs that it is provisioning to Massachusetts CLECs. In that event, the parties disagree whether Bell Atlantic should be able to immediately discontinue provisioning of such UNEs.

b. Positions of the Parties

i. Bell Atlantic

Bell Atlantic argues that its proposed language, allowing Bell Atlantic to discontinue any UNE it may no longer be required to provide once the FCC remand proceeding is concluded, is reasonable (Bell Atlantic Brief at 69). Bell Atlantic contends that MediaOne seeks to require Bell Atlantic to continue to provide the UNEs identified in the interconnection agreement even if the FCC no longer requires Bell Atlantic to do so (id.).(77)

ii. MediaOne

MediaOne argues that Bell Atlantic must provide a reasonable transition period in the event that it is no longer obligated to provide certain UNEs (MediaOne Brief at 35). MediaOne contends that the parties must await a final decision on the issue and then modify the interconnection agreement to be consistent with the change in law (id.). According to MediaOne, this process ensures that customers will not be affected negatively by the change because MediaOne will have the opportunity to arrange for the alternative provision of any UNEs that may no longer be provided by Bell Atlantic, and comports with the public interest (id.). MediaOne also maintains that Bell Atlantic's proposal would adversely affect MediaOne's ability to retain customers, which is contrary to the intent and spirit of the Act (id.).

c. Analysis and Findings

We find Bell Atlantic's proposal to unilaterally discontinue provisioning UNEs, without notice and a transition period, to be patently unreasonable. First, a change in law may involve interpretation of the

extent and impact of the change, and the parties certainly may disagree on the applicability of a change. One need only to look at the debate surrounding the provision and combination of UNEs to get a sense of the level of disagreement possible under the Act and court opinions interpreting the Act.(78) Second, the Department has a responsibility under the Act to ensure that interconnection agreements meet the requirements of § 251 of the Act. 47 U.S.C. § 252(c)(1). This responsibility includes changes to interconnection agreements, especially when those changes may materially affect service under the agreement. Bell Atlantic's interpretation of a change of law and the resulting impact on the provision of service under an interconnection agreement is subject to the Department's jurisdiction. Id.

Furthermore, in the changing environment of telecommunications, it is likely that this provision will be evoked, and customers may be affected negatively while the parties battle over their differences. In its filings on this subject, Bell Atlantic does not address the potential effect on customers (but see Section V.L.2., infra where Bell Atlantic proposes a 30-day notice period for changes in law that affect its services). The Department may enforce requirements of state law, including compliance with intrastate telecommunications service quality standards or requirements. 47 U.S.C. § 252(e)(3); see G.L. c. 159, § 16. No party disputes the Department's authority to review Bell Atlantic's provision of service, including service provided pursuant to an interconnection agreement, to determine whether service quality is affected. Furthermore, it is reasonable to allow affected CLECs an opportunity to make alternative arrangements in the event Bell Atlantic will no longer provide certain UNEs under the interconnection agreement.

Accordingly, the Department finds that MediaOne's proposal, which requires the parties to negotiate modifications to interconnection agreements and submit such changes to the Department for approval, is reasonable and in the public interest.(79) Until the changes are approved, Bell Atlantic is required to continue its provision of the affected UNEs. The parties shall include language in their interconnection agreement to reflect this finding.(80) We recognize Bell Atlantic's concern that its obligation to provide UNEs no longer mandated by law may continue indefinitely if the parties are unable to agree on application of a change in law. However, we note that the Bell Atlantic may invoke the Dispute Resolution provision in the interconnection agreement, and if it desires, seek appropriate relief from the Department. Bell Atlantic will have the burden of showing that MediaOne is not negotiating the change of law in good faith.(81)

2. Bona Fide Request Applicability/Available Network Elements

a. Introduction

The bona fide request ("BFR") process is a procedure whereby one party may request access to a UNE not identified in the interconnection agreement. The BFR process is set forth in Exhibit B of the interconnection agreement and includes procedures for Bell Atlantic to analyze and consider requests for UNEs "not already available." The parties disagree when a UNE should be considered "not already available" under the BFR process, the meaning of the FCC's "pick-and-choose" rule,(82) and how this FCC rule affects the BFR process.

b. Positions of the Parties

i. MediaOne

MediaOne argues that the BFR mechanism would only apply if a particular UNE were "not already available" anywhere in Bell Atlantic's operating territory, and therefore could not be obtained by the "pick and choose" rule (MediaOne Brief at 36). MediaOne asserts that the phrase "not already available" means that the UNE is not already provided anywhere in Bell Atlantic's operating territory, and Bell Atlantic has not been ordered by the FCC or a state commission to provide that UNE (IR-DTE-MediaOne-6). MediaOne argues that its position is consistent with the FCC's pick-and-choose rule, which states that an ILEC shall make available without unreasonable delay any interconnection service or network element arrangement contained in any agreement to which it is a party (MediaOne Brief at 36, citing 47 C.F.R. § 51.809).

ii. Bell Atlantic

Bell Atlantic argues that the purpose of establishing a BFR process is to provide for UNEs not already covered by the interconnection agreement between MediaOne and Bell Atlantic (Bell Atlantic Brief at 70). According to Bell Atlantic, which UNEs are available may vary depending on the requesting CLEC, the CLEC's network, or the provisioning or use for that UNE (Bell Atlantic Brief at 70; RR-DTE-24). Bell Atlantic argues that the fact that a CLEC may have ordered a UNE elsewhere does not mean that this UNE is readily available under the terms, conditions and rates established for provisioning to MediaOne (Bell Atlantic Brief at 71).

Bell Atlantic argues that MediaOne's assertion that the sole basis for providing a UNE is whether that UNE is available elsewhere in Bell Atlantic's region overlooks numerous factors that bear on the technical feasibility and cost of providing a UNE that has not been made generally available in a particular state (id.). Bell Atlantic contends that such factors include: (1) whether the element is a standard component of the Bell Atlantic network in the relevant jurisdiction; (2) whether MediaOne is requesting the element to the same specifications, and in the same context, as in another jurisdiction; (3) whether the same work efforts or business processes are needed or can be used under the operations systems and processes in that jurisdiction to make the requested element available in the new jurisdiction; and (4) whether the same cost factors and rates apply in the new jurisdiction (id.). Bell Atlantic adds that the BFR process allows Bell Atlantic to consider these factors, and includes a dispute mechanism should MediaOne disagree with Bell Atlantic's determinations (id. at 71-72).

Bell Atlantic contends that MediaOne's position contradicts FCC rules (id. at 72). According to Bell Atlantic, the "pick and choose" rule does not address the provision of UNEs ordered by the FCC or a state commission, but only addresses UNEs that are provided under an interconnection agreement approved under § 252 of the Act, regardless of whether Bell Atlantic was ordered to provide that UNE (id.).

Bell Atlantic maintains that even if it provides a particular UNE to one CLEC, the BFR process may be "permissible and appropriate" to evaluate whether or how Bell Atlantic would provide that UNE to a second CLEC because there may be different technical feasibility and cost considerations associated with providing that UNE to a second CLEC (id.). Bell Atlantic asserts that the FCC has recognized that such considerations may apply and has specifically provided that the "pick-and-choose" rule would not apply if an ILEC demonstrates to the state commission that different costs apply or technical infeasibility exists with respect to providing that UNE to a second CLEC (id.). Bell Atlantic

argues that the BFR process provides a method for evaluating such considerations and, in any event, individual UNEs made available through the "pick-and-choose" rule are only available for a reasonable period of time under 47 C.F.R. § 51.809(c) (Bell Atlantic Brief at 72; RR-DTE-24).

Bell Atlantic concludes that MediaOne is unreasonable in its demand that Bell Atlantic be required to offer any element on the basis of its availability in another state, outside the framework of the standard BFR process (Bell Atlantic Brief at 73). Lastly, Bell Atlantic argues that if the UNE that is the subject of the BFR is technically feasible, the BFR process is flexible enough to ensure that the particular UNE is provided in a timely fashion (RR-DTE-24).

c. Analysis and Findings

The initial issue the Department must resolve is under what circumstances the BFR process applies and how MediaOne accesses UNEs that are not addressed in the interconnection agreement. MediaOne argues that it would access UNEs through the BFR mechanism only if the particular UNE were "not already available" anywhere in Bell Atlantic's operating territory. In support of its position, MediaOne argues that the FCC's "pick-and-choose" rule enables it to request and, with certain limitations, receive any UNE offered by Bell Atlantic in any state within Bell Atlantic's territory. Bell Atlantic argues for a narrower interpretation of the "pick-and-choose" rule and for a more expansive view of the applicability of the BFR process. We agree, to some extent, with both parties.

MediaOne is correct in noting that the FCC's "pick-and-choose" rule, which was reinstated by the Supreme Court in AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366 (1999), provides that "[a]n [ILEC] shall make available without unreasonable delay to any requesting telecommunications carrier any individual interconnection, service, or network element arrangement contained in any agreement to which it is a party that is approved by a state commission pursuant to section 252 of the Act, upon the same rates, terms, and conditions as those provided in the agreement." 47 C.F.R. § 51.809(a) (emphasis added). In its Local Competition Order, the FCC explained that requesting carriers have the ability to choose among individual provisions contained in publicly-filed interconnection agreements and that a requesting carrier should be permitted to obtain its statutory rights on an expedited basis. Local Competition Order at ¶¶ 1310, 1321.

The Department can find no provision in the Act or in the FCC's rules or orders limiting the availability of the "pick-and-choose" rule only to UNEs contained in Department-approved interconnection agreements. Subject to the conditions imposed by the FCC in 47 C.F.R. § 51.809(b) and (c), the Department finds that Bell Atlantic shall provide to MediaOne in Massachusetts, and to any other requesting CLEC, pursuant to the "pick-and-choose" rule, the UNEs that Bell Atlantic[83] makes available in any of its state-approved interconnection agreements, without regard to which state commission approved the interconnection agreement.

Bell Atlantic is correct that it may demonstrate to the Department that it cannot provide the requested UNE at the same cost as it does to a CLEC with which it has an approved interconnection agreement, or that the provision of this UNE to MediaOne is not technically feasible. However, the Department finds that this showing by Bell Atlantic is to be made within the context of the "pick-and-choose" rule, not the BFR process. It is our view that the BFR process applies to the UNEs that are not the subject of any state-approved interconnection agreement and that are, thus, "not already available."

H. Local Number Portability

1. Introduction

The Act defines number portability as the ability of end-user customers to change local service providers and retain their telephone number while remaining at the same location. See

47 U.S.C. § 153(30).

2. Description of the Porting Process

Provisioning LNP requires certain activities of both the customer's current provider ("porting provider") and the customer's new provider (Exh. MediaOne-3, at 14). The LNP process begins when the new provider receives an order for service from a new customer and immediately sends a local service request ("LSR") to the porting provider (id.). Once the porting provider receives the LSR, it 1) generates its own E911 record to ensure the ALI database[84] is properly updated and 2) sends a firm order confirmation ("FOC") back to the new service provider within 24 hours receipt of the LSR (id. at 15). Once the new provider receives the FOC from the porting provider, it will 1) create the appropriate translations[85] in its switch; and 2) requests that the porting provider install a "ten-digit trigger" in its switch[86] (id.). Twenty-four hours before the porting due date, the porting provider must release the telephone number in Number Portability Administration Center ("NPAC") and install the ten-digit trigger (id. at 16). The new service provider must update the translations in its switch to include the newly ported number before 11.59 p.m. on the porting day; the ten-digit-trigger will only forward a ported number until this time. A ten-digit trigger ensures that the customer will be able to receive calls during the porting process by forcing the switch to launch a database query whenever the number is dialed (id.). If the number has not been ported, the porting provider's switch will route the call as if the customer is still receiving service from its current provider (id.). Once the porting is complete, a call sent to the porting provider's switch will be forwarded to the new carrier's switch for completion (id.). The porting provider removes its switch translations at 11:59 p.m. on the actual porting due date (id.). On the day after the porting due date, the porting provider "unlocks" the E911 record which enables the new provider to update the ALI record to reflect the new service provider.

3. Need for Performance Standards and Remedies

a. Positions of the Parties

i. MediaOne

MediaOne asserts that there is a compelling reason to adopt porting performance standards for MediaOne (MediaOne Brief at 37). MediaOne argues that the rationale for establishing porting standards and remedies in this arbitration is based on the stated rationale for adopting performance standards in the Consolidated Arbitrations,[87] and seeks to extend this rationale to the porting process (MediaOne Reply Brief at 15). MediaOne maintains that the Department stated that it would consider changes to the established performance standards if parties could show a compelling reason why such changes are necessary (MediaOne Brief at 37). MediaOne asserts that although it was not a party to the Consolidated Arbitrations, and is not seeking to add a porting standard to the Consolidated Arbitrations list of performance standards, it can nonetheless demonstrate that a compelling reason exists to adopt such a standard in its interconnection agreement with Bell Atlantic

(id. at 37-38).

According to MediaOne, the absence of standards for the porting process is critical for MediaOne, noting that the Department did not review or address in the Consolidated Arbitrations any activities associated with the number porting process for a carrier like MediaOne that does not purchase resale services or unbundled loops from Bell Atlantic (id. at 37). MediaOne describes the detrimental effects that failed ports have on customers by stating that when a port is not done properly, the customer either has no dial tone or cannot receive calls from others (id. at 38). Besides negatively affecting customers' service, failed ports also damage MediaOne's reputation, especially where one of the first experiences a new MediaOne customer has is with the porting process (id.). MediaOne cites to actual experience with number porting problems and the negative affect those problems had on its marketing abilities (see Exh. MediaOne-3, at 16-17; IR-BA-M1-11).

ii. Bell Atlantic

Bell Atlantic makes two arguments against establishing number porting standards. First, Bell Atlantic states that the FCC is the regulatory body with jurisdiction over number portability issues. However, Bell Atlantic also states that it would comply with Department orders on this issue (Bell Atlantic Brief at 74). Second, Bell Atlantic highlights its current number porting performance success rate, which it states is in excess of 99 percent on-time performance, based on current porting procedures (id. at 75). In light of its current performance, Bell Atlantic maintains that it is unfair and unreasonable to assume that the only way to ensure that Bell Atlantic continues to maintain that level of performance is to impose performance standards and penalties (id. at 75-76). Bell Atlantic states that it already provides the Department with more than 400 performance measurements, and there is no basis for adding to that list (id.).

b. Analysis and Findings

In the Consolidated Arbitrations, the Department established a method to evaluate whether more or fewer performance measures are necessary than those established in the Consolidated Arbitrations. The Department stated that

"[i]f, after at least six months of experience, there is an indication that more or fewer measures are necessary to support the parity standard, ... parties may petition the Department to that effect. However, the Department will only consider changes to the standards adopted here if parties can show [a] compelling reason why such changes are necessary."

Phase 3-B Order at 34. We also stated that the specific monetary remedies provided in the interconnection agreements established in that proceeding should not be the sole damage remedy available, and that there may be instances where other damages (e.g., consequential damages) may be appropriate. Id. at 22.

There are many performance standards that have been established under the Consolidated Arbitrations proceeding. However, that is not a sufficient reason to refrain from establishing additional standards where necessary. MediaOne is correct when it states that number porting standards were not considered when performance standards were established, and MediaOne has made a compelling case that these standards are appropriate here given the adverse affect on MediaOne and its customer for failed number ports. If Bell Atlantic maintains its current high level of porting performance, as it states it will, these additional performance standards will not adversely affect it.

Bell Atlantic has indicated that it is not opposed to negotiating performance standards for number porting, and has made a proposal for those standards. We now turn to each of the parties' proposals for appropriate standards and remedies for number porting.

4. Standards to be Established for Local Number Portability (Performance Criteria)

a. Introduction

Several of the performance measures discussed by the parties have been resolved.[88]

However, the parties disagree on (1) whether to establish a measurement for E911[89] unlock, and (2) whether to track Local Subscription Management System ("LSMS")[90] downtime and LNP trouble resolution.

b. Positions of the Parties

i. Bell Atlantic

Bell Atlantic has proposed a method to measure a successful port (Bell Atlantic Brief at 76). Bell Atlantic favors a measurement to determine whether service was transitioned from one provider to the other without service interruption, referred to as "Percent on Time - LNP" (id. at 81). Bell Atlantic explains that in applying the "Percent On Time - LNP" metric, an LNP order would be considered on time if a 10 digit trigger is in place before the porting due date and the removal of the telephone number translations (i.e., the retail disconnect) is completed on or after 11:59 p.m. of the porting date (Bell Atlantic Brief at 82). Orders disconnected early are considered "not met" (id.). Bell Atlantic testified that this proposed "Percent On Time - LNP" measurement has been adopted in New York as part of the collaborative process and could be established as a metric in Massachusetts in October 1999 (id.).

Bell Atlantic argues that MediaOne's proposal to measure interim steps in the porting process is not an appropriate reflection of the LNP process (id. at 76). Specifically, Bell Atlantic contends that the interim steps proposed by MediaOne do not, for the most part, affect customers, and would require Bell Atlantic to track intermediate steps not currently captured by the system as designed (id.).[91]

Regarding the E911 unlock metric, Bell Atlantic maintains that the post-provisioning activity to unlock the E911 records associated with a customer's line do not affect the customer's service during the porting process (id. at 81). Bell Atlantic explains that the E911 unlocking transaction does not remove the customer information from the E911 database (Bell Atlantic Reply Brief at 29).

Bell Atlantic opposes MediaOne's proposal for tracking LNP trouble resolution and LSMS downtime, stating that these metrics are not relevant to Bell Atlantic's performance for MediaOne (Bell Atlantic Brief at 86). Bell Atlantic asserts that the LSMS deployed by Bell Atlantic's network conforms to industry-defined requirements, that the LSMS may be inoperative for reasons beyond Bell Atlantic's control, and that LSMS downtime will not affect either MediaOne transactions nor its customers (id.).

Finally, regarding the proposal that Bell Atlantic check with the NPAC prior to switch translations removal, Bell Atlantic claims that its procedure that removes switch translations at 11:59 p.m. on the order date is an efficient process that gives a CLEC all day to complete customer work before translations removal (Bell Atlantic Reply Brief at 28). According to Bell Atlantic, it is MediaOne's responsibility to notify Bell Atlantic of any service changes prior to this time (id. at 29).

ii. MediaOne

MediaOne argues that the parties disagree (1) whether the new provider should check with the NPAC prior to removing switch translations, and (2) when the new provider should unlock the E911 record (MediaOne Brief at 41).[92]

Regarding switch translations removal, MediaOne maintains that the company from which a number is ported should check with NPAC prior to removing switch translations as a way to ensure that switch translations are not removed (causing customer disconnects) in certain situations (id. at 41). MediaOne states that it does not recommend measurement or imposition of penalties for this activity (id.). According to MediaOne, its proposal for performance standards is necessary to ensure that disconnects are minimized and that reconnects take place in a timely manner (id. at 42).

Regarding E911 unlocking, MediaOne proposes that the porting provider unlock the E911 record on the due date, as opposed to Bell Atlantic's current practice to unlock the E911 record on the day after the due date (id.).[93]

MediaOne maintains that its proposal is consistent with the National Emergency Number Association ("NENA") standards associated with unlocking and migrating E911 records during the porting process (id.). MediaOne states that Bell Atlantic's current procedure causes MediaOne to be unable to migrate the E911 record until two days after the due date of the port (id. at 43). MediaOne explained the negative consequences that could result from this delay. According to MediaOne, in the event that the database (which provides customer location) is inoperative during a number port, emergency personnel would not have the correct service provider name needed to verify the correct address of the person contacting E911 (id.). MediaOne states that a similar problem could occur, if law enforcement officials needed to place a tap on a line (id.).

Finally, MediaOne indicates that, because Bell Atlantic is in the process of developing the database system, reporting of the E911 record unlocks could be added to the system without significant extra work on the part of Bell Atlantic (id. at 44).

c. Analysis and Findings

Regarding MediaOne proposal that the old carrier check with NPAC prior to removing a translation and disconnecting the porting customer, Bell Atlantic's current process of disconnecting a customer at 11:59 p.m. is generating a 98 percent success rate by MediaOne's data.[94]

This current process is successful, and we see no reason to change it. If a customer decides at 11:58 p.m. on the scheduled date of the port that he does not wish to change providers, he does so at his own risk. Therefore, we decline to require that provider check with NPAC prior to removing switch translations.

Regarding the proposal that the E911 record be unlocked on the same date as the completion of the switch translations, in light of our finding above, it would be impossible for this to happen when translations are removed at one minute before the end of the day. We understand that the current industry standard requires an unlock on the same day as the switch translation work (Tr. 1, at 182-183). However, we are persuaded by Bell Atlantic testimony that NENA is reevaluating the timing between the old provider's completion of work, and the new provider's completion of installation work (Tr. 3, at 185).

We also note that MediaOne presented testimony on possible problems with the current E911 unlock process, but no evidence of any actual problems experienced by customers. Bell Atlantic has explained that customers may still reach E911 during the porting process (assuming there is no improper disconnect), and that the instances where incorrect provider information could affect a customer are rare. There is insufficient evidence for us to change the current process in order to allow the porting provider to unlock the E911 record on the same day as the port.[95]

5. Appropriate Threshold

a. Introduction

The parties disagree on the appropriate threshold for imposing penalties on an underperforming porting provider.

b. Positions of the Parties

i. Bell Atlantic

Bell Atlantic proposes that its "Percent On Time - LNP" metric should incorporate a minimum 90 percent standard (Bell Atlantic Brief at 81). Bell Atlantic argues that the same 90 percent metric established for UNE ordering in the Consolidated Arbitrations is applicable for LNP porting because of the similarities in the ordering processes (Bell Atlantic Reply Brief at 30). Bell Atlantic contends that, although its current performance level with MediaOne is approximately 98 percent,[96]

this level is too high to set as a performance metric because it reflects limited experience (two months) with just one CLEC (MediaOne) (id.). Bell Atlantic relates that the comparable LNP measurement is being developed in New York has a 95 percent standard (id.).

Bell Atlantic states that it based its recommended 90 percent "Percent On Time - LNP" on several factors (Tr. 3, at 465). Specifically, the 90 percent standard was based on Bell Atlantic's history for missed installation appointments because Bell Atlantic did not have a history of LNP completions for a basis, and on the complexity of the LNP process (id.). In general, Bell Atlantic explains that its proposed standard is based on its "judgment and experience in the business" (id.).

ii. MediaOne

MediaOne proposes a quarterly average performance standard of 98 percent on time[97] (MediaOne Brief at 45). MediaOne argues that this standard relates to Bell Atlantic's current performance, reflects a level of performance which does not adversely affect the new provider, and reflects a level of performance that assures consumers that they can change providers without unnecessary inconvenience (id. at 45). MediaOne cites the "devastating effect" on MediaOne's operations and ability to market its services that Bell Atlantic's proposed 90 percent standard would have (id. at 47). MediaOne further argues that the fact that the Department established a 90 percent standard for another measure in the Consolidated Arbitrations is irrelevant for a standard for a different activity (LNP performance) for which Bell Atlantic's current performance is higher (id. 46-47).

MediaOne states that its proposal for a 98 percent standard was based on current performance and its business judgment about a penalty that Bell Atlantic would consider more than the cost of doing business (Tr. 3, at 410).

c. Analysis and Findings

As noted above, the current porting process is successful. Bell Atlantic has a 98 percent success rate for number porting. We do not want to change the process, but provide incentives for Bell Atlantic to keep up its high level of performance. Currently, Bell Atlantic has dedicated a representative for MediaOne to resolve problems in a timely manner. MediaOne's witness testified that Bell Atlantic indicated that this contact person will remain (Tr. 3, at 406). However, we share MediaOne's concern that as porting requests increase, this specialized manual intervention may not be able to address LNP on a large scale. The results could be increased porting failures, and more customers out of service. The automation Bell Atlantic is developing in New York should help when applied to Massachusetts, but we believe additional incentives are useful.

MediaOne has convinced us that the 90 percent standard is too low a threshold for LNP performance. A failure rate exceeding ten percent puts too many customers out of service during the porting process, and adversely affects operations for both companies (MediaOne Brief at 46-47). A rate of 90 percent also is not reflective of current levels, and allows Bell Atlantic to provide service at a much lower level than it provides now. Conversely, maintaining a 98 percent success rate for a sustained period may unduly burden the porting provider (Tr. 3, at 468, 473-474). Therefore, we find that the 95 percent on time standard, as adopted through a collaborative process in New York, addresses the parties' need for a high level of successful porting without unduly burdening the porting provider.

6. Appropriate Penalties

a. Introduction

The parties disagree on the appropriate penalties for substandard number porting.

b. Positions of the Parties

i. Bell Atlantic

Bell Atlantic opposes MediaOne's proposed two-tiered penalty scheme, and instead proposes a sliding scale scheme based on a 90 percent "Percent On Time - LNP" standard (Bell Atlantic Brief at 83). Bell Atlantic states that MediaOne's penalties amount to a double penalty, and would require changes to the existing LNP process (Bell Atlantic Reply Brief at 30).

Bell Atlantic argues that, in practice, MediaOne's proposed "Customer Compensation" credit to be paid to MediaOne each day a customer remains without dialtone or cannot receive incoming calls would require extensive investigation to

determine the responsible party for each event (Bell Atlantic Brief at 83). Bell Atlantic argues that this "Customer Compensation" credit is not comparable to the incident-based credit established by the Department in the Consolidated Arbitrations because these credits apply 24 hours after the installation appointment is missed or the customer is out of service, and are based on a sliding scale (Bell Atlantic Reply Brief at 31). In addition, Bell Atlantic criticizes MediaOne's "Performance Credit" proposal as requiring Bell Atlantic to pay penalties even if the LNP was completed on time and without service interruption (for example, late installation of a 10-digit trigger or a late E911 unlock) (Bell Atlantic Brief at 84).

Bell Atlantic proposes a performance credit based on the credit calculation for percent missed UNE installation appointments from the Consolidated Arbitrations (id. at 86). The credit provides a sliding scale, which is based on the number of lines affected as well as the degree to which Bell Atlantic's performance is below the performance standard[98]

(id.). Bell Atlantic contends that its proposal would achieve the results of timeliness because it creates a performance mechanism based on a standard three business-day interval for LNP orders (Exh. BA-MA-1, at 38).

ii. MediaOne

MediaOne proposes to establish a two-tiered penalty mechanism for failed number ports. First, MediaOne proposes a "Customer Credit" of $25 for each day the customer is without dialtone for at least two hours (Exh. MediaOne-3, at 23). The purpose of the "Customer Credit" is to compensate the customer for the inconvenience of the failed port, and to provide the porting provider an incentive to work to restore a customer's service (MediaOne Brief at 49-50). MediaOne maintains that the "Customer Credit" is consistent with the establishment of incident-based credits in the Consolidated Arbitrations (id.).

Second, MediaOne proposes a "Performance Credit" which would consist of a $2000 penalty for each percentage point (or fraction thereof) by which the porting provider's quarterly average falls below the standard[99] (98 percent recommended by MediaOne) (Exh. MediaOne-3, at 23-24).

MediaOne argues that its proposed "Performance Penalties" and "Customer Credits" are needed to provide Bell Atlantic with incentives for meeting and sustaining performance standards, and address the issue of the need of disconnected customers to be provided with service again in a timely manner (MediaOne Brief at 48). MediaOne cites the principles employed by the Department when establishing performance standards and remedies in the Consolidated Arbitrations (id.). However, MediaOne distinguishes the standards and remedies adopted there, stating that Bell Atlantic's proposal is based on a different proceeding and for different measurements than this arbitration (id.). Further, MediaOne notes that, unlike the Consolidated Arbitrations, MediaOne has agreed to give up the UNE standards in return for the adoption of porting standards and remedies, and MediaOne has proposed to be bound by the porting standards and remedies (id.). MediaOne urges the Department to reject the performance remedies established in the Consolidated Arbitrations, and establish a higher remedy amount (id. at 49).

Moreover, MediaOne contends that Bell Atlantic's proposed penalties are not high enough to serve as a true incentive for ensuring adequate performance (id.). MediaOne counters Bell Atlantic's argument that imposing the "Customer Credit" would involve extensive investigation to determine the party responsible for a customer's lack of service, by stating that a simple review of the porting record would identify the responsible party (MediaOne Reply Brief at 16).

c. Analysis and Findings

In the Consolidated Arbitrations, the Department outlined its principles for performance standards and remedies. In our Phase 3-B Order, we stated that the performance remedies established there should provide Bell Atlantic with a monetary incentive to ensure good service, as well as supply a certain, timely payment to carriers for possible damages incurred as a result of substandard service. Phase 3-B Order at 22. We added that the amounts should be sufficiently high that they are not viewed by Bell Atlantic merely as a cost of doing business that Bell Atlantic feels comfortable paying to prevent competitors from making inroads into the local service market. Id.

We find that a greater incentive for adequate service is appropriate where the effect of a failure may be greater. In addition, MediaOne has persuaded us that Bell Atlantic's proposed remedy may be too low to provide adequate incentive to Bell Atlantic to maintain a high level of successful ports. Therefore, we find that MediaOne's proposed penalties would provide an appropriate level of incentive to Bell Atlantic to conduct successful number ports. We note that if Bell Atlantic

sustains its current level of service, the financial effect of adopting MediaOne's proposal should be minimal.

I. Dialing Parity

1. Introduction

On August 8, 1996, the FCC adopted rules implementing the dialing parity[100] requirements of the Act for LECs, including Bell Operating Companies ("BOCs"), such as Bell Atlantic. See In re Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, 11 FCC Rcd 19392, at ¶ 62 (1996). In NYNEX ILP, D.P.U. 96-106 (1997) and D.P.U./D.T.E. 96-106-A (1998), the Department implemented the FCC's dialing parity rules concerning Bell Atlantic. Then in ILP for Non-BOC LECs, D.T.E. 98-9 (1999), the Department established dialing parity requirements for CLECs and other Massachusetts ILECs. The parties disagree whether to include in the interconnection agreement a provision requiring them to comply not only with the dialing parity requirements of the Act and of the FCC, but also the Department's requirements.

2. Positions of the Parties

a. MediaOne

MediaOne argues that the parties should agree to comply with any dialing parity requirements set forth by the Department as well as those set forth in the Act (MediaOne Petition at 48).

b. Bell Atlantic

Bell Atlantic claims that it will comply with the dialing parity requirements set forth in the Act (Bell Atlantic Brief at 87). Bell Atlantic argues that compliance with any applicable Department orders or rulings is assumed, and therefore it is unnecessary to refer in the interconnection agreement to any dialing parity rules established by the Department (id.).

3. Analysis and Findings

Bell Atlantic cannot dispute its obligation to comply with dialing parity requirements established by the Department, in addition to those imposed by the Act and the FCC. 47 U.S.C. § 251(b)(3). We do not understand why Bell Atlantic would refuse MediaOne's request to reference compliance with the Department's ILP rules in the agreement, when it references similar Department compliance obligations in other sections of the interconnection agreement (see Proposed Interconnection Agreement, § 28.8.5). We, therefore, agree with MediaOne and direct the parties to include a provision in the interconnection agreement that makes explicit their compliance with the Department's dialing parity requirements.

Finally, as guidance for Bell Atlantic and CLECs in subsequent negotiations, we note our displeasure that such a minor, and easily resolved, issue as this was put before us for determination. At a time when the Department's resources are being severely taxed with much more important matters, we can ill afford to devote time to such insignificant disputes.

J. Coordinated Service Arrangements

1. Coordinated Repair Calls and Business Procedures

a. Introduction

The interconnection agreement addresses mutual obligations when a customer, intending to call his or her carrier for repairs, product information, or customer service assistance, mistakenly calls the other carrier. With respect to misdirected repair calls, the parties agree to provide the correct carrier's telephone number to the customer who mistakenly called the wrong carrier, and that "neither party shall make disparaging remarks about the other party" during such calls (Bell Atlantic Reply Brief at 31-33). However, they disagree on whether employees in such situations should be prohibited from marketing their company's products and services, and whether the prohibition against disparaging comments should apply to all employees, not just repair personnel.

b. Positions of the Parties

i. MediaOne

MediaOne proposes that the parties agree that they will not use misdirected repair calls as the basis for internal referrals or to market their services (MediaOne Brief at 50). MediaOne states that using misdirected repair calls to market services is clearly contrary to the spirit of the Act, constitutes anticompetitive marketing, and is also an unreasonable practice that should not be allowed pursuant to G.L. c. 159, § 16 (MediaOne Brief at 52; MediaOne Proposed Findings of Fact and Conclusions of Law at 17). MediaOne argues that Bell Atlantic proposes to comply with "applicable law" on the marketing of services without setting forth an explanation of the "applicable law" (RR-DTE-25). In addition, MediaOne argues that there should be a prohibition in these situations against disparaging remarks about the other company's products and services (MediaOne Brief at 54-55). MediaOne maintains that this provision should apply to all company personnel (MediaOne Proposed Findings of Fact and Conclusions of Law at 17).

ii. Bell Atlantic

Bell Atlantic argues that the prohibition against marketing of services during misdirected calls is adequately addressed in language directing the parties to comply with applicable law and, thus, further change is not required (Bell Atlantic Reply Brief at 31). Bell Atlantic contends that carriers are not prohibited by the Act or FCC rules from making internal referrals or from marketing their services in these types of situations (IR-MediaOne-BA-2-35). Bell Atlantic also argues that a provision prohibiting the marketing of services is also unnecessary since Bell Atlantic will comply with applicable law as noted elsewhere in the interconnection agreement (see Bell Atlantic's Proposed Findings of Facts and Conclusions of Law at 19). Bell Atlantic argues that MediaOne's proposed language is too restrictive and would require all Bell Atlantic personnel to refer misdirected callers without any further contact (Bell Atlantic Reply Brief at 33). Finally, Bell Atlantic contends that MediaOne's proposal to prohibit disparaging remarks under the Business Procedures section is redundant because that language is already included in the Coordinated Repair Calls section (Bell Atlantic Brief at 95).

c. Analysis and Findings

Neither party cites to any federal requirements addressing this issue and we are not aware of any. Thus, the Department, under its authority under G.L. c. 159, §§ 12 and 16, may prescribe its own requirements. In the emerging stages of local exchange competition, we believe it is important to establish a rule that prevents Bell Atlantic from using misdirected telephone calls as the basis for internal referrals or for marketing its services. Bell Atlantic's responsibility as an incumbent network provider should not be used to its advantage in the competitive retail market place. The Department, in the intraLATA toll competition context, has previously found a need to place limits on Bell Atlantic's ability to take advantage of its longstanding monopoly relationship with customers to unfairly market its services (see NYNEX ILP, D.P.U. 96-106, at 37-38 (1997)). We see an analogous situation here. Accordingly, we find that the parties shall include specific wording in the agreement that prevents them from using misdirected repair calls as the basis for internal referrals or to solicit end-users to market services. In addition, we find that the parties shall also include language that prevents all of their employees, not just repair personnel, from making disparaging comments about the other company and its product and services in these types of situations.

2. Customer Proprietary Network Information Audits

a. Introduction

Section 222(c) of the Communications Act of 1934 prohibits (with some exceptions[101]

) disclosure by telecommunications carriers of confidential Customer Proprietary Network Information ("CPNI") of individual customers.[102]

47 U.S.C. § 222(c). The parties disagree about whether Bell Atlantic should be allowed to monitor or audit MediaOne's access to and use and/or disclosure of CPNI.[103]

b. Positions of the Parties

i. Bell Atlantic

Bell Atlantic proposes the following language in the interconnection agreement; "[it] shall have the right to monitor and/or audit MediaOne's access to and use and/or disclosure of [CPNI] that is made available by Bell Atlantic to MediaOne pursuant to this Agreement to ascertain whether MediaOne is complying with the requirements of Applicable Law and this Agreement with regard to such access, use, and/or disclosure" (Bell Atlantic Brief at 89-90). Bell Atlantic argues that it should be allowed to monitor and/or audit in order to be able to take precautions to protect that data and that safeguarding that information is in the public interest (Bell Atlantic Brief at 90; Bell Atlantic Reply Brief 32).

ii. MediaOne

MediaOne opposes Bell Atlantic's proposal that Bell Atlantic be permitted to monitor or to audit MediaOne's access to and use and/or disclosure of Bell Atlantic's CPNI (MediaOne Brief at 52.). MediaOne argues that "Bell Atlantic is not the CPNI policeman, and [Bell Atlantic] has no obligation (or right) to monitor other carriers' use of CPNI" (id.). According to MediaOne, should a violation of the use of CPNI ever occur, it would be the customer who would request damages for the violation (id.).

c. Analysis and Findings

Section 222 does not contain a provision that permits (or requires) carriers to audit the use and/or disclosure of CPNI by another carrier. We are not inclined to create such a rule here. There is no evidence that MediaOne, or any other CLEC, would improperly use or disclose CPNI in violation of Section 222. Therefore, we find in favor of MediaOne. The interconnection agreement shall not include a provision allowing Bell Atlantic to audit MediaOne's use of CPNI. If Bell Atlantic has reason to believe the CPNI is being misused by any CLEC, Bell Atlantic may bring that concern to the Department's attention for possible further action.

3. Unauthorized Carrier Changes and Customer Authorization

a. Introduction

The Parties disagree about whether they should reference in their interconnection agreement only existing state and federal rules on the unauthorized change of a customer's telecommunications service provider (i.e., slamming), or create additional remedies.

b. Positions of the Parties

i. MediaOne

MediaOne proposes that the parties agree to follow both the FCC's and the Department's rules on slamming (MediaOne Brief at 51). MediaOne notes that the FCC has developed rules on this issue,[104]

that Massachusetts enacted anti-slamming legislation,[105]

and that the Department recently proposed rules to implement the state law[106] (Exh. MediaOne-5, at 9). MediaOne argues that Bell Atlantic has proposed to include remedies in addition to those provided by law, and that the federal and state remedies are adequate and sufficient (MediaOne Brief at 51).

ii. Bell Atlantic

Bell Atlantic claims that the Unauthorized Carrier Changes Section of Bell Atlantic's proposed interconnection agreement is reasonable because it does not preclude other rights available under law in addition to those required under the applicable slamming rules (Bell Atlantic Brief at 90). In addition, Bell Atlantic creates an additional remedy whereby the party that makes an unauthorized change (i.e., slams a customer) would be liable to the other party for certain damages (id. at 90-91). According to Bell Atlantic, MediaOne inaccurately characterizes Bell Atlantic's proposed slamming language as expanding rights and remedies (Bell Atlantic Reply Brief at 31). Bell Atlantic argues that its proposal merely acknowledges that, in addition to the specific penalties contained in the applicable state and federal slamming laws, other remedies may exist which could be invoked in the event of a slamming violation (id. at 31-32).

c. Analysis and Findings

The Massachusetts' new slamming law, which went into effect December 10, 1998, provides procedures for investigation, determination, and remedies for slamming. G. L. c. 93, §§ 108-113. In particular, Section 112 provides for penalties to be assessed against violating companies, and compensation for slammed customers and their original carriers. G. L. c. 93, § 112. In addition, federal and state laws and regulations provide for carrier-to-carrier remedies. The Department finds that it would be inappropriate for Bell Atlantic to create additional remedies in this interconnection agreement. See Implementation of the Subscriber Carrier Selection Change Provisions of the Telecommunication Act of 1996, CC Docket No. 94-129 (1998); G. L. c. 93, §§ 108-113. Bell Atlantic has not proven why the existing requirements are inadequate to meet its needs. We find that the existing slamming law, FCC regulations, and pending Department regulations provide for adequate remedies; Bell Atlantic's additional language is not needed.

K. Directory Services Arrangements

1. Operator Services and Directory Assistance Transport

a. Introduction

Bell Atlantic provides Operator Services ("OS") through five switch locations dispersed throughout Massachusetts and Directory Assistance ("DA") through nine switch locations serving the Eastern Massachusetts LATA only. Operator services include call completion services such as credit card, collect, and bill-to-third-number calls, and busy line verification/interruption. Intercept services, which provide a telephone number once a line has changed or been disconnected, are also covered under Operator services. Directory Assistance includes Directory Assistance Call Completion services.

The parties' dispute which carrier has the obligation to provide the necessary trunking and transport to and from these OS/DA switches. Bell Atlantic identifies the relevant OS/DA IPs in Schedule 4.2, and will include this information in Schedule 4.1 of the Interconnection Agreement (RR-DTE-10).

b. Positions of the Parties

i. MediaOne

MediaOne maintains that its obligations to provide transport to and from OS and DA switch locations should be the same as its obligations to provide transport for other types of traffic as set forth in Section 4.2 (Interconnection Point Section) of the interconnection agreement (MediaOne Brief at 52). As in the Interconnection Points section, where each carrier would deliver local traffic originated by its customer to the IP or POI of the other carrier and that other carrier would pay for the transport of the call to its customer, MediaOne proposes to pay for a portion of the transport, up to the OS/DA switch locations, and Bell Atlantic would be required to pay to transport the traffic back to the relevant MediaOne's IP. MediaOne claims that since it will be providing a geographically relevant IP within the footprint[107]

of each of Bell Atlantic's tandems, MediaOne has reasonably addressed Bell Atlantic's transport concerns regarding establishing only one IP and requiring Bell Atlantic to pay for transport costs to haul all types of traffic to this IP (MediaOne Brief at 52-53).

ii. Bell Atlantic

Bell Atlantic proposes that MediaOne should be responsible for arranging at its own expense the trunking and other facilities required to transport to and from Bell Atlantic's designated DA and OS switch locations[108] (Bell Atlantic Brief at 91). Bell Atlantic argues that MediaOne's designation of only one IP for eastern Massachusetts would force Bell Atlantic to haul traffic to this single IP and incur considerable transport costs (Bell Atlantic Brief at 91-92). Bell Atlantic also contends that the UNE rates for DA and OS do not include transport costs to deliver the OS/DA messages to MediaOne's IP (Bell Atlantic Reply Brief at 32). Lastly, Bell Atlantic argues that MediaOne's proposal to link the OS and DA transport issue to the interconnection issues in Section 4.2 (on geographic relevance) is unreasonable (Bell Atlantic Brief at 92-93).

c. Analysis and Finding

The Department finds that if MediaOne elects to purchase the OS and DA UNEs, it is reasonable to require MediaOne to pay the transport costs to and from Bell Atlantic's OS and DA switch IPs. While MediaOne's footprint proposal does provide additional IPs that may be located closer to Bell Atlantic's OS/DA IPs, Bell Atlantic's interconnection obligations with MediaOne should not be confused with Bell Atlantic's obligation to provide MediaOne access to a UNE, namely OS and DA. MediaOne's purchase of the OS/DA UNE involves only MediaOne's customers, whereas interconnection between MediaOne and Bell Atlantic's networks is for the exchange of traffic between Bell Atlantic's and MediaOne's customers. In the Local Competition Order, the FCC states that it requires that an incumbent LEC to provide access to operator service and directory assistance where technically feasible. Local Competition Order at ¶¶ 534-540. Providing access to a particular UNE does not necessitate Bell Atlantic paying a portion of the CLEC's transport costs for access to that UNE. If MediaOne elects to purchase the OS and DA UNE, it will be providing its customers access to this service. Thus, it should pay both legs of the transportation costs to obtain this service. MediaOne's proposal that Bell Atlantic be required to pay for the return leg of transport for OS and DA is unreasonable.

The proposed rates for OS and DA UNE's are reflected in Bell Atlantic's Tariff 17. Those rates are based on the FCC's Total Element Long-Run Incremental Cost ("TELRIC") method for pricing UNEs, and do not contain a cost component for transport from the Os and DA IPs to MediaOne's IP (see Miscellaneous TELRIC study attachment B).

L. Contractual Issues

1. Termination of Agreement

a. Introduction

The parties disagree about their respective obligations upon expiration of the interconnection agreement. MediaOne argues that the parties should continue operating under the expired interconnection agreement. Bell Atlantic contends that after a certain period of time, service arrangements made available under the interconnection agreement should be provided pursuant to standard or tariffed interconnection terms and conditions until execution of a new interconnection agreement.

b. Positions of the Parties

i. Bell Atlantic

Bell Atlantic proposes that, when the parties' interconnection agreement expires, and either party requests renegotiation of the interconnection agreement, the parties will continue to operate under the terms of the expired agreement for a maximum of nine months while the parties renegotiate a new agreement (Bell Atlantic Brief at 92). If a new interconnection agreement is not negotiated within nine months, the service arrangements made available under the interconnection agreement would be provided under (1) generally available standard interconnection terms and conditions, (2) tariff terms and conditions, or (3) the terms of the expired interconnection agreement on a month-to-month basis, if none of the above is available (id. at 92-93). Bell Atlantic explains that it would give 30-days notice before terminating the provision of any service under the expired interconnection agreement (Bell Atlantic Reply Brief at 33).

Bell Atlantic asserts that it is in the interest of both parties to promptly reach a new interconnection agreement, and its proposal provides the opportunity to renegotiate, and the incentive to reach a new agreement (Bell Atlantic Brief at 93). This new interconnection agreement would properly reflect the bargained-for exchange of provisions representing the resolution of a complex variety of issues between the parties (id.). According to Bell Atlantic, it is important that reasonable limitations be placed on the continuing effectiveness of the prior interconnection agreement in order to facilitate the efficient and successful negotiation of a new interconnection agreement (id.). Bell Atlantic asserts that the Department-approved standard terms and conditions are a readily-available and reasonable substitute offering all the components of an interconnection agreement (id. at 94).

ii. MediaOne

MediaOne argues that the parties' obligations under the interconnection agreement should remain in full force and effect

pending the execution of a new interconnection agreement (MediaOne Brief at 53). In describing the potential impact of Bell Atlantic's proposal on MediaOne and its customers, MediaOne contends that implementing an interim set of terms and conditions between the parties as proposed by Bell Atlantic could "wreak havoc" on the interconnection operations between the parties (id. at 54). According to MediaOne, Bell Atlantic would need to determine what changes MediaOne should expect in Bell Atlantic's interconnection provisions, and to notify MediaOne of those changes (id.).[109] Second, MediaOne maintains that there could be operational, engineering or provisioning changes that MediaOne may be required to implement immediately during this interim period under different terms and conditions, which might drastically affect MediaOne's ability to continue marketing and providing service (id.). Third, MediaOne argues that there could be changes to customer services that must be addressed with customers (id.). MediaOne concludes that Bell Atlantic's proposal ignores the complex practices and procedures involved with interconnection between the parties, and Bell Atlantic's interim proposal would adversely affect both MediaOne and its customers (id.).

MediaOne contends that Bell Atlantic's proposal eliminates MediaOne's ability to freely negotiate a new interconnection agreement because MediaOne must either agree to Bell Atlantic's various proposals for a new agreement, or be penalized for failure to agree by having its current agreement terminated and an entirely new set of terms, conditions and rates imposed on it until the new interconnection agreement is resolved (id. at 53). In addition, MediaOne notes that there may be factors outside of its control, such as a Bell Atlantic appeal of a timely arbitration decision, that affect its ability to execute a new agreement (id. at 54).

c. Analysis and Findings

The parties agree that the interconnection relationship as defined by the interconnection agreement is a complex arrangement (see MediaOne Brief at 54; Bell Atlantic Brief at 93). In this arbitration, in addition to the time spent negotiating and resolving a wide variety of issues, the parties have devoted significant time to developing, refining and presenting their positions on many of the aspects of their relationship to be defined in the interconnection agreement. MediaOne has persuaded us that wholesale changes in that relationship, such as terminating the arrangement as defined in the interconnection agreement and imposing a different arrangement defined by generally available terms and conditions, has the potential to affect substantially the way the parties interconnect and, ultimately, the service provided to customers. Bell Atlantic does not address this point, other than to say that its generally available terms and conditions are a "reasonable" substitute for negotiated and arbitrated terms and conditions.

We agree with Bell Atlantic, however, that there must be a mechanism in place that reasonably limits the length of time the parties may continue to operate under an expired interconnection agreement. Such a mechanism already exists. Under the Act, parties that cannot agree on interconnection terms, conditions and rates may petition the state commission to arbitrate any open issue. See 47 U.S.C. § 252(b). In addition, a state commission must conclude its resolution of any unresolved issue within a specific period of time, at most no longer than 165 days. See 47 U.S.C. § 252(b)(4)(C). Therefore, if Bell Atlantic is concerned that its negotiations with MediaOne for a new interconnection agreement will not produce results in a reasonable period of time, it may, in accordance with the provisions of the Act, petition the Department for arbitration.

Accordingly, we find that Bell Atlantic's proposal to impose standard terms and conditions upon MediaOne after nine months of renegotiating a new interconnection agreement is unnecessary. Bell Atlantic's proposal is therefore denied.

2. Compliance with Laws

a. Introduction

The parties disagree whether in the event of a change of law that relieves Bell Atlantic of any of its obligations relating to services provided pursuant to this interconnection agreement

(1) Bell Atlantic may cease providing the affected services upon 30-days notice, or (2) the parties must negotiate modification of the interconnection agreement and submit the modification to the Department for approval.

b. Positions of the Parties

i. MediaOne

MediaOne asserts that the parties should agree to meet and modify the interconnection agreement to be consistent with any further change in law (MediaOne Brief at 55). MediaOne predicts a negative effect on customers if the parties immediately change their provision of services based on their interpretation of any change in law (id.). According to MediaOne, it may need to negotiate and implement an alternative agreement to cover services no longer provided by Bell Atlantic (id. at 56). MediaOne argues that its proposal would preserve the Department's ability to review and approve interconnection agreement changes (MediaOne Proposed Findings of Fact and Conclusions of Law at 18).

ii. Bell Atlantic

Bell Atlantic proposes to include a provision in the interconnection agreement that provides that "if, as result of any decision, order or determination of any judicial or regulatory authority ... it is determined that [Bell Atlantic] is not required to furnish any service, facility or arrangement, or to provide any benefit [that is required to be provided] to MediaOne [under the interconnection agreement], then Bell Atlantic may discontinue the provision of such service, facility, arrangement or benefit" (Bell Atlantic Brief at 95-96). First, Bell Atlantic objects to MediaOne's insistence that absent a final decision affecting Bell Atlantic's obligations, Bell Atlantic should not be relieved of its obligations (id.). Bell Atlantic argues that absent an order that legally stays the applicability of a regulatory or court decision affecting either party's obligations, the fact that an order is subject to further appeal rights does not alter an order's fundamental legal enforceability (pending the result of an appeal) (id. at 96). Second, differentiating between a typical commercial contract and an interconnection agreement entered into pursuant to the Act, Bell Atlantic argues that MediaOne's proposal would impose requirements on Bell Atlantic that exceed the applicable law (Bell Atlantic Response at 36). Third, in response to MediaOne's concern regarding immediate changes in service, Bell Atlantic would give MediaOne 30-days prior written notice before discontinuing any service due to a change in law (Bell Atlantic Brief at 96-97). Fourth, Bell Atlantic argues that MediaOne's proposal does not include a date certain for discontinuation of its provision of services when those services are no longer mandated by law (Bell Atlantic Reply Brief at 34).

c. Analysis and Findings

This issue is closely related to the "Extent of Obligation to Provide UNEs" issue that we decided in Section V.G., above. For the same reasons as stated in the earlier section, we find that Bell Atlantic's proposal to terminate the provision of certain services upon 30-days notice in the event of a change of law is unreasonable. The parties shall comply with the directives stated in Section V.G.

M. Billing and Payment Dispute Amounts

1. Introduction

Section 28.8 of the Agreement governs the parties rights and responsibilities with respect to billing, payment and collection for services rendered by one carrier to the other. Although in agreement on many of the provisions of this Section, the parties contest four specific issues: whether (1) the payment due date should take into account when a bill is received; (2) one party may escrow amounts in dispute only after providing a billing inquiry response to the other party; (3) the billing dispute resolution period should be 60 or 90 days; and (4) a party can discount disputed bills held in escrow that are later determined to be in error.

2. Positions of the Parties

a. MediaOne

To protect itself from incurring penalties for late payments because Bell Atlantic did not issue its billing statements on time, MediaOne proposes that "the bills are due on the later of thirty days from the date of the statement or twenty days from the date of receipt of the statement" (MediaOne Brief at 56). MediaOne states that it has experienced significant delays and found Bell Atlantic to be unresponsive to billing issues (Exh. MediaOne-5, at 55). For example, MediaOne claims that certain billing issues are still unresolved after four months of working with Bell Atlantic (id.).

In order to provide Bell Atlantic with the incentive to produce accurate bills and respond promptly to billing inquiries from MediaOne, MediaOne proposes to put disputed billed amounts into an interest-bearing escrow account, if Bell Atlantic agrees to respond to billing inquiries within a reasonable period of time (MediaOne Brief at 56). MediaOne

suggests two days is a reasonable period of time (id.).[110]

In addition, MediaOne argues that it would agree to Bell Atlantic's proposed 60-day period for dispute resolution of billing matters if Bell Atlantic agrees to tie the escrow obligation to a reasonable response time for MediaOne's billing inquiries (MediaOne Reply Brief at 17).

As an alternative to tying a reasonable response time for billing inquiries with an escrow obligation, MediaOne proposes that "Bell Atlantic be subject to penalties if its bills are determined to be more than 30 % in error; the penalty would be equal to 5% of the total accurate

amount" (MediaOne's Proposed Findings of Facts and Conclusions of Law at 18).

b. Bell Atlantic

Bell Atlantic maintains that its escrow requirement is a standard provision (Bell Atlantic Brief at 97).[111]

Bell Atlantic contends that MediaOne's proposal of requesting two days as a reasonable time to respond to billing inquiries is too rigid (id. at 98; Bell Atlantic Reply Brief at 34). Bell Atlantic contends that the proposed two day response time "fails to consider the nature and complexity of the claim, investigation of billing issues, including the collection of necessary supporting documentation" (Bell Atlantic Reply Brief at 34). In addition, Bell Atlantic argues that MediaOne's proposed 90-day dispute resolution period is too long and that Bell Atlantic's proposed 60-day period is standard (id.). Finally, Bell Atlantic contends that MediaOne's proposal to impose severe penalties on disputed bill amounts is inappropriate (Bell Atlantic Brief at 99).

3. Analysis and Findings

First, we find that MediaOne's proposal that payment be due on the later of thirty days from the date of the billing statement or twenty days from the date of receipt of the statement is reasonable. MediaOne should not be disadvantaged because of Bell Atlantic's failure to send a bill out within the regular time frame or for third-party errors relating to the receipt of mail.

Second, we find that MediaOne's proposal to put all disputed bill amounts into an interest-bearing escrow account, as long as Bell Atlantic agrees to respond to billing inquiries within two days, is a creative way to ensure more accurate bills and a timely response to billing inquiries. However, we think the two-day turnaround time is too short to address those billing disputes that are complex and require detailed investigation, and more time may be required. We find that ten business days is more reasonable.[112]

N. Grant of License and Indemnification

1. Introduction

MediaOne and Bell Atlantic disagree on whether the interconnection agreement should reflect that an implied limited license to use Bell Atlantic's facilities arising from the interconnection agreement. In addition, the parties disagree as to whether they should indemnify each other for any third party claims that the use of the service, facilities, or equipment pursuant to the agreement infringes a copyright, trademark, patent or trade secret of a third party.

Section 28.13.1 of Bell Atlantic's proposal states, in pertinent part, that:

Nothing in this Agreement shall be construed as the grant of a license with respect to any patent, copyright, trademark, trade name, trade secret or any other proprietary or intellectual property now or hereafter owned, controlled or licensable by either Party. Neither Party may use any patent, copyrightable materials,

trademark, trade name, trade secret or other intellectual property right of the other Party except in accordance with the terms of a separate license agreement between the Parties granting such rights.

2. Positions of the Parties

a. MediaOne

MediaOne contends that the interconnection agreement gives rise to an implied license to use Bell Atlantic's facilities, equipment, and services and this implied license necessarily includes a limited license to any underlying intellectual property rights required for the use of the facilities (MediaOne Brief at 57).

According to MediaOne, it is therefore reasonable to include an indemnification in the event that such use is claimed to infringe the intellectual property rights of a third party (id.). MediaOne claims that a party offering use of its facilities and charging for such use, should also be required to stand behind their offering in the form of an indemnity (id.). MediaOne argues that the party providing the services, facilities and equipment (and charging a fee therefore) is in the best position to provide such indemnity because it has control over, and knowledge about the services, facilities and equipment (id.). MediaOne asserts that Bell Atlantic can best assume the risk of infringement, take appropriate measures to avoid the risk (e.g., by modifying the service, facilities or equipment) and allocate the risk among users of the services, facilities and equipments (e.g., in the form of fees) (id. at 57-58).

b. Bell Atlantic

Bell Atlantic contends that the interconnection agreement does not create a grant of license of any kind (Bell Atlantic Brief at 100). Since no licensing rights are created, according to Bell Atlantic, it is not necessary for the parties to defend, indemnify or hold harmless one another regarding infringement claims (id.). Bell Atlantic claims that MediaOne's proposal contradicts Bell Atlantic's longstanding tariffs on such matters (id.). To the extent that an implied license is assumed by MediaOne, Bell Atlantic would include language that would expressly deny that any license, express or implied, is granted under the Agreement (Bell Atlantic Reply Brief at 35).

3. Analysis and Findings

On the basis of representations made by the parties that the issue of implied license and indemnification was settled, the Department did not question the parties on this matter.[113]

Only after the Department received briefs from the parties did it realize that the parties did not, in fact, reach agreement on this section, Section 28.13, of the interconnection agreement. Consequently, the Department must decide this issue on the basis of the scant information contained in MediaOne's Petition, Bell Atlantic's Response, and the briefs filed in this proceeding. Bell Atlantic argues that MediaOne's position (that the agreement should reflect the existence of an implied license for use of Bell Atlantic's intellectual property rights and a corresponding indemnification clause) contradicts its longstanding tariffs on such matters but does not provide us with any citation to those tariffs. Likewise, MediaOne cites no Department precedent or other authority for its position.

Bell Atlantic's Department-approved access services tariff contains the following provision:

No license under patents (other than the limited license to use) is granted by [Bell Atlantic] or shall be implied or arise by estoppel, with respect to any service offered under this tariff. [Bell Atlantic] will defend the customer against claims of patent infringement arising solely from the use by the customer of services offered under this tariff and will indemnify such customer for any damages awarded based solely on such claims.

DTE MA No. 15 at 2.3.2.G.

On the basis of such language, it appears to the Department that at least one of Bell Atlantic's tariffs expressly provides

for a limited license to use Bell Atlantic's patents. Moreover, Bell Atlantic clearly agreed in Tariff No. 15 to indemnify the customers (IXCs) against patent infringement claims arising from the customer's use of Bell Atlantic's services. This appears to undermine Bell Atlantic's contention that its tariffs do not include an implied license. We recognize, however, that the issues surrounding Bell Atlantic's the provision of access services may differ from those which are the subject before us in this proceeding. Therefore, without further elaboration from the parties on this issue, we are reluctant to direct Bell Atlantic and MediaOne to license their intellectual property, absent a separate intellectual property licensing agreement granting the parties such rights. Accordingly, we decline to accept MediaOne's proposed language.

Since we do not find that an implied limited license to use a party's intellectual property exists in the interconnection agreement, we also agree with Bell Atlantic that it is unnecessary for the parties to indemnify each other from third party infringement claims. The Department notes that Bell Atlantic has proposed language identical to that contained in its access tariff for its Tariff No. 17, which encompasses, among other things, collocation and interconnection. However, the Tariff No. 17 is still under review (D.T.E. 98-57). Should the Department adopt Bell Atlantic's liability proposal in Tariff No. 17, which differs from the language proposed by Bell Atlantic for the interconnection agreement that we adopt today, the parties would be required to comply with the licensing and indemnification language contained in Tariff No. 17, if approved.

Finally, under the FCC's pick-and-choose rules[114] MediaOne may request that Bell Atlantic make available to MediaOne the intellectual property provision contained in Bell Atlantic's Department-approved interconnection agreement with MCImetro Access Transmission Services, Inc. ("MCIm"). This provision, contained Section 12 of the agreement, reads as follows:

12.1 Any intellectual property which originates from or is developed by a Party shall remain in the exclusive ownership of that Party. Except for a limited license to use a Party's patents or copyrights to the extent necessary for the Parties to use any facilities or equipment (including software) or to receive any service solely as provided under this Agreement, no license in patent, copyright, trademark or trade secret, or other proprietary or intellectual property right now or hereunder owned, controlled or licensable by a Party, is granted to the other Party or shall be implied or arise by estoppel.

12.2 BA shall indemnify MCIm with respect to MCIm's use, pursuant to the terms of this Agreement, of intellectual property associated with any new BA network equipment or software acquisitions. BA warrants that it will not enter into any licensing agreements with respect to new BA network equipment or software acquisitions that contain provisions that would disqualify MCIm from using or interconnecting with such network equipment or software pursuant to the terms of this Agreement. BA also warrants that it has not and will not intentionally modify any existing licensing agreements for existing network equipment or software in order to disqualify MCIm from using or interconnecting with such network equipment or software pursuant to the terms of this Agreement. To the extent that the providers of equipment or software in BA's network provide BA with indemnities covering intellectual property liabilities and those indemnities allow a flow through of protection to third parties, BA shall flow those indemnity provisions through to MCIm. BA will inform MCIm of any pending or threatened intellectual property claims relating to BA's network of which BA is aware and will update that notification periodically as needed, so that MCIm receives maximum notice of any intellectual property risks it might want to address. Notwithstanding any part of this Section 12, MCIm retains the right to pursue legal remedies against BA if BA is at fault in causing intellectual property liability to MCIm.

12.2.1 For purposes of Section 12.2, BA's obligation to indemnify shall include the obligation to indemnify and hold MCIm harmless from and against any loss, cost, expense or liability arising out of a claim that MCIm's use, pursuant to the terms of this Agreement, of such new BA network equipment or software infringes the intellectual property rights of a third party. Moreover, should any such network equipment or software or any portion thereof provided by BA hereunder become, or, in BA's reasonable opinion, be likely to become, the subject of a claim of infringement, or should MCIm's use thereof be finally enjoined, BA shall, at its immediate expense and at its choice:

12.2.1.1 Procure for MCIm the right to continue using such material; or

12.2.1.2 Replace or modify such material to make it non-fringing provided such replacement or modification is functionally equivalent.

O. Audits

1. Introduction

The parties' proposed interconnection agreement contains a number of provisions that allow the parties to conduct audits of each other concerning specific issues, but does not contain a general provision that allows auditing of the other party's overall compliance with terms and conditions of the interconnection agreement. MediaOne seeks such a provision.

2. Positions of the Parties

a. MediaOne

To ensure Bell Atlantic's compliance with the terms of the Agreement, MediaOne argues the parties should be allowed a general audit of each other, once a year (MediaOne Brief at 58). MediaOne states that the parties would be required to give each other 30-days notice prior to commencement of the audit and would bear the cost of their respective audits (id.). MediaOne argues that without a general audit, there is no way to know whether the other party is complying the with terms of the agreement (id.). MediaOne asserts that the dispute resolution provision is only useful when a party knows there is a compliance problem (id.).[115]

b. Bell Atlantic

Bell Atlantic opposes adding a provision that would allow MediaOne to conduct an annual yearly audit of Bell Atlantic's compliance with the interconnection agreement (Bell Atlantic Brief at 102). First, Bell Atlantic notes that the proposed interconnection agreement already contains audit provisions for those sections, such as the reciprocal compensation, meet-point billing, and CPNI [116] sections, where the parties have identified a specific need for an audit (id.). Second, Bell Atlantic claims the interconnection agreement contains a dispute resolution mechanism, which includes a right to petition the Department for an audit (id. at 103; Bell Atlantic Reply Brief at 35).

3. Analysis and Findings

We find that Bell Atlantic's proposal is reasonable. Broad audit rights to examine a party's general compliance with the terms of the interconnection agreement do not appear to be necessary at this time. As noted by Bell Atlantic, audit provisions already exist for those issues where audits are necessary and appropriate, and we encourage the parties to take advantage of those existing audit provisions. If MediaOne believes that additional specific audit provisions are necessary, it should negotiate such provisions with Bell Atlantic. Finally, if MediaOne can demonstrate credible evidence of a sustained pattern of noncompliance, the Department may reconsider its finding here and grant MediaOne general audit rights.

VI. ORDER

Accordingly, after hearing and due consideration, it is

ORDERED: That the issues under consideration in this arbitration be determined as set forth in this Order; and it is

FURTHER ORDERED: That MediaOne and Bell Atlantic incorporate these determinations into a final interconnection agreement, setting forth both the negotiated and arbitrated terms and conditions, to be filed with the Department pursuant to Section 252(e)(1) within 21 days from the date of this Order.

FURTHER ORDERED: That Greater Media and Bell Atlantic incorporate these determinations into a final interconnection agreement, setting forth both the negotiated and arbitrated terms and conditions, to be filed with the Department pursuant to Section 252(e)(1) after completion of the balance of their separate arbitration.

By Order of the Department,

_____

Janet Gail Besser, Chair

_____

James Connelly, Commissioner

_____

W. Robert Keating, Commissioner

_____

Paul B. Vasington, Commissioner

_____

Eugene J. Sullivan, Jr., Commissioner

1. The carriers' networks comprise (or will comprise in Greater Media's situation) a combination of cable plant and telecommunications facilities, including switching equipment.

2. That term of that interconnection agreement expired on April 18, 1998, but pursuant to Section 21, Term and Termination, of the expired interconnection agreement, the parties continue to operate under the agreement until a new agreement is in place.

3. Section 252(b) of the Act permits a carrier to petition a state commission to arbitrate any issue left unresolved after voluntary negotiations between the carriers have occurred. 47 U.S.C. § 252(b)(1).

4. The Commission designated Department Hearing Officer Joan Foster Evans as the Arbitrator.

5. Greater Media filed a Petition for Arbitration of an interconnection agreement with Bell Atlantic on May 10, 1999.

6. The parties agreed that all discovery responses submitted in this proceeding would be entered as evidence. Those responses are referred to in this Order by their information request designations.

7. Bell Atlantic filed Tariff No. 17 with the Department on April 2, 1999, and filed additional tariff provisions on May 28, June 11, and August 13, 1999. See D.T.E. 98-57 ("Tariff 17 Proceeding"). The Department suspended the tariff for investigation until November 2, 1999. Bell Atlantic Tariffs Nos. 14 and 17, D.T.E. 98-57 (May 18, 1999). This matter is still pending before the Department.

8. Although Bell Atlantic labeled its motion "Appeal and Motion for Clarification of Arbitrator Ruling," we find only a request for clarification contained in this filing, and not an appeal of the Ruling.

9. The first sentence of Bell Atlantic's proposed Section 2.2 reads as follows: "Each party hereby incorporates by reference those provisions of its tariff that govern the provision of any services or facilities provided hereunder."

10. The Department notes that the Arbitrator specifically directed the parties to incorporate language into their interconnection agreements that comports with the Ruling (Ruling at 5).

11. Subsequently, the Department was informed by the parties that Sections 11.7, 11.9, and 19 were resolved and, therefore, are negotiated Sections of the interconnection agreement. The rule clarified here applies to these negotiated provisions.

12. A mid-span fiber meet is an interconnection architecture whereby two carriers' transmission facilities meet at a mutually agreed upon point of interconnection with the POI in the middle of a fiber ring. Each party builds half a fiber ring and purchases and maintains all the fiber and electronics for its half of the ring (Bell Atlantic Brief at 2; Bell Atlantic Response to Petition at 9).

13. In the affidavit, Mr. Albert testified regarding the equipment that Bell Atlantic would need to install to establish a mid-span meet interconnection arrangement, and the estimated installed cost for one such "typical" arrangement.

14. The Department set forth its policy on late-filed exhibits in Boston Gas Company, D.P.U. 88-67, Phase II at 7 (1989), stating: "A party's presentation of extra-record evidence to the fact-finder long after the record has closed and after all briefs have been filed is an unacceptable tactic, potentially prejudicial to the rights of other parties even when the evidence is ultimately excluded. Facts or allegations of facts, once learned, cannot readily be unlearned . . . . In the future, once the record in a docket has closed, proper procedure will require that a party seeking to offer a late-filed exhibit or testimony move to reopen the record to introduce new evidence. (An exception is the Department's practice to permit updating of routine information already provided on the record -- for example, the most recent property tax bills -- or to permit filing responses to outstanding record requests.) The motion should state the subject or issue that the proffered exhibit or testimony would address. Only if such a motion were granted by the hearing officer, would it then be proper to present the exhibit or testimony itself."

15. Depending on the interconnection option selected by the carriers, they may share a POI (i.e., a shared mid-span fiber meet) or they may establish a POI at the other carrier's network (i.e., a collocation site) (Exh. BA-MA-7, at 6).

16. An end office is a Bell Atlantic switching facility that exclusively serves customers in a specific geographic location corresponding to a specific NXX exchange code. The first three digits in a seven digit telephone number is the NXX exchange code. Generally speaking, all calls to and from customers are routed by the particular end office that is designated for that specific exchange code. Bell Atlantic has 286 end offices in Massachusetts.

17. A Bell Atlantic tandem office (or tandem switch) either connects trunks to and from (1) a Bell Atlantic end office and another tandem or (2) CLEC and/or interexchange carrier ("IXC") switches to a Bell Atlantic tandem. Bell Atlantic has six tandem switches serving Eastern Massachusetts. The tandem switches are located in Lawrence, two in Cambridge, Framingham, Worcester, and Brockton.

18. On brief, Bell Atlantic proposed that during the twelve month transition period, the parties would execute a Memorandum of Understanding ("MOU") within three months of MediaOne's request to establish a mid-span IP and the mid-span IP would be implemented within six months of executing an MOU unless certain problems arise (Bell Atlantic Brief at 29). This proposal does not appear on the record. To the extent that Bell Atlantic's position is not supported on the record, the Department will not accept it.

19. On brief, Bell Atlantic proposes that the mid span meet arrangement will be located within one quarter mile of each Bell Atlantic tandem (Bell Atlantic Brief at 29). This proposal does not appear on the record. To the extent that Bell Atlantic's position is not supported on the record, the Department will not accept it.

20. Transport is a service whereby one carrier hauls traffic over its network for another carrier.

21. Digital Signal Level 1 ("DS1") refers to the speed at which a T-1 circuit will run. A T-1 is a single telephone circuit that carries up to 24 voice or data communications.

22. See Section V.C.3. for our discussion on direct trunking from MediaOne's IP to a Bell Atlantic end office.

23. The Department approved the BA/CLI negotiated interconnection agreement on September 10, 1998, effective December 2, 1998.

24. At the hearing, Bell Atlantic's witness stated that under its proposal to both MediaOne and Greater Media, Greater Media could establish an IP at or near the Bell Atlantic tandem location (Tr. 2, at 332).

25. Collocation is an arrangement whereby one LEC resides and connects its equipment in the end office of another LEC, for purposes of obtaining interconnection and/or access to unbundled network elements ("UNEs").

26. LATA refers to a Local Access and Transport Area. The Act defines a LATA as "a continuous geographic area '(A) established before February 8, 1996, by a Bell operating company such that no exchange area includes points within more than 1 metropolitan statistical area, consolidated metropolitan statistical area, or State, except as expressly permitted under the AT&T Consent Decree; or (B) established or modified by a Bell operating company after February 8, 1996, and approved by the [FCC]." 47 U.S.C.

§ 153 (25). Massachusetts has two LATAs: a Western LATA that corresponds to the area served by the 413 area code; and an Eastern LATA that corresponds to the area served by the 617/508/978/781 area codes.

27. The CLI/Bell Atlantic interconnection agreement provides for an 18 month period.

28. The CLI/Bell Atlantic interconnection agreement provides for a DS-3 threshold. A DS-3 circuit will carry up to 672 voice or data communications.

29. MediaOne argues that its "footprint" proposal would establish MediaOne IPs at each Bell Atlantic tandem within an average of 10 miles from each tandem location (MediaOne Brief at 15). As stated earlier, MediaOne's position on mileage was first introduced on brief. To the extent that MediaOne's position is not supported on the record, the Department may not accept it. MediaOne testified that it is already in the process of establishing another IP in Brockton (Tr. 2, at 289-290).

30. Bell Atlantic states that the existing reciprocal compensation rate of $.008 per minute of use is a blended end office and tandem reciprocal compensation rate that takes into account the balance of traffic delivered by MediaOne to a Bell Atlantic tandem or end office and Bell Atlantic's delivery of its traffic to MediaOne's end office switches (Exh. BA-MA-8, at 6; IR MediaOne-BA-2-5; Bell Atlantic Brief at 29).

31. MediaOne states that it has the right to receive tandem termination rates ($.021) as supported by both federal and state law and initially included this rate in its tandem footprint proposal (MediaOne Brief at 11, 14). However, MediaOne has modified its position on tandem termination rates and has agreed to use Bell Atlantic's proposed reciprocal compensation rate of $.008 if Bell Atlantic agrees to other elements of its compromise proposal (MediaOne Reply Brief at 6).

32. In the Local Competition Order, the FCC implemented the key provisions of the Act concerning, among other things, interconnection, access to UNEs, and pricing.

33. Rate centers are geographic areas (usually corresponding closely to end offices) that Bell Atlantic uses to determine distance-sensitive pricing. Bell Atlantic has 261 rate centers in the Eastern LATA.

34. Bell Atlantic states that each party should (1) be responsible for the transport to and from the geographically relevant point by providing its own transport, (2) compensating the other party for transport, (3) purchasing transport from a third party, or (4) negotiating a mid-span meet or other facility sharing arrangement, such as collocation (Bell Atlantic Brief at 15).

35. Section 4.4 (Alternative Interconnection Arrangements) provides for alternative interconnection arrangements, including mid-span meets, upon mutual agreement of the parties (Bell Atlantic Brief at 34).

36. MediaOne originally proposed one IP at its existing mid-span meet IP in Lawrence. This original IP would eventually be supplemented by an additional mid-span meet IP in Brockton that is in progress (Tr. 2, at 263-264).

37. A remote switching module is switching equipment that is physically remote from a host switch (e.g., an end office switch). The remote switch provides some switching capability but the rest of the switching capability, including operating and call processing functions, resides in the host switch. A network node is the building that contains a remote switching module.

38. Greater Media also objects to Bell Atlantic's proposal to pay Greater Media less than full reciprocal compensation fees when Bell Atlantic transports calls originated by its customers to Greater Media's one IP (Greater Media Brief at 3).

39. Bell Atlantic states that Greater Media has incorrectly assumed that Bell Atlantic would agree to use Remote Switching modules for interconnection points (Bell Atlantic Reply Brief at 15)

40. Bell Atlantic proposes that Greater Media would not have to deploy an additional IP per tandem serving area until the earlier of 24 months from the first exchange of traffic to another tandem serving area or 6,000,000 minutes of use per month of traffic in that other tandem serving area (Greater Media Brief at 22-23; Bell Atlantic Brief at 32).

41. The FCC includes mid-span meet arrangements in its discussion of meet point arrangements. Local Competition Order at ¶ 553.

42. Bell Atlantic argues that if MediaOne and Greater Media are allowed to establish a single IP, they could assign telephone numbers to customers without regard to the customer's location, and require Bell Atlantic to provide toll free transport for those calls (Bell Atlantic Brief at 25). For the reasons discussed below, such costs, if they are in fact real, are addressed by reciprocal compensation rates.

43. The Department notes that MediaOne has chosen to offer an alternative interconnection arrangement to Bell Atlantic. This compromise proposal would have MediaOne establish additional IPs at Bell Atlantic tandems in the Eastern LATA (MediaOne's "footprint" proposal). While we have determined that Bell Atlantic cannot force MediaOne to establish additional IPs in the LATA, MediaOne may nonetheless decide to negotiate a compromise with Bell Atlantic. We would encourage such negotiations in that they may result in an overall more efficient interconnection of the two networks.

44. We note that the record, including citation to relevant FCC precedent, on the transport costs issue was not well developed by the parties.

45. "Of course, a requesting carrier that wishes a "technically feasible" but expensive interconnection would, pursuant to

section 252(d)(1) [pricing standards for interconnection and network elements charges - standards for state determinations for the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2)] be required to bear the cost of that interconnection, including a reasonable profit." Local Competition Order at ¶ 199. See also section VII ("concluding that requesting carriers must pay [ILECs] the cost of interconnection and unbundling"). Id. at ¶ 199, n. 426.

46. Bell Atlantic has not shown with record evidence that the current reciprocal compensation rates do not appropriately compensate it for transport and termination related to the mid-span meet form of interconnection.

47. The Department recognizes that there may be exceptional circumstances that prevent Bell Atlantic from meeting this deadline, including delays caused by third-party vendors. Therefore, we will allow Bell Atlantic to petition the Department for relief in appropriate circumstances. We note that our reasoning here applies to establishment of each IP, not only those in a new LATA.

48. In addition, contrary to Bell Atlantic's suggestion that the FCC's rules impose reciprocal terms and conditions on ILECs and CLECs, the FCC in the Local Competition Order stated that § 251(c)(2) does not impose on non-incumbent LECs the duty to provide interconnection. Local Competition Order at ¶ 220.

49. Blocking is a condition in a network when, due to heavy traffic, all trunk circuits are busy, or a switching path is unavailable. The Information Age Dictionary, at 31. From a customer standpoint, blocking can result is delays in completing calls and, in more extreme cases, an inability to complete calls. Trunks are engineered or designed to be free of blocking for all but a small number of calls.

50. A busy-hold equivalent exists when there are twenty-four simultaneous voice or data calls (i.e., DS-1) during the busy hour.

51. If either carrier becomes aware of blocking through other means, the 15 day interval described below applies from the date the carrier became aware of the blocking.

52. If MediaOne's cooperation is lacking, Bell Atlantic should bring this matter to the attention of the Department, to be handled informally with the assistance of the Telecommunications Division.

53. "Signaling systems facilitate the routing of telephone calls between switches. Most ILECs employ signaling networks that are physically separate from their voice networks, and these "out-of-band" signaling networks [also known as Common Channel Interoffice Signaling] simultaneously carry signaling messages for multiple calls. In general, most LECs' signaling networks adhere to a Bellcore standard Signaling System 7 ("SS7") protocol." Local Competition Order at ¶ 455.

54. "Call-related databases are those SS7 databases used for billing and collection or used in the transmission, routing, or other provision of a telecommunications service." Local Competition Order at ¶ 484 n. 1126.

55. The FCC states that "[c]ompetitors should be able to interconnect their own switches to the incumbent LEC's signaling system in any technically feasible manner." Local Competition Order at ¶ 483 n.1125.

56. In this case, MediaOne is hiring the SS7 provider and MediaOne's agreement with that provider controls. Any other agreement Bell Atlantic has with the SS7 provider does not apply.

57. The level of service that MediaOne's commercial SS7 provider provides to MediaOne is not covered by this finding.

58. This issue is a consolidated issue with Greater Media.

59. Bell Atlantic's witness testified that Bell Atlantic's tandems are designed to route roughly 90 percent of local calls directly between end offices. Only approximately ten percent of local calls go through the tandem switch (Tr. 1, at 48).

60. Bell Atlantic added a new tandem switch in Newton supplementing the two Cambridge tandem switches and will add another switch in Brockton to supplement the existing Brockton tandem switch (Tr. 1, at 16; Bell Atlantic Brief at 56).

61. However, only 40,000 of the 66,000 trunks were CLEC-dedicated tandem interconnection trunks that could potentially be used for tandem transit traffic.

62. Other CLECs could elect this provision of the Petitioners' interconnection agreements through the "pick and choose" rule of Section 252(i).

63. Section 252(i) states that "[a] local exchange carrier shall make available any interconnection, service, or network element provided under an agreement approved under this section to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement. 47 U.S.C. § 252(i).

64. The Bell Atlantic/Metromedia Fiber Network Interconnection Agreement, which was executed on April 19, 1999 and approved by the Department on May 29, 1999, provides for the DS-1 limitation on Tandem Transit Service (RR-MediaOne-1).

65. MediaOne proposes six months beginning on the effective date of an interconnection agreement between MediaOne and the other CLEC to establish direct trunks to that CLEC (MediaOne Proposed Findings of Fact and Conclusions of Law at 8). This proposal was submitted on brief and does not appear on the record. To the extent that MediaOne's position is not supported by evidence on the record, the Department may not accept it.

66. Bell Atlantic's "economic breakpoint" is based on its network engineering design standards that indicate the threshold (i.e., one DS-1 trunk) when Bell Atlantic believes it is economically efficient to establish a direct trunk group connection from one end office to another instead of routing the calls from the end office through the Bell Atlantic tandem (Tr. 1, at 76-78).

67. SS7 originating point codes are 9-digit numbers sent by an originating CLEC's switch to a Bell Atlantic tandem switch; point codes are initiated by a CLEC's customer calling a MediaOne customer (Exh. BA-MA-3, at 6). The point codes identify the CLEC's network by this switch (id.). The SS7 point codes sent by the originating CLEC switch are lost once Bell Atlantic performs tandem transit switching because the Bell Atlantic tandem switch would have to send its own separate SS7 message to MediaOne, identifying the Bell Atlantic switch (id.). However, Bell Atlantic does record billing information that would identify the originating CLECs (Tr. 1, at 166-167).

68. We also note that requiring a CLEC to establish direct trunks to other CLECs prematurely, before traffic volumes warrant this investment, may constitute an economic barrier to market entry.

69. Because we find that Bell Atlantic is obligated, pursuant to Section 251(c)(2) of the Act, to make tandem transit service available to CLECs, we do not need to address MediaOne's "pick and choose" argument.

70. Bell Atlantic's witness stated that the study could not be located, but that he was able to testify about the contents of the study from personal knowledge (Tr. 1, at 87-88).

71. A trouble report is the means by which CLECs report to Bell Atlantic problems with provisioning, and maintenance and repair of Bell Atlantic UNEs and resale services.

72. The CLEC Handbook is a set of guidelines put together by Bell Atlantic to inform CLECs on following areas: getting started, technical specifications and business rules.

73. Incident and performance payments are designed to ensure that parity is achieved. Performance payments provide an incentive for Bell Atlantic to achieve general levels of parity, and incident payments help to ensure that CLEC customers receive service parity. See Phase 3-B Order at 25.

74. These are trunks from Bell Atlantic to MediaOne that carry calls that terminate to MediaOne customers.

75. A wire center is a building housing one or more end office switches.

76. Bell Atlantic regards a trunk group as underutilized if "at the end of the 90 day period the ratio of 'trunks

required' (based on actual traffic usage) versus 'trunks in service' is less than 60 percent" (RR-DTE-17).

77. In its reply brief, Bell Atlantic included a new proposal to provide a transition period for MediaOne in the event that an FCC order or change in other applicable law eliminates Bell Atlantic's obligations (Bell Atlantic Reply Brief at 26). Because this proposal is not supported by record evidence, we cannot accept it.

78. As the Supreme Court has noted, even the Act itself is "not a model of clarity. It is in many important respects a model of ambiguity or indeed self-contradiction." AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366 (1999).

79. But see MCI WorldCom, D.T.E. 97-116-B, at 24-25 (1999) (Department found that a just-released FCC decision relieved Bell Atlantic of its obligation to pay reciprocal compensation for ISP-bound traffic). This arbitration can be distinguished from the MCI WorldCom ruling because, in the former, Bell Atlantic was required to petition the Department for authority to change its operations in response to a change in law.

80. The Department has approved such language in AT&T/Bell Atlantic Interconnection Agreement, D.T.E. 98-35 (1998); MCImetro Access Transmission Services/Bell Atlantic Interconnection Agreement, D.T.E. 98-104 (1998) (see RR-DTE-31).

81. Bell Atlantic has not explained the purpose of its proposed 40 percent premium, and we decline to impose this burden on CLECs while they negotiate modifications to their interconnection agreement in response to a change to the provisions of UNEs.

82. This "pick-and-choose" rule is set forth in 47 C.F.R. § 51.809.

83. Bell Atlantic, as used here, indicates the company that signs the interconnection agreement with MediaOne. For example, if the agreement is signed by "New England Telephone and Telegraph Company," then the "pick-and-choose" rule applies only to provisions in any other agreements signed by "New England Telephone and Telegraph Company," including such agreements from Maine, New Hampshire, Rhode Island, and Vermont.

84. The automatic line identification ("ALI") database ensures that 911 calls placed from the service will carry the appropriate identification information to the Public Safety Answering Point (Exh. MediaOne-3, at 14).

85. Switch translations refers to the computer programming changes Bell Atlantic must perform in the switch when making changes to a customer's service.

86. A ten digit trigger is a switch translation installed by the porting provider that ensures that the customer will be able to receive calls from the porting provider's customers (Exh. MediaOne-3, at 15).

87. [87] Specifically, MediaOne contends that in the absence of normal commercial incentives to maintain high levels of service quality to its customers (which, in this case, are also its competitors) the Department established performance standards to provide Bell Atlantic with the incentives to conform to the interconnection requirements of the Act (MediaOne Reply Brief at 15, citing Consolidated Arbitrations - Phase 3-B at 22).

88. Bell Atlantic argues that one measurement proposed by MediaOne, consisting of a 24 hour turn around time for issuance of a service order confirmation or FOC, has been established in the Consolidated Arbitrations (Bell Atlantic Brief at 77-78). The FOC metric measures the components of the ordering process, as well as a local service request (id. at 78). Bell Atlantic presented testimony that processing a porting order is analogous to the UNE ordering process, and therefore, it is reasonable to use the same metrics adopted by the Department (id.). MediaOne agrees that there is no reason to duplicate FOC standards and measurements, and will accept the FOC metric as established in the Consolidated Arbitrations based on the understanding that LNP orders will be included in Bell Atlantic's performance reports and payments (MediaOne Brief at 41). The FOC metric states that FOCs should be returned within 24 hours from receipt of an error-free local service request (id.).

Bell Atlantic contends that another three measurements, the 10-digit trigger, switch translation removal, and E911 unlock,

essentially evaluate a single result, the overall successful completion of the porting process (Bell Atlantic Brief at 79). MediaOne has agreed to adopt the "Percent On Time - LNP" metric, where it incorporates measurement and remedies for timely installation of the 10-digit trigger, and the switch translation removal activities (MediaOne Brief at 40-41). Therefore, only the E911 unlock measurement is still in dispute.

89. This metric would measure when the porting provider "unlocks" the E911 record, which allows the new provider to update the database that contains E911 information (Exh. MediaOne-3, at 16). Updating the E911 database is referred to as "migrating" the E911 record (id.).

90. "LSMS" is an administrative database that downloads ported telephone routing data to the system that processes LNP queries (Bell Atlantic Brief at 86).

91. Bell Atlantic argues that it is proposing the "Percent On Time - LNP" metric in exchange for the elimination of Bell Atlantic's existing performance standards for unbundled loops (Bell Atlantic Brief at 81). In essence, MediaOne would be trading LNP standards for unbundled loop standards. MediaOne states that it will not be ordering unbundled loops from Bell Atlantic (Tr. 3, at 488). The Department did not establish the Performance Standards in the Consolidated Arbitrations in order for the parties to trade these items. Bell Atlantic will be required to meet the Performance Standards for unbundled loops under this interconnection agreement in the event that MediaOne orders such loops from Bell Atlantic.

92. MediaOne recommends (1) that the interconnection agreement should require Bell Atlantic to report LSMS downtime and the amount of time the system works properly, because when the LSMS is not operating, certain routing information is not communicated and a customer cannot receive calls; and (2) that the interconnection agreement should require Bell Atlantic to provide the number of LNP-related trouble tickets where the originator of the trouble is a CLEC (Exh. MediaOne-3, at 24). MediaOne did not brief these two issues.

93. MediaOne argues, in the alternative, that the Department should require Bell Atlantic to indemnify MediaOne for any damages occurring as a result of the delay in migrating the E911 record (MediaOne Brief at 43).

94. Bell Atlantic's witness testified that it experienced an increase in performance and decrease in complaints when it changed its procedure to remove switch translations at 11:59 p.m. (Tr. 1 at, 181-182).

95. The Department notes that New York has not adopted a process similar to MediaOne's E911 proposal (see RR-DTE-4).

96. Bell Atlantic indicates that the current porting success rate of approximately 98 percent does not include E911 unlocks or FOC performance (Bell Atlantic Brief at 79).

97. MediaOne clarifies that this proposal is for an average of 98 percent per quarter, and does not require Bell Atlantic to maintain a 98 percent standard at all times (MediaOne Brief

at 45).

98. Performance credits would begin for results below 90 percent. Credits per affected line range from $10 to $50 based on a sliding scale of one percent to ten percent below the performance standard (Bell Atlantic Brief at 85).

99. The provider must port at least 100 numbers to be liable for the "Performance Credit" (Exh. MediaOne-3, at 23).

100. Dialing parity, also know as intraLATA presubscription ("ILP"), allows telephone customers to access the long-distance carrier of their choice without having to dial an access code or 800 telephone number.

101. See Section 222(c)(2) providing that "[a] telecommunications carrier shall disclose customer proprietary network information, upon affirmative written request by the customer, to any person designated by the customer".

102. Section 222(f)(1) of the Act defines CPNI as "(A) information that relates to the "quantity, technical configuration, type, destination, and amount of use of a telecommunications service subscribed to by any customer" of a carrier, and that is made available to the carrier by the customer solely because of the carrier-customer relationship; and (B) information

contained in the bills pertaining to telephone exchange service or telephone toll service received by a customer of a carrier." 47 U.S.C.

§ 222(f)(1).

103. In its initial pleadings, Bell Atlantic disagreed about whether the rights and obligations under § 222 were mutual. However, in its reply brief, Bell Atlantic stated that it would agree to MediaOne's mutuality provision (Bell Atlantic Reply Brief at 32).

104. Implementation of the Subscriber Carrier Selection Change Provisions of the Telecommunication Act of 1996, CC Docket No. 94-129 (1998).

105. G. L. c. 93, §§ 108-113.

106. Order Instituting Rulemaking, D.T.E. 99-18 (June 10, 1998).

107. MediaOne's footprint proposal would establish IPs at each BA tandem (MediaOne Brief at 15). However, as previously discussed, the Department is not relying on this MediaOne proposal.

108. Bell Atlantic specifies, in Schedule 4.1, its IP for OS and DA traffic (RR-DTE-10).

109. MediaOne argues that identifying the differences between the approved agreement and the tariff would be both time consuming and subject to dispute (MediaOne Brief at 54).

110. In its brief, MediaOne proposed five days (MediaOne Proposed Findings of Fact and Conclusions of Law at 19). Because that proposal is not supported by record evidence, we cannot accept it.

111. [111] Bell Atlantic's proposal reads, in its entirety, "If any portion of an amount due to a Party (the "Billing Party") under this Agreement is subject to a bona fide dispute between the Parties, the Party billed (the "Non-Paying Party") shall within thirty (30) days of its receipt of the invoice containing such disputed amount give notice to the Billing Party of the amounts it disputes ("Disputed Amounts") and include in such notice the specific details and reasons for disputing each item. The Non-Paying Party shall pay when due

(i) all undisputed amounts to the Billing Party and (ii) all Disputed Amounts into an interest bearing escrow account with a third party escrow agent mutually agreed upon by the Parties" (Bell Atlantic Brief at 97; Bell Atlantic Petition Exhibit B, Section 28.8).

112. Since we provide MediaOne the relief it seeks regarding a reasonable response time for billing inquiries, we will hold MediaOne to its offer to accept a 60-day period for dispute resolution of billing matters. In addition, we need not address MediaOne's proposal for discounting disputed bills held in escrow that are later determined to be in error, since that proposal was submitted as an alternative to its proposal for expedited response to billing inquiries.

113. At the hearing on July 8, 1999, the Arbitrator asked whether the "grant of license and indemnification section" remained open. Bell Atlantic's witness responded, "That was agreed . . . [o]n July 6th." The Arbitrator replied, "Then I will not ask a question about that" (Tr. 3, at 505-506).

114. A summary of these rules is provided above, under Section G.2., Bona Fide Request Applicability.

115. In its initial brief, MediaOne proposed a compromise to Bell Atlantic, that the party requesting the audit would have to demonstrate, and the Department would have to find, "good cause" for such an audit (id.). Because this proposal was made after the evidentiary record closed and is not supported by record evidence, we will not accept it.

116. In Section V.J.2, supra, we rejected Bell Atlantic's proposal for an audit of MediaOne's use of CPNI.

Docket No. 10767-U

In Re: **Petition by ICG Telecom Group, Inc. for Arbitration of an Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996.**

ORDER

Appearances

On behalf of ICG Telecom Group, Inc.
Charles V. Gerkin, Attorney
Albert H. Kramer, Attorney
Jacob S. Farber, Attorney

On behalf of BellSouth Telecommunications, Inc.
Fred McCallum, Attorney
Lisa Foshee, Attorney
A. Langley Kitchings, Attorney

On behalf of the Commission Staff
Daniel Walsh, Attorney

On behalf of the Consumers' Utility Counsel Division
Of the Governor's Office of Consumer Affairs
Ron Jackson, Attorney
John Maclean, Attorney

BY THE COMMISSION:

On May 27, 1999, ICG Telecom Group, Inc. ("ICG") petitioned the Commission to decide the unresolved issues in the interconnection negotiations with BellSouth Telecommunications, Inc. ("BellSouth").

I. JURISDICTION AND PROCEEDINGS

Under the Federal Telecommunications Act of 1996 (the Federal Act), State Commissions are authorized to decide the issues presented in a petition for arbitration of interconnection agreements. In addition to its jurisdiction of this matter pursuant to Sections 251 and 252 of the Federal Act, the Commission also has general authority and jurisdiction over the subject matter of this proceeding, conferred upon the Commission by Georgia's Telecommunications and Competition Development Act of 1995 (Georgia Act), O.C.G.A. §§46-5-160 *et seq.*, and generally O.C.G.A. §§ 46-1-1 *et seq.*, 46-2-20, 46-2-21, and 46-2-23.

On December 18, 1998, BellSouth notified ICG that it wished to negotiate a new interconnection agreement. On May 27, 1999, pursuant to Section 252 of the Federal Act, ICG petitioned the Commission to arbitrate the issues that the parties were unable to negotiate. ICG's initial Petition for Arbitration included 26 issues; however, the parties have settled the majority of these issues.

On August 25, 1999, the Hearing Officer issued a Consent Procedural and Scheduling Order. Both ICG and BellSouth filed testimony on October 8, and rebuttal testimony on October 25, 1999. The Commission held hearings on the matter on November 4 and 5, 1999. The Commission Staff and the Consumers' Utility Counsel Division of the Governor's Office of Consumer Affairs appeared but did not question the witnesses.

The testimony at the hearing addressed the six issues that remained as of the time of the hearing:

1. Until the FCC adopts a rule with prospective application, should dial-up calls to internet service providers ("ISPs") be treated as if they were local calls for purposes of reciprocal compensation?

2. For purposes of reciprocal compensation, should ICG be compensated for end office, tandem, and transport elements of termination where ICG's switch serves a geographic area comparable to the area served by BellSouth's tandem switch?

3. Should BellSouth be required to provide as a UNE "Enhanced Extended Link" Loops ("EELs")?

4. Should BellSouth be required to enter into a binding forecast of future traffic requirements for a specified period?

5. Should the Commission order enforcement mechanisms to ensure BellSouth's compliance with the Performance Measures included in the interconnection agreement?

6. Should BellSouth be required to make available as UNEs packet-switching capabilities?

At the hearing, BellSouth and ICG agreed to a set of service quality measurements ("SQMs") contained in the attachment to BellSouth witness Coon's testimony. These are the same service quality measurements that BellSouth agreed to in Louisiana. If the parties agree to amend the SQMs, then the changes would be automatically incorporated into the interconnection agreement. Tr. 127. Any new SQMs ordered by either this or the Louisiana Commission would be automatically adopted into the agreement. Id. Any performance measurement that BellSouth agrees to in either Louisiana or Georgia will be automatically incorporated into this BellSouth-ICG agreement, without the need for Commission approval. Id. The parties were not able to reach agreement on whether enforcement mechanisms to hold BellSouth to the performance standards should be included in the interconnection agreement. After the hearing, ICG and BellSouth reached an agreement on the final issue stated above, the obligation of BellSouth to make available as UNEs packet-switching capabilities.

Pursuant to the Consent Procedural and Scheduling Order, ICG and BellSouth filed briefs on November 22, 1999 and reply briefs on December 6, 1999. The Commission has before it the testimony, evidence, arguments of counsel and all appropriate matters of record enabling it to reach its decision.

II. FINDINGS AND CONCLUSIONS

A. Until the FCC adopts a rule with prospective application, should dial-up calls to internet service providers (ISPs) be treated as if they were local calls for purposes of reciprocal compensation?

In its Petition, ICG asserted that reciprocal compensation is appropriate for calls prior to the adoption of a prospective rule by the FCC. ICG argues that, while the FCC found in its February 26, 1999 Declaratory Ruling, in CC Docket 96-98 (Declaratory Ruling), that ISP traffic is mostly interstate in nature, it also authorized state commissions to find in arbitrations that reciprocal compensation is appropriate for ISP-bound calls until a federal rule is adopted concerning inter-carrier compensation for such traffic. Further, ICG asserts that BellSouth should be economically indifferent to whether it incurs the transport and delivery costs directly or through a reciprocal compensation arrangement with ICG. ICG Post-Hearing Brief, p. 11.

BellSouth maintains the position that the FCC, in its Declaratory Ruling, held that the obligation to pay reciprocal compensation is not applicable to ISP-bound traffic, and that therefore, any inter-carrier compensation mechanism adopted by a state commission is outside the provisions of 252(b)(5). BellSouth Post-Hearing Brief, p. 3. BellSouth urged the Commission to decline ruling on reciprocal compensation, until the final resolution of the FCC's Notice of Proposed Rule-Making on ISP-bound traffic. BellSouth proposed that the parties track ISP-bound traffic and true-up any compensation due after the FCC reaches a final decision on whether ISP traffic is due reciprocal compensation. BellSouth's Post-Hearing Brief, p. 13.

The Commission finds that it has the authority under Section 252 of the Federal Act to order a provision in the arbitration agreement that reciprocal compensation be due for ISP-bound traffic. see Declaratory Ruling ¶ 25 (State commissions "may determine in their arbitration proceedings at this point that reciprocal compensation should be paid for this traffic."). The Commission concludes that, pending the adoption of a federal rule, dial-up calls to ISPs should be treated as local calls for purposes of reciprocal compensation. As the FCC has stated, the FCC's own policy of "treating ISP-bound traffic as local for purposes of interstate access charges would, if applied in the separate context of reciprocal compensation suggest that such compensation is due for that traffic." Id. ILECs and CLECs should be compensated for transport and delivery of ISP-bound calls based on the rates established in Docket No. 7061-U. While the FCC's issuance of a Notice of Proposed Rule-Making on ISP-bound traffic does not mean the Commission cannot, or should not, address this question in the context of this Petition, it is efficient to structure its decision in an effort to accommodate, to the degree possible, potential outcomes of the Rule-Making. Accordingly, the Commission directs the parties to track all reciprocal compensation payments, which shall be subject to a true-up mechanism approved by this Commission as warranted by the outcome of the FCC's Rule-Making in CC Docket 99-68 on ISP-bound traffic. Except to the extent the FCC's forthcoming Rule-Making directs otherwise, the parties shall continue under all applicable terms of this order until further order of this Commission.

B. For purposes of reciprocal compensation, should ICG be compensated for end office, tandem, and transport elements of termination where ICG's switch serves a geographic area comparable to the area served by BellSouth's tandem switch?

The Commission must answer two questions in order to determine whether ICG should receive reciprocal compensation for end office, tandem and transport elements of termination. The first issue is whether ICG's switch serves a geographic area comparable to the area served by BellSouth's tandem switch. ICG testified that the answer to this question is yes. Tr. 173. BellSouth argues in brief that ICG did not make an adequate showing that the geographic areas are comparable. However, at the hearing, BellSouth did not contradict ICG's assertion. The Commission finds that the ICG's switch serves a comparable geographic area because ICG's assertion to that effect went undisputed.

The second question concerns whether ICG's switch performs the same function as BellSouth's. ICG argues that similar functionality is not a prerequisite to receive the tandem reciprocal compensation rate. However, ICG states that even if the Commission were to find that the same functionality is required, its switch performs the same function as BellSouth's tandem switch. To support this conclusion, ICG references both Alabama and North Carolina Commission findings that the switch functions are similar. Finally, ICG argues that because ICG's switch is identified in the local exchange routing guide ("LERG") as a tandem, it meets BellSouth's own standards for payment of the tandem reciprocal compensation rate. ICG cited BellSouth testimony in an arbitration case before the Florida Public Service Commission that BellSouth would only pay ICG the interconnection rate if ICG's switch was identified in the LERG as a tandem. ICG Post-Hearing Brief, p.28.

In its Post-Hearing Brief, BellSouth references the FCC's language in its First Report and Order that states state commissions "shall consider whether new technologies perform functions similar to those performed by an incumbent LEC's tandem switch" to demonstrate that similar functionality is required to receive the tandem reciprocal compensation rate. BellSouth argues that since ICG has only one voice switch it cannot operate as a tandem switch, and thus, cannot achieve similar functionality.

The Commission finds that the appropriate policy is to compensate ICG for the service that it provides. First, the record supports the conclusion that ICG's switch serves the same geographic area as BellSouth. On the issue of functionality, the Commission finds that ICG's switch serves the same function as a BellSouth switch. For instance, even if a BellSouth customer calls an ICG customer within the same service area, the call has to go through an ICG switch. Therefore, granting ICG the tandem interconnection rate for purposes of reciprocal compensation would allow ICG to recover its costs associated with the transport and termination on its network facilities. See U.S. West Communications v. MFS Intelenet, Inc, 1999 WL 799082, *9 (9th Cir. Oct. 9, 1999). Finally, the Commission is persuaded by the evidence that the LERG identifies ICG's switch as a tandem, and, in other proceedings, BellSouth has considered such identification a prerequisite for receiving the interconnection rate.
~~See U.S. West Communications v. MFS Intelenet, Inc, 1999 WL 799082, *9 (9th Cir. Oct. 9, 1999).~~

C. Should BellSouth be Required to Provide as a UNE, "Enhanced Extended Link" Loops ("EELs")?

The EEL is a UNE combination consisting of a loop, transport and a cross-connect. Like the FCC, the Commission declines to define the EEL itself as a UNE. Third Report and Order, ¶ 478. However, as discussed below, CLECs can obtain at UNE rates combinations of UNEs that BellSouth ordinarily combines in its network.

FCC Rule 315 addressed combinations of unbundled network elements. Rule 315(b) provides:

> Except upon request, an incumbent LEC shall not separate requested network elements that the incumbent currently combines.

(Emphasis added). BellSouth has interpreted the term "currently combines" as "currently combined." BellSouth defines the term to mean those elements "that are physically in a combined state as of the time the CLEC requests them and which can be converted to UNEs on a 'switch as is' or 'switch with changes' basis. . . Currently combined elements only include loops, ports, transport or other elements that are currently installed for the existing customer that the CLEC wishes to serve." BellSouth's Post-Hearing Brief, p. 23. ICG argued that BellSouth is obligated to provide EELs as a UNE combination at UNE prices. ICG's Post-Hearing Brief, p. 31.

When the Supreme Court reinstated Rule 315(b), it stated its understanding of the intent of the rule:

> The reality is that §251(c)(3) is ambiguous on whether leased network elements may or must be separated, and the rule the Commission has prescribed is entirely rational, finding its basis in §251(c)(3)'s nondiscrimination requirement. As the Commission explains, it is aimed at preventing incumbent LECs from "disconnect[ing] previously connected elements, over the objection of the requesting carrier, not for any productive reason, but just to impose wasteful reconnection costs on new entrants." Reply Brief for Federal Petitioners 23. It is true that Rule 315(b) could allow entrants access to an entire preassembled network. In the absence of Rule 315(b), however, incumbents could impose wasteful costs on even those carriers who requested less than the whole network. It is well within the bounds of the reasonable for the Commission to opt in favor of ensuring against an anticompetitive practice.

Iowa Board.

It appears clear that the Supreme Court believed that at least one major purpose of Rule 315(b) was to prevent the incumbent from ripping apart elements which were already connected to each other. The Commission agrees that at the very least, Rule 315(b) requires BellSouth to provide combinations of elements that are already physically connected to each other regardless of whether they are currently being used to serve a particular customer. The Supreme Court, however, did not state that it was reinstating Rule 315(b) only to the extent it prohibited incumbents from ripping apart elements currently physically connected to each other. It reinstated Rule 315(b) in its entirety, and it did so based on its interpretation of the nondiscrimination language of Section 251(c)(3). See Third Report and Order, ¶¶ 481 and 482.

The Ninth Circuit Court of Appeals has even recently ruled that it "necessarily follows from AT&T that requiring [the ILEC] to combine unbundled network elements is not inconsistent with the Act . . . the Act does not say or imply that network elements may only be leased in discrete parts." U.S. West Communications v. MFS Intelenet, Inc, 1999 WL 799082, *7 (9th Cir. Oct. 9, 1999). The Commission, however, does not at this time order BellSouth to combine for CLEC's UNEs that BellSouth does not ordinarily combine for itself.

Rule 315(b), by its own terms, applies to elements that the incumbent "currently combines," not merely elements which are "currently combined." In the FCC's First Report and Order, the FCC stated that the proper reading of "currently combines" is "ordinarily combined within their network, in the manner which they are typically combined." First Report and Order, ¶ 296. In its Third Report and Order, the FCC stated that it was declining to address this argument at this time because the matter is currently pending before the Eighth Circuit. Third Report and Order, ¶ 479.[1] Accordingly, the only FCC interpretation of "currently combines"

[1] While the FCC declined to address this argument again in its Third Report and Order, significantly the FCC did not disavow the position it took in the First Report and Order. BellSouth argues that "the FCC made clear that 'currently combined' elements are those elements physically combined as of the time the CLEC requests them and which can

remains the literal one contained in the First Report and Order. The Commission finds that "currently combines" means ordinarily combined within the BellSouth's network, in the manner which they are typically combined. Thus, CLECs can order combinations of typically combined elements, even if the particular elements being ordered are not actually physically connected at the time the order is placed. However, in the event that the Eighth Circuit Court of Appeals determines that ILECs have no legal obligation to combine UNEs under the Federal Act, the Commission will reevaluate its decision on this issue.

Based on the FCC's Third Report and Order, even if this Commission were to limit the definition of "currently combines" to the more restrictive "currently combined" interpretation, CLECs would still be able to obtain and use the same UNE combinations. The process of obtaining them would be more cumbersome, however, and would serve no purpose except to complicate the ordering process and impede competition. According to the FCC, CLECs can purchase services such as special access and resale even when the network elements supporting the underlying service are not physically connected at the time the service is ordered. At the point when the CLEC begins to receive such service, the underlying network elements are necessarily physically connected. The CLECs can then obtain such currently combined network elements as UNE combinations at UNE prices. Third Report and Order, ¶¶ 480, 486. The Commission finds that even assuming arguendo that "currently combines" means "currently combined," rather than go through the circuitous process of requiring the CLEC to submit two orders (e.g., one for special access followed by another to convert the special access to UNEs) to receive the UNE combination, the process should be streamlined to allow CLECs to place only one order for the UNE combination.

To the extent that ICG seeks to obtain other combinations of UNEs that BellSouth ordinarily combines in its network, which have not been specifically priced by this Commission when purchased in combined form, the Commission finds that ICG can purchase such UNE combinations at the sum of the stand-alone prices of the UNEs which make up the combination. If ICG is dissatisfied with using the sum of the stand-alone rates, it is free to pursue the bona fide request process with BellSouth to seek a different rate. ICG may purchase EELs from BellSouth at the rates and subject to the conditions established in the Commission's Docket No. 10692-U.

On November 24, 1999, the FCC issued a Supplemental Order to its Third Report and Order. In this Supplemental Order, the FCC modified its conclusion in paragraph 486 of the Third Report and Order to now allow incumbent LECs to constrain the use of combinations of unbundled loops and transport network elements as a substitute for special access service. Supplemental Order, ¶ 4. IXCs may not convert special access services to combinations of unbundled loops and transport network elements, whether or not the IXCs self-provide entrance facilities, unless the IXC uses the combination "to provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer." Id. at ¶ 5.

---

be converted to UNEs on a 'switch as is' or 'switch with changes basis." BellSouth's Brief on Impact of Third Report and Order, p. 5. The FCC, however, was not stating that Rule 51-315(b) is limited only to currently combined elements. Instead, the FCC was stating that since, at the least, Rule 51-315(b) includes currently combined elements, and since when a CLEC purchases special access the elements are currently combined, that even under the more restrictive "currently combined" interpretation, CLECs would be able to convert special access to loop-transport combinations at UNE rates. Third Report and Order ¶ 480.

Accordingly, the Commission finds that in order for ICG to use a loop/transport combination to provide special access service, it must provide a significant amount of local exchange service over the combination. Further, such loop/transport combinations must be connected to a CLEC switch and must be used in the provision, of circuit switched telephone exchange service. ICG must "self-certify that they are providing a significant amount of local exchange service over combinations of unbundled loops and transport network elements" in order to convert special access facilities to UNE pricing. Id. at footnote 9. The FCC did not find it to be necessary for ILECs and requesting carriers to undertake auditing processes to monitor whether requesting carriers are using UNEs solely to provide exchange access service. Id. The Commission finds that BellSouth shall not make auditing a precondition to converting special access to UNEs; thus the conversion of facilities will not be delayed. The Commission finds, however, that BellSouth shall be allowed to audit ICG's records in order to verify the type of traffic being transmitted over EELs. If, based on its audits, BellSouth concludes that ICG is not providing a significant amount of local exchange traffic over the facilities, BellSouth may file a complaint with this Commission.

D. Should BellSouth be required to enter into a binding forecast of future traffic requirements for a specified period?

ICG requested that the interconnection agreement include binding forecasts for trunking facilities to deliver to ICG traffic originated in BellSouth's network. Currently, BellSouth is responsible for the costs associated with the trunking for calls from a BellSouth customer to an ICG customer. Tr. 86. However, ICG testified that binding forecasts would ensure that BellSouth would have the requisite capacity on its network to meet ICG's traffic needs as its business expands. In addition, ICG testified that it would commit to BellSouth for a specified volume of traffic to be delivered by BellSouth. If the traffic volume does not meet the forecasted levels, ICG committed to pay BellSouth's full costs for the unused trunks. Tr. 86-87. In response, BellSouth argued that binding forecasts are not required by the Federal Act. Moreover, BellSouth questions whether ICG has contemplated all the costs related to binding forecasts. BellSouth's Post-Hearing Brief, p.30.

Merely because an issue is not explicitly spelled out in the Federal Act, does not render it outside its scope. Binding forecasts relate to the quality of service that ICG can provide its customers. Enabling CLECs to provide quality service to its customers promotes competition, and promoting competition is an intent of the Federal Act. The binding forecasts would provide a benefit to ICG without exposing BellSouth to any risk, so long as the costs of unused trunks are passed on to ICG. The interconnection agreement should include the option of the binding forecasts requested by ICG, under the condition that ICG pays for BellSouth's full costs for the unused trunks.

E. Should the Commission order enforcement mechanisms to ensure BellSouth's compliance with the Performance Measures included in the interconnection agreement?

In its May 27, 1999, Petition for Arbitration, ICG included the following issues related to Performance Standards/Measures:

a. Should BellSouth be subject to liquidated damages for failing to meet the time intervals for provisioning UNEs?

b. Should BellSouth be required to pay liquidated damages when BellSouth fails to install, provision, or maintain any service in accordance with the due dates set forth in an interconnection agreement between the Parties?

c. Should BellSouth continue to be responsible for any cumulative failure in a one-month period to install, provision, or maintain any service in accordance with the due dates specified in the interconnection agreement with ICG?

d. Should BellSouth be required to pay liquidated damages when BellSouth's service fails to meet the requirements imposed by the interconnection agreement with ICG (or the service is interrupted causing loss of continuity or functionality)?

e. Should BellSouth continue to be responsible when the duration of service's failure exceeds certain benchmarks?

f. Should BellSouth be required to pay liquidated damages when BellSouth's service fails to meet the grade of service requirements imposed by the interconnection agreement with ICG?

g. Should BellSouth continue to be responsible when the duration of service's failure to meet the grade of service requirements exceeds certain benchmarks?

h. Should BellSouth be required to pay liquidated damages when BellSouth fails to provide any data in accordance with the specifications of the interconnection agreement with ICG?

i. Should BellSouth continue to be responsible when the duration of its failure to provide the requisite data exceeds certain benchmarks?

Although the parties reached agreement at the hearing on service quality measurements, the issue of enforcement of the measurements remains unresolved. ICG argued that in order for the performance standards to which the parties have agreed to have meaning, enforcement mechanisms must be in place. ICG Post-Hearing Brief, p. 41. Without the threat of penalty, BellSouth does not have enough of an incentive to meet the performance standards. BellSouth counters with both a legal and a policy argument. Its legal argument is that ICG is asking the Commission to award compensatory damages, which is outside the scope of Commission authority. BellSouth's Post-Hearing Brief, p. 32-33. BellSouth's policy argument is that it is

unnecessary to include enforcement mechanisms in the interconnection agreement because ICG can make use of the Commission's complaint procedures. Id. at 34.

Addressing the legal issue first, the inclusion of enforcement mechanisms in an interconnection agreement are distinguishable from awarding compensatory damages. BellSouth cites Georgia Public Service Commission v. Atlanta Gas Light Company,[2] to support its claim that the Commission does not have the authority to order the inclusion of enforcement mechanisms in an interconnection agreement. This case involved the Commission ordering a refund to customers after the Company charged a rate that the Commission approved. There is nothing retroactive, however, about the Commission ordering enforcement mechanisms in an interconnection agreement. Moreover, the mere inclusion of the enforcement mechanisms does not, in and of itself, amount to compensatory damages. It is only providing an incentive for BellSouth to meet the performance standards to which it has agreed. In any event, the Commission is specifically authorized to set and enforce terms and conditions of interconnection and unbundling. O.C.G.A. § 46-5-164. Therefore, the Commission concludes that it has the authority to order enforcement measures as part of an interconnection agreement.

Despite~~tha~~ the Commission's jurisdiction in this area, the specific enforcement measures advocated by ICG, and listed under the Statement of Proceedings, do not find adequate support in the record. The Commission reserves the jurisdiction to adopt for this agreement, enforcement mechanisms that are ordered in future arbitration proceedings.

~~III.~~III. CONCLUSION AND ORDERING PARAGRAPHS

The Commission finds and concludes that the issues that the parties presented to the Commission for arbitration should be resolved in accord with the terms and conditions as discussed in the preceding sections of this Order, pursuant to Sections 251 and 252 of the Telecommunications Act of 1996 and Georgia's Telecommunications and Competition Development Act of 1995.

WHEREFORE IT IS ORDERED, pending the adoption of a federal rule, dial-up calls to ISPs should be treated as local calls for purposes of reciprocal compensation. ILECs and CLECs should be compensated for transport and delivery of ISP-bound calls based on the rates established in Docket No. 7061-U. However, the Commission directs the parties to track all reciprocal compensation payments, which shall be subject to a true-up mechanism, based upon the outcome of the FCC's Rule-Making in CC Docket 99-68 on ISP-bound traffic.

ORDERED FURTHER, that for the purposes of reciprocal compensation, ICG is entitled to the tandem switch rate,

---

[2] 205 Ga. 863, 55 S.E.2d 618 (1949)

ORDERED FURTHER, that BellSouth is obligated to provide to ICG EELs at UNE prices because the network elements that comprise EELs are routinely combined in BellSouth's system,

ORDERED FURTHER, that the arbitration agreement shall provide ICG with the option of binding forecasts for trunking facilities to deliver to ICG traffic originated in BellSouth's network, provided that ICG is responsible for the costs of unused trunks,

ORDERED FURTHER, that enforcement mechanisms are within the Commission's authority. However, the measures proposed by ICG in this proceeding are not supported by the record. Therefore, the Commission will reserve its jurisdiction to incorporate enforcement measures that are approved in a future interconnection arbitration into the ICG-BellSouth interconnection agreement.

ORDERED FURTHER, that a motion for reconsideration, rehearing, or oral argument or any other motion shall not stay the effective date of this Order, unless otherwise ordered by the Commission.

ORDERED FURTHER, that jurisdiction over these matters is expressly retained for the purpose of entering such further Order or Orders as this Commission may deem just and proper.

The above by action of the Commission in Administrative Session on the 1st day of February, 2000.

Helen O'Leary Executive Secretary	Bob Durden Chairman
Date	Date

D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 -- Phase 4

Consolidated Petitions of New England Telephone and Telegraph Company d/b/a NYNEX, Teleport Communications Group, Inc., Brooks Fiber Communications, AT&T Communications of New England, Inc., MCI Communications Company, and Sprint Communications Company, L.P., pursuant to Section 252(b) of the Telecommunications Act of 1996, for arbitration of interconnection agreements between NYNEX and the aforementioned companies.

APPEARANCES: Bruce P. Beausejour, Esq.
185 Franklin Street, Room 1403
Boston, MA 02107

-and-

Robert N. Werlin, Esq.
Keegan, Werlin & Pabian, LLP
21 Custom House Street
Boston, MA 02110
FOR: NEW ENGLAND TELEPHONE & TELEGRAPH COMPANY D/B/A NYNEX
Petitioner

Keith J. Roland, Esq.
Roland, Fogel, Koblenz & Carr, LLP
1 Columbia Place
Albany, New York 12207

-and-

Paul Kouroupas, Esq.
David Hirsch, Esq.
One Teleport Drive
Suite 301
Staten Island, NY 10311
FOR: TELEPORT COMMUNICATIONS GROUP, INC.
Petitioner

Todd J. Stein, Esq.
2855 Oak Industrial Drive
Grand Rapids, MI 49506-1277
FOR: BROOKS FIBER COMMUNICATIONS OF MASSACHUSETTS, INC.
Petitioner

Jeffrey F. Jones, Esq.
Jay E. Gruber, Esq.
Laurie S. Gill, Esq.
Palmer & Dodge
One Beacon Street
Boston, MA 02108

-and-

Michael J. Morrissey, Esq.
Eleanor R. Olarsch, Esq.
32 Avenue of the Americas
Room 2700
New York, NY 10013
FOR: AT&T COMMUNICATIONS OF NEW ENGLAND, INC.
Petitioner

Robert Glass
Glass Seigle & Liston
75 Federal Street
Boston, MA 02110

-and-

Hope Barbalescu, Esq.
One International Drive
Rye Brook, New York 10573
FOR: MCI TELECOMMUNICATIONS CORPORATION
Petitioner

Cathy Thurston, Esq.
1850 M Street, N.W., Suite 1110
Washington, D.C. 20036
FOR: SPRINT COMMUNICATIONS COMPANY L.P.
Petitioner

L. Scott Harshbarger, Attorney General
By: Daniel Mitchell
Assistant Attorney General
Public Protection Bureau
Regulated Industries Division
200 Portland Street, 4th Floor
Boston, MA 02114
Intervenor

TABLE OF CONTENTS

I. INTRODUCTION ..... Page 1

II. PROCEDURAL ISSUES 2

III. STANDARD OF REVIEW 6

IV. THE MODELS 10
A. The Suitability of the NYNEX Model 10
1. Positions of the Parties 10
2. Analysis and Findings 12
B. The Suitability of the Hatfield Model 17
1. Positions of the Parties 17
2. Analysis and Findings 20

V. THE INPUTS 26
A. Sizing of the Network 26
1. Positions of the Parties 27
a. AT&T & MCI 27
b. NYNEX 28
2. Analysis and Findings 30
B. The Cost of Capital 37
1. Positions of the Parties 37
2. Analysis and Findings 38
a. Overview 38
b. Cost of Equity 47
c. Cost of Debt 52
d. Capital Structure 52
C. Depreciation Rates 53
D. The Calculation of Forward-Looking Joint and Common Costs 56
1. Retail-Related Costs 56
2. Calculation of the Cost Factors 57
a. Positions of the Parties 57
b. Analysis and Findings 58

VI. The Choice of Geographic Zones for Deaveraging of Costs 61
A. Positions of the Parties 61
B. Analysis and Findings 63

VII. Service Order Pricing 65

VIII. Prices for Collocation 66

IX. The Mutual Compensation Rate 66
A. Positions of the Parties 66
B. Analysis and Findings 68

X. E911 Port Charges 70

XI. ORDER 71

PHASE 4 ORDER

I. INTRODUCTION

This is a proceeding being held pursuant to the federal Telecommunications Act of 1996 ("the Act") and regulations issued thereunder by the Federal Communications Commission ("FCC") in its First Report and Order dated August 8, 1996.[1] The Act and the FCC regulations are designed to facilitate the introduction of competition in the provision of telecommunications services throughout the United States. The Act recognized that many of the physical facilities and operating systems needed to provide local exchange service in a given geographic area are owned and controlled by the incumbent local exchange carrier ("ILEC") and that it would be difficult and inefficient for potential competitors to duplicate these facilities and systems. Accordingly, under procedures set forth in the Act, each ILEC is required to engage in good faith negotiations with each telecommunications carrier who wishes to compete against it. The purpose of the negotiations is to establish the terms and conditions of service for the resale of ILEC services, the provisioning of certain telecommunications services, and other matters necessary (together, an "interconnection agreement") that would enable the potential competitor to enter the marketplace under conditions which would promote robust competition.

The Act and the regulations further provide for binding arbitration in the event that negotiations cannot be concluded within a specified time, upon petition to the state public utility commission by either party to the negotiation. 47 U.S.C. § 252. This proceeding is the result of

---

[1] First Report and Order, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 96-325, adopted August 1, 1996 (released August 8, 1996) (hereinafter "Local Competition Order").

such petitions.

II. PROCEDURAL ISSUES

On July 16, 1996, Teleport Communications Group ("TCG") and New England Telephone and Telegraph Company, d/b/a NYNEX ("NYNEX"), respectively, filed petitions requesting arbitration pursuant to the regulations. They were docketed as D.P.U. 96-73/74. On July 18, 1996, Brooks Fiber Communications of Massachusetts, Inc. ("Brooks") filed a petition requesting arbitration pursuant to the regulations, which was docketed as D.P.U. 96-75. On August 9, 1996, AT&T Communications of New England, Inc. ("AT&T") and NYNEX, respectively, filed petitions requesting arbitration pursuant to the regulations. They were docketed as D.P.U. 96-80/81. On August 29, 1996, MCI Telecommunications Corporation ("MCI") also filed a petition requesting arbitration pursuant to the regulations, which was docketed as D.P.U. 96-83. On September 19, 1996, Sprint Communications Company L.P. ("Sprint") filed a petition requesting arbitration pursuant to the regulations, which was docketed as D.P.U. 96-94.

Upon agreement by the parties, Paul F. Levy was designated by the Department of Public Utilities ("Department") as the arbitrator for each of these proceedings. At a procedural conference held on September 18, 1996, it was determined that there was sufficient overlap in the issues presented in the various petitions and they were consolidated for hearing. The Attorney General of the Commonwealth ("Attorney General") intervened.

The proceeding has been divided into four phases: Phase 1 covered issues which were determined by the parties to be ripe for an abbreviated hearing format. In that phase, parties

submitted statements of positions and reply statements, no discovery took place, and a short hearing was held without witnesses to permit the arbitrator to ask follow-up questions of the parties' attorneys. The Department issued an Order addressing the issues in Phase 1 on November 8, 1996.

Phase 2 covered the issue of the appropriate amount by which NYNEX retail services will be discounted for resale. As envisioned by the Act, such prices are to be based on the retail rates charged for such services, excluding the portion attributable to costs that would be avoided by the ILEC in the wholesale provisioning of such services. 47 U.S.C. § 252(d)(3). It is the review of avoided cost studies and other associated matters that was the subject of Phase 2 prefiled testimony, discovery, and evidentiary hearings. The Department issued an Order addressing the issues in Phase 2 on December 3, 1996.

Phase 3 covered other non-cost study issues that were too complex to be handled in the abbreviated format of Phase 1, and it consisted of prefiled testimony, discovery, and evidentiary hearings. The Department issued an Order addressing the issues in Phase 3 on December 4, 1996.

Phase 4 covered the issue of the appropriate pricing for unbundled network services and combinations of unbundled network services, and these matters also were the subject of prefiled testimony, discovery, and evidentiary hearings. Prefiled testimony and exhibits were filed by all parties, except Brooks. Those documents, plus all information responses, were introduced into evidence. This evidence was supplemented by oral testimony and record requests from a number of witnesses at hearings on November 4-8 and 11, 1996. At these hearings, NYNEX presented Dr. William E. Taylor, senior vice-president of National Economic Research Associates, Inc.; Dr.

Timothy J. Tardiff, vice-president at National Economic Research Associates, Inc.; Michael J. Anglin, director of service cost studies at NYNEX; Dr. Lawrence K. Vanston, President of Technology Futures, Inc.; James H. Vander Weide, research professor of finance and economics at the Fuqua School of Business at Duke University; and Joseph Gansert, managing director, network and operations support systems, architecture planning at NYNEX. AT&T presented Robert Glenn Hubbard, professor of economics and finance at Columbia University; Lee Globerson, district manager, local infrastructure and access management at AT&T; and Dr. Brenda Kahn, district manager at AT&T. MCI presented August H. Ankum, an independent telecommunications consultant; and Dr. Robert A. Mercer, of Hatfield Associates, Inc. TCG presented William Page Montgomery, an independent telecommunications consultant. Briefs were submitted on November 18, 1996 and reply briefs on November 24, 1996.

In this phase of the proceeding, the parties were asked to address a number of issues with regard to the determination of the incremental costs of unbundled network elements:

1) Which costing model, the NYNEX model or the Hatfield model, more accurately represents the network conditions, accounting decisions, and numerical calculations appropriate for the total element long-run incremental cost ("TELRIC") study deemed appropriate by the FCC for the pricing of these elements?

2) Regardless of the model or models chosen by the Department, which inputs to the model(s) should be used? The following areas are in dispute:

a) Sizing of the network, which includes the overall level of demand that should be assumed in the cost model, the fill factors that are assumed for the various network elements, and

the level of investment costs;

b) The cost of capital (i.e., cost of debt, cost of equity, and debt:equity ratio);

c) The depreciation rates;

d) The calculation of forward-looking joint and common costs; and

f) The choice of geographic zones for deaveraging of costs.

There are also a number of issues from earlier phases of this proceeding that were carried over into this phase, some of which are dependent on our rulings with regard to the TELRIC studies and some of which are not. These issues include: a) service order pricing; b) the prices for collocation, including prices for space, power and lighting in collocated space; c) the appropriate mutual compensation rate; and d) E911 port charges.

As we have discussed in our Phase 2 Order in these proceedings, the pricing of unbundled network services is affected by the actions of the Federal Court of Appeals for the Eighth Circuit, which, on October 15, 1996, issued a stay of certain portions of the FCC regulations, including those portions setting forth the required methodology to be used by the states in determining the rates for resale of services and unbundled network elements. Iowa Utilities Board v. FCC, No. 96-332, Order Granting Stay Pending Judicial Review filed October 15, 1996, left stand by the United States Supreme Court on November 12, 1996. As the pricing testimony filed in this proceeding by all parties was predicated on the FCC requirements, it was necessary to reach an agreement among the parties as to the appropriate manner of proceeding in this case in light of the Court's order. At the hearing on October 21, 1996, all parties agreed that Phase 2 and Phase 4 of this proceeding would go forth as though the FCC regulations had not been stayed, in order to

ensure a timely completion of this arbitration (Tr. 1, at 4-10). However, recognizing that the Court's ruling might affect the ultimate rules under which pricing of services and unbundled network elements would be determined, the arbitrator asked the parties to submit briefs in Phase 2 on the question of the appropriate status of the rates determined in this arbitration. In our Phase 2 Order, upon review of the arguments raised by the parties, we concluded that the revenues collected pursuant to the rates established in this arbitration should not be subject to reconciliation when the Department decides on its own costing and pricing methodologies. Consolidated Arbitrations, D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 (Phase 2), at 6-8 (1996). Recognizing the importance of this issue, however, the Department expressed a commitment to investigate and give expedited consideration to these matters. Id. at 8.

III. STANDARD OF REVIEW

Before turning to the detailed issues in the proceeding, we set forth the context of the case and the standard of review we will apply. In the Local Competition Order, the FCC devoted a substantial amount of discussion to the importance of pricing unbundled network elements and to the description of the appropriate pricing methodology. Local Competition Order at ¶¶ 618 et seq. The standard for pricing individual network elements and interconnection is different from the standard we employed in Phase 2 to calculate the wholesale price of resold services (e.g., residential local exchange service). There, we determined the appropriate discount from retail prices that should be used to calculate the wholesale price for resold services by evaluating which of the ILEC's expenses would be avoided in a wholesale environment. Thus, the retail price was the starting point of the analysis. Here, the retail price is not relevant. Instead, we are

constructing a "bottoms-up" analysis of costs. The FCC presents the rationale for this choice of methodologies, the TELRIC model, stating:

> Adopting a pricing methodology based on forward-looking, economic costs best replicates, to the extent possible, the conditions of a competitive market. In addition, a forward-looking cost methodology reduces the ability of an incumbent LEC to engage in anti-competitive behavior. Congress recognized in the 1996 Act that access to the incumbent LECs' bottleneck facilities is critical to making meaningful competition possible. As a result of the availability to competitors of the incumbent LEC's unbundled elements at their economic cost, consumers will be able to reap the benefits of the incumbent LECs' economies of scale and scope, as well as the benefits of competition. Because a pricing methodology based on forward-looking costs stimulates the conditions in a competitive marketplace, it allows the requesting carrier to produce efficiently and to compete effectively, which should drive retail prices to their competitive levels. We believe that our adoption of a forward-looking cost-based pricing methodology should facilitate competition on a reasonable and efficient basis by all firms in the industry in establishing prices for interconnection and unbundled network elements based on costs similar to those incurred by the incumbents, which may be expected to reduce the regulatory burdens and economic impact of our decisions for many parties, including both small entities seeking to enter the local exchange market and small incumbent LECs.

Local Competition Order at ¶ 679.

This theme is repeated in a number of places by the FCC. For example: "We are establishing pricing rules that should produce rates for monopoly elements and services that approximate what the incumbent LECs would be able to charge if there were a competitive market for such offerings." Id. at ¶ 738. The agency expanded on this to indicate that, "under a TELRIC methodology, incumbent LECs' prices for interconnection and unbundled network elements shall recover the forward-looking costs directly attributable to the specified element, as well as a reasonable allocation of forward-looking common costs." Id. at ¶ 682. To provide guidance as to the configuration of the telecommunications network that should be assumed by

each state commission, the FCC stated that the pricing methodology "should be based on costs that assume that wire centers will be placed at the incumbent LEC's current wire center locations, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements." Id. at ¶ 685.

The FCC clearly stated that the ILEC -- in this case NYNEX -- has the burden of proof with regard to calculation of incremental costs of unbundled network elements, noting that the ILECs have greater access to the cost information needed for such a study. Id. at ¶ 680.

To determine whether NYNEX's proposed TELRIC study meets the standards set forth by the FCC, we must examine both the structure of the model and the inputs used in the model. With regard to the structure of the model, we must determine whether it is reviewable, i.e., whether it is possible to find and understand the financial and numerical relationships inherent in the model. We must also determine whether the structure itself provides a good representation of a reconstructed local network that will employ the most efficient technology for reasonably foreseeable capacity requirements. If the model is reviewable and accurately portrays the network we desire, we must determine whether the various financial inputs to the model are appropriate. These include the variety of items listed above, such as cost of capital and fill factors.

In conducting this analysis, we are assisted by the presentation of an alternative TELRIC study, the Hatfield model, presented by AT&T and MCI. If we determine that NYNEX has not met its burden of proof with regard to the efficacy of its TELRIC model, we could employ the Hatfield model as a replacement, if we determine that it meets the FCC's requirements.

As mentioned by the arbitrator at the start of the Phase 4 hearings, it is also conceivable that we will find both the NYNEX and the Hatfield models to present acceptable formulations of forward-looking incremental costs (Tr. 6, at 5-6). In so doing, we might determine that both models have strengths and flaws, but that together they provide the Department with useful information in designing rates for unbundled network elements. Accordingly, in the following sections, we will review the structure of both the NYNEX and the Hatfield models. We will then, separately, determine which inputs should be used in whichever model(s) we deem acceptable for pricing purposes. Following issuance of this order, the parties will "run" the appropriate model(s) using the inputs that we have determined are correct, and we will conduct compliance hearings to ensure that the results are in conformance with this order (Tr. 10, at 150-155).

IV. THE MODELS

A. The Suitability of the NYNEX Model

1. Positions of the Parties

The NYNEX model was presented by Mr. Anglin (Exh. NYNEX-11). It was used to produce costs for links, local switching, tandem switching, dedicated transport, common transport, signaling network, and call-related databases - switch query. Mr. Anglin relied upon Mr. Gansert for the specifications of network elements (Exhs. NYNEX-17, 18), Dr. Vander Weide for cost of capital (Exhs. NYNEX-15, 16), and Dr. Vanston for depreciation rates (Exhs. NYNEX-13, 14).

The NYNEX study uses currently available switching, transmission, and distribution technologies. It assumes that wire centers are located where they are today. It establishes

geographically-deaveraged rates for three cost-related rate zones: a rural zone, a suburban zone, and an urban zone. It uses the company's current anticipated demand as the estimated increment of demand on which the network design is based. It calculates a required level of investment to meet that demand, and then "loads" that investment to reflect a utilization factor and costs of installation and power. It further assigns to each amount of investment and the buildings that would house those investments carrying charge factors that reflect depreciation, cost of capital, and forward-looking joint and common costs. Depending on the element in question, costs are presented either on a flat rate monthly basis or on a usage-sensitive basis.

AT&T and MCI offer a series of objections to the use of the NYNEX model. AT&T argues that the model does not satisfy the FCC's TELRIC criteria, is methodologically unsound and is impenetrable. It asserts that the FCC stated a preference for generic forward-looking costing models, like the Hatfield model, because such models would allow state commissions to examine the assumptions and parameters that go into the cost estimates. It states that the NYNEX model is not generic, not forward-looking, and not a model. It states that NYNEX offers no evidentiary support for its engineering inputs, that it is not possible to conduct sensitivity analyses on those engineering assumptions, and that the NYNEX model has significant and unexplained differences from the model presented by NYNEX in New York. AT&T further argues that the NYNEX study does not reflect the lowest cost, most efficient forward-looking network design.

MCI states that NYNEX's model is not open, public or verifiable. It asserts that it is

nothing more than an uncritical picture of NYNEX's existing network and practices and does not assume a forward-looking network with forward-looking fill factors and other crucial characteristics. Both AT&T and MCI argue that the NYNEX model is so flawed that it cannot be the vehicle by which NYNEX sustains its burden of proof. (They also offer extensive criticism of the model's inputs, to which we shall return below.)

NYNEX responds that the NYNEX model meets the FCC standards for TELRIC studies. It agrees with AT&T that it did not provide "every voucher for materials and labor, every engineering manual, every cost and facilities database, every engineering costing tool, or every engineer" that supports inputs to its study, but it asserts that to require such a level of data would be to impose on the company a burden that would be both unprecedented and unreasonable. NYNEX states that it offered the other parties access to all of these inputs, but none of them took the opportunity to examine these data. The company states that the Hatfield model is replete with engineering judgments of its own, and that the NYNEX model provides more support for these than does the Hatfield model.

NYNEX states that the fact that there are differences between the Massachusetts and New York TELRIC studies is proof of the degree of care used in Massachusetts. It asserts that the Massachusetts model can and should be judged on its merits, and then NYNEX defends the inputs it has used.

2. Analysis and Findings

As noted above, we distinguish here between the characteristics of the NYNEX model and the inputs used therein, and we turn now to those characteristics. We first address whether the

NYNEX model is reviewable, i.e., whether it is possible to find and understand the financial and numerical relationships inherent in the model. We find that the NYNEX model is reviewable.

The NYNEX model is not complicated. It consists of a series of interlocking spreadsheets, in which the outputs of one section are the inputs to the next. The workpapers provided by Mr. Anglin make these relationships clear, and he was also able to elaborate on them clearly and concisely when questioned (see, e.g., Tr. 11, at 16-255). The model's lack of sophistication is certainly not grounds for finding it lacking; indeed, its transparency is, in many ways, refreshing. The ability of NYNEX to rather quickly re-run the model with a different set of density zones is a good indication of its ability to be used for sensitivity analyses (RR-23). Having now learned the model's structure, we conclude that it would likewise be possible to vary other inputs for similar purposes. It is not necessary -- notwithstanding society's leap into the age of CD-ROMs and powerful microcomputers -- to present a model in an interactive format to have it meet the test of reviewability. The NYNEX model is reviewable.

We now turn to the question of whether the structure of the model provides a good representation of a reconstructed local network that will employ the most efficient technology for reasonably foreseeable capacity requirements. We find that it does.

To model loop plant, NYNEX constructed three density zones. To determine the loop profile characteristics and utilization levels for all wire centers in Massachusetts, it took a random sample of the wire centers based upon their density characterization, sampling ten percent of the wire centers for each density zone (RRs-22, 38). We recognize that this approach is different from that used in the Hatfield model advocated by AT&T and MCI, but we find that it is

reasonable. It determining the average loop length and the loop characteristics that are the keys to estimating loop costs, a surrogate must be found to model the dozens of wire centers across the state. Using a random sample is an appropriate way to construct this surrogate. There is no indication that NYNEX attempted, in any way, to create a biased sample, and we find that its approach is an effective way of modeling this aspect of the network.

AT&T has complained that NYNEX's network design does not meet the FCC standards because it incorporates the existing lay-out and topology of the current network facilities in Massachusetts. MCI joins this issue in a similar manner. We do not read the FCC standards in the same way as AT&T. The FCC states that we should use "a reconstructed local network [that] will employ the most efficient technology for reasonable foreseeable capacity requirements." Local Competition Order at ¶ 685. We interpret that sentence to refer to the technology, not to the geographic distribution of that technology. We believe that the FCC, in requiring that existing wire centers remain unchanged, was trying to rationalize a forward-looking technology approach to costing with the reality of the physical distribution of existing customers and central offices. We agree with AT&T that such an approach does not address the question of whether any efficiency gains could be achieved by a physical reconfiguration of NYNEX's forward-looking technologies, but we cannot find a section of the Local Competition Order that would lead us to believe that the FCC expected such an analysis. We also believe that to do so is simply not practical without a circuit by circuit topographical study. To require such a study within the strict

timeframes imposed by the Act is not feasible, even if it were desirable.[2]

We turn now to the question of whether the technology choices used in the NYNEX model are appropriately forward-looking. For switching equipment, NYNEX used its existing configuration of digital switches where such switches exist, and, where analog switches currently exist, NYNEX "replaced" these in the model with digital switches. No party has suggested that there is a more advanced form of switching in common use today or that NYNEX's choice of switch technology was inappropriate, and we, therefore, find that NYNEX has made the appropriate judgment with regard to switching technology. For its transport system, NYNEX has assumed the upgrading of certain transport electronics to an all-SONET configuration. No party has suggested that this is not an appropriate technology choice with regard to transport investment, and we, therefore, find that NYNEX has made the appropriate judgment with regard to transport technology.

The parties have disputed NYNEX's choice of technology in the feeder portion of the loop. MCI and the Attorney General argue that NYNEX's use of optical fiber in the feeder system is not an efficient use of this technology, when considering the general needs of telecommunications subscribers. They argue that inclusion of fiber feeder in lengths of less than 9,000 feet is, in essence, a subsidy between narrow-band users and broad-band services that NYNEX will be offering in the future. They reach this conclusion by attempting to demonstrate

---

[2] Of course, the Hatfield approach, to which we will return below, offers a methodological way of incorporating gross numbers of customers and general topographical features into a model, but it, too, cannot be considered a model that would actually be used by system planners in designing a system. Its purpose, too, is to present a surrogate for costing purposes (Tr. 10, at 97).

that for the vast majority of customers who are served by copper distribution circuit, a 100% fiber feeder is not the least expensive way of providing service, for the present or for the next few years. In particular, MCI cites the testimony of Dr. Mercer to the effect that studies that he has seen by other telephone companies support a 9,000 foot cutoff point for fiber in the feeder, and it further cites testimony by Mr. Gansert along the same lines.

NYNEX first notes that there is no basis on the record for assuming that the TELRIC cost that would result from an all-fiber feeder system would be greater than one which incorporates copper. It further states that the industry practice today is to install feeder and cites testimony by Dr. Mercer to the effect that new entrants to the telecommunication business would use fiber. Finally, the company cites an earlier study that it undertook to demonstrate the efficiency of fiber in the loop.

We find the arguments of MCI and the Attorney General unpersuasive, for a number of reasons. First, NYNEX has testified that, for five years, the company's application guideline has been to install fiber in the feeder component of the loop (Tr. 8, at 307). Thus, it has actually been installing fiber in the feeder, and so its model is not attempting to create a fictitious forward-looking view of the network. Second, during that period, the Department has never, in its review of NYNEX's retail rates, made a determination that such an investment policy was imprudent or represented an unwarranted subsidy of broadband services by narrow-band telecommunications users. Third, use of fiber in the feeder system is an established industry practice (Tr. 10, at 63-64). AT&T's witness in another phase of this proceeding stated that AT&T, in fact, would like access to NYNEX's "outreach" (as opposed to interoffice) dark fiber to

support AT&T's SONET access rings, "to get into that building or that office building, or even out into residential communities, so that we could start getting closer and closer to the resident" (Tr. 5, at 30-31; see also, Tr. 5, at 46-48). As we have stated in our Phase 3 order, SONET rings are an integral part of the current local exchange telecommunications infrastructure. This architecture and its inherent use of fiber is the forward-looking network architecture (Tr. 6, at 27-29).

Accordingly, we find that the structure of the NYNEX model provides a good representation of a reconstructed local network that will employ the most efficient technology for reasonably foreseeable capacity requirements. We now turn to a similar analysis of the Hatfield model.

B. The Suitability of the Hatfield Model

1. Positions of the Parties

The Hatfield model recommended by AT&T, MCI, Sprint and the Attorney General consists of a number of sequential modules, where like the NYNEX spreadsheet, outputs from one module serve as inputs to the next. The Hatfield model starts by using the number of household and business employees in each census block group ("CBG") in the state to determine the number of residence and business lines that would exist in that CBG, subject to the constraint that the overall state total has to equal the actual NYNEX total number of lines. The output from this Line Converter Module is fed into a Data Module, which calculates feeder, sub-feeder and distribution cable lengths required to satisfy the total number of access lines in each CBG, taking into account the CBG's physical size, the line density, and its location relative to the wire center

serving that CBG. The Loop Module takes the distribution lengths per CBG and the feeder lengths per wire center developed by the DATA Module to calculate the initial loop investment needed to serve that CBG. The Wire Center Module calculates the investments in the non-loop elements, such as switching, interoffice transport, and signaling. A Convergence Module combines the loop and wire center investments and adds in other required investments. Finally, the Expense Module calculates the four segments of each unbundled network element's cost. It converts the total investment outputs of the Convergence Module to a per-month carrying cost. It calculates direct plant-specific operating expenses based on the expense-to-investment ratio of certain ARMIS accounts. It assigns non-plant-specific and other supporting network expenses. It uses a 10 percent variable overhead factor to calculate variable support expenses associated with network and customer operations (Exh. AT&T-21).

AT&T and MCI assert that the Hatfield model is reviewable, in that the inputs, structure, and operation of the model are all open for verification by any party. It also states that the model offers a good representation of a reconstructed local network that will employ the most efficient technology for reasonably foreseeable capacity requirements.

NYNEX asserts that the Hatfield model uses erroneous assumptions and flawed methodologies. It further asserts that, even if the stated methodologies had merit, the actual calculations performed do not always follow the methodology described. It describes the model as "riddled with error and unreliable and unsubstantiated assumptions" and unsuitable for the purposes envisioned by the FCC (NYNEX Initial Brief at 17).

NYNEX claims, for example, that the Data Module is unrealistic in that it estimates the

amount of distribution cable required in a CBG based upon the average distance from the serving area interface ("SAI") to a customer, which is calculated to be 0.625 times the square root of the serving area, assuming an even distribution of customers across the CBG. The model then assumes a certain number of "legs" of distribution cable, each of the same length, depending on the density zone involved. NYNEX offers a hypothetical example from a low density zone to show that the simplifying assumptions used in the model failed to provide sufficient cable length and to size the cable correctly. NYNEX argues that neither AT&T nor MCI provide any basis to prove that their model, even on average, is actually estimating the amount of distribution cable required, the sizes of cable required, or the extent of structure necessary for outside plant.

NYNEX also claims that the model does not adequately anticipate physical obstructions, such as rivers and mountain ranges; that it arbitrarily assumes that 9,000 feet is the appropriate cut-off point in selecting whether to install copper or fiber feeder; and that it improperly assumes different characteristics from CBG to CBG as feeder cable moves out from a wire center. NYNEX also asserts that the methodology used to estimate common costs is flawed.

NYNEX states that, counter to the claims of AT&T and MCI, the FCC has not adopted the Hatfield model and also states that the model has not been subjected to rigorous reviews around the country. It also asserts that the model is difficult to use and confusing to interpret, noting that it is not possible to audit the model on a spreadsheet to trace the source of an input for a given cell and also the destination of that data after further manipulation. NYNEX states that before using the Hatfield model, it should be validated by comparing its outputs to reliable external sources and comparing its estimate of physical structure to what exists in the real world

(NYNEX Initial Brief at 23-24).

NYNEX states that the Hatfield model behaves in a bizarre fashion, such as calculating negative structure investment in certain regions and responding in counterintuitive ways when inputs are changed. It says that the model is demonstrably unreliable, failing even to perform as described. NYNEX further asserts that it has structural flaws that tend to underestimate the facilities required to serve the state, and it lists a number of errors that cause this to occur (NYNEX Initial Brief at 24-28).

MCI states that NYNEX's attacks on the Hatfield model are a study in nitpicking and cherry-picking that have an insignificant impact on the end results from the model. It agrees that the model makes assumptions concerning average loop lengths but claims that this modeling technique is similar to the modeling techniques used by NYNEX in its own model. It also argues that NYNEX has selectively chosen flaws in the model that tend to underestimate costs, while ignoring similar flaws that would overestimate costs. Finally, it states that the Hatfield model has been adopted for use in other jurisdictions.

2. Analysis and Findings

We apply the same standard here as we did to the NYNEX TELRIC model. With regard to the structure of the Hatfield model, we must determine whether it is reviewable, i.e., whether it is possible to find and understand the financial and numerical relationships inherent in the model. We must also determine whether the structure itself provides a good representation of a reconstructed local network that will employ the most efficient technology for reasonably foreseeable capacity requirements.

While it is difficult to follow through the Hatfield model on a cell-by-cell basis in its underlying spreadsheet (Tr. 10, at 75), the basic structure and assumptions of the model are clearly presented. Also, because it can be made available to any interested user with the proper computer, that user can change inputs and conduct sensitivity analyses to get a "feel" for the behavior of the model under changing assumptions. In these respects, the Hatfield model is clearly reviewable.

With regard to the representation of the local network, it is clear that the network created by the Hatfield model is a hypothetical one. That is not problematic in and of itself, but the form of the hypothetical is. The creation of the outside plant based on CBG data and broad state averages is unrealistic because, in essence, the model is placing houses and businesses where they do not currently exist, and it is designing outside plant based on a trigonometric view of the world. As NYNEX correctly notes, there are at least some circumstances in which this formulation will be far afield of the actual manner in which a local distribution system will be built (Tr. 10, at 165-168). While the NYNEX model, too, relies on averages, it is at least based on a random sample of actual distribution plant served by actual wire centers, and it therefore presents a stronger resemblance to a real portrayal of the actual layout of wires and customers in the state. The Hatfield model has the clear potential, given the configuration it adopts, to present skewed results with regard to local loop plant investment. AT&T has not presented data or results that demonstrate that the Hatfield formulation accurately portrays the configuration of outside plant in Massachusetts. Indeed, such an analysis has not been undertaken (Tr. 10, at 99-100). This leaves the model unverified and without support, and, given its abstract reconstruction of the network,

we are therefore unable to find that it is an acceptable representation of the network for use in the TELRIC studies.

We are concerned, too, about the examples raised by NYNEX with regard to the inner workings of the Hatfield model. For example, when the model was run reducing the cut-off point from copper to fiber feeder from 9,000 to 100 feet, it produced a counterintuitive result. In this case, the model should have calculated that many more lines would be served by fiber feeder and thus would need to be equipped with digital loop carrier equipment (Tr. 10, at 77). In fact, the reverse occurred (NYNEX Initial Brief at 24). MCI does not dispute this result, and its argument that such mistakes are offset by mistakes in the opposite direction does not inspire confidence in the underlying assumptions and structure of the model (MCI Reply Brief at 1-2). The fact that the model is reviewable, i.e., one can test its assumptions, does not mean those assumptions are correct.

We are also concerned that the Hatfield model relocates tandem switches in new locations in the state (Tr. 10, at 253). It is unclear from the record what the effect of this change is on the costs generated by the model, but it certainly has not been demonstrated that such a relocation is, in fact, a more efficient forward-looking view of the network, especially when the placement seems to be derived from the hypothetical configuration of customers generated by another module of the model.

We find, too, that the design of feeder plant produced by the model is unrealistic. In essence, each CBG is treated as an independent part of the feeder system, and so continuous cables in the model will experience different fill factors and structures as they pass through

adjacent CBGs' (Tr. 10, at 132-135). This is not an accurate representation of the network. We cannot tell from this record whether this assumption has the effect of increasing or decreasing costs in the various density zones.

In making these criticisms, we are in no way seeking to impugn the developers of the Hatfield model. The model is a thoughtful and clearly presented view of the world. It suffers, however, from design flaws. Some are immediately evident. Some are difficult to track and produce counterintuitive results. Ironically, the model's sophistication may make it vulnerable to unexplainable results, in that the various modules have such a variety of formulas and interactions that one cannot trace why such counterintuitive results occur. Whatever the reason, in light of our unresolved concerns about the Hatfield model, we find that its sponsors have not met their burden of proving that it is an appropriate model to develop TELRIC costs. In light of that finding, we will not use the Hatfield model in this proceeding.

Before turning from this issue, we raise a final point. While we ordinarily place little weight on the decisions reached in other states, since we rely for our decisions on the record presented here, we feel compelled to address the argument made by AT&T that at least two state commissions, those in Iowa and Washington, have endorsed the Hatfield model. Dr. Kahn's testimony that other states have adopted numbers "that were either the Hatfield numbers themselves or Hatfield-like numbers" does not appear to be supported in fact, if she meant to imply that these states actually have used the Hatfield methodology (Tr. 10, at 287-289). We have reviewed the decisions submitted by AT&T in support of this statement and can find only two instances in which the Hatfield model was adopted (RR-35). In one state, Iowa, the model

was adopted, but no reason was given for the decision other than the fact the model is publicly available and can be verified. State of Iowa, Department of Commerce, Utilities Board, Docket Nos. ARB-96-1, ARB-96-2, at 3 (October 18, 1996). Thus, we cannot determine whether the structural issues we have raised here with regard to the model were considered in that state.

In another state, Minnesota, the arbitrator concluded: "The Hatfield Model submitted by AT&T is the best evidence in the record of GTE's costs." His elaboration explained why: "GTE and AT&T presented cost studies using very different methodologies. Their results for TELRIC costs, however, are fairly close; it is GTE's addition of what it calls "forward looking common costs" that generate substantial differences in the proposed prices." Arbitration Decision, Minnesota Public Utilities Commission, Dockets OAH 78-2500-10733-2 and MPUC P-442, 407/M-95-939, at 17-18 (November 12, 1996).

The other examples offered by Dr. Kahn are not at all supportive of her conclusion. In the California GTE arbitration, the arbitrator used the cost studies submitted by GTE, but applied to them the Hatfield 16 percent shared and common cost factor. Arbitrator's Report, California Public Utilities Commission, Application 96-08-041, at 13 (October 31, 1996). In the California Pacific Bell arbitration, the arbitrator concluded, "Neither model could be presented in adequate depth in the time available. . . . Neither party has satisfied me that its model accurately captures the relevant costs or that the opposing model necessarily does not." The arbitrator decided, in the interim, to use the incumbent's previously approved total service long-run incremental cost model. Arbitrator's Report, California Public Utilities Commission, Application 96-08-040, at 18-19 (October 31, 1996).

In Texas, the arbitrators determined that, "[while] the merits of the SWBT methodology outweigh the "openness" advantage of the [Hatfield model], they also find that the SWBT methodology must be made much more open. . . . The Arbitrators find that, on the whole, the advantages of the SWBT methodology outweigh its disadvantages, if the changes recommended by this Award are made. . . . The Arbitrators are also concerned that, after spending significantly more time reviewing the [Hatfield model] than has been done in this proceeding, the FCC has as yet been unable to fully endorse [it] as an appropriate TELRIC model." Public Utilities Commission of Texas, Arbitration Award, Consolidated Docket Nos. 16189, 16196, 16226, 16285, and 16290, at 26, 27, 29 (November 7, 1996).

In the Illinois decision, there is no mention of the Hatfield model at all. Hearing Examiners' Proposed Arbitration Decision, Illinois Commerce Commission, Docket 96-AB-005, at 9-12 (November 8, 1996). In Michigan, the arbitration panel adopted the AT&T costing proposal because the incumbent's study was not based on long-run incremental costs. Notice of Decision of Arbitration Panel, Michigan Public Service Commission, Case. No. U-11165, at 15 (November 12, 1996). In Pennsylvania, two decisions included determinations to rely on the FCC default rates, pending Commission review of the TELRIC analysis. Agreement for Withdrawal and Modification of Arbitration Issues, Pennsylvania Public Utility Commission, Docket No. A-310125F0002, at 4 (undated); Recommended Decision before the Administrative Law Judge, at 33 (September 30, 1996). Another Pennsylvania decision submitted by AT&T was not relevant to the unbundled element cost issue at all. Recommended Decision before the Administrative Law Judge, Docket No. R-00963556 and others (October 8, 1996). Finally, in the Ohio case

submitted by AT&T, there was no mention of the Hatfield model. Arbitration Panel Report, Public Utilities Commission of Ohio, Case No. 96-752-TP-ARB, 17-29 (November 5, 1996).

Likewise, Dr. Kahn's suggestion that the FCC has endorsed the Hatfield model (Tr. 10, at 288) is not supported. The FCC clearly stated that the model was admitted too late in its proceeding for it to be evaluated fully. Local Competition Order at ¶ 835. In fact, it is unclear that the version of the Hatfield model that is discussed from time to time by the FCC is the version 2.2.2 presented in this proceeding. Local Competition Order at ¶ 794, footnote.

To summarize, we find that it has not been demonstrated that the Hatfield model presents a good representation of a reconstructed local network, and we therefore conclude that it should not be used in this proceeding. We will therefore use the NYNEX TELRIC model for determining the costs of unbundled network elements. We now turn to the inputs that should be used in that model to produce accurate costing results.

V. THE INPUTS

A. Sizing of the Network

The parties agree that the FCC has required that the current level of demand on the NYNEX network should be the basis for establishing the investment requirements of the TELRIC model. The Local Competition Order provides the economic basis for this standard, stating that the relevant increment in a long-run incremental cost study is the entire quantity of the service that a firm produces, rather than just a marginal increment over and above a given level of production. Local Competition Order at ¶ 677.

The FCC went beyond this premise to relate this level of demand to the physical facilities

that would be required to meet that demand. The agency recognized that it is not feasible to build a telecommunications network to meet exactly the level of demand upon it, but that there is a certain amount of spare capacity designed into the network. It stated, "Per unit costs shall be derived from total cost using reasonably accurate "fill factors" (estimates of the proportion of a facility that will be "filled" with network usage); that is, the per unit cost associated with a particular element must be derived by dividing the total cost associated with the element by a reasonable projection of the actual total usage of the element." Local Competition Order at ¶ 682. Thus, as noted by AT&T, under the FCC standard, the cost calculation for any given element must start with a determination of current demand for that element, which is then increased by reasonably anticipated growth in demand for the element (AT&T Initial Brief at 14). An important related step, of course, is to estimate the actual cost of the equipment that satisfies this technical criterion. Thus, these three items -- demand, fill factors, and equipment costs -- are intimately related. They create the starting point for the TELRIC studies, for they produce an investment amount to which is applied a variety of factors, including installation factors and carrying cost factors. As such their calculation is key to an accurate forward-looking cost study for unbundled network elements.

1. Positions of the Parties

a. AT&T & MCI

The parties disagree as to whether NYNEX properly carried out the calculation of sizing the network. AT&T asserts that the NYNEX methodology does not conform to the FCC criteria. It states that the NYNEX methodology starts with engineering estimates which incorporate

assumptions about future growth and spare capacity. Then, according to AT&T, it "applies to those engineering estimates fill factors, which are themselves both unsubstantiated and overstated, that have the effect of adding excess capacity on top of excess capacity" (AT&T Initial Brief at 14).

MCI offers a somewhat different view of how NYNEX is overstating network costs. It asserts that NYNEX assumes a given material quantity or size to meet the network demand, and then it grosses up its price via a fill factor. MCI states that, particularly with regard to facilities such as cable, where the price increase for greater capacity is non-linear, this has the effect of increasing the alleged cost of the facility in question (MCI Initial Brief at 10).

MCI also argues that NYNEX has not used an appropriate discount off the manufacturer's listed prices for switches and other electronic equipment that is assumed. It asserts that, if the network were being purchased in whole today, NYNEX would obtain a relatively large discount from the equipment suppliers (MCI Initial Brief at 20-21).

We will review these contentions after we summarize the methodology employed by NYNEX in its TELRIC study.

b. NYNEX

NYNEX says that, to size its TELRIC network, the company used the current demand on each of the network components and estimated the amount of material investment needed to serve that demand. In so doing, the company employed utilization factors. These factors vary by type of plant and, according to NYNEX, reflect the unique characteristic and uses of the plant as actually employed in a network (NYNEX Initial Brief at 34).

Mr. Gansert explained the "drivers" behind the utilization factors for the various kinds of plant investment. For those components of the network that grow incrementally in capacity in response to changes in demand, the utilization factors are a function of (1) the fill-at-relief point, an engineering parameter used in administering the network to ensure that plant additions are made appropriately in advance of using up the capacity in an element; (2) the breakage points, which reflect the modularity in the supply of capacity of elements; and (3) the unit of capacity addition, the expected growth in demand over the planning horizon for that element. The components of the network that are designed in this fashion are local switching, tandem switching, interoffice elements, channel units, channel bank commons, copper feeder, and all signaling elements (Tr. 9, at 46-48).

Mr. Gansert further explained that the utilization of distribution cable was affected by the serving area concept of designing that part of the network. Under this concept, which has been in use by NYNEX and most of the industry for over 25 years, the copper distribution size is defined by the physical extent of the area and the number of households and businesses in the area. It is sized to provide enough distribution to cover current demand, the percent of customers who are likely to purchase additional lines, and the maximum number of housing units on the streets served by the distribution cable. The purpose of this approach is to avoid having to re-enter a local distribution area to augment service when growth or changes occur. This is viewed as more economical because the carrying cost of installing surplus distribution capacity when the system is first laid out is less than the cost of repeatedly augmenting a distribution route from year to year (Tr. 8, at 218-220; Tr. 9 at 49).

The utilization of fiber feeder and conduit are driven by other factors. Both are affected by the need to have surplus capacity for an administrative and maintenance margin, and both are also affected by the breakage, or modularity, of the supply of the commodity. In the case of fiber, NYNEX installs cable sizes well beyond those needed for anticipated future growth because the various sizes of cables have a minimal impact on cost as compared with the costs of installing additional fiber at a later time (Tr. 9, at 49-50).

NYNEX has argued that, although AT&T and MCI have complained about its utilization factors, neither party has shown that the company has employed any unreasonable assumptions or departed from accepted engineering practices in estimating those factors (NYNEX Initial Brief at 36).

Mr. Anglin explained that the investments associated with local loops were based on the company's Outside Plant Planner's Costing Tool and its Engineering and Construction Records Information System ("ECRIS") and used the vendor costs and other cost factors from the company's recent outside plant jobs (Exh. NYNEX-11, at 10). Switching investments for every switch in Massachusetts were developed using the Switching Cost Information System ("SCIS"), an engineering costing model (id. at 15-16). Other elements were also costed using recent discounted vendor prices.

2. Analysis and Findings

As noted above, AT&T argues that the cost methodology employed by NYNEX results in an overstatement of investments. In arguing that NYNEX's fill factors are too low, AT&T asserts that the company has ignored the TELRIC requirement to design a least cost, most efficient

network based on fill factors that reflect a reasonably anticipated growth level. AT&T asserts that this must mean that one of the characteristics of the TELRIC network is that it is "assumed to be dropped in place, i.e., created from scratch, at the moment in time when the TELRIC costs of the network are being determined." AT&T argues that Mr. Gansert's use of fill factors has ignored this characteristic of the TELRIC network in that it has applied "business as usual" engineering assumptions as if he were designing a slowly evolving network with incremental additions over extended periods of time. Instead, says AT&T, in the TELRIC network, there is no reason at all to have any facility that has an "initial" utilization of as low as those presented by NYNEX for many of its elements (AT&T Initial Brief at 16-21).

As noted by NYNEX, AT&T is not disputing the engineering assumptions used by NYNEX with regard to its fill factors. Rather, AT&T is claiming that the use of those fill factors is incorrect in the TELRIC model because the TELRIC model should be designed to a higher level of network efficiency when it is "dropped in place." It is clear that these two parties have a fundamentally different view of the FCC requirements, and so we must address that issue directly.

As we have noted above, the FCC requires that "per-unit costs shall be derived from total costs using reasonably accurate 'fill factors' (estimates of the proportion of a facility that will be 'filled' with network usage." Local Competition Order at ¶ 682. We are attempting to design "the reconstructed local network [that] will employ the most efficient technology for reasonably foreseeable capacity requirements." Local Competition Order at ¶ 685. We do not draw from these descriptions the same conclusions as AT&T. NYNEX has explained that there are a number of drivers that determine the fill factors for various portions of the network. It has

explained those drivers in a manner that, on its face, is clear and sensible, and there has been no engineering evidence presented that they are not. We do not agree with AT&T's argument that those drivers would not also apply to the TELRIC network. Although that network may be viewed as "dropped in place", it will presumably exist beyond the moment it is dropped in place, and there is no reason to believe that the same set of drivers that exist today when NYNEX plans its own network would not exist in a situation where it is the "firm" building unbundled network elements under the TELRIC framework.

On another matter, AT&T asserts that it is "very likely" that NYNEX, in performing the first step in its TELRIC cost calculation, i.e., the determination of investment dollars for each component of each network element, has already included a greater capacity than is required to serve existing demand. AT&T provides an extensive example of this issue with regard to Mr. Gansert's description of the process of estimating the quantities of loop facilities needed in each operating area (AT&T Initial Brief at 22-23).

We believe that AT&T has misconstrued the nature of the analysis described by Mr. Gansert (Exh. NYNEX-17, at 13-14). AT&T views the steps listed by Mr. Gansert as steps taken seriatim, one process building on the other, and therefore double-counting the need for surplus capacity. We do not read the testimony in that way; and it is perhaps more clear from Mr. Gansert's oral testimony that the steps he has outlined in his prefiled testimony are, taken together, components that lead to the loop investment amounts. We have summarized, above, that testimony, which gives a clear and reasonable statement of the drivers of the utilization factors on which NYNEX relies in costing loop investment amounts. We do not agree with

AT&T that the double-counting it has termed "highly likely" does, in fact, occur.

AT&T goes on to say that it was difficult to understand what NYNEX actually did because the workpapers containing its underlying calculations were difficult to retrieve from the computer disk (AT&T Initial Brief at 24). As we have mentioned earlier, we have found NYNEX's calculations to be transparent and clear, and we are not willing to use AT&T's early difficulties as evidence of some ulterior motive of NYNEX to hide alleged double-counting.

AT&T further states that NYNEX's workpapers contained a "paucity of actual inputs." It draws a comparison with equivalent workpaper pages from the New York arbitration proceeding in support of its contention that the cost inputs to the element investment amounts were insufficient (AT&T Initial Brief at 24-25). It views NYNEX's response to this issue -- that NYNEX used average/typical configurations of, for example, cable sizes -- as evidence of insufficient engineering support for the ultimate investment amounts derived.

As above, this complaint does not, in any event, go to the heart of AT&T's double-counting argument. It is, in fact, a different argument, that the choice of technology used in the model (average-sized cables versus a variety of smaller and larger copper cables) is inappropriate. Putting aside the question of whether the New York model, which was not the subject of examination in this proceeding, is a proper guide, we nonetheless conclude that this is not a severe problem, if it is indeed a problem at all. We find nothing untoward in NYNEX's Record Response No. 25, in which it states that "the costing methodology allows an average to be determined in advance of input or allows the model to calculate the average."

It appears that, if NYNEX did indeed make an incorrect averaging assumption, it would

have worked to its disadvantage, at least in the instances cited by AT&T (AT&T Initial Brief at 25). Use of a single cable size as a costing input in the model actually has the effect of producing a lower cost per loop, as can be demonstrated by comparing the New York and NYNEX inputs. The range of costs assumed in the New York major cities and urban zones for aerial fiber cable range from $6.85 per foot installed for the smallest cable size (12 fibers) to $44.87 for the largest (216 fibers); while in the Massachusetts workpaper, an average 144-fiber cable is assumed for the urban zone, at a cost of $8.50 per foot installed. While two of the cable sizes in the New York example (the 12 and 24 fiber size) have installed costs below that of the average used for NYNEX, the resulting weighted average cost in the New York major cities zone is $11.55, and in the urban zone it is $14.73. The weighted average cost in the Massachusetts urban zone is $8.50. The same phenomenon occurs with respect to underground fiber feeder, where the weighted average costs in the New York zones are $18.80 and $16.72, while the Massachusetts figure for its urban zone is $12.70 (Exh. AT&T- 13, page 105 of 135 (New York inputs); Exh. AT&T-18, page 13; and Exh. NYNEX-40, page 12 (NYNEX inputs)).

This evidence rebuts MCI's complaint, as well. As noted, MCI argues that, if the utilization factor were applied to the facility, and not the cost of the facility, a larger facility would be purchased, thus lowering the unit price (MCI Initial Brief at 10). NYNEX correctly notes that MCI's logic is based on a faulty premise, since the investment cost used in the NYNEX TELRIC study already accounts for the optimum sizing of the facilities and is a weighted average cost reflecting the most efficiently engineered plant. Thus, the investment cost to which the utilization factor is applied already reflects the economies associated with installing the properly sized units

of capacity (NYNEX Reply Brief at 13-14).

AT&T goes on to raise similar objections concerning the assumptions of switching costs in the NYNEX model, once again comparing the results with that of New York. It derides Mr. Anglin as being unable to provide an explanation for this difference (AT&T Initial Brief at 28). It is not Mr. Anglin's responsibility to explain the difference between a Massachusetts study that he supervised and a New York study in which he was not involved. Nonetheless, he offered coherent and thoughtful and -- in the words of the AT&T attorney -- plausible explanations based on his personal knowledge of the New York and Massachusetts networks (Tr. 9, at 129-132; Tr. 11, at 72-73, 87-88, 99-100).

AT&T raises additional objections concerning the use of the SCIS model and states that NYNEX asks these outputs to be taken on faith (AT&T Initial Brief at 29). NYNEX states in reply that the SCIS model has been audited on behalf of the FCC and found reasonable (NYNEX Initial Brief at 37). We have no reason to believe that the model does not produce reasonable outputs.

AT&T states that switch costs are overstated because NYNEX ran the SCIS model using lines both active in service and those currently inactive, or spare. Thus, says AT&T, the total calling seconds employed as an input to the SCIS model is based on NYNEX's current total switch capacity rather than its current total switch utilization (AT&T Initial Brief at 30). We believe, based on the evidence presented, that AT&T is correct in this assertion, although there is probably a reason to include a number of spare lines to reflect maintenance and growth and other administrative requirements. Accordingly, when NYNEX prepares its compliance filing in this

proceeding, it shall correct the inputs to the SCIS model to reflect the lines currently active in service, plus others it demonstrates to be appropriate, unless it is able to present an explanation for why the numbers it has used are properly reflective of TELRIC assumptions.

Finally, we turn to MCI's argument that NYNEX has not used an appropriate discount off the manufacturer's listed prices for switches and other electronic equipment that is assumed. It asserts that, if the network were being purchased in whole today, NYNEX would obtain a relatively large discount from the equipment suppliers (MCI Initial Brief at 20-21). Mr. Gansert testified that NYNEX used the discounts currently obtained from suppliers for purchases of incremental additions to its current electronic equipment. He further stated that it would be unreasonable to assume that a larger discount would be forthcoming if all the BOCs were assumed to be building new networks at once, because there could be a shortage of equipment that could result in no discounts or even premium prices (Tr. 8, at 354-356). MCI describes Mr. Gansert's answer as "cute, but disingenuous" and asserts that we should use the discount that NYNEX obtained several years ago when it replaced its old analog switches.

We find that it is speculative to assume what the manufacturers' discounts would be if a TELRIC network were being constructed today. Suppliers' discounts are a function of both supply and demand in the marketplace.

In conclusion, we find that the demand quantities, fill factors, and investment amounts presented by NYNEX, with the exceptions noted, are reasonable and appropriate for use in its TELRIC model.

B. The Cost of Capital

1. Positions of the Parties

NYNEX presents a 13.18 percent overall cost of capital for use in the TELRIC model, based on a cost of equity of 14.8 percent, a cost of debt of 7.9 percent, and a debt:equity ratio of 23.51:76.49. AT&T states that this is overstated and offers a cost of capital of 9.8 percent, based on a cost of equity of 11.5 percent, a cost of debt of 7.7 percent, and a debt:equity ratio of 45:55. We discuss in detail below the cases presented by the parties and our analysis and findings on these issues. Following a general overview of the issue, we turn to specific determinations of the cost of equity, the cost of debt, and the capital structure.

2. Analysis and Findings

a. Overview

The FCC provides us with guidance concerning the appropriate cost of capital to be used in the TELRIC cost studies. In one section of the Local Competition Order, we are directed to consider the monopoly, or bottleneck, aspects of the unbundled elements we seek to price:

> Based on the current record, we conclude that the currently authorized rate of return at the federal or state level is a reasonable starting point for TELRIC calculations, and incumbent LECs bear the burden of demonstrating with specificity that the business risks that they face in providing unbundled networks elements and interconnection services would justify a different risk-adjusted cost of capital or depreciation rate. These elements generally are bottleneck, monopoly services that do not now face significant competition. We recognize that incumbent LECs are likely to face increased risks given the overall increases in competition in this industry, which generally might warrant an increased cost of capital, but note that, earlier this year, we instituted a preliminary inquiry as to whether the currently authorized federal 11.25 percent rate of return is too high given the current marketplace cost of equity and debt. On the basis of the current record, we decline to engage in a time-consuming examination to determine a new rate of return, which may well require a detailed proceeding. States may adjust the cost of capital if a party demonstrates to a state commission that either a higher or

> lower level of cost of capital is warranted, without that commission conducting a "rate-of-return or other rate based proceeding." We note that the risk-adjusted cost of capital need not be uniform for all elements. We intend to re-examine the issue of the appropriate risk-adjusted cost of capital on an ongoing basis, particularly in light of the state commissions' experiences in addressing this issue in specific situations.

Local Competition Order at ¶ 702.

In other parts of the order, we are reminded to price these elements in the manner they would be priced by the ILEC and other entrants in a competitive market:

> In this proceeding, we are establishing pricing rules that should produce rates for monopoly elements and services that approximate what the incumbent LEC would be able to charge if there were a competitive market for such offerings. We believe that a forward-looking economic cost methodology enables incumbent LECs to recover a fair return on their investment, i.e., just and reasonable rates.

Id. at ¶ 738.

> Because a pricing methodology based on forward-looking costs stimulates the conditions in a competitive marketplace, it allows the requesting carrier to produce efficiently and to compete effectively, which should drive retail prices to their competitive levels.

Id. at ¶ 679.

And specifically, with regard to the cost of capital, we are directed as follows:

> [T]he forward-looking costs of capital (debt and equity) needed to support investments required to produce a given element shall be included in the forward-looking direct cost of that element.

Id. at ¶ 691.

In the sections below, we will employ these sections of the FCC order to determine the appropriate forward-looking cost of capital to use in the TELRIC studies for pricing unbundled network elements.

No party to this proceeding disputes the general theory of finance that the cost of capital demanded by investors is related to the level of risk anticipated by those investors compared to other investments in the marketplace, and so we conclude that an appropriate response to the FCC directives is to assess the level of risk faced by NYNEX in its provision of unbundled network elements (see, e.g., Exh. AT&T-9, at 5-6). That assessment, in turn, will be used to determine the appropriate methodology for estimating the cost of capital to be used in the TELRIC studies.

In carrying out our assessment of the level of risk faced by NYNEX in its provision of unbundled network elements, we want to clearly distinguish our task from the task of determining an allowed rate of return in a rate case. In that instance, we review the return for an entire company, based on a number of factors, like its current customer base, its range of services, and the statutory framework governing provisions of all of those services. Here, we are constructing a stand-alone forward-looking cost estimate for each of a specific set of services. The relative risk of the rest of the company or the company as a whole is not at issue, unless there is not a significant difference in the risk of the particular assets in question and that of the entire company (Tr. 8, at 99).

AT&T cites paragraph 702 of the Local Competition Order as imposing on NYNEX the burden of demonstrating with specificity that the business risks associated with providing unbundled network elements would justify a different risk-adjusted cost of capital from the current authorized rate of return (AT&T Initial Brief at 44). As noted, the FCC, later in that paragraph, permits states to adjust the costs of capital upon such demonstration by any party to

this proceeding, "without the commission conducting a 'rate of return or other rate-base proceeding'". The inclusion of this latter statement raises the question of what evidentiary standard is required for us to adopt a different rate of return from that currently authorized for NYNEX as a whole, whether in the state or the federal jurisdiction. We explore this question in the context of the positions set forth by the parties.

As AT&T notes, Dr. Vander Weide argued in favor of assuming a competitive market as the context for this analysis, but it denigrates Dr. Vander Weide's assertion, stating that NYNEX offers no evidence proving a competitive market exists, "either today or at any time in the future" (AT&T Initial Brief at 46). AT&T further asserts that NYNEX is "uniquely situated to have available to it relevant data concerning competitive inroads into its existing monopoly business" (id. at 45).

We find that AT&T mischaracterizes NYNEX's obligation here and, indeed, mischaracterizes which parties have the information that would prove future levels of competition. NYNEX is under no obligation to prove that there are "competitive inroads to its existing monopoly business." We are conducting a forward-looking cost study and in so doing are attempting to estimate an appropriate cost of capital in the marketplace that will develop upon the signing of the interconnection agreements. Dr. Vander Weide expressed this point concisely and well:

> [I]t seems to me that the assumption that the FCC had in mind when valuing the investment in the network on a going-forward basis was that it was a competitive-market assumption. Indeed the entire Telecommunications Act and the FCC order is designed to bring about competition in telecommunications. . . Well, it would certainly be inappropriate to use a cost of capital that is based on

> no competition or very little competition or a regulatory model of some type when one is using a competitive assumption when valuing the investment.

Tr. 8, at 102.

The competition experienced by NYNEX to date is simply not a relevant indicator of the broadly expanded competitive marketplace envisioned by the Act. As noted by Dr. Hubbard:

> Q. Are there not carriers today who are competing on a facilities-based basis with NYNEX?
> A. But not on the scale that would provide the kind of meaningful competition that the Act is trying to get.

Tr. 7, at 108.

As to future levels of competition, NYNEX can scarcely be expected to offer estimates of the level of facilities-based competition that will be provided by AT&T, MCI, Sprint, TCG, and others in that environment.

Likewise, AT&T's argument that NYNEX's growth projections prove that NYNEX "will continue to enjoy its monopoly status for the foreseeable future" is specious (AT&T Initial Brief at 46). The NYNEX forecast (even if accurate) simply reflects a growth in demand. It does not offer an indication of market share, the prime determinant of monopoly status.[3]

Rather than adopting AT&T's misplaced view on this issue and its mistaken assertion that NYNEX has the responsibility to prove the future existence of facilities-based competition in the Massachusetts telecommunications market, we turn to the record developed in this proceeding. Our aim is to produce a characterization of the relative risks faced by NYNEX in its provision of

---

[3] A similar argument could have been made upon the divestiture of AT&T in the early 1980s—that if AT&T had projected growth in long-distance usage, it would maintain a monopoly in long-distance service—but such an argument would also have been specious.

unbundled network elements. This, in turn, will inform our decision concerning the methodology to employ in estimating an appropriate cost of capital for the TELRIC studies.

Unbundled network elements are bottleneck facilities until competing carriers choose to bypass them by constructing their own facilities. It is clear that the Act and the Local Competition Order envision such bypass occurring. Indeed, the requirement to offer unbundled network elements, in addition to resold services, directly suggests that the Congress and the FCC understood that competing carriers will choose to construct facilities for portions of their networks. As noted by Mr. Montgomery, "That's the only way you can interpret what the FCC and in fact the Act require with respect to unbundling" (Tr. 6, at 29; see also Tr. 6, at 88; Tr. 7, at 108).

In this proceeding, the competing carriers have made it clear that they intend to use NYNEX's unbundled network elements to supplement the carriers' facilities where it is more economical to do so, but they have also stated a desire to move towards facilities-based competition. For example, Mr. Montgomery stated: "I know in the case of TCG that its philosophy and its business is oriented towards facilities-based competition" (Tr. 6, at 22). AT&T has a similar philosophy (Tr. 8, at 202-203). MCI has adopted a similar philosophy, as noted in its public statements:

> MCI is entering the local market and challenging the regional Bell companies with the same pioneering spirit it demonstrated when it took on AT&T for the right to offer long distance service over 25 years ago. ... MCI plans to offer local service over its own network facilities in 25 major U.S. cities by early 1997. MCI now provides facilities-based switched local service to business customers in 13 cities. . . [list includes Boston].

-42-

As discussed in Phase 3 of this proceeding, Brooks and AT&T have both requested and received permission to install remote switching modules in collocated space to take advantages of efficiencies of that equipment in the network. Those efficiencies include a reduction in leased capacity from NYNEX. Consolidated Arbitrations, D.P.U. 96-73/74, 96-75, 96-80/81, 96-94 (Phase 3 Order), at 32-36 (1996). The degree to which carriers will rely on NYNEX's unbundled network elements versus NYNEX's resold services versus the carriers' own facilities is not established on this record. Certainly, the carriers face financial constraints that limit building a totally facilities-based network (Tr. 6, at 24-25, Tr. 8, at 202-203); and therefore they must direct capital to the most attractive business opportunities. It is difficult, at best, to predict when and where those opportunities will arise. The experience of TCG and Brooks building facilities in the heavily travelled business market of downtown areas provides evidence of the desirability of carriers' owning facilities in such markets (see also, Tr. 6, at 88-89); there also reasons to believe that facilities-based competition could arrive in rural and suburban markets (Tr. 6, at 25-27).

Recognizing this uncertainty, we nonetheless conclude that the level of business risk faced by NYNEX with regard to the provision of unbundled network elements is higher than that which would apply to a monopoly bottleneck facility, a facility that, by definition, is not subject to bypass. A utility providing monopoly services certainly faces business risks, for example, the risk of declining revenues during an economic recession. In contrast, here, there is a risk of bypass of the company's own facilities, a risk that is separate and distinct from the risks facing a monopolist.

As Dr. Taylor explained:

> Q. If NYNEX were just in the business of providing competitive unbundled network elements, would investors view it any differently from any other company providing competitive unbundled network elements?
>
> A. The answer to that is probably no except for its historical reputation. But this is providing network services to large and sophisticated competitors, not to customers, so the fact that it's been here for 100 years and everyone knows the name doesn't count for anything.

Tr. 6, at 90.

An additional level of risk has been brought out in this proceeding. While NYNEX must provide other carriers with unbundled network elements -- either by using existing network capacity or by building new capacity -- those carriers are under no obligation to use those facilities for any specific contract term. The rates we set in this proceeding are posted rates for a circuit or a switching port per month. There is no contractual commitment by the competing carrier to use any given unbundled network element for more than a month. There is no termination liability proposed in this proceeding (Tr. 8, at 114-115, 204-206). In essence, NYNEX has an obligation to provide facilities, but the carriers have no obligation to take those facilities over all or even a significant portion of their useful economic lives (Tr. 6, at 85-86). This risk is aggravated further because the decreasing cost nature of the telecommunications industry means that unbundled network customers could be encouraged to become facilities-based providers because they, with their newer equipment, would have a cost advantage over the incumbent (Tr. 8, at 107; Exh. NYNEX-15, at 18).

It might be suggested that this does not present a business risk for NYNEX, in that its

own demand for network capacity will fill the capacity left behind by a carrier that built its own facilities. (Dr. Hubbard appears to make this claim (Exh. AT&T-9, at 20).) Such an assertion simply would not add up. If NYNEX installs and maintains sufficient network capacity to serve the projected needs of both it and its competitors, subtracting the latter after several months or years of usage does not cause the former to grow to fill the void. The problem is compounded because much of the network equipment is not fungible and therefore must remain in its installed location.

In a competitive market, investors viewing the provision of a speculative investment, like an office building or a "merchant" power plant, would demand a high return, certainly a return greater than that warranted for monopoly, bottleneck facilities (Tr. 8, at 114). We recognize that the provision of unbundled network elements differs from these examples which were posited by the arbitrator in this proceeding, in that, at least for some period of time, some carriers are certain to use some of the unbundled network elements. In the examples he mentioned, there is no assurance whatsoever that the given investment will ever be leased or sold. Thus, unbundled network elements might be viewed as a "hybrid" set of assets, having some of the characteristics of monopoly bottleneck facilities while also displaying some characteristics of speculative, unsecured investments.[4]

---

[4] The FCC has warned us to avoid the use of company-produced internal rates of return ("hurdle rates") on specific investments to estimate the appropriate cost of capital for unbundled network elements. Local Competition Order at ¶ 689. We want to make clear that we do not use such internal rates of return in this analysis. Instead, we present these examples to illustrate the features that would influence the way in which the capital markets might view the relative risks of providing unbundled network elements. We

(continued...)

We have reviewed the question of whether we might be assisted in determining the appropriate cost of capital for the TELRIC studies of unbundled network elements if we referred to the rate of return calculation last employed by the Department in reviewing NYNEX's retail rates, described by the FCC as a "starting point" for the instant proceeding. See NYNEX, D.P.U. 94-50, at 430-485 (1995). After all, our cost of capital decision there implicitly took into account our own intraLATA competition order, in which we determined that competition for telecommunications services would be permitted in Massachusetts. IntraLATA Competition, D.P.U. 1731 (1985). However, in that rate determination, we were establishing a rate of return for NYNEX as a whole, not for individual unbundled network elements. Further, while we had permitted competition, we had not established the pervasive requirements that have since been set forth in the Act. For example, we had not required NYNEX to provide resale of unbundled network elements on an unsecured month-to-month basis. Thus, the allowed cost of capital in that proceeding is not informative of the appropriate cost of capital for use in the TELRIC studies.

Likewise, the FCC's allowed interstate rate of return offers little value in the instant proceeding. Local Competition Order at ¶ 702. It, too, was established before passage of the Act and could not have incorporated the elements of risk that derive from the pervasive requirements

---

(...continued)

adopt, below, a market-based determination of the cost of capital for the TELRIC studies. In light of the FCC's advice, we find confusing AT&T's proposal that NYNEX's own internal cost of capital calculation should be regarded as establishing an absolute ceiling on any cost of capital estimate for NYNEX (AT&T Initial Brief at 47). If, as AT&T asserts, this internal cost of capital is not relevant, it is hard to see why it should represent a maximum.

that have since been set forth in the Act.

b. Cost of Equity

In this proceeding, we are offered two approaches to estimating the cost of equity for the TELRIC studies. The first, presented by AT&T, uses the telecommunication providers in the United States as the comparison group and performs discounted cash flow ("DCF") and capital asset pricing model ("CAPM") analyses based on that group (Exhs. AT&T-9, 11). The second approach, presented by NYNEX, is a DCF model that draws upon a group of industrial companies ("the S&P 400"), stating that these companies are representative of the business risks facing NYNEX in the provision of unbundled network elements (Exh. NYNEX-15).

We cannot, for the reasons set forth above, rely on AT&T's analyses. The analyses rely on a set of companies that, while similar in whole to NYNEX, do not fully reflect the specific risk factors inherent in the provision of unbundled network elements. In particular, in light of our finding above concerning the relative risk of supplying unbundled network elements, we conclude that Dr. Hubbard's testimony is unsupported when he states that the leasing of network facilities is less risky than the other lines of business in which telephone holding companies participate (Exh. AT&T-9, at 20). As Dr. Hubbard notes, 91 percent of NYNEX's revenues were associated with providing regulated local and toll telephone services, essentially on a monopoly basis. The remainder, 9 percent, are associated with other ventures (Exh. AT&T-9, at 19). We cannot conclude, based on this record, that this 91:9 split would also represent an appropriate characterization of the relative monopoly:competitive revenue-generating characteristics of the market for unbundled network services. As noted by Dr. Taylor, the large customers that AT&T

and MCI and TCG will seek to serve upon the onset of competition (i.e., when the interconnection agreements are finalized), using the carriers' own facilities in downtown Boston, represent a substantially larger portion of the revenues collected by NYNEX today (Tr. 6, at 89-90). This point, which was not disputed by any of the competing carriers in this proceeding, was also made by Dr. Vander Weide (Exh. NYNEX-15, at 16).

In contrast, we find merit in NYNEX's approach. Dr. Vander Weide created a DCF model based on the S&P 400. These companies represent a range of business risks, from retail to medical service to manufacturing. AT&T correctly notes that we have never accepted an assertion that it is appropriate to take a group of 400 companies and deem them to be "on average" comparable to a subject company (AT&T Initial Brief at 49). Here, though, we are not establishing a rate of return for NYNEX as a whole. We are choosing a cost of equity that is meant to represent the workings of a competitive market, a market that is in some respects characterized by some suppliers' market power (ability to control a large portion of the market) and in other respects characterized by the buyers' market power (i.e., ability not to purchase or to influence the purchase price).

There is not yet a competitive market for unbundled network services, but there will be one shortly. We need a surrogate to describe the risks of that to-be-developed market, and we choose to rely on one of the most liquid and well publicized markets, the stock market, whose performance is often measured by the S&P 400. It is a diverse market, representing a portfolio of companies and their incumbent risk. As such, we find that it presents a composite view of the risks of competitive organizations, against which it is reasonable to compare the likely risk of

building and leasing unbundled network elements.

We recognize that our approach here is quite different from that employed by us in determining the rate of return for NYNEX and other companies in our jurisdiction, but, as we have stated, our task is different. We seek to estimate the cost of equity for a service offering that does not yet exist in a marketplace that is about to come into existence. We recognize that our finding must be inherently qualitative, and we are aware of the possibility that the S&P 400 might be less risky or more risky than a company selling unbundled network elements. We have already acknowledged that, based on this record, we cannot precisely determine the degree of risk associated with offering unbundled network elements. We know it is more risky than the provision of monopoly services. We know it is less risky than speculative real estate or power plant projects. It has some characteristics of the two, in that, for common carriers who lack the capital or the ability to build facilities, it does provide an essential service. For other carriers, however, it offers a no-obligation option to use and later abandon, perhaps to preserve capital in the short run and then to spend it on those facilities that have a high financial priority.

In total, we see no systemic reason that the level of risk represented by the S&P 400 as a group should be biased either above or below that of an ILEC providing unbundled network elements.[5] Accordingly, we find that the comparison group employed by Dr. Vander Weide is of

---

[5] AT&T's assertions to the contrary are not on point (AT&T Initial Brief at 49-51). All of the points raised by AT&T refer to the overall risk of NYNEX as a corporation. We find no surprise, for example, in the fact that Bell Atlantic Corporation and NYNEX project that their merger will result in greater financial strength. (Indeed, we trust that their stockholders would expect such a result, one akin to that projected by MCI and British Telecommunications (RR-42)). That projection is not relevant to the question at

(continued...)

value in determining the appropriate cost of equity in the TELRIC studies.

We now turn to another criticism offered by AT&T of Dr. Vander Weide's model. A component of the DCF model is the growth assumption contained in that model. Dr. Vander Weide used a constant growth model, while Dr. Hubbard employed a three-stage growth model, in which the assumed growth rate declines over time. For the first five years Dr. Hubbard uses the same growth rate forecasts employed by Dr. Vander Weide; for the second stage, the next fifteen years, he assumes that the growth rate declines from the level of the first five years to the growth rate of the U.S. economy; and from the twentieth year forward, he assumes that the firm's growth rate equals the growth rate of the economy as a whole. Dr. Hubbard argues that Dr. Vander Weide's growth rate assumption, constant throughout the term of the study, results mathematically in any company with above-average growth ultimately consuming the entire U.S. economy (Exh. AT&T-10, at 7). Dr. Vander Weide agrees with the theory set forth by Dr. Hubbard, that in the long-term, the growth rate has to trend towards the growth rate in gross domestic product, but he further asserts that this has no impact on the DCF model, because dividends beyond 20 to 25 years have no impact on the price (Tr. 8, at 157). He further argues there is no support for the particular three stages used by Dr. Hubbard, and in particular, the idea that growth rates will reduce after five years. He cites Value Line, a financial publication, for the premise that growth rates for telecommunications firms would go up after five years (Tr. 8, at 158-159).

(...continued)
hand.

On this matter, we agree with Dr. Hubbard. The mathematical result of Dr. Vander Weide's analysis is uncontroverted and reasonable. Dr. Vander Weide's testimony concerning the Value Line forecast is not documented on the record, and, even if it were, does not address the underlying problem explained by Dr. Hubbard with regard to the model. Accordingly, NYNEX is directed to conduct its analysis in accordance with the three-stage growth methodology used by Dr. Hubbard.

c. Cost of Debt

The costs of debt assumed by NYNEX and AT&T are very close, 7.9 percent and 7.7 percent, respectively. NYNEX used the yield to maturity of Moody's AA-rated corporate bonds, while AT&T bases its cost of debt on the yield to maturity of NYNEX's outstanding debt. Given the narrow spread between these two estimates and the fact that even this small difference will be further reduced after it is weighted by the percentage of debt in the capital structure, we will not spend the time here to outline the methodological differences between the two approaches. Nor need we reach a policy determination as to which method is superior. We simply average the two and determine that 7.8 percent is an acceptable cost of debt for use in the TELRIC studies.

d. Capital Structure

The arguments of the parties concerning capital structure parallel those presented with regard to the cost of equity. Dr. Vander Weide used the average market-based percentages of debt and equity in the capital structures of the S&P 400 because he views this as consistent with the FCC mandate that network element pricing be based on a forward-looking competitive market model. He states that the average market-based capital structure of the S&P 400 is a good proxy

for the capital structure of competitive firms. This produces a capital structure of 23.51 percent debt and 76.49 percent equity (Exh. NYNEX-15). Dr. Hubbard asserts that, to the extent the unbundled network element "firm" is less risky than the telephone holding company, it is likely to have a larger optimal use of debt financing in its long-term capital structure. He also says that telephone companies have less cyclical risk than industrial companies generally, and therefore they may optimally use more debt in their capital structure (Exh. AT&T-10, at 11). He presents market-based and book-based debt:equity ratios for NYNEX and for a sample of telephone holding companies, and then determines that a capital structure of 45 percent debt and 55 percent equity is reasonable (Exh. AT&T-9).

We have addressed this issue at length above, in our general discussion and in our determination of an appropriate cost of equity. We agree with Dr. Vander Weide that it would be inconsistent to use forward-looking competitive assumptions in the investment and expense components of a TELRIC study, but historical accounting-based capital structures in the cost of capital component (Exh. NYNEX-15, at 21). As in the case of the cost of equity determination, the S&P 400 offers a good proxy for the "firm" providing competitive unbundled network elements under the conditions set forth in the Act and the Local Competition Order. Accordingly, we accept NYNEX's proposal with regard to the appropriate weighting of debt and equity in the TELRIC studies.

C. Depreciation Rates

The construction of a forward-looking cost study for unbundled network elements requires a determination of the appropriate depreciation rates to apply to the various categories of

telecommunications plant. Local Competition Order at ¶ 702. The chart below summarizes, for the major plant accounts, the projection lives used by NYNEX in its TELRIC study, by MCI and AT&T in the Hatfield model, and the lives currently prescribed for NYNEX in Massachusetts by the FCC. The FCC prescription was most recently conducted in May, 1996 (AT&T Initial Brief at 55).

Projection Lives (Years)

Account	NYNEX	Hatfield	FCC
ESS Digital	10	14.3	15
Circuit Digital	8	10	11
Aerial Cable (metal)	17	20	22
Und. Cable (metal)	15	20	25
Buried Cable (metal)	17	20	23
Fiber Cable	20	20	25

Neither NYNEX nor AT&T presented witnesses who were involved in the determination of the depreciation lives used in their cost studies. Dr. Vanston, on behalf of NYNEX, and Mr. Lee, on behalf of AT&T, offered their opinions on the reasonableness of the economic lives that were presented to them (Exhs. NYNEX 13, 14 and unmarked AT&T Exhibit dated October 11, 1996). In summary, NYNEX contends that the current regulatorily-determined depreciation lives are too long in light of the pace of technological innovation that will occur in the

telecommunications industry once full competition begins (NYNEX Initial Brief at 42-45). AT&T, on the other hand, argues that the FCC has been applying a forward-looking methodology in its determination of depreciation lives for regulated telephone companies for a number of years. This point is also made by the Attorney General. AT&T concludes by stating that the lives reflected in the Hatfield model, which are generally consistent with the current FCC-prescribed lives for NYNEX, are appropriate for TELRIC purposes. The Attorney General argues that the FCC lives, themselves, should be used (AT&T Initial Brief at 54-63; Attorney General Initial Brief at 8-12).

There is not sufficient time in an arbitration proceeding of this sort to conduct a full review of the appropriate depreciation rates for the TELRIC studies. Fortunately, that is not required here. As noted by Mr. Lee, the FCC's represcription process is based on a forward-looking orientation, including current technological developments and trends. He notes that this has been made evident in increasing depreciation reserve levels for NYNEX. He also states that the FCC projection lives result in a composite 7.4 percent depreciation rate, despite an average retirement rate of only 3.3 percent. This, he asserts, is a clear indication that the FCC's projection lives are forward-looking, because, if it were using a historical approach, the composite rate would be in the 3 to 4 percent range (AT&T Unmarked Exh. at 6-4).

Under the terms of the Local Competition Order, it is NYNEX's burden to prove the reasonableness of its proposed depreciation rates. Dr. Vanston's testimony does not effectively rebut Mr. Lee's characterization of the FCC process, and, although he has offered general opinions about the degree of technological change that might occur in the industry, he has

presented no NYNEX-specific analysis that might cause us to think that the FCC lives are not appropriate.[6]

We find, based on this record, that the projection lives prescribed by the FCC in its last represcription of NYNEX's depreciation rates are the kind of forward-looking projection lives required in a TELRIC study. Accordingly, as suggested by the Attorney General, we direct that these lives, rather than those used in either the NYNEX model or the Hatfield model, be incorporated into NYNEX's compliance filing when calculating the rates for unbundled network elements using the NYNEX TELRIC model.

D. The Calculation of Forward-Looking Joint and Common Costs

The FCC has directed that a reasonable allocation of forward-looking common costs shall be included in the TELRIC studies. Local Competition Order at ¶ 682. Some of these costs, "joint costs," are directly attributable to specific unbundled elements. Others are more general overhead expenses of the firm. Local Competition Order at ¶ 676. The FCC directed that "relevant common costs do not include billing, marketing, and other costs attributable to the provision of retail service." Local Competition Order at ¶ 694.

1. Retail-Related Costs

AT&T argues that NYNEX's calculation of joint and common costs is flawed. First, it states that NYNEX has improperly included retailing costs in the TELRIC study, restating a number of its arguments made in Phase 2 of this proceeding (the phase dealing with the avoided

---

[6] We will not present here a detailed review of Mr. Vanston's testimony and instead defer to AT&T's rather persuasive characterization of the points made by him (AT&T Initial Brief at 56-61.)

cost methodology used to determine the wholesale discount for resold services).

NYNEX says its approach with regard to retail-related costs is consistent with that used in Phase 2 and relies on its arguments set forth in that part of the proceeding. It states that it would make any appropriate adjustments to joint and common costs to reflect the Department's findings with respect to retail avoided costs.

We need not address this issue in detail here, as we have made findings with regard to retail-related costs in our Order on Phase 2. Consolidated Arbitrations, D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 (Phase 2) (1996). NYNEX is therefore directed to modify its TELRIC study to exclude those expenses found in Phase 2 to be related to the provision of retail service.

2. Calculation of the Cost Factors

a. Positions of the Parties

AT&T argues that NYNEX's calculation of the joint and common cost factors is not a forward-looking methodology. It notes that the company simply used 1995 booked expenses, allocated those expenses to investment accounts, and created a ratio of those expenses to the investments in each account. AT&T disputes NYNEX's use of a fixed allocator to divide costs among the various investment accounts, stating that a more appropriate allocator would reduce the share of common costs allocated to the "critical bottleneck elements, such as the local loop". (AT&T Initial Brief at 37). AT&T also argues that there is no evidence that the historical relationships derived from the 1995 expense:investment ratios are the appropriate ratios to be applied to the forward-looking TELRIC network technologies and facilities. AT&T argues that this problem is aggravated because the TELRIC investment amounts far exceed NYNEX's

embedded switching investment, resulting in expenses being twice as high in absolute dollars.

AT&T also says that NYNEX has failed to recognize future efficiency gains and cost savings. It cites Mr. Globerson's testimony in support of the proposition that NYNEX has the highest cost and is therefore the least efficient of the regional Bell operating companies. It argues that these figures indicate that NYNEX's historical performance is not reflective of what it should achieve in a least cost, forward-looking TELRIC world, when one considers technological improvements and competitive forces (id. at 39).

NYNEX defends it cost factors by stating that they reflect the actual costs incurred by NYNEX and that the allocation of these costs across the investment accounts is reasonable for a TELRIC study. It argues that the company has recently undergone a comprehensive investigation of its costs by the Department in D.P.U. 94-50.

b. Analysis and Findings

The parties agree that the joint and common expense factors should be presented as a ratio of expenses to investments, but they disagree as to how a forward-looking ratio should be calculated. NYNEX uses current expenses and allocates them equally across investment accounts. AT&T would allocate these costs differentially among the various TELRIC elements, and, it would also use a projection of expenses that reflected increasing efficiency in the company's operations.

On the first point, although the FCC has stated that a differential allocation among accounts could be appropriate, we have no record here to support anything other than an equal allocation. Accordingly, we find that NYNEX's equal allocation approach is acceptable. In so

doing, we note in passing that AT&T's statement that the TELRIC model has doubled NYNEX embedded investment in switching is not supported on the record. In fact, the two numbers are remarkably close, separated by only $300 million out of over $6 billion (RR-44). The second point raises a more interesting question of analysis. We believe that AT&T is correct that it is reasonable to assume that NYNEX, upon the onset of competition, will take actions to reduce its joint and common costs. It has already begun this process (see, e.g., Exhs. AT&T-14; 27, at 17; 28, at 3). We enter here a realm of some speculation, but we find that it is inconceivable that NYNEX will maintain its current level of expenses, given its relative cost position in the country and the demands of a competitive marketplace. As Mr. Globerson notes, NYNEX currently has among the highest operating expenses per line of service in the country (Exh. AT&T-16, at 14). This is incompatible with a company that seeks to be a vigorous competitor.

This issue is not a question of the reasonableness of NYNEX's current expenses for retail ratemaking, as implied by NYNEX's argument that the company's rates were recently reviewed by the Department. It is a question of the appropriate level of expenses to assume for a forward-looking cost study.[7]

We find that it is appropriate and necessary, in constructing the kind of forward-looking cost study envisioned by the FCC, to scale down NYNEX's 1995 expenses to account for likely efficiency improvements in the face of improved technology utilization and competitive forces. In

---

[7] Indeed, using the NYNEX argument on this issue, we would have been correct to use the company's currently approved retail rate of return instead of the cost of capital we have found appropriate in this Order. That, as we have discussed above, is also not appropriate for the TELRIC forward-looking study.

doing so, we will assume that NYNEX, to compete effectively, will have to incur a level of expenses at or near the average of its competitors. We do not have this information for the future for all of NYNEX's competitors, but we do have information about NYNEX's peers today, and we will use that as a surrogate. Mr. Globerson's exhibit presents the operating exenses per line in service for 1995 for ten of the Bell operating companies (Exh. AT&T-16 at Part LG-2, page 2). We have constructed a ratio of NYNEX's expense level to the average of the entire group, excluding NYNEX. That ratio is: 430/[(456 + 399 + 385 + 342 + 338 + 319 + 317 + 310 +296)/9], or 1.22. We find that this ratio presents us with a useful surrogate of the extent to which NYNEX would have to reduce its expenses to be an effective competitor in a TELRIC network environment. (In fact, since all of the regional operating companies will be undergoing similar pressures to reduce costs, it is likely that the ratio is conservative.) We therefore direct NYNEX, in recalculating its TELRIC study, to scale down its joint and common expenses by dividing them by this factor before allocating those expenses to the various investment accounts used in unbundled element cost calculation.

VI. The Choice of Geographic Zones for Deaveraging of Costs

The FCC has provided clear guidance with respect to the issue of geographic deaveraging of rates. We repeat that here:

> The 1996 Act mandates that rates for interconnection and unbundled elements be "based on the cost . . . of providing the interconnection of network elements." We agree with most parties that deaveraged rates more closely reflect the actual costs of providing interconnection and unbundled elements. Thus, we conclude that rates for interconnection and unbundled elements must be geographically deaveraged.

> . . . We conclude that three zones are presumptively sufficient to reflect geographic cost differences in setting rates for interconnection and unbundled elements, and that states may, but need not, use these existing density-related rate zones. Where such systems are not in existence, states shall create a minimum of three cost-related rate zones to implement deaveraged rates for interconnection and unbundled elements. A state may establish more than three zones where cost differences in geographic regions are such that it finds that additional zones are needed to adequately reflect the costs of interconnection and access to unbundled elements.

Local Competition Order at ¶¶ 764-765, footnotes omitted.

A. Positions of the Parties

The parties to this case agree that the use of customer density, i.e., loops per square mile, is an appropriate indicator of the underlying costs of providing interconnection and unbundled network elements. They disagree, however, on the appropriate number of density zones for Massachusetts. NYNEX states that three zones -- urban, suburban, and rural -- are appropriate for geographical deaveraging of costs. The urban zone is characterized by densities of over 1500 loops per square mile, the suburban zone contains areas with densities of 151 to 1500 loops per square mile, and the rural zone contains wire centers serving areas of under 151 loops per square mile.

AT&T and MCI state that four zones more accurately reflects the distribution of costs in the state, and they would separate the urban zone into a downtown Boston Central Exchange zone and a zone covering other urban areas. They note that the four most densely served central exchange wire centers -- Harrison, Back Bay, Franklin, and Bowdoin -- have densities that set them far apart from the next highest in the urban zone. They assert that the cost characteristics of this zone are sufficiently different that the TELRIC study should disaggregate this group from the rest of the urban zone.

NYNEX argues that, in light of the stay of the FCC's order, the Department should not deaverage

the rates for unbundled network elements, regardless of the cost differences among the three or four density zones. It states that deaveraging the rates for unbundled network elements without a corresponding deaveraging of the company's retail rates for services that use the same elements will not promote efficient competition. Rather, argues NYNEX, the effect will be a "classic example of uneconomic bypass," as competitors gain a price advantage over NYNEX's retail rates in some areas solely because the company's retail services have been priced by the Department on a statewide average bases and have not been priced to reflect cost differences among exchanges (NYNEX Initial Brief at 4-6).

In response, MCI argues that this arbitration is being guided by the FCC pricing rules and that those rules specifically require geographic deaveraging into at least three density zones and that the evidence in this proceeding supports four zones. It further argues that the Act itself envisions geographic deaveraging. It suggests that the appropriate remedy to the bypass issue raised by NYNEX is for NYNEX to petition the Department for changes in its retail rate structure (MCI Reply Brief at 7-12).

AT&T joins MCI in many of its arguments and further notes that the parties to this case agreed at the outset that the FCC pricing rules would be determinative of the rates set in this proceeding. It accuses NYNEX of wanting to "pick and choose" among the FCC requirements to support its commercial interests. AT&T strongly supports the use of four zones, in light of the evidence presented in the proceeding that the cost characteristics of the Boston Central Exchange are very different from the rest of the urban density zone (AT&T Reply Brief at 1-6).

B. Analysis and Findings

The following facts are in evidence and are agreed upon by the parties: The costs of unbundled network elements are properly characterized by reference to the density, in loops per square mile, of the

NYNEX wire centers (see, e.g., Tr. 8, at 183). There is a substantial difference in loop density in the Boston Central Exchange wire centers (Harrison, Back Bay, Franklin, and Bowdoin) compared to the rest of the urban zone, or even compared to the next most densely configured wire centers, Cambridge, Somerville, and South Boston (Tr. 8, at 190-191; RR-15). When the NYNEX TELRIC study is run with the Boston Central Exchange wire centers separated from the rest of the urban zone, there is a significant difference in the cost produced by the NYNEX TELRIC model between that exchange and the rest of the urban zone and with the costs for the urban zone that are produced in the three-density-zone TELRIC study (RR-23; compare Exh. NYNEX-11, Part A, pages 1-2). A summary of some of those differences is presented here:

NYNEX TELRIC Cost Study Results (cost per month)

Loop Item	Combined Urban	Boston Exchange	Other Urban
Two-Wire Analog Voice Grade	$13.53	$9.22	$16.98
Four-Wire Analog Voice Grade	$46.87	$38.38	$53.01
Two-Wire Conditioned Digital	$29.60	$24.65	$33.39
Four-Wire Conditioned Digital	$111.26	$94.66	$121.60

We cannot ignore these differences. Indeed, the difference in loop costs between the Boston Exchange and the other urban zone is wider in all respects than the cost difference between NYNEX's original combined urban zone and the suburban zone in its TELRIC study (Exh. NYNEX-11, Part A, pages 1-2). We believe it would be contradictory to the language and the intent of the Act and Local

Competition Order to ignore the cost differences between the Boston Exchange wire centers and the rest of the urban wire centers. Mr. Globerson presented persuasive reasons as to why a failure to deaverage rates into the four density zones would inhibit competition in the state, particularly in the highly attractive Boston market (Exh. AT&T-16, at 4-5; Tr. 8, at 181-182).

While we are sympathetic to the concerns raised by NYNEX with regard to the different rate design standard currently applied to retail rates, that is a matter for the company to pursue in another forum at the Department. AT&T and MCI are correct that, insofar as this proceeding is concerned, the parties agreed that the Act and the FCC regulations would be in force, and NYNEX may not now make policy arguments as to why the provisions of the federal rules should be held in abeyance. Accordingly, NYNEX is directed to create four density zones, as described above, when it recalculates the rates for unbundled network elements using its TELRIC model.

VII. Service Order Pricing

NYNEX states that it will incur substantial development costs to introduce and maintain electronic interfaces through which the company and the resellers will exchange information concerning service order, trouble reporting and testing, and billing information. While NYNEX has provided an estimate of the cost onsets associated with resale, it has not yet quantified the costs associated with developing other systems and capabilities that will be required for unbundled elements and requests for branding. NYNEX states that the record in this proceeding concerning service order pricing and resale cost onsets is incomplete. Accordingly, it is not proposing a specific set of charges. It suggests that the Department review these issues, and the issues of whether NYNEX should be allowed to recover its associated costs and if so, from whom is NYNEX allowed to recover those costs when the NYNEX later comes forward with a specific

proposal that contains full support for the proposed rates (NYNEX Initial Brief at 70-72).

AT&T agrees, but it elaborates further by stating that NYNEX should not be permitted, in any event, to impose charges on resellers to recover the costs associated with the development of the electronic interfaces that will allow NYNEX and resellers to exchange service orders, trouble reporting, testing information and billing information. These are costs, states AT&T, that implement a fundamental aspect of the network restructuring that NYNEX is obligated to accomplish under federal law and as a condition of entry in the interLATA market (AT&T Initial Brief at 73). MCI's comments parallel those of AT&T. It agrees that NYNEX has presented no cost justification for any service order prices. In their absence, says MCI, no substantial charges may be imposed (MCI Initial Brief at 29).

The parties have agreed that there is an insufficient record in this proceeding to determine this issue. Accordingly, no rates for service charges and cost onsets shall be included in the interconnection agreements until such time as the parties have agreed on such charges or the Department has arbitrated the applicability and design of such charges.

VIII. Prices for Collocation

The parties agree that the prices for collocation should be established on the basis of a TELRIC study. NYNEX states that it expects to prepare such a study by April 1, 1997. In the meantime, it suggests that its existing D.P.U. 15 tariff should apply, as the existing rates are cost based and appropriate for use on an interim basis. MCI suggests that the proposed continuation of the tariffed rates should be disallowed. AT&T suggests that the current rates be reduced by twenty percent.

As NYNEX says, there is no support for AT&T's proposal, and we agree that a reasonable course of action is to maintain the existing collocation rates, pending review of collocation costs and prices in a

TELRIC study. Given our guidance concerning TELRIC studies in this order, however, we find that NYNEX's April 1, 1997 proposed filing date is unnecessarily delayed. The company is directed to file its collocation cost study within sixty days of the date of this Order.

IX. The Mutual Compensation Rate

A. Positions of the Parties

Mutual compensation refers to the means by which one exchange carrier compensates another exchange carrier for terminating traffic on that carrier's network. NYNEX believes that the rates set in this proceeding for unbundled elements, such as local and tandem switching, should be the basis upon which carriers compensate each other for terminating traffic.

In contrast, AT&T advocates a bill and keep arrangement subject to monitoring. It says that bill and keep will reduce the billing and collection costs of NYNEX and the other carriers and reduce a potential barrier to entry. In response to NYNEX's concerns about a lack of balance in providing interconnection to competitive carriers, AT&T states that this asymmetry is hypothetical and unlikely given its plans to be a full service provider of both business and residential services. Accordingly, AT&T supports adopting bill and keep and maintaining it as long as usage between it and NYNEX remain in reasonable balance. If, upon monitoring traffic flows for a year, it is apparent that there is a significant imbalance, an adjustment in the process can be made.

MCI says that the compensation rate should be based on the tandem, rather than end office rate, because all of the ILEC's traffic will terminate at a competitor's switch that is equivalent to a tandem switch.

TCG recommends that compensation be based on a long-run incremental costs ("LRIC") rather

than on TELRIC costs, since the Department established these rates in the past as a floor for NYNEX's competitive offerings. It asserts that, if NYNEX prices services to TCG on a TELRIC basis, but sets rates for its own customers on a LRIC basis, TCG will be caught in a price squeeze. TCG also argues that each carrier should have the option of compensating the other on a flat rate basis, utilizing a flat monthly fee for a DS-1 level of capacity regardless of the actual number of minutes sent. The flat rate charges, it asserts, should be based upon an assumed use of 120,000 minutes per month multiplied by the applicable per minute rate for end offices or tandems. TCG, like MCI, asserts that it should be entitled to receive the tandem rate for calls terminating on its network. It describes its switch as the functional equivalent of a NYNEX tandem.

Sprint states that compensation should be based on the TELRIC methodology established in this proceeding.

B. Analysis and Findings

We discuss three issues: (1) whether the mutual compensation rate should be based on the TELRIC results from this proceeding or a bill and keep arrangement; (2) whether a flat rate option should be offered to carriers; and (3) whether the rate collected by a competing carrier should be based on a tandem or an end-office rate.

On the first issue, if we could be assured that calling was roughly symmetrical, we would adopt the bill and keep arrangement. However, we cannot be so assured, and so we will not require it. Parties are free, however, to agree between themselves on such an arrangement, if they deem it in their interest. Without such an agreement, the TELRIC rates developed in this proceeding shall apply.

On the second issue, we find merit in TCG's suggestion that carriers be offered the option of

compensating each other on a flat rate basis. It is not at all inconsistent with the principles of the TELRIC methodology to buy and sell capacity, rather than usage. The basis for that capacity charge, however, is less clear on this record. TCG proposes a rate based on 120,000 minutes of use, the average number of peak minutes of traffic exchanged during a month. NYNEX, however, argues that TCG's assumption is wrong. It suggests instead that "any arrangement to utilize a flat-rate equivalent charge should be accompanied by a mechanism that regularly reviews the actual usage on the facilities and thus allows the parties either to select a per-minute rate if the usage is below the flat-rate equivalent or to adjust the rate upward if actual usage is found to exceed the standard" (NYNEX Initial Brief at 73).

NYNEX's recommendation misstates the purpose of a flat-rate charge. It is not intended, on a going forward basis, to be reconciled with actual usage. It is meant to reflect a different definition of cost incurrence, one based on capacity rather than usage. Such a charge is helpful in this situation in that it avoids the need to measure and bill for usage (Tr. 6, at 13). As noted by AT&T, that measurement and billing cost in itself can form a barrier to entry in the early days of competition (AT&T Initial Brief at 76).

As to the specific basis for the capacity charge, Mr. Montgomery pointed out that the FCC proxy rate of 9,000 minutes per DS-0, which NYNEX advocates, is applied to trunking between a local exchange carrier and a long distance carrier, and it is a surrogate for interoffice and local transport in the access arena. He asserts that it is not appropriate to use as a proxy for the TCG to NYNEX trunk because TCG would be spreading its traffic out over multiple NYNEX offices. Thus, the trunk loading will be different from that which would occur if NYNEX were connecting two of its own offices or if a long distance carrier were connecting directly to a NYNEX end office (Tr. 6, at 10-12).

We find Mr. Montgomery's analysis persuasive and accordingly permit the type of flat-rate pricing

he advocates, as adjusted for the actual TELRIC results produced in this proceeding.

On the final issue, we find that the carriers' switch should be viewed as a tandem. As noted by MCI and TCG, it performs the functional equivalent of the NYNEX tandem. The FCC has reached the same conclusion, finding that "where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate." Section 51.711(a)(3).

X. E911 Port Charges

TCG argues that because NYNEX already recovers it E911 costs through a separate statutory funding mechanism and has failed to provide any cost justification for its proposed charges, a per call rate should be established for terminating E911 calls that originate from TCG customers. NYNEX argues that this position is unreasonable. It states that, absent an appropriate charge to TCG for helping to support the overall E911 system, the costs of provisioning that system for all local exchange companies in Massachusetts would be borne only by the customers who elect to purchase their services from NYNEX.

We agree with NYNEX. Along with the benefit of access to Massachusetts customers, as provided in the Act, carriers also have a responsibility to help support the costs of the E911 system. Otherwise, as suggested by NYNEX, only its customers would bear those costs.

NYNEX suggests that, until it performs a cost and rate study for E911, there are two alternatives available. The first is to use the rates other carriers are paying under existing interconnection agreements. The second is for the company to develop a cost per line based on its cost of provisioning E911 service in the state, as reported to the Department.

We find that the second alternative is preferable. It allocates the E911 costs in proportion to the number of telephone numbers each carrier has in the E911 database. Since it can be assumed that the customer at the end of any line has an equal likelihood of needing access to this emergency service, this is a fair apportionment of these costs.[8]

XI. ORDER

After notice, hearing and consideration, it is

ORDERED: That the issues under consideration in this Phase 4 be determined as set forth above; and it is

FURTHER ORDERED: That New England Telephone and Telegraph Company, d/b/a NYNEX shall determine the cost of unbundled network elements based on the findings in this Order and submit those calculations, along with supporting documentation, in a compliance filing, to be filed with the Department within fourteen days of the date of this Order; and it is

FURTHER ORDERED: That the parties incorporate these determinations into a final agreement, setting forth both negotiated and arbitrated terms and conditions, to be filed with the Department pursuant to the Section 252(e)(1) of the Act, by January 10, 1997; and it is

---

[8] However, Teleport will only be able to recover its portion of E911 costs in the same manner as NYNEX when it provides local exchange service to over 1,000 subscribers. Therefore, Teleport is only required to contribute to E911 network costs when it reaches that penetration level. St. 1990, c. 291 sec. 7; G.L. c. 166 §15E; G.L. c. 159 §§ 19, 19A.

FURTHER ORDERED: That the parties comply with all other directives contained herein.

By Order of the Department,

John B. Howe, Chairman

Janet Gail Besser, Commissioner

The Commission concludes that Focal should not be required to establish a POI within 15 miles of the rate center for any NXX code that Focal uses to provide FXX service. If such a requirement were adopted, Focal could be required to construct or lease interconnection facilities, regardless of whether the interconnection was warranted by overall traffic volumes. Ameritech's proposal is not required by federal or state law. The Commission does not accept the "free ride" argument of Ameritech for the reasons provided by Focal.

5. Resolved

6. Resolved

7. Should Ameritech notify Focal prior to making service-affecting changes to the components of an already provisioned xDSL loop? (Section 9.5.6)

a. Positions of the Parties

Ameritech argues that it must maintain the unfettered opportunity to service and repair xDSL ("digital subscriber line") loops that are leased by Focal. Ameritech notes that the loops are only leased to Focal and that Ameritech continues to own the loops and with continuing ownership, the maintenance responsibility. Ameritech argues that it would be unfair to saddle it with the maintenance responsibility, while limiting its ability to perform those duties by imposing a notice requirement. Ameritech also questions what effect a notice requirement would have because Focal can not preclude Ameritech from performing the required maintenance and repairs.

In addition, Ameritech argues that the proposed notice requirement would be inordinately costly because it would result in large-scale changes to Ameritech's current maintenance procedures. The most onerous burden, according to Ameritech, would be the necessity of establishing teams to determine whether a loop is being used by another carrier, which carrier is using the loop, and contacting the carrier's representative, during which time the Ameritech field technician would be forced to wait for confirmation that notice had been given. Finally, Ameritech notes that its interconnection agreements require the non-discriminatory treatment of all interconnecting carriers, which Ameritech accomplishes by assuring that its field technicians are blind to the carrier to whom a particular loop is leased. Ameritech argues that branding loops would give potential rise to claims of discrimination because technicians would know in advance the party that was using the loop.

Focal argues that, because many alterations to an xDSL loop (particularly the installation of load coils or bridge taps) may serve to degrade service, Focal should be notified in advance of what Ameritech is proposing to do. Focal points to 47 C.F.R. Sec. 51.325, which requires public notice of any network changes that would either

To: Penny Sumpter
From: Candy Finley
15 pages

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. P-582, SUB 6

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Petition by ICG Telecom Group, Inc. For Arbitration of Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	)	ORDER RULING ON OBJECTIONS, REQUEST FOR CLARIFICATION, RECONSIDERATION, AND COMPOSITE AGREEMENT

BEFORE: Jo Anne Sanford, Chair; and Commissioners Robert V. Owens, Jr. and Sam J. Ervin, IV

BY THE COMMISSION: On November 4, 1999, the Commission entered its Recommended Arbitration Order (RAO) in this docket. As part of that Order, the Commission made the following

FINDINGS OF FACT

1. The parties should, as an interim inter-carrier compensation mechanism, pay reciprocal compensation for dial-up calls to Internet Service Providers (ISPs) at the rate the parties have agreed upon for reciprocal compensation for local traffic and as finally determined by this Order, subject to true-up at such time as the Commission has ruled pursuant to future Federal Communications Commission (FCC) consideration of this matter.

2. ICG Telecom Group, Inc.'s (ICG's) Charlotte switch serves an area comparable to that served by BellSouth Telecommunications, Inc.'s (BellSouth's) Charlotte tandem switch and ICG's switch also provides the same functionality as that provided by BellSouth's tandem switch. For reciprocal compensation purposes, ICG is entitled to compensation at the tandem interconnection rate (in addition to the other appropriate rates) where its switch serves a geographic area comparable to that served by BellSouth's tandem switch.

3. The Commission declines to decide at this time whether BellSouth should be required to commit to provisioning the requisite network buildout and necessary support. The Commission encourages BellSouth and ICG to continue to negotiate on this issue. Further, the Commission notes that since a similar provision is found in BellSouth's

03-01-00 P05:44 IN

Revised Statement of Generally Available Terms (SGAT) and at least one interconnection agreement, it would appear reasonable for a similar provision to be voluntarily included in the BellSouth/ICG interconnection agreement.

4. The issue of performance measurements and liquidated damages has been, in essence, withdrawn from the arbitration and accordingly is not in need of resolution in this docket. Further, the Commission will create a new docket, Docket No. P-100, Sub 133k, and issue an Order in that docket establishing the generic docket and requesting that the industry, the Public Staff, the Attorney General, and any other interested parties form a Task Force to attempt to agree on all potential issues concerning performance measurements and enforcement mechanisms. Further, the Commission will issue an Order in Docket No. P-100, Sub 133l (AT&T's Petition for Third-Party Testing) stating that the Commission is investigating performance measurements in a generic docket as a first step, but will keep the third-party testing docket open for future consideration.

On December 6, 1999, BellSouth filed its Objections and Request for Clarification and Reconsideration with an additional letter filed on December 14, 1999, correcting the citations referenced in its Objections and Request for Clarification and Reconsideration. BellSouth stated in its Objections and Request for Clarification and Reconsideration that it seeks clarification and reconsideration concerning: (1) the interim inter-carrier compensation plan adopted by the Commission for ISP traffic; and (2) the Commission's determination that ICG is entitled to reciprocal compensation at BellSouth's tandem interconnection rate. BellSouth stated that it seeks clarification of the RAO on two points. First, BellSouth stated that it desires confirmation that any compensation paid pursuant to the interim inter-carrier compensation plan will be trued-up retroactively to the effective date of the Interconnection Agreement resulting from this Arbitration in accordance with the mechanism established by the FCC and the Notice of Proposed Rulemaking (CC Docket 99-68). Second, BellSouth stated that it seeks clarification that the true-up will be triggered, and based on, an effective order by the FCC in CC Docket 99-68 which ensures the most expeditious resolution of this issue for all competing local providers (CLPs) and incumbent local exchange companies (ILECs) operating under the Commission's interim inter-carrier compensation plan. Finally, BellSouth requested the Commission to reconsider its position on the interim inter-carrier compensation rates for ISP-bound traffic and consider an alternative for the payment of those rates and to reconsider its conclusion that ICG is entitled to reciprocal compensation at the tandem interconnection rate.

On December 14, 1999, ICG filed a letter confirming its intentions to file on or before December 21, 1999, a response to BellSouth's Objections and Request for Clarification and Reconsideration.

On December 22, 1999, ICG filed its Opposition to BellSouth's Objections and Request for Clarification and Reconsideration. ICG maintained that BellSouth's filing is nothing more than a rehash of arguments already considered and rejected by the Commission. ICG further maintained that BellSouth's request for clarification is unclear. ICG concluded that neither of the requested clarifications is in any way necessary.

On January 3, 2000, the Public Staff filed its Response to Request for Reconsideration. The Public Staff stated that the single issue it wished to address concerned whether ICG should be compensated for tandem switching. The Public Staff stated that it did not address this issue in its Proposed Order in this docket, however, it now believes that the Commission should reconsider and reverse its finding on this issue on the grounds that ICG failed to demonstrate that its switch provides the tandem function in terminating a call delivered to it by the LEC.

On January 10, 2000, ICG filed its Reply to the Public Staff's Response. ICG maintained that the Commission correctly concluded that FCC Rule 51.117 provides a single criterion for tandem rate eligibility and that though not required, the record demonstrates that ICG's switch functions as a tandem. ICG recommended that the Commission deny BellSouth's Request for Reconsideration.

On January 20, 2000, the Commission issued an Order Regarding Maps. The Commission required ICG and BellSouth to submit as late-filed exhibits a map showing ICG's network with relevant switches in North Carolina overlaid against the geographic area which BellSouth's tandem switch serves and the number of BellSouth central offices ICG is presently collocated in within North Carolina by no later than January 23, 2000.

On January 20, 2000, BellSouth filed the Final Order of the Florida Public Service Commission in its ICG/BellSouth arbitration docket.

On February 7, 2000, BellSouth filed its maps in response to the Commission's January 10, 2000 Order. ICG also filed its maps in response to the Order on February 7, 2000.

On February 14, 2000, ICG filed a Notice of Supplemental Authority which included decisions of the Alabama and Georgia Public Service Commissions.

On February 14, 2000, ICG filed a letter to protest the letter filed by BellSouth with its maps stating that BellSouth used its transmittal letter as an opportunity to present its arguments on the tandem rate eligibility issue.

Discussions and Commission conclusions regarding the issues raised by BellSouth in its Objections and Request for Clarification and Reconsideration follow. These matters are addressed below by reference to the specific Findings of Fact which coincide with

those findings set forth in the Commission Order entered in this docket on November 4, 1999, which are the subject of said Objections and Request for Clarification and Reconsideration.

FINDING OF FACT NO. 1: Until the FCC adopts a rule with prospective application, should dial-up calls to ISPs be treated as if they were local calls for the purposes of reciprocal compensation?

INITIAL COMMISSION DECISION

The Commission concluded that the parties should, as an interim inter-carrier compensation mechanism, pay reciprocal compensation for dial-up calls to ISPs at the rate the parties have agreed upon for reciprocal compensation for local traffic and as finally determined by the Commission's Order in this docket, subject to true-up at such time as the Commission has ruled pursuant to future FCC consideration of this matter.

COMMENTS/OBJECTIONS

BELLSOUTH: BellSouth has asked the Commission for clarification or reconsideration of the following:

1. Confirmation that any compensation paid pursuant to the interim inter-carrier compensation mechanism will be trued-up retroactively to the effective date of the Interconnection Agreement resulting from this Arbitration. BellSouth requested clarification on this point because of the dual true-up referenced by the Commission in its RAO — (1) an interim true-up based on the establishment of final unbundled network element (UNE) rates and (2) a final true-up based on the upcoming FCC decision. BellSouth believes that the reciprocal compensation rates should be trued-up once the Commission establishes rates in the UNE docket without regard to any action from the FCC.

2. Clarification regarding the procedure that the parties are to utilize to effectuate the true-up. BellSouth argued that the true-up should be triggered and based upon an effective Order by the FCC. Theoretical alternative dates would be when the FCC decision is released, or as the Commission has implied, after Commission action pursuant to that Order.

3. Reconsideration of the interim-carrier compensation rates for ISP-bound traffic and consideration of an alternative for payment of those rates. BellSouth noted that the Commission had established interim inter-carrier compensation rates at the same level as reciprocal compensation rates for local traffic but, in light of the fact that the interim inter-carrier compensation plan adopted here will be the template for other agreements, BellSouth argued that the rates paid for ISP-bound traffic should reflect the longer holding times associated with ISP-bound traffic. Specifically, BellSouth stated it is willing to accept

the 20-minute call duration originally proposed by ICG in this Arbitration. This would yield a minute of use (MOU) total rate of $0.0022606.

BellSouth also requested that the Commission reconsider its ruling regarding payment and allow BellSouth to make payments pursuant to the plan in an interest-bearing escrow account. BellSouth cited substantial risk that it would be unable to recover those funds at final true-up, especially from smaller CLPs.

ICG: ICG urged the Commission to reject BellSouth's request that it modify the inter-carrier compensation rates for ISP-bound traffic based on an average call length (ACL) factor of 20 minutes. ICG argued that the costs it incurs for delivering calls to BellSouth customers are the same regardless of whether the called party is an ISP and thus there is no basis for a different compensation rate. ICG also chided BellSouth for attempting to insert new data in this proceeding purporting to show that the flow of compensation would be one-sided on a statewide basis by citing evidence in another proceeding (BellSouth/Time Warner, Docket No. P-472, Sub 15). Finally, ICG also maintained that BellSouth had not presented the Commission with a workable, alternative compensation mechanism.

ICG further noted that the 20-minute ACL proposal had been originally submitted by ICG itself in response to the Commission's Order seeking alternative approaches to compensation, but that the ICG proposal assumed that the proposed rate would be applied to all calls, not just ISP-bound calls. Moreover, ICG had noted that it had not done a study of actual call lengths and that the 20-minute figure was an "overly conservative" estimate of actual call lengths. In any event, the Commission rejected the ACL proposal. BellSouth is also using the new costs/rates which it proposed in the UNE docket, but these are final rates and not in effect yet. ICG further stated that ISP-bound calls are indistinguishable from other calls; thus there is not a reliable way to identify them.

With respect to BellSouth's requests for clarification, ICG expressed puzzlement. To the extent that BellSouth is asking whether the true-up will be to the final UNE rates and will occur when the FCC issues its final ruling, this would appear consistent with the Order. The true-up, however, should not occur upon the effective date of the FCC Order, since the Commission has made it plain that subsequent proceedings to implement the FCC ruling will be needed.

ICG emphatically rejected BellSouth's proposal that the payments be held in escrow as the Commission did in its original ruling.

PUBLIC STAFF: The Public Staff did not address this issue in its Response to Request for Reconsideration.

DISCUSSION

There are two major issues for consideration. The first is BellSouth's request for an alternative inter-carrier compensation mechanism based on a 20-minute ACL rather than one based on the sum of certain UNE rates. The other is BellSouth's request for clarification.

With respect to the first item, the Commission sees no reason to depart from the decision that it has already made on this matter. It is, to say the least, ironic for BellSouth to propose what in essence was a tentative proposal, later withdrawn, originally made by ICG in response to the Commission's request for "creative thinking" on inter-carrier compensation. Apparently, the merits of this proposal became obvious to BellSouth only after its own proposal was rejected. Meanwhile, the merits have become less persuasive to ICG, since it extensively critiqued the deficiencies of the ACL proposal in its reply to BellSouth. This only fortifies the Commission's belief that it would be on the right track to stand by an interim mechanism that is relatively simple and straight forward and tracks the reciprocal compensation rates applicable to other calls.

With respect to BellSouth's request for clarification regarding the inter-carrier compensation rates for ISP-bound traffic, the Commission makes the following clarification:

1. There is to be a first true-up applicable to all traffic subject to reciprocal compensation when the interim UNE rates become final UNE rates. However, if the final UNE rates are effective before the Interconnection Agreement becomes effective, then the final UNE rates will apply, and no such true-up will be necessary. The true-up will be retroactive to the effective date of the Interconnection Agreement resulting from this Arbitration.

2. There is to be a second true-up applicable to ISP-bound traffic at such time as the Commission has issued an Order setting up a permanent inter-carrier compensation mechanism for ISP-bound traffic. The true-up will be retroactive to the effective date of the Interconnection Agreement resulting from this Arbitration.

Finally, with respect to BellSouth's request that BellSouth be allowed to make payments into an interest-bearing escrow account rather than to the CLPs, the Commission finds it appropriate to reject this proposal for the reasons originally set out in the RAO.

CONCLUSIONS

The Commission upholds and reaffirms its original decision in this regard. Further, the Commission finds it appropriate to clarify the true-up process as outlined above.

FINDING OF FACT NO. 2: For purposes of reciprocal compensation, should ICG be compensated for end office, tandem, and transport elements of termination where ICG's switch services a geographic area comparable to the area served by BellSouth's tandem switch?

INITIAL COMMISSION DECISION

The Commission concluded that ICG's Charlotte switch serves an area comparable to that served by BellSouth's Charlotte tandem switch and ICG's switch also provides the same functionality as that provided by BellSouth's tandem switch. For reciprocal compensation purposes, the Commission found that ICG is entitled to compensation at the tandem interconnection rate (in addition to the other appropriate rates) where its switch serves a geographic area comparable to that served by BellSouth's tandem switch.

COMMENTS/OBJECTIONS

BELLSOUTH: BellSouth contended that in its RAO, the Commission relied heavily on FCC *Rule* 51.711(a)(3), and failed to consider the FCC's *discussion* of Rule 51.711, which sets forth a two-prong test that must be satisfied prior to a CLP being entitled to reciprocal compensation at the ILEC's tandem interconnection rate. BellSouth noted that, in its discussion, the FCC identified two requirements that ICG, or any CLP, must satisfy in order to be compensated at the tandem interconnection rate: (1) the CLP's network must perform functions similar to those performed by the ILEC's tandem switch; and (2) the CLP's switch must serve a geographic area comparable to the geographic area served by the ILEC.

BellSouth stated that ICG failed to satisfy the first prong of the FCC's two-prong test because ICG's network does not actually perform functions similar to those performed by BellSouth's tandem switch. While ICG's switch may be capable of performing tandem switching functions when connected to end office switches, capability is not the test. Throughout the testimony, ICG repeatedly concluded that ICG's switch "performs the same functionality as the BellSouth tandem switch and end office switch combined." ICG, however, did not offer any evidence to support a conclusion that the ICG switch actually performs functions similar to BellSouth's tandem switch.

BellSouth contended that the only evidence presented by ICG concerning switch functionality revolved around a network diagram attached to witness Starkey's direct testimony. (Starkey direct, at page 22 - diagram 3.) Based on ICG's network diagram, it is clear that: (1) ICG does not interconnect end offices or perform trunk-to-trunk switching, but rather performs line-to-trunk or trunk-to-line switching; (2) to the extent ICG has a switch in North Carolina, it performs only end-office switching functions and does not switch BellSouth's traffic to another ICG switch; and (3) based on the information provided, ICG's switch does not provide other centralization functions, namely call recording, routing

of calls to operator services, and signaling conversion for other switches, as BellSouth's tandems do and as required by the FCC's rules.

BellSouth argued that while ICG witness Starkey insists that ICG's switch performs the same functions as a BellSouth tandem switch, the network design included in witness Starkey's testimony shows that each of ICG's collocation arrangements serve only as an intermediate point in ICG's loop plant. Without specific information from ICG to the contrary, the "piece of equipment" in ICG's collocation cage appears to be nothing more than a Subscriber Loop Carrier, which is part of loop technology and provides no "switching" functionality. ICG's switch is not providing a transport or tandem function, but is switching traffic through its end office for delivery of traffic from that switch to the called party's premises. No switching is performed in these collocation arrangements. These lines are simply long loops transported to ICG's switch; they are not trunks. Long loop facilities do not qualify as facilities over which local calls are transported and terminated as described by the Telecommunications Act of 1996 (TA96) and therefore are not eligible for reciprocal compensation.

BellSouth stated that other state commissions have rejected arguments that a CLP's switch performs the same functions as a tandem switch. BellSouth specifically referenced orders by the Florida Public Service Commission which concluded that "...MCI is not entitled to compensation for transport and tandem switching unless it actually performs each function." Order No. PSC-97-0294-FOF-TP, Docket 962121-TP, at 1011 (March 14, 1997), and also Order No. PSC-98-1532-FOF-TP, Docket No. 980838-TP, at 4 (December 16, 1998) which concluded that "...evidence in the record does not support MFS' position that its switch provides the transport element; and the Act does not contemplate that the compensation for transporting and terminating local traffic should be symmetrical when one party does not actually use the network facility for which it seeks compensation."

BellSouth argued that even assuming ICG's switch performs the same functions as BellSouth's tandem switch, there is no evidence in the record that ICG's switch serves a geographic area comparable to BellSouth's tandem switch. BellSouth pointed out there is a distinction between actually serving and being capable of serving. BellSouth stated that, in fact, other than generally referencing ICG switches, there is no record evidence that ICG has a switch in North Carolina.

BellSouth contended that when it attempted to determine the number of customers ICG has in North Carolina, ICG conveniently refused, claiming that such information was proprietary. BellSouth stated that ICG also failed to identify where the unknown number of customers are located — information that is essential to support a finding that ICG's switch serves a comparable geographic area. BellSouth contended that under no set of circumstances could ICG seriously argue in such a case that its switch services a comparable geographic area to BellSouth. See Decision 99-09-069, In Re: Petition of,

Pacific Bell for Arbitration of an Interconnection Agreement with MFS/WorldCom, Application 99-03-047, at 15-16 (September 16, 1999) California Public Service Commission (finding "unpersuasive" MFS's showing that its switch served a comparable geographic area when many of MFS's ISP-bound customers were actually collocated with MFS's switch.)

BellSouth contended that ICG failed to make a showing that its network performs functions similar to those performed by BellSouth's tandem switch and that its switch serves a geographic area comparable to BellSouth's. For these reasons, BellSouth argued that the Commission should reconsider its decision and deny ICG's request for reciprocal compensation at the tandem interconnection rate.

ICG: ICG contended that the Commission's determination that ICG is entitled to reciprocal compensation at BellSouth's tandem interconnection rate is supported by the evidence of record. In response to BellSouth's claim that the Commission failed to consider the FCC's discussion of Rule 51.711, specifically, that the Commission failed to address both parts of the FCC's two-prong test, ICG contended that the Commission did consider BellSouth's contention that Rule 51.711 contains a two criterion test — and squarely rejected it. The Commission expressly held that the FCC "requires only that a CLP's switch serve a geographic area comparable to that served by an ILEC's tandem to qualify for the tandem termination rates." The Commission should summarily reject BellSouth's attempt to re-argue a point on which the Commission has clearly, and correctly, ruled.

ICG further argued that the only relevant criterion is whether ICG's switch serves a geographic area comparable to that served by BellSouth's tandem. BellSouth simply refuses to recognize that the evidence it claims to be nonexistent is amply spread throughout the record and that it is totally consistent with the Commission's findings and conclusions on this issue. ICG witnesses Starkey and Schonhaut presented evidence demonstrating that ICG's switch serves a comparable geographic area to that served by BellSouth's tandem switch.

ICG contended that the record evidence is uncontroverted. BellSouth has not so much as suggested, much less proven, that the geographic area served by its tandem switch is not comparable to the area served by ICG's switch. Nor did BellSouth introduce any evidence whatsoever and did not cross-examine ICG's witnesses on this point.

ICG further contended that the record in this proceeding clearly demonstrates that ICG's switch also provides the same functionality as BellSouth's tandem. As ICG witness Starkey testified: "ICG's switching platform transfers traffic amongst discrete network nodes that exist in the ICG network for purposes of serving groups of its customers in exactly the same fashion that [BellSouth's] tandem switch distributes traffic."

ICG argued that BellSouth misses the point of Rule 51.711. BellSouth essentially argues that ICG's switch cannot meet the tandem switching definition because ICG's switch does not route traffic between other ICG switches. Rule 51.711 contemplates that a single CLP switch will serve the same function in the CLP's network that a tandem and multiple serving central office switches serve in the ILEC's network. The rule would be rendered meaningless if CLPs were required to duplicate the ILEC's network architecture in order to qualify for the tandem rate. The FCC made clear that in constructing their networks CLPs may opt to use new technologies that were unavailable when the ILEC's networks were designed: "... states shall ... consider whether new technologies (e.g. fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and, thus, whether some or all calls terminating on the new entrant's network should qualify for the tandem rate." ICG contended that its fiber ring is precisely the sort of new technology the FCC had in mind when it adopted Rule 51.711.

In its Reply to the Public Staff's Response to Request for Reconsideration, ICG restated that Rule 51.711 of the FCC rules provides a single criterion for tandem rate eligibility — whether the competing carrier's switch serves an area comparable to that of the ILEC's tandem switch. ICG maintained that the Commission thus correctly rejected the Public Staff's argument that, in order to qualify for the tandem rate, Rule 51.711 requires a competing carrier to also demonstrate that its switch provides functionality similar to that provided by the incumbent's tandem switch.

ICG maintained that Rule 51.711 speaks for itself and is unambiguous. If a competing carrier is able to make the geographic showing, it is entitled to the tandem rate, regardless of whether it is able to make the functionality showing.

ICG suggested that the Public Staff's Response should be disregarded and that BellSouth's Request should be denied. As noted in ICG's Opposition to BellSouth's Request, ICG's evidence that the ICG switch serves an area comparable to that served by the BellSouth tandem is uncontroverted in the record.

ICG also contended that even though it is not required, the record demonstrates that ICG's switch functions as a tandem. ICG explained that its witness Starkey offered detailed testimony explaining the configuration of ICG's network and specifically addressed the switch functionality issue. Witness Starkey testified that ICG's network consists of a Lucent 5ESS switch which performs both Class 4 and Class 5 functions, SONET nodes collocated at BellSouth end offices and in ICG on-network buildings, and a fiber optic ring.

ICG contended that the fact that ICG's network incorporates collocated SONET nodes instead of Class 5 central office switches, as BellSouth witness Varner pointed out in his direct testimony, is irrelevant. This difference in architecture between the two networks is a result of the technology each carrier has chosen in an effort to best serve its particular customer base. Witness Starkey testified:

At the time the majority of the ILEC network was built, switches were very limited in the number of individual lines they could service and copper plant was the most expensive portion of the network to deploy. Therefore, ILECs chose to trade switching costs for copper plant costs by deploying greater numbers of switches and shorter copper loops. However, with the advent of relatively inexpensive fiber optic transport facilities and the enormous switching capacity available in today's switching platforms, the economics of the switch/transport tradeoff have changed.

As witness Starkey further explained in his testimony, ICG's network consists of a centrally-located host switch (defined in the Local Exchange Routing Guide (LERG) as a combination Class 4/Class 5 switch) that supports other, individual switching nodes that are collocated either in BellSouth central offices or in customer locations. ICG's fiber optic ring connects these discrete switching nodes within its network and transfers traffic amongst those nodes. This is exactly the function that BellSouth's tandem switch serves in the BellSouth network. The fact that ICG is not required to place fully-featured Class 5 switches in each collocation does not detract from the fact that the ICG network performs exactly the same function as the BellSouth network; it simply uses a different architecture to accomplish the same tasks. This is exactly what the FCC envisioned in paragraph 1090 of the Local Competition First Report and Order when it directed state commissions to "...consider whether new technologies (e.g. fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem...."

ICG stated that the arguments of the Public Staff and BellSouth are premised on the faulty assumption that competing carriers must mimic the incumbents' network to qualify for the tandem interconnection rate. ICG believes that tandem rate eligibility depends solely on geographic service area comparability as expressly provided in Rule 51.711. However, even if the Commission were to conclude that functionality is a second requirement, the Commission could not conclude that identical functionality is the standard. The often quoted paragraph 1090 from the Local Competition First Report and Order expressly contemplates that competing carriers will employ different network architectures than those used by incumbents. In that Order, the FCC notes that new technologies may "perform functions similar - not identical - to those performed by incumbents' tandem switches."

ICG contended that the Public Staff is mistaken in its belief that ICG relies on the fact that its switch serves as a point of interconnection for interexchange carriers (IXCs) and an access point for operator services to establish the tandem status of ICG's switch. These two functions are included in a general description of tandem functionality. Witness Starkey testified that the ICG switch performs nearly all of the functions included in the tandem definition included in the LERG. Indeed, the LERG definition provides that a switch is defined as a tandem if it performs one or more of a list of functions. Witness Starkey testified that the ICG switch performed "nearly all" of the functions

enumerated in the LERG. ICG reiterated, however, that no FCC rule or order makes inclusion of a switch in the LERG a requirement for tandem rate eligibility.

In conclusion, ICG stated it has met its burden of proving that its Charlotte switch serves an area comparable to that of BellSouth's tandem. ICG asserted that the record evidence on this issue is uncontroverted, and there is no basis to disturb the Commission's conclusion.

PUBLIC STAFF: The Public Staff did not address this issue in its Proposed Order. However, in its Response to Request for Reconsideration, the Public Staff stated that it now believes that the Commission should reconsider and reverse its finding on this issue on the grounds that ICG failed to demonstrate that its switch provides the tandem function in terminating a call delivered to it by a LEC.

The Public Staff indicated that by reading Paragraph 1090 of the FCC's First Report and Order in CC Docket No. 96-98, FCC 96-325, 11 FCC Rcd 15499, as a whole, and as an indication of the FCC's intent in promulgating Rule 51.711, it is clear that the functionality of the interconnecting carrier's network must be considered for the purpose of determining whether the carrier should be compensated for tandem switching. The FCC specifically directs the states to consider whether new technologies (e.g., fiber ring or wireless networks) perform functions similar to those performed by an ILEC's tandem switch. If the only requirement were that the interconnecting carrier's switch serve an area comparable to the LEC's tandem switch, any consideration of the new technologies would be completely irrelevant.

The Public Staff contended that ICG's fiber ring is apparently a means of connecting its switch to its customers. Fiber rings can also be used to interconnect end office switches and to reroute traffic in the event that an interoffice circuit is cut. Such is the case with BellSouth. ICG's ring, on the other hand, does not extend between switches, but between ICG customers, and between ICG customers and the ICG switch from which dial tone is provided. Under normal circumstances, in the termination of a call delivered to ICG by BellSouth, the ICG ring does not perform a function even remotely similar to that of a tandem switch. It actually serves as the loop between the ICG switch, where end office switching is done, and the ICG customer. Tandem switching, if it was involved, would occur at the other end of the circuit, even before the call reached the end office from which dial tone is provided.

The Public Staff stated that ICG's assertions that its switch qualifies as a tandem because it serves as a point of interconnection for traffic to and from IXCs, and as ICG's access point for operator services for its customers are not persuasive. Even if these are considered tandem functions for some purposes, they have no bearing on the issue at hand unless they are actually employed in the process of terminating calls delivered to

ICG by BellSouth. Since they are not so employed, they do not qualify ICG for tandem switching and transport compensation.

The Public Staff recommended that the Commission reconsider and reverse Finding of Fact No. 2 and Ordering Paragraph No. 2 of the RAO dated November 4, 1999.

The Public Staff also suggested that the Commission consider this issue in conjunction with its deliberations in the pending arbitration between BellSouth and ITC^DeltaCom in Docket No. P-500, Sub 10.

DISCUSSION

The difference in the positions of the parties appears to be due to ambiguity between the language in the FCC's discussion of this issue, Paragraph 1090, and the language in the FCC's Rule 51.711.

ICG's position is that the only relevant criterion is whether ICG's switch serves a geographic area comparable to that served by BellSouth's tandem as stated in Rule 51.711(a)(3). However, even if that is the only requirement, ICG believes that its switch performs the same functionality as BellSouth's tandem switch as discussed in Paragraph 1090 of the FCC's First Report and Order.

BellSouth's position is that the discussion of Rule 51.711 which addresses functionality must be considered as well as Rule 51.711(a)(3) and that ICG does not meet either requirement.

The Public Staff's position supports that of BellSouth.

Paragraph 1090 of the First Report and Order states:

> We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states may establish transport and termination rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end-office switch. *In such event, states shall also consider whether new technologies (e.g., fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination via the incumbent LEC's tandem switch.* (Emphasis added) Where the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the

interconnecting carrier's additional costs is the LEC tandem interconnection rate. (First Report and Order, CC Docket 96-98, Paragraph 1090) (August 8, 1996).

Rule 51.711(a)(3) states:

Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate.

On February 7, 2000, ICG and BellSouth filed maps in response to a Commission Order. BellSouth filed a map depicting the geographic coverage of BellSouth's local access and transport area (LATA) tandem switch and a map depicting BellSouth's local tandem switch in the Charlotte area. ICG filed a map showing ICG's Charlotte serving area. These maps are hereby allowed in evidence in this proceeding as late-filed exhibits.

The Commission is unpersuaded by the arguments of BellSouth and the Public Staff in this matter. The Commission believes, based on the evidence in the record, including the maps filed by the parties on February 7, 2000, that ICG has met its burden of proof that its switch serves a comparable geographic area to that served by BellSouth's tandem switch for the Charlotte serving area. Although such information may be both useful and relevant, the Commission can find no basis for BellSouth's argument that the location of actual customers is essential to support a finding that ICG's switch serves a geographic area comparable to the area served by BellSouth's tandem switch in either Paragraph 1090 or Rule 51.711 of the FCC's First Report and Order. The Commission believes that the testimony of ICG witness Starkey was more cogent and convincing than that of BellSouth witness Vamer and that witness Starkey clearly demonstrated that the technologies employed by ICG's network provide functions that are the same as or similar to the functions performed by BellSouth's tandem switch and, in fact, meet both the criteria discussed in the parties' filings.

Since we are persuaded that ICG has demonstrated both geographic and functional capability in this case, we believe that it is unnecessary at this time to decide the question of whether both criteria must be satisfied in order for a CLP such as ICG to receive compensation at the tandem interconnection rate for reciprocal compensation purposes.

CONCLUSIONS

The Commission upholds and reaffirms its original decision and concludes that for reciprocal compensation purposes, based on the fact that ICG's Charlotte switch serves an area comparable to that served by BellSouth's Charlotte tandem switch and provides

functionality the same as or similar to that provided by BellSouth's tandem switch, ICG is entitled to compensation at the tandem interconnection rate.

The Commission strongly advises parties involved in future arbitrations where inclusion of the tandem switch element for reciprocal compensation purposes is an issue to file maps showing their serving areas as compared to that of the ILEC serving area, along with substantial testimony including a description of the switch(es) and associated technology necessary to provide service; the number and location of customers, if available; and any other information relevant to capability or intent to serve.

IT IS, THEREFORE, ORDERED as follows:

1. That the Composite Agreement submitted by BellSouth and ICG is hereby approved, subject to such modifications as may be required by this Order.

2. That BellSouth and ICG shall revise the Composite Agreement in conformity with the provisions of this Order and shall file the revised Composite Agreement for review and approval by the Commission not later than 15 days from the date of this Order. Should no revisions be necessary to the Composite Agreement, the parties shall so advise the Commission not later than 15 days from the date of this Order.

3. That the Commission will entertain no further comments, objections, or unresolved issues with respect to issues previously addressed in this arbitration proceeding.

4. That the maps filed in this docket by BellSouth and ICG on February 7, 2000, be, and the same are hereby, admitted in evidence as late-filed exhibits.

ISSUED BY ORDER OF THE COMMISSION.

This the 1st day of March, 2000.

NORTH CAROLINA UTILITIES COMMISSION

Geneva S. Thigpen

Geneva S. Thigpen, Chief Clerk

bc020100.01

Copr. © West 2000 No Claim to Orig. U.S. Govt. Works

55 F.Supp.2d 968
(Cite as: 55 F.Supp.2d 968)

US WEST COMMUNICATIONS, INC., Plaintiff,
v.
MINNESOTA PUBLIC UTILITIES COMMISSION, Edward A. Garvey, Chairman, Joel Jacobs, Commissioner, Marshall Johnson, Commissioner, Gregory Scott, Commissioner, and Don Storm, Commissioner (In Their Official Capacities as Past or Present Commissioners of the Minnesota Public Utilities Commission); and AT & T Wireless Services, Inc., Defendants.

No. CIV. 98-914 ADMAJB.

United States District Court, D. Minnesota.

March 30, 1999.

Incumbent local exchange carrier (ILEC) requested judicial review of interconnection agreement provision approved by Minnesota Public Utility Commission. The District Court, Montgomery, J., held that: (1) finding that ILEC should compensate calls terminated at wireless company's mobile switching center at tandem switch rate, rather than end-office switch rate, was not arbitrary or capricious; (2) ILEC could be required to construct, at wireless company's request and expense, new facilities needed to provide interconnection at any technically feasible point within ILEC's network; (3) Commission lacked authority to regulate telephone directory publisher; (4) ILEC could be required to make its recording and billing services available to wireless company to facilitate company's collection of termination charges when third party originated calls that transited ILEC's network and were then terminated on company's network; and (5) ILEC's taking claim was not yet ripe for adjudication.

Request granted in part and denied in part.

[1] TELECOMMUNICATIONS k267

372k267
State commissions arbitrating disputes between incumbent local exchange carriers (ILEC) and competing local exchange carriers (CLEC) over interconnection agreements are limited to arbitrating open issues raised by parties themselves. Telecommunications Act of 1996, 47 U.S.C.A. § 252(c).

[2] TELECOMMUNICATIONS k461.5
372k461.5
Minnesota Public Utility Commission's finding that incumbent local exchange carrier (ILEC) should

compensate calls terminated at wireless company's mobile switching center at tandem switch rate, rather than end-office switch rate, was not arbitrary or capricious; center performed functions comparable to both types of landline switches and covered area comparable to tandem switch. Telecommunications Act of 1996, 47 U.S.C.A. § 252(d)(2)(A).

[3] STATUTES k212.6
361k212.6
Presumptively, identical words used in different parts of same act are intended to have same meaning.

[4] TELECOMMUNICATIONS k267
372k267
"Necessary" equipment for interconnection, for which incumbent local exchange carrier (ILEC) has statutory duty to provide physical collocation, is more narrowly defined than equipment which is merely "useful" for interconnection.
Telecommunications Act of 1996, 47 U.S.C.A. § 251(c)(6).

[5] TELECOMMUNICATIONS k461.5
372k461.5
Minnesota Public Utility Commission had authority to require incumbent local exchange carrier (ILEC) to construct, at wireless company's request and expense, new facilities needed to provide interconnection at any technically feasible point within ILEC's network. Telecommunications Act of 1996, 47 U.S.C.A. § 251(c)(2)(B).

[6] TELECOMMUNICATIONS k269
372k269
Minnesota Public Utility Commission's state law authority to regulate public utility telephone companies did not extend to affiliated company which published telephone directories. M.S.A. § 237.23.

[7] TELECOMMUNICATIONS k267
372k267
Company which published telephone directories was not covered entity under Telecommunications Act. Telecommunications Act of 1996, 47 U.S.C.A. §§ 153(26), 251(b)(3).

[8] TELECOMMUNICATIONS k267
372k267
Minnesota Public Utility Commission lacked authority to require telephone directory publisher to treat incumbent local exchange carrier (ILEC) and its competitors the same with respect to yellow page advertising and white page directory listings.

[9] TELECOMMUNICATIONS k461.5
372k461.5
Minnesota Public Utility Commission had authority to resolve, in arbitration proceeding, any open issues parties were unable to resolve in negotiations for interconnection agreement, so long as resolution did not violate or conflict with Telecommunications Act. Telecommunications Act of 1996, 47 U.S.C.A. §§ 251, 252(b)(4)(C), (c).

[10] TELECOMMUNICATIONS k461.5
372k461.5
Minnesota Public Utility Commission had authority to require incumbent local exchange carrier (ILEC) to make its recording and billing services available to wireless company to facilitate company's collection of termination charges when third party originated calls that transited ILEC's network and were then terminated on company's network; even though issue was not covered in Telecommunications Act, it was open issue between parties, was expressly presented to Commission for resolution, and Commission's resolution did not violate or conflict with Act. Telecommunications Act of 1996, 47 U.S.C.A. §§ 251, 252(b)(4)(C), (c).

[11] ADMINISTRATIVE LAW AND PROCEDURE k462
15Ak462
When Congress establishes burden of proof or production to be applied in administrative proceedings, courts must defer to Congress; however, when Congress is silent as to issue, it is left to judiciary to resolve question.

[12] TELECOMMUNICATIONS k461.5
372k461.5
Minnesota Public Utility Commission, when arbitrating open issues from interconnection agreement negotiations between incumbent local exchange carrier (ILEC) and wireless company, properly placed burden of production and persuasion with respect to all issues of material fact upon ILEC, except to extent that company had control of critical information regarding issue in dispute.

[13] EMINENT DOMAIN k286
148k286
Federal district court, reviewing Public Utility Commission's resolution of open issues from interconnection agreement negotiations between incumbent local exchange carrier (ILEC) and wireless company, had jurisdiction to hear ILEC's claim that physical collocation requirement imposed by Commission was unconstitutional taking without just compensation. U.S.C.A. Const.Amend. 5; Telecommunications Act of 1996, 47 U.S.C.A. § 252(e)(6).

[14] EMINENT DOMAIN k277
148k277
In order for takings claim to be ripe: (1) administrative agency must have reached final, definitive position as to how it will apply regulation at issue, and (2) plaintiff must have attempted to obtain just compensation through procedures provided by State. U.S.C.A. Const.Amend. 5.

[15] EMINENT DOMAIN k70
148k70
Takings Clause is not meant to limit government's ability to interfere with individual's property rights, but rather to ensure compensation when legitimate interference that amounts to taking occurs. U.S.C.A. Const.Amend. 5.

[16] EMINENT DOMAIN k74
148k74
Compensation does not have to precede taking in order to satisfy Takings Clause; Clause is satisfied so long as process for obtaining compensation exists at time of taking. U.S.C.A. Const.Amend. 5.

[17] EMINENT DOMAIN k2(1.1)
148k2(1.1)
In determining whether interconnection agreement between incumbent local exchange carrier (ILEC) and competing local exchange carrier (CLEC) constitutes taking of ILEC's property without just compensation, issue is whether any provision or provisions of agreement negatively affect overall operation of the ILEC to such degree that it can no longer receive fair rate of return from its investment. U.S.C.A. Const.Amend. 5.

[18] EMINENT DOMAIN k277
148k277
Incumbent local exchange carrier's (ILEC) claim that interconnection agreement with competing local exchange carrier (CLEC) constituted taking of ILEC's property without just compensation was not ripe for judicial review because ILEC had not yet exhausted state law opportunities to have its rates adjusted. U.S.C.A. Const.Amend. 5.

***970** Geoffrey P. Jarpe and Martha J. Keon, Maun & Simon, PLC; Kevin J. Saville, U.S. West Communications, Inc.; and Wendy M. Moser, Norton Cutler, and Blair A. Rosenthal, U.S. West, Inc., for Plaintiff U.S. West Communications, Inc.

Dennis D. Ahlers and Megan J. Hertzler, Assistant Attorneys General, for Defendants MPUC and the Commissioners.

Mark J. Ayotte and Darrin M. Rosha, Briggs and Morgan, P.A., for Defendant AT & T Wireless Services, Inc.

MEMORANDUM OPINION AND ORDER

MONTGOMERY, District Judge.

Plaintiff U.S. West Communications, Inc., ("US West") brought this action pursuant to the Telecommunications Act of 1996 ("the Telecommunications Act" or "the Act"), specifically 47 U.S.C. § 252(e)(6), seeking judicial review of determinations made by the Minnesota Public Utilities Commission ("MPUC"). US West has named the individual commissioners of the MPUC as Defendants. For purposes of this order, the individual commissioners and the MPUC, itself, will be referred to collectively as the MPUC.

The above-captioned case is one of eight cases involving review of determinations made by the MPUC presently before this Court. On December 10, 1997, this Court issued an Order in US WEST Communications, Inc. v. Garvey, No. 97-913 ADM/AJB, slip op. at 3 (D.Minn. Dec.

10, 1997), determining the scope of review for cases brought pursuant to § 252(e)(6). The Court found the scope of review limited to an appellate review of the record established before the MPUC. Id. On May 1, 1998, the Court filed an Order addressing the standard of review in the eight Telecommunications Act cases. AT & T Communications of the Midwest, Inc. v. Contel of Minnesota, No. 97-901 ADM/JGL, slip op. at 10-11 (D.Minn. April 30, 1998). Questions of law will be subject to de novo review while questions of fact and mixed questions of fact and law will be subject to the arbitrary and capricious standard. Id. at 11-13.

*971 I. BACKGROUND

Before 1996, local telephone companies, such as U.S. West, enjoyed a regulated monopoly in the provision of local telephone services to business and residential customers within their designated service areas. AT&T Communications of Southern States v. BellSouth Telecomms., Inc., 7 F.Supp.2d 661, 663 (E.D.N.C.1998). In exchange for legislative approval of this scheme, the local monopolies ensured universal telephone service. Id. During this monopolistic period, the local telephone companies constructed extensive telephone networks in their service areas. Id.

Congress passed the Telecommunications Act of 1996, in part, to end the monopoly of local telephone markets and to foster competition in those markets. Iowa Utilities Bd. v. FCC, 120 F.3d 753, 791 (1997), rev'd in part sub nom., AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 119 S.Ct. 721, 142 L.Ed.2d 835 (1999); GTE North, Inc. v. McCarty, 978 F.Supp. 827, 831 (citing Joint Explanatory Statement of the Committee of Conference, H.R.Rep. No. 104-458, at 113 (1996)). Because the local monopolies, or incumbent local exchange carriers ("ILECs" or "incumbent LECs"), had become so entrenched over time through their construction of extensive facilities, Congress opted "not to simply issue a proclamation opening the markets," but rather constructed a detailed regulatory scheme to enable new competitors to enter the local telephone market on a more equal footing. AT & T Communications of the Southern States, 7 F.Supp.2d at 663. The Act obligates the incumbent LECs, like U.S. West: (1) to permit a new entrant in the local market to interconnect with the incumbent LEC's existing local network and thereby use the LEC's own network to compete against it (interconnection); (2) to provide competing carriers with access to individual elements of the incumbent LEC's own network on an unbundled basis (unbundled access); and (3) to sell any telecommunication service to competing carriers at a wholesale rate so that the

competing carriers can resell the service (resale). Iowa Utils. Bd., 120 F.3d at 791 (citing 47 U.S.C.A. § 251(c)(2)-(4)). In order to facilitate agreements between incumbent LECs and competing carriers, the Act creates a framework for both negotiation and arbitration. 47 U.S.C. § 252. Two sections of the Act, 47 U.S.C.- §§ 251 and 252, explain the basic structure of the overall scheme for opening up the local markets.

Section 251

Section 251 describes the three relevant classes of participants effected by the Act: (1) telecommunications carriers, (2) local exchange carriers, and (3) incumbent local exchange carriers. 47 U.S.C. § 251(a), (b), and (c). A telecommunications carrier is a provider of telecommunications services, 47 U.S.C. § 153(44), telecommunication services being "the offering of telecommunications for a fee directly to the public ...," 47 U.S.C. § 153(46), and telecommunications being "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." 47 U.S.C. § 153(43). Both U.S. West and Defendant AT & T Wireless Services, Inc., ("AWS") qualify as telecommunications carriers. A local exchange carrier ("LEC") is "any person that is engaged in the provision of telephone exchange service or exchange access," 47 U.S.C. § 153(26), within an exchange area. 47 U.S.C. § 153(47). An incumbent local exchange carrier is a company that was an existent local exchange carrier on February 8, 1996, and was deemed to be a member of the exchange carrier association. 47 U.S.C. § 252(h). In this action, only U.S. West qualifies as an incumbent LEC.

Section 251 establishes the duties and obligations of these categories of participants. For example, all telecommunications carriers have a duty "to interconnect directly or indirectly with the facilities and equipment of other telecommunications *972 carriers," 47 U.S.C. § 251(a); local exchange carriers have a duty "not to impose unreasonable or discriminatory conditions or limitations on, the resale of its telecommunications services." 47 U.S.C. § 251(b); and incumbent LECs have a duty to negotiate in good faith with telecommunications carriers seeking to enter the local service market, as well as a duty to "offer for resale at wholesale prices any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers." 47 U.S.C. § 251(c). Section 251 requires an incumbent LEC to provide interconnection that is at least equal in quality to that

provided by the incumbent LEC to itself at any technically feasible point, 47 U.S.C. § 251(c)(2); to provide nondiscriminatory access to network elements on an unbundled basis at any technically feasible point, 47 U.S.C. § 251(c)(3); and to provide for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier. 47 U.S.C. § 251(c)(6).

Section 252

Section 252 delineates the procedures for the negotiation, arbitration, and approval of an interconnection agreement that permits a new carrier's entry into the local telephone market. 47 U.S.C. § 252. Once an incumbent LEC receives a request for an interconnection agreement from a new carrier, the parties can negotiate and enter into a voluntary binding agreement without regard to the majority of the standards set forth in § 251 of the Act. 47 U.S.C. § 252(a). If the parties cannot reach an agreement by means of negotiation, after a set number of days, a party can petition a State commission, here the MPUC, to arbitrate unresolved open issues. 47 U.S.C. § 252(b)(1).

An interconnection agreement adopted by either negotiation or arbitration must be submitted for approval to the State commission. 47 U.S.C. § 252(e)(1). The State commission must act within 90 days after the submission of an agreement reached by negotiation or after 30 days of an agreement reached by arbitration. 47 U.S.C. § 252(e)(4). The State commission must approve or reject the agreement, with written findings as to any deficiencies. 47 U.S.C. § 252(e)(1).

FCC Regulations

47 U.S.C. § 251(d)(1) directs the FCC to promulgate regulations implementing the Act's local competition provisions within six months of February 8, 1996. "Unless and until an FCC regulation is stayed or overturned by a court of competent jurisdiction, the FCC regulations have the force of law and are binding upon state PUCs [Public Utility Commissions] and federal district courts." AT&T Communications of California v. Pacific Bell, 1998 WL 246652, at *2 (N.D.Cal. May 11, 1998) (citing Anderson Bros. Ford. v. Valencia, 452 U.S. 205, 219-20, 101 S.Ct. 2266, 68 L.Ed.2d 783 (1981)). Review of FCC rulings is committed solely to the jurisdiction of the United States Court of Appeals pursuant to 28 U.S.C. § 2342(1) and 47 U.S.C. § 402(a).

On August 8, 1996, the FCC issued its First Report and Order, which contains the Agency's findings and rules pertaining to the local

competition provisions of the Act. Iowa Utils., Bd., 120 F.3d at 792 (citing First Report and Order, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 F.C.C.R. 15499, CC Docket No. 96- 98 (Aug. 8, 1996) ("First Report and Order")). Soon after the release of the First Report and Order, incumbent LECs and State Commissions across the country filed motions to stay the implementation of the Order, in whole or in part. The cases were consolidated in front of the Eighth Circuit. In Iowa Utilities Board, the Eighth Circuit decided that "the FCC exceeded its jurisdiction in promulgating the pricing rules regarding local telephone service." Id. The Eighth Circuit *973 also vacated the FCC's "pick and choose" rule as being incompatible with the Act. Id. at 801. Other provisions of the First Report and Order were upheld by the Eighth Circuit.

On August 8, 1996, the FCC also promulgated the Second Report and Order, which contains additional FCC comments and regulations concerning provisions of the Telecommunications Act of 1996 that were not addressed in the First Report and Order. The People of the State of California v. FCC, 124 F.3d 934, 939 (8th Cir.1997), rev'd in part sub nom., AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 119 S.Ct. 721, 142 L.Ed.2d 835 (1999). Again many local exchange carriers and state commissions filed suit challenging the order. Several cases were combined in front of the Eighth Circuit, which issued another order addressing the FCC's rules. Id.

On January 25, 1999, the Supreme Court reversed a significant portion of the Eighth Circuit's decisions. AT & T Corp. v. Iowa Utils. Bd., 119 S.Ct. at 721. The Supreme Court ruled that the FCC does have jurisdiction to implement local pricing rules and the FCC's rules governing unbundled access, with the exception of Rule 319, are consistent with the Act. Id. at 738. In addition, the Supreme Court upheld the FCC's "pick and choose" rule as a reasonable, and possibly the most reasonable, interpretation of § 252(i) of the Act. Id.

Procedural History

In this case, AWS, a Commercial Mobile Radio Service ("CMRS"), sent a letter dated October 3, 1996, to U.S. West making a request for the partes to negotiate an Interconnection Agreement pursuant to the Act. (A1, Ex. 1). The parties failed to reach accord on all issues and AWS petitioned the MPUC for arbitration on March 7, 1997.(A1). In its Petition for Arbitration, AWS noted eleven open issues for arbitration. (A1; Petition for Arbitration at 7-23). On

April 1, 1997, U.S. West submitted its response to the MPUC. (A7).

On April 17, 1997, the MPUC granted AWS's petition and established procedures for the arbitration. (A11; MPUC Order Granting Petition at 1-5). The MPUC referred the matter to the Office of Administrative Hearings [FN1] to designate an Administrative Law Judge (ALJ) to conduct the arbitration proceedings and issue a recommendation. (A11; MPUC Order Granting Petition at 4). In its order, the MPUC noted that the Minnesota Department of Public Service ("DPS") [FN2] and the Residential Utilities Division of the Office of the Attorney General ("RUD-OAG") [FN3] had a right under state law to intervene in all MPUC proceedings. (A11; MPUC Order Granting Petition at 6).

FN1. The Office of Administrative Hearings is an independent state agency which employs administrative law judges to conduct impartial hearings on behalf of other state agencies. Minn.Stat. §§ 14.48 and 14.50.

FN2. The Minnesota Department of Public Service is a state agency charged with the responsibility of investigating utilities and enforcing state law governing regulated utilities, as well as enforcing the orders of the MPUC. The DPS is authorized to intervene as a party in all proceedings before the MPUC. Minn.Stat. § 216A.07.

FN3. The Attorney General of Minnesota is "responsible for representing and furthering the interests of residential and small business utility consumers through participation in matters before the Public Utilities Commission involving utility rates and adequacy of utility services to residential or small business utility consumers." Minn.Stat. § 8.33, subd. 2.

The MPUC ordered that: "The burden of production and persuasion with respect to all issues of material fact shall be on U.S. WEST. The facts at issue must be proven by a preponderance of the evidence. The ALJ, however, may shift the burden of production as appropriate, based on which party has control of the critical information regarding the issue in dispute." (A11; MPUC Order Granting Petition at 10). The MPUC reasoned that the federal Telecommunications Act and the Minnesota Telecommunications Act of 1995 ***974** are designed to create competitive entry into the local telephone market and placing the burden of proof on U.S. West facilitates this purpose. (A11; MPUC Order Granting

Petition at 10). The MPUC further explained that U.S. West controlled most of the key information relevant to the proceedings. (A11; MPUC Order Granting Petition at 10).

On May 2, 1997, AWS and U.S. West submitted a matrix of twelve key issues to ALJ Allen Giles and the MPUC. (A15). Those issues included:

1) Access to Service Agreements;
2) Points of Interconnection;
3) Pricing of Services;
4) Application of Access Charges;
5) Reciprocal Compensation/Symmetrical Compensation;
6) Access to Unbundled Network Elements;
7) Items Specific to Paging;
8) Access to Poles, Ducts, Conduits, and Rights of Way;
9) Reciprocal Compensation Effective Date and Rates;
10) Contract Language;
11) Service Quality Standards; and
12) Transit Traffic.

(A15; Positions on Key Issues at 1-7). US West withdrew from its original list of open issues Wide Area Inbound Calling; Access to Numbering Resources; Dialing Parity; and Procedure for Notice of Change, because those issues were no longer in dispute. (A15; Positions on Key Issues at 5).

ALJ Giles presided over the arbitration hearing on May 6 and 7, 1997. (A17-A19). Attorneys for U.S. West, AWS, and the DPS were present, as well as a member of the MPUC staff. (A17; ALJ Hearing Transcript at 2). Eight witnesses were called and various exhibits were entered. (A17-A19). AWS called Kerri M. Landeis, Director of External Affairs for AWS, (A20); Russell Thompson, Director of Network Planning for AWS, (A22); and Dr. Thomas M. Zepp, economist and Vice-President of Utility Resources, Inc., (A25), as expert witnesses. (A17-A18). US West called Thomas G. Londgren, Director of the Minnesota Regulatory Group for U.S. West, (A28); Denyce Jennings, U.S. West's Manager of Wireless Interconnection, (A30); Craig Wiseman, a member of U.S. West's technical staff in the Interconnection Planning Group, (A18; ALJ Hearing at 261); and Dean Buhler, a member of U.S. West's technical staff in Information Technologies, (A18; ALJ Hearing at 312), as expert witnesses. (A17-A19). US West also submitted the rebuttal testimony of Robert Harris, Principal at the Law and Economics Consulting Group and Professor Emeritus of Business and Public Policy in the Haas School of Business, University of California, Berkeley. (A39). The DPS called Susan Peirce, Public Utilities Rates Analyst for the MPUC, as an expert witness. (A40, Ex. A). The parties, including the DPS, submitted post-hearing briefs. (A45-A50). On June 6, 1997, the ALJ issued a

Report and Recommended Arbitration Decision. (A51).

In early June, both U.S. West and AWS filed exceptions to the Recommended Arbitration Decision. (A53); (A54). By letter dated June 11, 1997, the DPS noted no exceptions would be filed as the ALJ's recommendations were consistent with the positions advocated by the DPS. (A55). The MPUC heard a staff briefing and oral arguments on June 30 and July 2, 1997.(A57). Pursuant to its vote at the July 2 meeting, the MPUC issued its Order Resolving Arbitration Issues on July 30, 1998.(A58). In its Order, the MPUC took judicial notice of the stayed FCC rules and made the FCC methodologies part of the record. (A58; Order Resolving Arbitration Issues at 2). The MPUC ruled on the following issues:

1) Bill & Keep;
2) Interim Prices;
3) Compensation to AWS from Third-Party Carriers;
*975 4) Compensation for Traffic Terminated at AWS' Mobile Switching Center (MSC);
5) Access Charges for Intra-Major Trading Area (MTA) Roaming Calls;
6) Compensation for Terminating Paging Calls;
7) Dedicated Paging Facilities;
8) The Effective Date for Reciprocal Compensation;
9) Rates to Be Applied Between Commencement of Reciprocal Compensation and the Issuance of an Order;
10) "Pick and Choose" Option;
11) Points of Interconnection;
12) Limitation on Distance as to Mid-span Meet Point;
13) Collocation of AWS' Remote Switching Units (RSUs) and Digital Loop Carrier Systems (DLCs) at U.S. West's Premises;
14) The Definition of "Collocated Premises";
15) Denial of Access Due to Space Exhaustion;
16) Nondiscriminatory Access to Unbundled Network Elements;
17) Access to Operational Support Systems (OSS);
18) Remedies for Service Quality Violations;
19) Access to Poles, Ducts, Conduits, and Rights of Way;
20) Adoption of Proposed Contract as Template; and
21) Arbitration Costs.

(A58; Order Resolving Arbitration Issues at 4-33). The MPUC ordered the parties to submit a final contract, containing all the arbitrated and negotiated terms, no later that 30 days from the service date of the MPUC's Order. (A58; Order Resolving Arbitration Issues at 34). On August 27, 1997, the parties submitted a CMRS Interconnection Agreement in accordance with the Order, but expressly reserved all rights in connection with any future challenges to the Order. (A48; Letter of Mark Ayotte at 2). The parties were unable to resolve the issue of special construction for interconnection facilities and therefore submitted two

alternative versions for the portion of the Agreement addressing that issue. (A48; Letter of Mark Ayotte at 2).

On August 11, 1997, AWS filed a Petition for Reconsideration. (A59). On September 18, 1997, the Petition for Reconsideration and the Proposed Contract came before the MPUC. (A66; Order Resolving Issues After Reconsideration at 1). On September 29, 1997, the MPUC issued its Order Resolving Issues After Reconsideration, Examining Interconnection Agreement, and Requiring Compliance Filing. (A66). In that Order, the MPUC granted in part and denied in part AWS' Petitions for Reconsideration; the MPUC was persuaded that the compensation rate for AWS-terminated traffic should be the tandem switching rate rather than calculated on a per call basis. (A66; Order Resolving Issues After Reconsideration at 3, 11). The MPUC also corrected an error in its calculation of prices. (A66; Order Resolving Issues After Reconsideration at 4). The MPUC adopted the language submitted by AWS concerning special construction for interconnection facilities as the final contract language. (A66; Order Resolving Issues After Reconsideration at 11). The MPUC required a few further amendments and modifications to the Agreement, such as the addition of a notice provision and a provision concerning U.S. West Dex. (A66; Order Resolving Issues After Reconsideration at 6-11). The MPUC found the rest of the agreement to be generally consistent with the federal Act, Minnesota law, and the public interest. (A66; Order Resolving Issues After Reconsideration at 6).

The MPUC ordered the parties to submit a final contract that complied with its Order within 30 days; the MPUC noted ***976** that a final contract with the proposed modifications would meet all applicable legal requirements, and therefore would be approved and effective as of September 18, 1997. (A66; Order Resolving Issues After Reconsideration at 11). The final U.S. West-AWS Agreement was filed with the MPUC on October 30, 1997.(A68). On December 15 and March 4, 1998, the MPUC issued two memorandums noting that the parties filed an Agreement that complied with its Order of September 29, 1997.(A69); (A73).

On March 13, 1998, pursuant to 47 U.S.C. § 252(e)(6), U.S. West filed the instant action seeking review of the MPUC's Orders. US West alleges nine counts in its complaint: (1) Count I, the MPUC violated U.S. West's due process rights and the dictates of the Act and Minnesota law by placing the burden of proof on U.S. West; (2) Count II, the MPUC violated 47 U.S.C. §§ 252(b)(1) and (b)(4)(A) by considering issues not

included in AWS' petition or U.S. West's response; (3) Count III, the MPUC violated 47 U.S.C. § 252(d)(2) and (d)(A)(ii) by treating AWS's Mobile Switching Center ("MSC") as a tandem switch for the purpose of compensation; (4) Count IV, the MPUC violated 47 U.S.C. § 251(c)(6) when it required U.S. West to collocate RSUs and DLCs on its premises; (5) Count V, the MPUC violated 47 U.S.C. § 252(i) by ordering the inclusion of a provision in the Interconnection Agreement referencing the "unsettled state of the law" concerning the "pick and choose" rule; (6) Count VI, the MPUC violated § 251(c)(2) when it ordered U.S. West to provide interconnection at any technically feasible point, even if construction is involved; (7) Count VII, the MPUC exceeded its authority when it imposed conditions on U.S. West Dex; (8) Count VIII, the MPUC exceeded its authority under § 252(b)(4)(C) and (c) of the Act when it imposed requirements not expressly contained in the Act or state law; and (9) Count IX, the MPUC violated the Takings Clause by taking U.S. West's property without just compensation.

II. OPERATIONAL SUPPORT SYSTEMS AS AN OPEN ISSUE

US West argues that the MPUC improperly required U.S. West to provide AWS access to its operational support systems ("OSS"). US West alleges the MPUC had no authority to require this access because this was not an open issue before the MPUC.

[1] Section 252(c) ("Standards for arbitration") states that:

> In resolving by arbitration under subsection (b) of this section any open issues and imposing conditions upon the parties to the agreement, a State commission shall-
> (1) ensure that such resolution and conditions meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title;
> (2) establish any rates for interconnection, services, or network elements according to subsection (d) of this section; and
> (3) provide a schedule for implementation of the terms and conditions by the parties to the agreement.

47 U.S.C. § 252(c) (emphasis added). Standing alone, this provision could arguably be read as ambiguous concerning the MPUC's ability to impose any condition of its choosing. However, when read in conjunction with 47 U.S.C. § 252(b) ("Agreements arrived at through compulsory arbitration"), there is a clear indication that any condition that the MPUC decides to impose on the agreement must relate to an "open issue," that is an issue raised by the parties themselves. Section 252(b)(4)(A) states that "[t]he State commission shall

limit its consideration of any petition under paragraph (1) (and any response thereto) to the issues set forth in the petition and in the response, if any ...." This subsection indicates that the MPUC cannot independently *977 raise an issue not raised by one of the parties. This interpretation is further reinforced by subsection (b)(4)(C) which states that "[t]he State commission shall resolve each issue set forth in the petition and the response, if any, by imposing appropriate conditions as required to implement subsection (c) of this section upon the parties to the agreement ...." In this context, the imposition of conditions is expressly limited to resolving open issues. Therefore, § 252(c) cannot be read as a grant of authority to a state commission to impose any requirement of its choosing; under § 252(c) state commissions are limited to arbitrating open issues.

The MPUC and AWS argue, in turn, that the issue of access to unbundled network elements was clearly before the MPUC as an open issue and that because the OSS is a network element to be made available to new entrants on an unbundled basis according to 47 C.F.R. § 15.319, the issue of access to the OSS was also clearly before the MPUC.

After the MPUC issued its order and the parties submitted their briefs in this case, the Supreme Court vacated § 15.319. AT&T Corp., 525 U.S. at ----, 119 S.Ct. at 736. The Supreme Court stated that the FCC, in determining which network elements an incumbent LEC must make available, should give greater weight to the terms "necessary" and "impair" in § 252(d)(2). Id. The issue of access to OSS was an open issue only to the extent it could be considered a network element to be made available on an unbundled basis. In light of the Supreme Court's decision vacating 47 C.F.R. § 15.319, whether OSS can be considered an unbundled network element is now in doubt and § 15.319 cannot serve as the basis for its being considered such. Because the singular basis asserted by the MPUC for its considering access to OSS an open issue has now been removed by the Supreme Court, this Court concludes that the MPUC lacked authority under § 252(c) to require U.S. West to make access to its OSS available to AWS. This issue is remanded to the MPUC for further consideration in light of this Order. [FN4]

FN4. As was noted by the Eastern District of North Carolina, the Act does not explain what should occur if a district court finds that an Interconnection Agreement violates the Act. AT & T Communications of the Southern States, Inc. v. BellSouth Telecommunications, Inc., 7 F.Supp.2d 661, 668

(E.D.N.C.1998). Given the appellate nature of the proceeding, a remand to the state commission is the most appropriate option. Id.

III. TANDEM TRANSPORT AND TERMINATION

US West argues that a provision of the Agreement imposed by the MPUC unlawfully compensates calls terminated at AWS's MSC at the tandem switching rate. US West alleges that the MPUC failed to consider actual function, that is that the MSC actually operates like an end-office switch rather than a tandem switch, in making its determination.

Section 251(b)(5) of the Act directs that all local exchange carriers are obligated to establish reciprocal compensation arrangements for the transport and termination of telecommunications. 47 U.S.C. § 251(b)(5). The terms and conditions for reciprocal compensation must be just and reasonable and, to meet this standard, they must allow for the recovery of a reasonable approximation of the "additional cost" of transporting and terminating a call begun on another carrier's network. 47 U.S.C. § 252(d)(2)(A). The FCC found that the "additional cost" will vary depending on whether or not a tandem switch is involved. First Report and Order, ¶ 1090. The FCC, therefore, determined that state commissions can establish transport and termination rates that vary depending on whether the traffic is routed through a tandem switch or directly to a carrier's end-office switch. Id. The FCC directed state commissions to "consider whether new technologies (e.g. fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's ***978** tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination via the incumbent LEC's tandem switch." Id. The FCC further instructed that where the new carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the new carrier's costs is the LEC tandem interconnection rate. First Report and Order, ¶ 1090; 47 C.F.R. § 51.711(a)(3). [FN5] Therefore, in order to evaluate whether a switch performs as a tandem switch, it is appropriate to look at both the function and geographic scope of the switch at issue.

FN5. The Eighth Circuit vacated 47 C.F.R. § 51.711(a)(3) on the ground that the FCC lacked jurisdiction to issue pricing rules. Iowa Utils. Bd., 120 F.3d at 800, 819 n. 39. However, the Supreme Court reversed this

determination and reinstated the FCC's pricing rules, including 47 C.F.R. § 51.711, finding that "the Commission has jurisdiction to design a pricing methodology." AT&T Corp., 119 S.Ct. at 733.

Whether a switch performs as a tandem or end-office switch is a factual determination that has been expressly delegated to the state commissions by the FCC. Because this is a question of fact, the MPUC's determination is reviewed using the arbitrary and capricious standard of review. AT & T Communications of the Midwest, Inc. v. Contel of Minnesota, No. 97-901 ADM/JGL, slip op. at 10-11 (D.Minn. April 30, 1998) (order denying motions to dismiss and determining standard of review); see TCG Milwaukee, Inc. v. Public Service Commission of Wisconsin, 980 F.Supp. 992, 1004 (W.D.Wis.1997).

The fundamental technical differences between wireless and landline telephone systems greatly complicate the comparison of the functions of their component elements. It is to some extent like comparing the proverbial apples and oranges.

Russell Thompson, Director of Network Planning for the Western Region of AWS, testified that the MSC performs duties similar to both a tandem and an end-office switch. (A23; Rebuttal Testimony of Russell Thompson at 1). Thompson described landline networks as being characterized by hierarchical switching centers with both tandem and end-office switches often being involved in the routing of calls. (A23; Rebuttal Testimony of Russell Thompson at 2). Wireless networks were explained as being hierarchical involving IS 41 Tandems, Cell Site Control ("CSC") switches, and cell sites in the routing of calls. (A23; Rebuttal Testimony of Russell Thompson at 2). The IS 41 and CSC are both located in the MSC. (A23; Rebuttal Testimony of Russell Thompson at 2). The CSC switches and cell sites together perform end office-like functions, (A23; Rebuttal Testimony of Russell Thompson at 7-8), while the IS 41 Tandem provides tandem-switch functions. (A23; Rebuttal Testimony of Russell Thompson at 3). "[T]andem switching systems perform trunk switching and generally provide two basic network functions--traffic concentration and centralization of services." (A23; Rebuttal Testimony of Russell Thompson at 9 (citing BOC Notes on Network, Section 4, Network Design and Configuration, 4.1.3.3, Tandem Switching Systems, pp. 4-6)). Thompson testified that the IS 41 Tandem performs both these functions. (A23; Rebuttal Testimony of Russell Thompson at 9).

Thomas Zepp, economist and Vice President of Utility Resources, Inc., confirmed Thompson's assessment that the MSC functions as a tandem switch. (A25; Direct Testimony of Thomas Zepp at 38-41). Zepp gave a number of examples as to how a MSC performs tandem functions, for example storing the location of and tracking a wireless customer in a "Home Location Register," routing calls to another MSC while a customer is in transit, and routing phone calls to a landline in the most cost-effective manner. (A25; Direct Testimony of Thomas Zepp at 38-40).

US West, in turn, presented strong evidence that the MSC functions as an end- ***979** office switch rather than a tandem switch. (A42; Direct Testimony of Craig Wiseman at 9). US West's expert Craig Wiseman, a member of U.S. West's technical staff in the Interconnection Planning Group, testified that the MSC only connected AWS subscribers to each other or to other local service provider networks in order to deliver calls to or receive calls from AWS subscribers. (A42; Direct Testimony of Craig Wiseman at 9). AWS depends on U.S. West tandems to send calls to or receive calls from the vast majority of subscribers in Minnesota and the rest of the United States. (A42; Direct Testimony of Craig Wiseman at 9). Wiseman also testified that other wireless companies, such as GTE Mobilenet, SouthWestco, and Aliant, had recognized their switching offices as end offices in arbitrated agreements, and that other state arbitration panels had determined that wireless companies are not entitled to tandem switching and transport compensation. (A42; Directory of Craig Wiseman at 13).

On the issue of the geographic scope of the switches, there was evidence that the MSC serves a geographic area similar to that of a landline tandem switch. US West's tandem switches are limited by the LATA [FN6] boundaries in Minnesota and therefore there are several tandem switches within the state. (A18; ALJ Hearing at 209-10). AWS' MSC directly serves sixty-six percent of Minnesota's population. (A17; ALJ Hearing at 33). Although percentage of population is not precise as to geographic area covered, it indicates that the MSC covers at least an area comparable to one of Minnesota's LATAs and therefore covers an area comparable to a U.S. West tandem switch. US West argues that AWS' MSC fails to reach the same geographic area as all of U.S. West's tandem switches. (A42; Direct Testimony of Craig Wiseman at 11- 12). However, that comparison is irrelevant. The issue is not whether the MSC covers the same geographic area as all of the tandem switches in Minnesota, but rather whether it covers the

same geographic area as one tandem switch.

FN6. A Local Access and Transport Area ("LATA") is "a contiguous geographic area" established by a Bell operating company pursuant to a consent decree. 47 U.S.C. § 153(25). Generally a state will have more than one LATA.

[2] Based on the evidence before the ALJ and the MPUC, it appears that the MSC performs functions comparable to both end-office and tandem switches. Although there was conflicting evidence concerning the function of the MSC, the testimony of Thompson and Zepp provided a sufficient basis for the MPUC's finding that the MSC performs a tandem switch function. [FN7] This is particularly true in light of the FCC's admonition to consider the capabilities of new technology such as wireless networks. While there may be no exact corollaries between the wireless and landline systems, there is evidence to suggest that the MSC has capabilities and reach that are of a certain equivalence to a tandem switch. The evidence also indicates that the MSC covers a geographic area comparable to that covered by a tandem switch. Pursuant to the FCC rules, this alone provides sufficient grounds for a finding that the appropriate rate for the MSC is the tandem switch rate. [FN8]

FN7. US West indicated that the MPUC should have been limited by the definition of tandem switch found in 47 C.F.R. § 51.319(c)(2). However, since the MPUC made its decision, 47 C.F.R. § 51.319 was vacated by the Supreme Court. AT&T Corp., 119 S.Ct. at 736. US West's argument is now moot in light of the Supreme Court's recent decision.

FN8. The MPUC stated that it did not base its final decision on FCC Rule 51.711(a)(3) and the geographic reach of the switches, although its preliminary ruling may have taken geographic reach into consideration. (MPUC's Brief at 4). Even though the MPUC may not have relied on FCC Rule 51.711(a)(3), the reinstated rule and the comparable geographic reach of the switches reinforces the MPUC's final decision.

The MPUC's finding that calls terminated at AWS's MSC should be compensated ***980** at the tandem switching rate is not arbitrary and capricious.

IV. COLLOCATION OF EQUIPMENT

US West argues that the MPUC erred by requiring U.S. West to permit AWS to physically collocate RSUs on U.S. West's

premises because such equipment is not necessary for access to unbundled network elements under § 251(c)(6). [FN9]

> FN9. US West briefed only the issue of collocating RSUs, although its complaint referenced both RSUs and DLCs in connection with this issue.

Section 251(c)(6) states that an incumbent LEC has a duty to provide "for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier ...." 47 U.S.C. § 251(c)(6) (emphasis added). The FCC found that § 251(c)(6) "generally requires that incumbent LECs permit the collocation of equipment used for interconnection or access to unbundled network elements." First Report and Order, ¶ 579. In reaching that conclusion, the FCC interpreted and defined the term "necessary": "Although the term 'necessary,' read most strictly, could be interpreted to mean 'indispensable,' we conclude that for the purposes of section 251(c)(6) 'necessary' does not mean 'indispensable' but rather 'used' or 'useful.' " Id. The FCC decided that a more expansive interpretation of the term "necessary" would further the competitive motivation behind the Act. Id.

The FCC then determined whether specific equipment could or could not be collocated on the incumbent LEC's premises, essentially deciding whether the equipment is "useful" for interconnection or access to unbundled elements. Id. ¶ 580-82. Concerning the collocation of switching equipment, the FCC stated:

> At this time, we do not impose a general requirement that switching equipment be collocated since it does not appear that it is used for the actual interconnection or access to unbundled network elements. We recognize, however, that modern technology has tended to blur the line between switching equipment and multiplexing equipment, which we permit to be collocated. We expect, in situations where the functionality of a particular piece of equipment is in dispute, that state commissions will determine whether the equipment at issue is actually used for interconnection or access to unbundled elements.

Id. ¶ 581. The FCC left the factual determination as to whether "switching equipment" is used for interconnection to the discretion of the state commissions.

When allotting the burden of proof, the FCC placed the burden on the incumbent LEC to prove that specific equipment is not "necessary," meaning useful, for interconnection to

unbundled network elements. Id. ¶ 580. In explaining this standard, the FCC stated that:

> [W]henever a telecommunication carrier seeks to collocate equipment for purposes within the scope of Section 251(c)(6), the incumbent LEC shall prove to the state commission that such equipment . . . is not "necessary," as we have defined that term, for interconnection or access to unbundled network elements. Id. ¶ 580.

In addition to defining "necessary" in the context of § 251(c)(6), the FCC also interpreted the term "necessary" in relation to § 251(d)(2). [FN10] The FCC determined ***981** that within the context of § 251(d)(2) the term "necessary" means "that an element is a prerequisite for competition." First Report and Order, ¶ 282. Without a necessary element, a new entrant's "ability to compete would be significantly impaired or thwarted." Id. The FCC stated that finding that a proprietary element is not "necessary" for purposes of § 251(d)(2)(A), requires an incumbent LEC to establish that "a new entrant could offer the same proposed telecommunications service through the use of other, nonproprietary unbundled elements within the incumbent's network." Id. ¶ 283. The FCC would view the "necessary" requirement as having been met even if the " 'requesting carriers can obtain the requested proprietary element from a source other than the incumbent,' " since " ' [r]equiring new entrants to duplicate unnecessarily even a part of the incumbent's network could generate delay and higher costs for new entrants, and thereby impede entry by competing local providers and delay competition, contrary to the goals of the 1996 Act.' " AT&T Corp., 119 S.Ct. at 735 (citing First Report and Order, ¶ 283). By means of these lexicographical permutations, the FCC created a similar definition for the term "necessary" within the context of § 251(d)(2) and § 251(c)(6); in both cases, the word means something akin to "useful."

> FN10. 47 U.S.C. § 251(d)(2) provides:
>
> In determining what network elements should be made available for purposes of subsection (c)(3) of this section, the Commission shall consider, at a minimum, whether-
>
> (A) access to such network elements as are proprietary in nature is necessary; and
>
> (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer. (emphasis added).

In AT & T Corp., the Supreme Court vacated the FCC's interpretation of the word "necessary" within the context of § 251(d)(2), finding that the FCC had given the term too broad a definition and robbed it of all of its teeth as a limiting standard. AT&T Corp., 119 S.Ct. at 736. The Court stated that "the Act requires the FCC to apply some limiting standard, rationally related to the goals of the Act, which it has simply failed to do." Id.

[3][4] By rejecting the FCC's definition of the term "necessary" within the context of § 251(d)(2), the Supreme Court implicitly rejected the same overly broad definition given to the word by the FCC in relation to § 251(c)(6). "Presumptively, 'identical words used in different parts of the same act are intended to have the same meaning.' " United States National Bank of Oregon v. Independent Insurance Agents of America, 508 U.S. 439, 460, 113 S.Ct. 2173, 124 L.Ed.2d 402 (1993) (quoting Commissioner v. Keystone Consol. Industries, Inc., 508 U.S. 152, 159, 113 S.Ct. 2006, 124 L.Ed.2d 71 (1993)). As "necessary" does not mean "useful" in the context of § 251(d)(2), it cannot mean "useful" in § 251(c)(6). In making its factual determination about whether to permit the collocation of RSUs, the MPUC utilized the "used" or "useful" standard originally promulgated by the FCC. [FN11] In light of the rejection of this standard by the Supreme Court, collocation must be remanded to the MPUC for redetermination using a more stringent meaning of the term "necessary."

> FN11. In its Order, the MPUC stated that it will allow the collocation of RSUs and DLCs on U.S. West's premises "[c]onsistent with its reasoning and action in the Consolidated Arbitration Order." (A58; Order Resolving Arbitration Issues at 22). In the Consolidated Arbitration Order, the MPUC ordered collocation of RSUs and DLCs based on U.S. West's failure "to meet its burden of proving that these types of equipment are not 'necessary,' as interpreted by the FCC, for interconnection or access to unbundled elements." (A168 from US West Communications, Inc. v. Garvey, No. 97- 913 ADM/AJB; Consolidated Arbitration Order at 16) (emphasis added).

V. "PICK AND CHOOSE" PROVISION

In its reply brief, U.S. West seeks to withdraw, without prejudice, its Count V request for declaratory relief concerning AWS's rights under § 252(i)'s most favored nation provision. (Pl.'s Reply Brief at 1 n. 1). Therefore, the Court will dismiss Count V without prejudice. It should

be noted, however, that in light of the recent Supreme Court ruling, the provision concerning § 252(i) that the MPUC chose now seems prescient.

*982 VI. INTERCONNECTION AT ANY TECHNICALLY FEASIBLE POINT

The MPUC ruled that U.S. West must build facilities necessary for AWS to connect to U.S. West's network at any technically feasible point of AWS's choosing. (A66; Order Resolving Issues After Reconsideration at 7). [FN12] The MPUC approved the following language in the U.S. West-AWS Agreement: "USWS shall provide the facilities and arrangements herein described to AWS in order to establish the physical connection and permit the interchange of traffic between the Parties, as well as any other facilities AWS may require for operation of AWS's System." (A68; CMRS Interconnection Agreement at § 2.B). The MPUC also approved § 2.D of the Agreement, which would require U.S. West to build a DS1 or DS3 facility any place where one is not available. (A68; CMRS Interconnection Agreement at § 2.D).

FN12. The parties do not dispute that AWS would pay for the construction of any new facilities.

US West claims that the MPUC erred when it required U.S. West to construct new facilities. US West argues that this requirement over extends the Act's directive that incumbent LECs need to provide interconnection "that is at least equal in quality to that provided by the local exchange carrier to itself." 47 U.S.C. § 251(c)(2)(C).

The MPUC claims that § 251(c)(2)(C) is not controlling and urges that the focus should instead be on the Act's directive that incumbent LECs must provide interconnection to new entrants "at any technically feasible point within the [incumbent] carrier's network." 47 U.S.C. § 251(c)(2)(B). In support of the MPUC's ruling that U.S. West must build facilities, AWS similarly cites to § 251(c)(2)(B), as well as relying on the FCC's order stating that "the obligations imposed by sections 251(c)(2) and 251(c)(3) include modifications to incumbent LEC facilities to the extent necessary to accommodate interconnection or access to network elements." First Report and Order, ¶ 198.

Section 251(c)(2) states that an incumbent LEC has:

> The duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network-
> (A) for the transmission and routing of telephone exchange service and exchange access;

(B) at any technically feasible point within the carrier's network;

(C) that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; ...

47 U.S.C. § 251(c)(2). The FCC originally interpreted § 252(c)(2)(C) as requiring incumbent LECs to provide superior quality interconnection when such interconnection was requested by new entrants. Iowa Utils. Bd., 120 F.3d at 812. The Eighth Circuit, however, vacated this FCC interpretation of § 251(c)(2)(C), finding that it was not supported by the Act's language. Id. The Eighth Circuit explained that:

Although we strike down the Commission's rules requiring incumbent LECs to alter substantially their networks in order to provide superior quality interconnection and unbundled access, we endorse the Commission's statement that "the obligations imposed by sections 251(c)(2) and 251(c)(3) include modifications to incumbent LEC facilities to the extent necessary to accommodate interconnection or access to network elements."

Id. at 813 n. 33 (quoting First Report and Order, ¶ 198). The Eighth Circuit specifically upheld the FCC's definition of the term "technically feasible" from § 251(c)(2)(B). Id. at 810. In defining "technically feasible," the FCC stated:

*983 Interconnection, access to unbundled network elements, collocation, and other methods of achieving interconnection or access to unbundled network elements at a point in the network shall be deemed technically feasible absent technical or operational concerns that prevent the fulfillment of a request by a telecommunications carrier for such interconnection, access, or methods. A determination of technical feasibility does not include consideration of economic, accounting, billing, space, or site concerns, except the space and site concerns may be considered in circumstances where there is no possibility of expanding the space available. The fact that an incumbent LEC must modify its facilities or equipment to respond to such request does not determine whether satisfying such request is technically feasible.

47 C.F.R. § 51.5.

In reaching its decision concerning the construction of facilities, the MPUC stated that the issue was not whether AWS can demand a superior quality interconnection, but rather whether U.S. West can be required to modify its network to permit interconnection at existing quality levels. (A66; Order Resolving Issues After Reconsideration at 7). The

MPUC did not rely on the FCC's vacated interpretation of § 251(c)(2)(C), but rather what it considered to be the FCC's upheld interpretation of § 251(c)(2)(B).

The MPUC is correct that construction of a new facility does not necessarily mean superior interconnection. New facilities could be necessary just to create equivalent quality interconnection and access. Therefore, in making its ruling, the MPUC did not violate § 251(c)(2)(C).

[5] The question therefore becomes did the MPUC have the power under § 251(c)(2)(B) to order U.S. West to provide new facilities upon request or did the construction of new facilities exceed the modifications envisioned by the FCC in its interpretation of "technically feasible." The answer is dependent on whether the concept of modifying facilities is interpreted broadly or narrowly. Three factors favor a broad construction. First, the FCC stated that site concerns should not be determinative of technical feasibility except to the extent space could not be expanded. In this statement that site concerns should not be determinative, there is an implication that the parties should look beyond any specific site, e.g. to new facilities, when resolving interconnection issues. In addition, construction of new facilities falls under the rubric of space expansion and therefore ensures technical feasibility. Second, so long as the new entrant pays for the costs associated with the new facility, the incumbent LEC should not be unduly burdened. Third, the purpose of the Act is to promote the opening up of local telephone markets to competition in a speedy manner. Because the incumbent LEC has the relevant expertise and knowledge for building facilities to interconnect with its network, it would be expedient to require it to build the facilities.

Based on the foregoing, the Court concludes that the MPUC had the necessary authority under § 251(c)(2)(B) to order U.S. West to provide new facilities on request.

VII. US WEST DEX

US West claims the MPUC exceeded its authority when it rejected the parties' agreement to defer directory and yellow page issues to later negotiations and instead required the parties to adopt a provision that regulated U.S. West Dex. U.S. West argues that the MPUC does not have the authority, under either state law or the Act, to impose obligations on U.S. West Dex.

In response, the MPUC and AWS claim that the Commission did not directly regulate U.S. West Dex. They argue that the MPUC did what it was required to do by the Act, ensure that AWS had nondiscriminatory

access to telephone numbers and *984 listings, and that U.S. West provide AWS with services that are "at least equal in quality to that provided by the incumbent LEC to itself." First Report and Order, ¶ 970.

US West Communications, Inc., the party in this case, and U.S. West Dex are wholly owned subsidiaries of U.S. West, Inc. ("US West Parent"). MCI Telecomms. Corp. v. U.S. West Communications, Inc., Case No. C97-1508R, at 23- 24 (July 21, 1998 W.D.Wash.). US West Dex is the publishing branch of the parent company and publishes U.S. West's white and yellow page directories. Id. at 24. US West Dex is not a named party to the underlying Agreement in this case.

Contrary to the MPUC's and AWS's argument, the Commission did regulate U.S. West Dex. The MPUC required the parties to include language in the Agreement that placed a direct obligation on U.S. West Dex: "US WEST Dex will give the Carrier the same opportunity to provide directory listings as it provides to U.S. WEST (for example, through some type of bidding process)." (A56; Order Denying Reconsideration at 11). While other portions of the MPUC's Order were explicitly directed only at U.S. West, the MPUC did seek to control U.S. West Dex's business and contract agreements, and therefore to regulate U.S. West Dex: "US WEST shall make its contracts with U.S. WEST DEX available for review by the Carrier, as necessary, to ensure that the Carrier is receiving the same services at the same terms as U.S. WEST." (A56; Order Denying Reconsideration at 11). The question becomes whether the MPUC had the authority to regulate U.S. West Dex under either state law or the Act, or whether it assumed authority it never had as the Plaintiff claims.

[6] Under state law, the MPUC has only the "powers expressly delegated by the legislature and those fairly implied by and incident to those expressly delegated." In the Matter of Northwestern Bell Telephone Co., 371 N.W.2d 563, 565 (Minn.Ct.App.1985) (citing Great Northern Railway Co. v. Public Service Comm'n, 284 Minn. 217, 169 N.W.2d 732, 735 (1969)). Implied powers must be fairly evident from the express powers. Id. (quoting Peoples Natural Gas Co. v. Minnesota Public Utilities Comm'n, 369 N.W.2d 530 (Minn.1985)). As the Minnesota Supreme Court held, Chapter 237 was created to resolve issues concerning public utility telephone companies; a business that publishes directories is not a telephone company and therefore does not fall under the regulatory powers of the MPUC. In the Matter of Northwestern Bell Telephone Co., 367 N.W.2d 655, 660 (Minn.App.1985). US West, as a utility, is regulated by the MPUC, while U.S. West Dex, which is in the business of

publishing directories, is not. See id. The MPUC does not have the power under state law to regulate U.S. West Dex. The Court must therefore analyze federal law as the possible basis of authority for the MPUC's action regulating U.S. West Dex.

[7] The Act states that local exchange carriers have the duty to provide competitors with nondiscriminatory access to telephone numbers, directory assistance, and directory listings. 47 U.S.C. § 251(b)(3). US West Dex is not a local exchange carrier because it does not engage in providing telephone exchange service or exchange access. See 47 U.S.C. § 153(26). As U.S. West Dex is not a covered entity under the Act, the MPUC cannot use the statute to regulate U.S. West Dex or impose an obligation on it. See MCI Telecomms, Corp. v. U.S. West Communications, Inc., Case No. C97-1508R, at 25 (July 21, 1998 W.D.Wash.). [FN13]

> FN13. The FCC concluded that the term "directory listings" encompasses directory listings published by a telecommunication carrier and its "affiliates," but then never defines the term "affiliate." 47 C.F.R. § 51.5. Given the Act's express limitation of covered entities to telecommunications carriers, a telecommunications carrier's control of an entity must be a prerequisite for finding that the entity is an affiliate within the meaning of the FCC's rules. Although U.S. West and U.S. West Dex share a parent company that does not equate to exerting control over one another. Without some evidence of U.S. West's control of U.S. West Dex, the Court cannot conclude that U.S. West Dex is an affiliate of U.S. West.

***985** [8] Because it lacked the power under both state law and the Act to regulate U.S. West Dex, the MPUC exceeded its authority by ordering the addition of a provision to § 11 requiring U.S. West Dex to treat U.S. West and its competitors the same with respect to yellow page advertising and white page directory listings. These matters are remanded to the MPUC for further deliberations.

VIII. RECORDING AND BILLING SERVICES

US West argues that the MPUC violated § 252(b)(4) and (c) by requiring U.S. West to make its recording and billing services available to AWS to facilitate AWS's collection of termination charges when a third party originates calls that transit U.S. West's network and are then terminated on AWS's network. US West argues that the MPUC did not have the authority

under the Act to impose such a requirement.

AWS argues that the MPUC had the necessary authority under § 252(b)(4)(C) as well as § 251(b)(5). The MPUC argues that its authority derived from § 253(b) and state law.

After a request for negotiations has been made, the parties have a duty to negotiate an Interconnection Agreement pursuant to § 251 of the Act. 47 U.S.C. § 252(a)(1). During their negotiations, the parties are not bound by the directives of subsections (b) and (c) of § 251. Id. Essentially, the parties can create an Interconnection Agreement of their choosing that covers any desired aspect of interconnection. In their discussions, the parties are not limited to those matters explicitly enumerated in § 251 or the FCC's rules. If the parties are unable to resolve the issues that formed the subject of their negotiations, § 252(b)(1) provides that a party "to the negotiation may petition a State commission to arbitrate any open issues." (emphasis added). The parties can bring any unresolved interconnection issue before the state commission for arbitration. The parties are again not limited to issues explicitly enumerated in § 251 or the FCC's rules, but rather are limited to the issues which have been the subject of negotiations among themselves.

Section 252(b)(4)(C) provides the authority for a state commission to act during arbitration proceedings, "[t]he State commission shall resolve each issue set forth in the petition and the response, if any, by imposing appropriate conditions as required to implement subsection (c) of this section upon the parties to the agreement ...." Section 252(c) ("Standards for arbitration") states that:

> In resolving by arbitration under subsection (b) of this section any open issues and imposing conditions upon the parties to the agreement, a State commission shall-
> (1) ensure that such resolution and conditions meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title;
> (2) establish any rates for interconnection, services, or network elements according to subsection (d) of this section; and
> (3) provide a schedule for implementation of the terms and conditions by the parties to the agreement.

47 U.S.C. § 252(c).

[9] Section 252(b)(4)(C) expressly provides that a state commission "shall resolve each issue set forth in the petition and the response." If an issue has been designated by the parties as in need of resolution by the MPUC, the MPUC has an obligation to address that

issue and, as was noted above, the parties may raise any issue concerning which they have attempted *986 to negotiate a resolution. The language of § 252(c)(1) stating that the state commission shall ensure that the resolution of open issues meets the requirements of § 251, does not confine the resolution of the issues to the requirements of § 251. If a state commission ensures that the resolution meets the requirements of a section, it is merely certifying that the resolution meets the affirmative requirements of the section while simultaneously determining that it does not conflict with or violate the section's affirmative and negative requirements. Not every issue included in the resolution necessarily involves the affirmative requirements of § 251. Thus, the only limitations that § 252(b)(4)(C) and (c) place upon any individual issue addressed by a state commission during arbitration are that the issue must be: (1) an open issue and (2) that resolution of the issue does not violate or conflict with § 251.

[10] Transit traffic was an issue presented by the parties to the ALJ and the MPUC in their matrix of twelve key issues. (A15; Positions on Key Issues at 5). As part of the transit traffic issue, the parties discussed including transit traffic as part of their "bill and keep" arrangement. AWS argued that it should be part of the arrangement and U.S. West argued that it would not be appropriate to include it because transit traffic does not involve a U.S. West customer originating the call. (A15; Positions on Key Issues at 5). The billing of transit traffic was an open issue between the parties and was expressly presented to the MPUC for resolution. Furthermore, as the billing of transit traffic is not expressly addressed by § 251 or the FCC rules, the MPUC's decision to require U.S. West to make its recording and billing services available to AWS does not conflict with or violate § 251. Because this issue met the two requirements of § 252(b)(4)(C) and (c), the MPUC had the authority under the Act to resolve this open issue.

IX. BURDEN OF PROOF

The MPUC created the following burden of proof for the parties: "The burden of production and persuasion with respect to all issues of material fact shall be on U.S. WEST .... The facts at issue must be proven by a preponderance of the evidence. The ALJ, however, may shift the burden of production as appropriate, based on which party has control of the critical information regarding the issue in dispute." (A3) (MPUC Order Granting Petition at 10).

[11] When Congress establishes the burden of proof or production to be applied in an administrative proceedings, the courts must defer to Congress. Steadman v. S.E.C., 450 U.S. 91, 95-96, 101 S.Ct. 999, 67 L.Ed.2d 69 (1981). However, when Congress is silent as to the issue, it is left to the judiciary to resolve the question. 450 U.S. at 95, 101 S.Ct. at 1004.

The provisions of the Act and the FCC rules, which address the issue, place the burden of proof on the incumbent LEC. See 47 C.F.R. §§ 51.5 ("An incumbent LEC that claims that it cannot satisfy such request because of adverse network reliability impacts must prove to the state commission by clear and convincing evidence that such interconnection, access, or methods would result in specific and significant adverse network reliability impacts.") and 51.321(d) ("An incumbent LEC that denies a request for a particular method of obtaining interconnection or access to unbundled network elements on the incumbent LEC's network must prove to the state commission that the requested method of obtaining interconnection or access to unbundled network elements at that point is not technically feasible."). There appears to be no section of the Act or FCC rules that places the burden of proof on the new entrant. The MPUC has admittedly placed a heavy burden of proof on the incumbent LEC, but no evidence has been adduced that such a standard conflicts ***987** with the Act or the FCC rules. [FN14] To the extent Congress and the FCC have spoken to the burden of proof, the MPUC's position does not conflict with their directives.

> FN14. The one apparent exception involves the issue of technical feasibility of interconnection. The FCC rules create a clear and convincing standard in relation to this issue while the MPUC created a preponderance of the evidence standard. As this apparent conflict is not relevant to this case, it will not be addressed here.

As for the burden of proof for the remainder of the statute, normally when a federal statute is silent as to the burden of proof in an administrative proceeding, a court would turn to the Administrative Procedure Act (APA) to fill the void. However the APA does not apply to these proceedings because the MPUC is not a federal agency. Franklin v. Massachusetts, 505 U.S. 788, 800, 112 S.Ct. 2767, 120 L.Ed.2d 636 (1992). Typically an applicable state statute would determine the proper burden of proof for proceedings before a state agency like the MPUC. In fact, U.S. West argues that the MPUC should have applied the burden of proof for contested case

proceedings found in Minnesota Rule 1400.7300, subp. 5. However, because this is a sui generis proceeding, a state agency applying federal law to review telecommunications agreements, at the time of the hearing there was no state law explicitly on point. [FN15] The MPUC was thus left the task of developing an appropriate burden of proof.

> FN15. After the hearing, the MPUC adopted Minnesota Rule 7812.1700, subp. 23 to govern the arbitration of intercarrier negotiations. Minnesota Rule 7812.1700, subp. 23 contains the same burden of proof as the one used by the MPUC in this case. Minnesota Statute § 237.16 authorized the MPUC to promulgate rules governing local competition and to define the procedures for competitive entry and exit. Minn.Stat. § 237.16, subd. 8.

The burden of proof the MPUC selected is in accord with the procompetitive purposes of the Act and realistically reflects the parties access to and control of information. Generally, under federal and Minnesota common law, the proponent of an issue--that is the one who wants to prove the affirmative--has the burden of proof as to that issue. Newport News Shipbuilding and Dry Dock Co. v. Loxley, 934 F.2d 511, 516 (4th Cir.1991) (citing Selma, Rome & D. Railroad v. United States, 139 U.S. 560, 567, 11 S.Ct. 638, 35 L.Ed. 266 (1891); Fleming v. Harrison, 162 F.2d 789, 792 (8th Cir.1947)); Holman v. All Nation Insurance Co., 288 N.W.2d 244, 248 (Minn.1980). However, under both federal and Minnesota common law, questions of fairness, such as the control of information, can alter the disposition of the burden of proof. Fleming, 162 F.2d at 792; Holman, 288 N.W.2d at 248.

[12] In this case, placing the burden of proof on the competitive local exchange carrier ("CLEC") would present an insurmountable barrier to entry into the local telephone market. As the MPUC accurately noted, U.S. West has held a monopoly in the local telephone market for an extended period of time and as a result largely controls the information about the market. It knows the operation and function of various component elements of its system as well as the costs involved. Thus, fairness supports leveling the playing field by allocating the burden of proof onto the incumbent LEC, the party with the historical advantage.

In addition, the burden of proof established by the MPUC permits for the shifting of the burden in appropriate circumstances, e.g. when the CLEC controls the relevant information. Flexibility is provided to accommodate situations where it would be unjust to leave the burden of proof on the incumbent LEC.

Given this flexibility and in light of the control of information as well as the purpose of the Act, the burden of proof standard chosen by the MPUC was appropriate.

X. TAKINGS CLAIM

US West makes a general claim that if the U.S. West-AWS Agreement is upheld, *988 it will result in a taking of U.S. West's property. US West also alleges that requiring U.S. West to permit collocation of RSUs, access to its OSS, and interconnection and access to unbundled elements is a physical occupation of its property, and therefore constitutes a "per se taking under the Fifth Amendment."

In relation to its takings claim, U.S. West states that it is not seeking compensation for the alleged taking but rather that it wishes an injunction to prevent a taking without just compensation. US West appears to be alleging a violation of the jurisdictional grant of the Act. In making its argument, U.S. West relies on Bell Atlantic Tel. Cos. v. FCC, 24 F.3d 1441 (D.C.Cir.1994). In Bell Atlantic, the D.C. Circuit determined that 47 U.S.C. § 201 did not vest the FCC with the necessary authority to order LECs to provide physical collocation of equipment upon demand. Id. at 1444-47. It found that because the particular statute did not expressly authorize an order of physical collocation, the FCC could not impose it. Id. at 1447. Bell Atlantic is, however, inapposite to the present case, because, unlike the general Communications statute at issue in Bell Atlantic, 47 U.S.C. § 251(c)(6) expressly provides for limitations being placed on the LECs' property rights, including the requirement that incumbent LECs have a duty to provide for the physical collocation of equipment. See 47 U.S.C. § 251(c)(6). In fact, Congress was aware of the Bell Atlantic decision when it authorized the imposition of physical collocation:

> Paragraph 4(B) [of section 251] mandates actual collocation, or physical collocation, of equipment necessary for interconnection at the premises of a LEC, except that virtual collocation is permitted where the LEC demonstrates that actual collocation is not practical for technical reasons or because of space limitations.... Finally, this provision is necessary to promote local competition, because a recent Court decision indicates that the Commission lacks the authority under the Communications Act to order physical collocation. (See Bell Atlantic Tel. Co. v. Federal Communications Commission, 24 F.3d 1441 (1994)).

House Rep. No. 104-204, at 73 (1995). Therefore, Congress clearly intended to vest the

agencies with authority to place limitations on the LECs' property rights.

US West has not only challenged the MPUC's authority to impose these limitations on U.S. West's property, but also claimed that the Agreement approved by the MPUC does not fully compensate U.S. West for the taking of its property. This is a traditional takings claim allegation and the Court will therefore apply a traditional takings claim analysis.

The defendants argue that U.S. West's taking claim must fail because: (1) it exceeds the scope of this Court's jurisdiction, which is limited by 47 U.S.C. § 252(e)(6); (2) the claim is not ripe for review; and (3) the agreement contains provisions which allow for full cost recovery by U.S. West.

[13] The Eighth Circuit explicitly noted that a takings claim can be presented to a federal district court under the review provisions of subsection 252(e)(6). Iowa Utils., Bd., 120 F.3d at 818. Therefore, this Court has jurisdiction to hear the takings claim.

[14] In order for a takings claim to be ripe, two elements must be met: (1) the administrative agency has reached a final, definitive position as to how it will apply the regulation at issue, and (2) the plaintiff has attempted to obtain just compensation through the procedures provided by the State. Williamson Co. Regional Planning v. Hamilton Bank, 473 U.S. 172, 191, 194, 105 S.Ct. 3108, 87 L.Ed.2d 126 (1985). Here, neither of these elements have been satisfied.

[15][16] The Fifth Amendment states that, "private property [shall not] be taken for public use without just compensation." The Takings Clause is not meant to limit ***989** the government's ability to interfere with an individual's property rights, but rather to ensure compensation when a legitimate interference that amounts to a taking occurs. Glosemeyer v. Missouri-Kansas-Texas Railroad, 879 F.2d 316, 324 (8th Cir.1989) (quoting First English Evangelical Lutheran Church v. County of Los Angeles, 482 U.S. 304, 315, 107 S.Ct. 2378, 96 L.Ed.2d 250 (1987)). The compensation does not have to precede the taking; a process for obtaining compensation simply has to exist at the time of the taking. Id. (citing Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1016, 104 S.Ct. 2862, 81 L.Ed.2d 815 (1984)). If U.S. West ultimately receives just compensation then there has been no violation of the Takings Clause.

Public utilities, which have a hybrid public and private status, must be analyzed in a slightly different manner than other entities under the Takings Clause. [FN16]

Duquesne Light Co. v. Barasch, 488 U.S. 299, 307, 109 S.Ct. 609, 102 L.Ed.2d 646 (1989).

> FN16. Although the traditional public utility rate model is not a perfect model for § 252(e)(6) cases, it is informative. See J. Gregory Sidak & Daniel F. Spulber, Deregulatory Takings and Breach of the Regulatory Contract, 71 N.Y.U. Law Rev. 851, 954 (Oct.1996).

The guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so "unjust" as to be confiscatory. Covington & Lexington Turnpike Road Co. v. Sandford, 164 U.S. 578, 597, 17 S.Ct. 198, 205-206, 41 L.Ed. 560 (1896) (A rate is too low if its is "so unjust as to destroy the value of [the] property for all the purposes for which it was acquired," and in so doing "practically deprive[s] the owner of property without due process of law"); FPC v. Natural Gas Pipeline Co., 315 U.S. 575, 62 S.Ct. 736, 742, 86 L.Ed. 1037 (1942) ("By long standing usage in the field of rate regulation, the 'lowest reasonable rate' is one which is not confiscatory in the constitutional sense"); FPC v. Texaco Inc., 417 U.S. 380, 391-392, 94 S.Ct. 2315, 2323, 41 L.Ed.2d 141 (1974) ("All that is protected against, in a constitutional sense, is that the rates fixed by the Commission be higher than a confiscatory level").

Id. at 308, 109 S.Ct. 609. If the state fails to provide sufficient compensation, then the state has taken the use of a utility without just compensation and thereby violated the Takings Clause. Id. The particular theory used to determine whether a rate is fair does not matter. Id. at 310, 109 S.Ct. 609 (citing FPC v. Hope Natural Gas Co., 320 U.S. 591, 602, 64 S.Ct. 281, 88 L.Ed. 333 (1944)). If the overall effect cannot be said to be unreasonable then judicial inquiry is at an end. Id. (citing FPC v. Hope Natural Gas Co., 320 U.S. 591, 602, 64 S.Ct. 281, 88 L.Ed. 333 (1944)). Whether a rate is unfair depends on what is a fair rate of return given "the risks under a particular rate-setting system, and on the amount of capital upon which the investors are entitled to earn that return." Id. "Rates which enable [a] company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risk assumed certainly cannot be condemned as invalid ...." Hope Natural Gas, 320 U.S. at 605, 64 S.Ct. 281.

[17] The purpose of the Telecommunications Act of 1996 is, in part, to foster competition in the local telephone market. GTE North,

Inc. v. McCarty, 978 F.Supp. 827, 831 (N.D.Ind.1997) (citing Joint Explanatory Statement of the Committee of Conference, H.R.Rep. No. 104-458, at 113 (1996)). Under the Act, U.S. West provides services to its competitors rather than the public. 47 U.S.C. § 251(c). The end goal is not a fair rate of return as in the traditional rate-setting paradigm, but rather the equitable opening up of a market. Neither party to the Agreement is expected to profit in the interconnection or resale processes. See 47 U.S.C. § 251(c)(4)(A) ("to offer for resale at wholesale rates ..."). Because these transactions are not designed to be profitable, ***990** the analysis cannot be fair rate of return as to any individual provision concerning the sale or access of services to the CLECs. Rather the query must be whether any provision or provisions of the Agreement negatively affect the overall operation of the incumbent LEC to such a degree that it can no longer receive a fair rate of return from its investment.

[18] In this case, it is premature to ask this question for two reasons. First, the MPUC has not reached a final decision concerning the prices for unbundled elements; they are still subject to a true-up procedure at the end of the Generic Cost Investigation. Until the MPUC reaches a decision on that issue, the overall effect of the Agreement cannot be determined and the takings claim is not ripe for review. Second, the incumbent LEC still has an opportunity to have its public rates increased in light of the MPUC's Orders made pursuant to §§ 251 and 252. If U.S. West is not earning a sufficient return on its investment in Minnesota, it can petition the MPUC for a rate change. See Minn.Stat. § 237.075. The MPUC is obligated to implement a rate base upon which a telephone company can earn a fair rate of return. See id., subd. 6. U.S. West will not have exhausted its state remedies until it has taken this final step. It would only be after such a hearing that a court could determine whether the overall utility rates are "inadequate to compensate current equity holders for the risk associated with their investments under a modified prudent investment scheme." Duquesne Light Co. v. Barasch, 488 U.S. 299, 312, 109 S.Ct. 609, 102 L.Ed.2d 646 (1989). The MPUC's actions under the Act establish LECs relationships with one another; the equation is not complete until the economic relationship with the public is determined in light of the intercarrier relationships. Because Minnesota offers an opportunity to U.S. West to have its rates readjusted, U.S. West has not yet exhausted its state remedies and its takings claim is ripe for review. US West's takings claim is therefore dismissed without prejudice.

CONCLUSION

Based upon the foregoing, and all of the files, records and proceedings herein, IT IS HEREBY ORDERED that:

1. US West's request that this Court find that the MPUC's determinations concerning the U.S. West-AWS Agreement violates 47 U.S.C. §§ 251 and 252 is GRANTED IN PART, DENIED IN PART, and DENIED WITHOUT PREJUDICE IN PART. It is granted with respect to: (1) Count I (operational support systems as an open issue); (2) Count IV (the collocation of RSUs); and (3) Count VII (the regulation of U.S. West Dex). It is denied without prejudice with respect to Count IX (U.S. West's takings claim) and Count V (the "pick and choose" provision). It is denied in all other respects. The matter is remanded to the MPUC for further determinations consistent with this decision.

END OF DOCUMENT

Decision No. C00-479

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 00B-011T

IN THE MATTER OF THE PETITION OF SPRINT COMMUNICATIONS COMPANY, L.P. FOR ARBITRATION PURSUANT TO U.S. CODE § 252(B) OF THE TELECOMMUNICATIONS ACT OF 1996 TO ESTABLISH AN INTERCONNECTION AGREEMENT WITH U S WEST COMMUNICATIONS, INC.

INITIAL COMMISSION DECISION

Mailed Date: May 5, 2000
Adopted Date: May 3, 2000

Appearances:

Steve Kukta, Esq., Kansas City, Missouri, *Pro Hac Vice*, and Andrew Jones, Esq., Kansas City, Missouri, *Pro Hac Vice*, for Sprint Communications Company, L.P.; and

John M. Devaney, Esq., Washington, D.C., *Pro Hac Vice*, and John L. Munn, Esq., Denver, Colorado, for U S WEST Communications, Inc.

TABLE OF CONTENTS

I. BY THE COMMISSION 2
A. Statement 2
B. Findings of Fact 4
1. Reciprocal Compensation for ISP-Bound Traffic 4
2. Sprint's Position 6
3. U S WEST's Position 7
C. Commission Decision. 10
1. UNE Issues 19
II. ORDER 21

I. BY THE COMMISSION

A. Statement

1. Sprint Communications Company, L.P. ("Sprint") initiated this proceeding by filing a Petition for Arbitration on January 12, 2000. Sprint requests that the Commission arbitrate certain terms, conditions, and prices for interconnections and related arrangements with U S WEST Communications, Inc. ("U S WEST"), pursuant to 47 U.S.C. § 252(b) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996 ("1996 Act"). U S WEST filed its Response on February 7, 2000. New Edge Networks, Inc., and Advanced TelCom Group, Inc filed petitions to intervene. Those petitions were denied by the Commission in Decision No. C00-173, February 24, 2000.

2. The Commission assigned an Administrative Law Judge ("ALJ") to hear the matter. The ALJ established a procedural schedule which called for the matter to be heard on April 11 and 12, 2000 in Denver, Colorado. Under the 1996 Act, the Commission's decision is due May 5, 2000. Because of this time constraint, the Commission finds that due and timely execution of its functions imperatively and unavoidably require

that the recommended decision of the ALJ be omitted and that the Commission make the initial decision in this proceeding.

3. At the assigned place and time, the ALJ called the matter for hearing. As a preliminary matter, he granted admission pro hac vice to Steven Kukta and Andrew Jones to represent Sprint and John Devaney to represent U S WEST.

4. After negotiation, four items remained to be arbitrated by the Commission. The first, reciprocal compensation, was addressed at hearing. The remaining three issues, issues nos. 2, 3, and 10 from the issues matrix, involved matters concerning unbundled network elements ("UNEs"). By agreement of the parties, the UNE issues will be determined on the basis of the written submissions including testimony admitted by stipulation.

5. The matter then proceeded to hearing. Exhibits 1 through 10 and 12 through 15 were identified, offered, and admitted into evidence. Exhibit 11 was identified, offered, and then withdrawn. At the conclusion of the hearing, the parties were authorized to file posthearing statements of position no later than April 20, 2000. Both Sprint and U S WEST filed timely statements of position..

B. Findings of Fact

1. Reciprocal Compensation for ISP-Bound Traffic

a. This issue involves compensation for traffic that originates on the network of one local exchange carrier ("LEC") and is delivered over the network of another LEC to an Internet service provider ("ISP"). The ISP then provides services by transmitting the data to and from the Internet. The Federal Communications Commission ("FCC") has indicated that State commissions may determine, compensation between carriers for this type of traffic under § 252 of the 1996 Act. *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 and Inter-Carrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98, 99-68, Declaratory Ruling in CC Docket 99-68, 14 FCC Rcd 3689 ¶¶ 25-27 (Feb. 26, 1999) ("Declaratory Ruling"). The FCC had determined that Internet calling is interstate in nature for jurisdictional purposes. *Id.* at ¶ 12. However, the decision of the FCC has been vacated by the U.S. Court of Appeals. *Bell Atlantic Telephone Co. v. F.C.C.*, 206 F.3d 1 (D.C. Cir. 2000). Despite this vacating of the FCC decision, the parties to this proceeding agree that this Commission has the authority to set a compensation rate for ISP-bound traffic.

b. According to U S WEST, § 251(b)(5) allows reciprocal compensation for local traffic only. U S WEST argues

that ISP traffic is interstate, not local, in nature; therefore, this traffic is not subject to reciprocal compensation under the Act.

c. U S WEST correctly notes that the FCC has ruled that ISP traffic is primarily interstate in nature. In the Declaratory Ruling, the FCC held that, notwithstanding the interstate nature of ISP calls, state commissions may still mandate reciprocal compensation for this traffic in § 252 arbitrations. Declaratory Ruling, ¶¶ 25-27. By the same token, the FCC determined, state commissions "are free not to require the payment of reciprocal compensation for this traffic and to adopt another compensation mechanism." Declaratory Ruling, ¶ 26.

d. In *Bell Atlantic,* the D.C. Circuit vacated the FCC's holding that ISP traffic is not local, but interstate in nature. The court ruled that the FCC failed satisfactorily to explain its reasons for concluding that delivery of calls to ISPs does not constitute termination of local telecommunications traffic under the Act. Although the court vacated the Declaratory Ruling to the extent it found ISP calls to be interstate in nature, the court did not address the FCC's holding that state commissions are authorized to determine the intercarrier compensation mechanism for such traffic in § 252 proceedings. See *Bell Atlantic,* 206 F. 3d at 9.

2. **Sprint's Position**

a. Sprint argues for compensation at the local end-office termination rate, which is $0.00283 per minute. It notes that it incurs costs to provide the service, and without some compensation from U S WEST those costs will go unrecovered. This will keep it from competing for this type of local traffic, and is thus anticompetitive. Inasmuch as the compensation is reciprocal, U S WEST would be compensated for traffic which originates on Sprint's network and terminates at an ISP served by U S WEST. Sprint also rejects the notion of singling out Internet traffic because there are many types of local traffic that exhibit similar characteristics which are not singled out. Sprint points to such examples as telecommuters who log onto a local area network ("LAN") for an extended period of time, radio talk show call in numbers, and governmental help lines.

b. Sprint concedes that its cost structure will be different from U S WEST's since its network structure is different. It argues that a competitive local exchange carrier ("CLEC") such as Sprint will have lower call volumes at the beginning and hence a higher per unit cost than an incumbent local exchange carrier ("ILEC") such as U S WEST. Sprint concedes that with state-of-the-art technology it will likely be able to build a network without deploying as many switches as an

ILEC. It seeks to have the local end-office termination rate utilized for the reciprocal compensation rate.

c. Sprint claims that Internet traffic cannot currently be distinguished from other categories of telephone calls. It suggests that, at present, attempting to separately identify and measure ISP-bound traffic will be of little value and expensive.

d. Sprint notes that the Commission in prior cases has ordered termination compensation for other CLECs for ISP traffic, and argues that failure to take the same action here would constitute unlawful discrimination. Sprint primarily points to the ICG complaint case[1] in which we directed U S WEST to pay termination compensation to ICG for ISP calls.[2]

3. U S WEST's Position

a. U S WEST opposes the payment of reciprocal compensation for ISP traffic. In U S WEST's view, ISP traffic is not local but is analogous to long distance traffic. U S WEST suggests that the FCC's Declaratory Ruling finding Internet traffic to be substantially interstate in nature was unaffected by the Court of Appeals' vacating of the that order. It further analogizes ISP-bound traffic to paging traffic. It notes that

---

[1] *ICG Telecom Group, Inc. v. U S WEST Communications, Inc.*, Docket No. 98F-299T.

this Commission has previously held that reciprocal compensation makes little or no sense when traffic is strictly one-way.

b. U S WEST views the cost-causer as the ISP, not the party originating the Internet call. It notes the different characteristics of Internet calls from other local calls: the calls last several times longer than voice calls and the calls are one-way because ISP modems do not call out. U S WEST notes that at the current local end-office termination rate of $0.00283 per minute, one hour of Internet usage by one customer each day for a month would result in $5.10 per month of compensation at the existing voice rate. U S WEST suggests this is clearly excessive given that it receives only about $15 per month for providing local exchange service.

c. U S WEST claims that the proper analysis is to view Internet calls (calls to ISPs) using a long distance paradigm rather than a local paradigm. In U S WEST's view, an ISP is more like an interexchange carrier ("IXC"). While an IXC connects a local customer to someone in a different exchange area for a voice call, an ISP connects a local customer's computer to a computer which may be located anywhere in the world. The IXC arranges all the intermediate steps and pays

---

[2] The other case Sprint relies on is the MFS/ U S WEST arbitration, Docket No. 96A-287T. *See* Decision Nos. C96-1185 (Mailed Date of November 8, 1996), page 30.

whatever it has to, to complete the call, charging only the end user. When there are several carriers carrying an interexchange call for the IXC, they all split the revenue. U S WEST suggests that a similar approach is more appropriate for ISP traffic. It notes that the traffic would not be present but for the ISP. The ISP receives compensation from the end user, its customer. In U S WEST's view the ISP should be compensating the carriers that bring calls to the ISP, just as the ISP compensates the providers that take the call out on the Internet.

d. Because the FCC exempts ISPs from paying access charges, U S WEST argues that the next best approach is for the CLEC to share some of the revenues it receives from the ISP with the ILEC in proportion to the relative costs which the ILEC and CLEC incur. This approach addresses the situation in which the call originates on the ILEC's network and is then transferred to the CLEC's network for the purpose of connecting with the customer's ISP. As a third-best, interim solution, U S WEST recommends bill and keep where ISP traffic is exchanged between the ILEC and the CLEC but without any exchange of compensation.

e. In the alternative, should this Commission determine that some compensation should be paid to a CLEC for calls originating on an ILEC's network destined to an ISP on a CLEC's network, U S WEST suggests that the local end-office

termination rate which is contained in its tariffs for voice traffic is too high. U S WEST argues that the voice rate set by this Commission is not reflective of costs for a data network such as Sprint would provide in the future. Sprint's costs would be lower. It also argues that the rate component that recovers the fixed cost of a voice call (call set up) was designed to recover that cost over a shorter period of time typical of a voice call. Thus, the longer Internet calls would over-recover fixed costs.

f. U S WEST finally suggests that reciprocal compensation will cause an over-investment in facilities to serve dial up modems of ISPs. It will also cause a subsidy to flow to those users. In U S WEST's view, reciprocal compensation will inevitably create upward pressure on basic local exchange rates.

C. **Commission Decision.**

a. We disagree with Sprint's argument that failure to order reciprocal compensation here would be discriminatory in light of the ICG ruling. We likewise disagree that ICG has any preclusive or precedential value here. In the ICG proceeding, we concluded that the existing ICG/U S WEST agreement provided for termination compensation for ISP traffic. *See* Decision No. C99-898, page 6. While we observed (Decision No. C99-898, pages 6-9) that certain policy considerations

suggested that termination compensation should be paid for ISP calls (e.g. because ISP traffic is exempt from access charges, ICG could not recover its ISP-related costs for terminating those calls without reciprocal compensation), those observations were based upon the record in that case. The ICG/U S WEST dispute came before the Commission on cross-motions for summary judgment. The economic analysis present in this record was not present in the ICG proceeding.

b. Moreover, public policy concerns were not the deciding factors in the ICG proceeding. That case concerned interpretation of an existing interconnection agreement, not arbitration of terms that should be included in such an agreement. We based our directive that U S WEST pay termination compensation to ICG for ISP calls on the existing ICG/U S WEST interconnection agreement's provision for such compensation. *See* Decision No. C99-898, page 6. Notably, we specifically stated that we might revisit this issue (i.e. the payment of termination compensation for ISP traffic) in future arbitration proceedings:

> Given reasonable expectations by ICG that its existing interconnection agreement provided for reciprocal compensation for ISP traffic (above), it is reasonable to order U S WEST to pay compensation at this time. This arrangement may change in the future depending on the FCC's pending rulemaking on this matter, or depending on future § 252 proceedings before this Commission. Whether the continued allowance of reciprocal compensation for ISP-traffic provides

'perverse' economic incentives may be more fully considered at that time for purposes of future interconnection agreement. (footnotes omitted)

(emphasis added) Decision No. C99-898, pages 9-10.

c. The point is that our prior orders mandating reciprocal compensation for ISP calls-Sprint mentions two, the ICG case and the MFS/U S WEST arbitration discussed in the ICG ruling were from the first round of § 252 arbitrations before the Commission in 1996 and early 1997. Here, U S WEST correctly observes that in those prior proceedings no one, including the Commission, appreciated the economic ramifications of ordering termination compensation for ISP traffic. For example, the information presented in this case relating to the substantial and growing volume of ISP traffic and the imbalance of that traffic on U S WEST's network as compared to CLECs' networks was not available at that time.

d. The present case is the first fully litigated § 252 proceeding after the first round of arbitrations to present the question relating to termination compensation for ISP calls. It is appropriate for the Commission to reconsider, in light of the evidence and argument presented here, whether termination compensation should continue to be paid for calls to the Internet. Our present decision not to require termination compensation for ISP traffic does not discriminate against Sprint. Past interconnection agreements (i.e. the MFS/U S WEST

and ICG/U S WEST agreements) were based upon circumstances existing at that time, and we note that those agreements have expired or will shortly expire. Therefore, the present ruling is not unlawfully discriminatory as compared to past decisions by the Commission.[3] As for future interconnection agreements, whether U S WEST will be ordered to pay termination compensation to other CLECs for ISP traffic will, of course, be decided based upon the evidence and argument presented in those cases. If our future decisions on this issue differ from the present one, Sprint may exercise its rights under § 252(i) of the Act to opt into those provisions.

e. The relevant situation is as follows: An end-user, a local exchange customer of U S WEST is a customer of an ISP, which is, in-turn, a local exchange customer of Sprint. When this end-user initiates Internet-bound traffic, the call is transmitted from U S WEST to Sprint, from Sprint to the ISP, and from the ISP to the Internet. Both U S WEST and Sprint incur costs during this process. The Commission must determine, as part of the interconnection agreement between U S WEST and Sprint, how these costs will be recovered.

f. Both parties present scenarios which they

---

[3] A contrary holding that we are bound by the mistakes of past arbitrations is belied by the fact the these agreements are for a limited duration.

contend are analogous to the situation described above. U S WEST offers as an analogy the ILEC-IXC interconnection for the purpose of transmitting an interstate call. In this model, the originator of the call is primarily the customer of the IXC and the IXC charges the customer for the call. The IXC then turns around and compensates the LECs, which originate and terminate the call. In the situation of interest here, U S WEST argues that the ISP plays a role analogous to that of the IXC. Sprint, on the other hand, favors an analogy involving ILEC-CLEC interconnection for the purpose of transmitting a local call. The originator of the call in this analogy is a customer of the ILEC and the ILEC charges the customer for the call. The ILEC then compensates the CLEC for the costs it incurs in terminating the call. Articulating the parties' positions more succinctly, U S WEST contends that the Internet-bound traffic being considered here is an interstate call, whereas Sprint believes it to be a local call.

g. The Commission finds that U S WEST's analogy is the more reasonable. Given that most Internet calls end at locations out of state, it appears that such calls are primarily interstate in nature. We view the originator of the Internet-bound call as acting primarily as a customer of the ISP, not as a customer of U S WEST. Both U S WEST and Sprint are providing access-like functions to transmit the call to the Internet,

similar to what their role would be in providing access to an IXC to transmit an interstate call. Furthermore, the remote hubs to which Internet-bound traffic is directed are often outside the state in which the call originated. Beyond that, the ultimate destination of these calls is some web site, which is generally in another state or even another country.

h. The ILEC-IXC interconnection analogy suggests that the ISP should compensate both U S WEST and Sprint for the costs they incur in transmitting this call. Even if that analogy were not employed, applying the principle of cost causation would lead to the same conclusion, namely, that the ISP should pay access charges to both U S WEST and Sprint for the cost caused by the ISP customer. The ISP would recover these charges from that customer. This option, however, is precluded by the FCC's access charge exemption for ISPs.[4] Therefore, both U S WEST and Sprint are in the position of having to recover the costs of carrying this Internet-bound traffic through some means other than access charges.

i. Sprint recommends that cost recovery be done through the process of reciprocal compensation. In the scenario being considered here, since the end-user originating the

---

[4] By granting this exemption, the FCC has given the ISPs a valuable property right. The importance of clearly defining property rights was analyzed in a path-breaking article by R. H. Coase ("The Problem of Social Costs," Journal of Law and Economics, Vol. 3, 1960, pp. 1-44).

Internet-bound call is a local exchange customer of U S WEST, U S WEST would have to compensate Sprint for the latter's costs incurred in transmitting the call to the ISP. The Commission rejects the use of reciprocal compensation with a positive rate in this instance.

j. While ISP calls appear to be interstate in nature, our conclusion is not necessarily based upon that determination. Even if this traffic were considered to be local in nature, the Commission still would not embrace reciprocal compensation with a positive rate. Such a scheme would, in our view, bestow upon Sprint an unwarranted property right, the exercise of which would result in decidedly one-sided compensation. In addition, we find that reciprocal compensation would introduce a series of unwanted distortions into the market. These include: (1) cross-subsidization of CLECs, ISPs, and Internet users by the ILEC's customers who do not use the Internet; (2) excessive use of the Internet; (3) excessive entry into the market by CLECs specializing in ISP traffic mainly for the purpose of receiving compensation from the ILECs;[5] and (4) disincentives for CLECs to offer either residential service or

---

[5] The North Carolina Commission recently put an end to a "sham CLEC" operation that underscores the profitable arbitrage possibilities created by ordering reciprocal compensation. *See In the Matter of Bell South Communications, Inc. v. US LEC,* Docket P-561, sub 10, Order Denying Reciprocal Compensation (N.C. P.U.C. March 31, 2000).

advanced services themselves. In short, we agree with U S WEST that reciprocal compensation for ISP traffic would not improve overall social welfare; it would simply promote the welfare of some at the expense of others. See, *Complaint of MCI Worldcom, Inc against New England Telephone and Telegraph Co.*, D.T.E. 97-116-C Order (Mass. Dept. of Telecommunications and Energy May 1999) ("[T]he benefits gained through this regulatory distortion by CLECs, ISPs and their customers do not make society as a whole better off, because they come artificially at the expense of others.").

k. U S WEST suggests that, because the ISP cannot be required to pay access charges, a second-best solution would be for Sprint to share the revenues it obtains from the ISP with U S WEST, in proportion to Sprint's and U S WEST's relative costs incurred in transmitting this call. The Commission rejects this suggestion as well. We agree with Sprint that this is the equivalent of imposing access charges on the ISP, an option which is precluded by the FCC exemption.

l. The only remaining suggestion offered by either party is the application of bill and keep, whereby, in effect, Internet-bound traffic would be transmitted between U S WEST to Sprint without monetary compensation flowing in either direction. This possibility is offered by U S WEST as its third-best alternative. The Commission finds that bill and keep

should be adopted here to deal with ISP traffic. Notably, bill and keep avoids the problems found with the other proposed solutions, as stated above. In particular, it treats U S WEST and Sprint symmetrically. Moreover, the Commission believes that a bill and keep approach is appropriate because it emphasizes the need for various networks to interconnect and for carriers to recover their costs from charges imposed upon their own customers.[6]

m. In adopting bill and keep, the Commission believes that U S WEST will be able to differentiate ISP traffic from the traffic between U S WEST and Sprint that is subject to reciprocal compensation. Such differentiation is necessary because the two types of traffic will be treated differently. The procedure for differentiating the two was explained by witnesses for U S WEST, and we find this method to be reasonably designed to measure ISP traffic.[7]

---

[6] As we move forward, correctly, to the consideration of globally connected communications networks, we need to abandon the archaic approaches to service categorization and regulatory jurisdiction. Regardless of technology or purpose, universal access to equitable connections should be the goal. Whether a call is local, interstate, voice, data, wireless, internet or wireline should not be a determining factor in how the activity is regulated, priced or compensated.

[7] We have concluded that Sprint is not entitled to reciprocal compensation for ISP-bound traffic for the reasons stated above. Notwithstanding the D. C. Circuit's vacation and remand of the Declaratory Ruling, we believe that the FCC correctly concluded that ISP-bound traffic is interstate and thus not "local telecommunications traffic". The FCC's conclusion, though wanting in explanation, is ultimately vindicated by an economic analysis of ISP traffic. In addition, even if ISP traffic were determined to be local, the policy and economic considerations discussed above indicate that it should not be subject to reciprocal compensation.

1. UNE Issues

a. Issues nos. 2, 3, and 10 submitted for arbitration relate to UNEs. Issues nos. 2 and 3 involve the question to what extent U S WEST is required to combine UNEs at the request of Sprint. Sprint suggests that U S WEST be obligated to combine UNEs in any manner in which UNEs are ordinarily combined within U S WEST's network, provided that such combination is technically feasible and would not impair the ability of other carriers to obtain access to UNEs or to interconnect with U S WEST's network. U S WEST argues that it should not be required to combine UNEs unless the UNE combination is pre-existing or already combined for the particular customer Sprint seeks to serve.

b. Issue no. 10 involves nonrecurring charges for the provision of UNE combinations. Sprint contends that U S WEST is not entitled to a nonrecurring charge for each and every element included in a pre-existing UNE combination. U S WEST on the other hand suggests that it is entitled to recover all nonrecurring charges for each UNE whether the UNE combination already exists or the UNE combination is new. Neither party has explicitly set forth specific nonrecurring charges for UNEs and for UNE combinations.

Hopefully the FCC will consider these factors in future proceedings on this issue.

c. The Commission has previously ruled upon the issue regarding U S WEST's obligation to combine UNEs requested by CLECs.[8] We have determined that U S WEST should be required to combine UNEs for CLECs in the same manner that it normally combines them for itself. *See* Decision No. C98-1047. The same result should occur here. We accept Sprint's position and will require U S WEST to combine UNEs in any manner in which UNEs are ordinarily combined within U S WEST's network. U S WEST's position on provision of UNE combinations being limited to those UNEs that are already combined or pre-existing is rejected.

d. This requirement is consistent with the currently effective FCC rule (47 C.F.R. 51.315(b)) regarding combinations of UNEs. Furthermore, we agree with Sprint that its ability to compete in the local exchange market would be impaired under U S WEST's proposal. Therefore, the interconnection agreement between Sprint and U S WEST will require U S WEST to combine UNEs for Sprint in any manner in which they are ordinarily combined within U S WEST's network

e. This Commission has previously addressed the nonrecurring charge for provision of pre-existing UNE

---

[8] To the extent U S WEST asserts that our authority to order combinations of network elements is limited because FCC Rules 47 C.F.R. 51.315(c-f) were vacated by the Eighth Circuit Court of Appeals, Iowa Utilities Board v. FCC, 120 F. Ed 753 (8th Cir. 1997), we disagree. We affirm our prior ruling in Decision No. C98-267 that the Commission possesses independent authority under State law to order combinations of network elements.

combinati ntext of the interconnection tariffs of U S WES: ission Decision Nos. C97-739, C97-946, C98-1047 . When the Commission established the inter: it adjusted the nonrecurring charges to conside: find U S WEST is entitled to recover all nonrecu: set out in its interconnection tariffs.

II. ORDE:

A. rders That:

Arbitrat es presented in the Petition for Sprint Communications Company, L.P. on January solved as set forth in the above discussi

days of the final Commission decision in this mmunications Company, L.P. and U S WEST C: nc. shall submit a complete proposed intercon: for approval or rejection by the Commis: the provisions of 47 U.S.C. § 252(e) of the ns Act of 1996.

and R: n for Leave to File Motion to Strike submitte int's Late-Filed Notice of Decision granted. Communications, Inc. on May 3, 2000 is e to the motion is waived.

4. The Motion to Strike Sprint's Late-Filed Notice of Decision submitted by U S WEST Communications, Inc. on May 3, 2000 is granted. Response time to the motion is waived.

5. The twenty-day period provided for in § 40-6-114(1), C.R.S., within which to file applications for rehearing, reargument, or reconsideration begins on the first day following the Mailed Date of this decision.

6. This Order is effective upon its Mailed Date.

B. **ADOPTED IN COMMISSIONERS' DELIBERATIONS MEETING May 3, 2000.**

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

_____

_____

_____
Commissioners

G:\YELLOW\c00-479:KD&W - 05/05/00 8:51 PM

C:\WINDOWS\TEMP\c00-479.doc

Decision No. C00-479

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 00B-011T

IN THE MATTER OF THE PETITION OF SPRINT COMMUNICATIONS COMPANY, L.P. FOR ARBITRATION PURSUANT TO U.S. CODE § 252(B) OF THE TELECOMMUNICATIONS ACT OF 1996 TO ESTABLISH AN INTERCONNECTION AGREEMENT WITH U S WEST COMMUNICATIONS, INC.

INITIAL COMMISSION DECISION

Mailed Date: May 5, 2000
Adopted Date: May 3, 2000

Appearances:

Steve Kukta, Esq., Kansas City, Missouri, *Pro Hac Vice*, and Andrew Jones, Esq., Kansas City, Missouri, *Pro Hac Vice*, for Sprint Communications Company, L.P.; and

John M. Devaney, Esq., Washington, D.C., *Pro Hac Vice*, and John L. Munn, Esq., Denver, Colorado, for U S WEST Communications, Inc.

TABLE OF CONTENTS

I. BY THE COMMISSION 2
A. Statement 2
B. Findings of Fact 4
1. Reciprocal Compensation for ISP-Bound Traffic 4
2. Sprint's Position 6
3. U S WEST's Position 7
C. Commission Decision. 10
1. UNE Issues 19
II. ORDER 21

I. BY THE COMMISSION

A. Statement

1. Sprint Communications Company, L.P. ("Sprint") initiated this proceeding by filing a Petition for Arbitration on January 12, 2000. Sprint requests that the Commission arbitrate certain terms, conditions, and prices for interconnections and related arrangements with U S WEST Communications, Inc. ("U S WEST"), pursuant to 47 U.S.C. § 252(b) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996 ("1996 Act"). U S WEST filed its Response on February 7, 2000. New Edge Networks, Inc., and Advanced TelCom Group, Inc filed petitions to intervene. Those petitions were denied by the Commission in Decision No. C00-173, February 24, 2000.

2. The Commission assigned an Administrative Law Judge ("ALJ") to hear the matter. The ALJ established a procedural schedule which called for the matter to be heard on April 11 and 12, 2000 in Denver, Colorado. Under the 1996 Act, the Commission's decision is due May 5, 2000. Because of this time constraint, the Commission finds that due and timely execution of its functions imperatively and unavoidably require

that the recommended decision of the ALJ be omitted and that the Commission make the initial decision in this proceeding.

3. At the assigned place and time, the ALJ called the matter for hearing. As a preliminary matter, he granted admission pro hac vice to Steven Kukta and Andrew Jones to represent Sprint and John Devaney to represent U S WEST.

4. After negotiation, four items remained to be arbitrated by the Commission. The first, reciprocal compensation, was addressed at hearing. The remaining three issues, issues nos. 2, 3, and 10 from the issues matrix, involved matters concerning unbundled network elements ("UNEs"). By agreement of the parties, the UNE issues will be determined on the basis of the written submissions including testimony admitted by stipulation.

5. The matter then proceeded to hearing. Exhibits 1 through 10 and 12 through 15 were identified, offered, and admitted into evidence. Exhibit 11 was identified, offered, and then withdrawn. At the conclusion of the hearing, the parties were authorized to file posthearing statements of position no later than April 20, 2000. Both Sprint and U S WEST filed timely statements of position..

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Focal Communications Corporation of Illinois	:	
	:	
Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Illinois Bell Telephone Company, d/b/a Ameritech Illinois.	:	**00-0027**

ARBITRATION DECISION

Jurisdiction

Section 252(b) of the Telecommunications Act of 1996 ("1996 Act") addresses the procedures for arbitration between incumbent local exchange carriers and other telecommunications carriers requesting interconnection. Section 252(b) prescribes the duties of the petitioning party, provides an opportunity to respond to the non-petitioning party, and sets out time limits. Section 252(b)(4) provides that the State Commission shall limit its consideration to the issues set forth in the petition and in the response; and shall resolve each such issues by imposing appropriate conditions on the parties as required to implement Subsection (c) (Standards for Arbitration). Subsection (d) sets out pricing standards for interconnection and network element charges, transport and termination of traffic, and wholesale prices.

Under §252(c), a State Commission shall apply the following standards for arbitration:

> (1) ensure that such resolution and conditions meet the requirements of Section 251, including the regulations prescribed by the Commission pursuant to Section 251;
>
> (2) establish any rates for interconnection, services, or network elements according to subsection (d); and
>
> (3) provide a schedule for implementation of the terms and conditions by the parties to the agreement.

Background and Procedural History

Focal Communications Corporation of Illinois ("Focal") and Illinois Bell Telephone Company d/b/a Ameritech Illinois ("Ameritech") entered into an interconnection agreement that expired on October 28, 1999. On August 6, 1999, Focal sent a letter to Ameritech requesting negotiations for a new interconnection agreement pursuant to Section 252 of the 1996 Act. During the pendency of negotiations for a new interconnection agreement, Focal and Ameritech have continued to operate, and are currently operating, pursuant to the expired interconnection agreement.

During their negotiations for a new interconnection agreement, Focal and Ameritech reached agreement on many of the issues raised. On January 13, 2000, Focal filed a petition to arbitrate 14 open issues with Ameritech. On February 8, 2000, Ameritech filed a response to the petition for arbitration.

On February 14, 2000, Ameritech filed a motion to strike Issue 8 raised in the petition for arbitration. Responses thereto were filed by Focal and Commission Staff ("Staff") and a reply to those responses was filed by Ameritech. On February 24, 2000, the Hearing Examiners granted the motion to strike Issue 8.

Pursuant to proper notice, a pre-hearing conference was held on January 18, 2000, before duly authorized Hearing Examiners of the Commission at its offices in Springfield, Illinois. Thereafter, procedural matters were discussed at hearings on January 25 and 28, 2000, and evidentiary hearings were held on March 15 and 16, 2000. Appearances were entered by counsel on behalf of Focal, Ameritech and Staff. Verified statements of John Barnicle, Michael Starkey and David Tatak on behalf of Focal; Debra J. Aron, Kent A. Currie, Michael C. Auinbauh, Robert G. Harris, Eric L. Panfil, and Fred A. Miri on behalf of Ameritech; and John M. Garvey, Christopher L. Graves, Patrick L. Phipps and Julie M. VanderLaan on behalf of Staff were admitted into evidence. On March 31, 2000, a hearing was held for the purpose of clarifying the positions of Focal and Ameritech regarding Issue 3.

Post-hearing briefs were filed by Focal, Ameritech and Staff.

On April 3, 2000, the Hearing Examiners' Proposed Arbitration Decision was served on the parties. Focal, Ameritech and Staff filed briefs on exceptions and replies. These briefs on exceptions and replies have been considered by the Commission in reaching the arbitration award granted herein.

Issues Subject to Arbitration

As previously noted, Focal initially sought arbitration of 14 issues. The Hearing Examiners granted the motion to strike Issue 8. Focal and Ameritech settled Issues 5, 6, and 9 through 14. Thus, there are five remaining issues to be resolved through

arbitration. The remaining issues will be considered in order. At the conclusion of each issue statement is the contract section to which the resolution of the issue applies.

1. Should Focal charge Ameritech the tandem rate for non-internet service provider ("ISP") local calls terminated on Focal's network? (Section 4.7)

a. Positions of the Parties

Ameritech argues that Focal is entitled to receive the composite tandem rate for the termination of local traffic only if it meets a two prong test demonstrating that its switches cover the same geographic area as the area covered by Ameritech's switches and that Focal's switches provide the same functionalities as do the tandem switches of Ameritech. Ameritech included language to this effect in its proposed contract, as well as language requiring Focal to permit it to interconnect at a Focal end office at rates, terms and conditions that are non-discriminatory, which would include offering the termination of local traffic by other local exchange carriers ("LECs") and long distance traffic by interexchange carriers ("IXCs") at the same rate.

Ameritech's position is based upon Federal Communications Commission's ("FCC") language found in paragraph 1090 of FCC 96-325 ("First Report and Order"), wherein the FCC discussed the fact that additional costs may be incurred by a LEC in transporting and terminating calls depending upon whether tandem switching is involved. After previously directing state commissions to establish presumptive symmetrical rates upon the incumbent local exchange carriers' ("ILECs") costs for transport and termination (Par. 1089, First Report and Order), the FCC concluded that states could, in conducting arbitrations under the Act, establish disparate rates for transport and termination of traffic that vary depending upon whether the traffic is routed through a tandem or directly to an end-office switch. In that event, the state commission was to also consider whether new technologies perform functions similar to tandem switches and, if so, whether some or all calls terminating on the new entrant's network should be priced at the composite tandem rate. The Commission went on to note that, where the interconnecting carrier's switch serves a geographic area comparable to the area served by the incumbent's tandem switch, the appropriate proxy for the interconnecting carrier's additional costs is the LEC tandem interconnection rate. The rule that was eventually codified in response to this discussion (47 U.S.C. §51.711(a)(3)) refers only to the geographic coverage of the companies' switches.

Ameritech argues that the FCC has established a two-prong test to determine the eligibility of an interconnecting carrier to be entitled to receive the tandem rate as reciprocal compensation and that Focal does not meet the functionality test in several respects. Ameritech first points to an NXX application filed by Focal seeking codes for its Chicago switch in which it did not indicate its switch would be performing tandem functions. In addition, Ameritech argues that because some of Focal's customers are collocated, Focal, in terminating such a call, uses what amounts to a local loop,

because the traffic is taken from a switch and routed to an end user in the same building through the use of an intra-building OC48 transport system. Finally, in addressing the fact that the system employed by Focal is primarily fiber optic utilizing SONET rings (referred to generally as a "non-hierarchical" system) as opposed to the system used by Ameritech, which is primarily copper (and referred to generally as "hub and spoke"), Ameritech concludes that the only difference is that Focal's switches serve larger geographic areas through longer loops. Ameritech argues that the fact that the systems look different does not change the fact that Focal's end offices are no less dependent on their connections to Ameritech's tandem switches than are Ameritech's end office switches, leading to the apparent (but unstated) conclusion that they function in many ways as an end office switch and are not functionally equivalent to a tandem.

Focal notes that the 1996 Act provides for recovery by each carrier of costs associated with the transport and termination on its network facilities that originate on the network of another carrier. Focal indicates that such costs are to be determined "on the basis of a reasonable approximation of the additional costs of terminating such calls." 47 U.S.C. §252(d)(2)(A).

Focal contends that reciprocal compensation should be paid on the transport and termination of all local calls at a cost-based rate. Focal states that Ameritech should pay Focal a single rate any time Ameritech delivers traffic to Focal's point of interconnection, and that Focal should pay Ameritech that same rate when Focal delivers traffic to Ameritech's point of interconnection. Focal concludes that the reciprocal compensation rate should be Ameritech's "tandem rate", which consists of the following four rate elements: end office termination, tandem switching, tandem transport termination and tandem transport facility mileage. This tandem rate is presently $0.005175 per minutes of use.

Focal contends that the FCC has identified the geographic comparability test as the sole test for entitlement to the tandem rate for reciprocal compensation, citing para. 1090 of the FCC's Order in CC Docket No. 96-98 ("*Local Competition Order*"), and Rule 51.711(a)(3) promulgated by the FCC to implement para. 1090, which states:

> Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than the incumbent LEC is the incumbent LEC's tandem interconnection rate.

Focal asserts that it meets the geographic comparability test. Focal states that each of its two switches serves an area that is larger than the area served by several Ameritech tandem switches combined.

Focal contends that Ameritech and Staff are wrong as a matter of law in contending that Focal must also meet a functionality test in order to be entitled to the

tandem rate for reciprocal compensation. Focal argues that a reasonable reading of the FCC's language leads to the conclusion that the functional equivalence test applies only where a state commission decides to impose two disparate reciprocal compensations depending on whether traffic is terminated at an end office or a tandem switch. The apparent (but unstated) conclusion is that because the issue of disparate reciprocal compensation rates is not before the Commission here, the functionality test is moot. Focal goes on to argue additionally that, where an interconnecting carrier can show geographic comparability, a state commission must establish reciprocal compensation rates based upon the LECs interconnection tandem rate. Focal notes that no state commission that has addressed this issue has concluded that the issue of functionality has anything to do with the opportunity of an interconnecting carrier to receive the LEC tandem rate as reciprocal compensation.

In terms of the geographic comparability test, Focal notes that the unequivocal evidence is that it has the ability to serve and is currently servicing customers through Ameritech's footprint.

In terms of the functionality test, Focal argues that, in the event the Commission concludes that it must meet this test, the evidence shows that it does. On the customer access side of Focal's network, i.e., on the customer side of Focal's switch, Focal typically acquires DS-3 fiber optic transport extending from the switch to multiplexing equipment at leased hubs located either at the facilities of third party transport providers such as MCI WorldCom, AT&T or Nextlink, or at Ameritech tandem or end offices. From the hubs, Focal leases T-1 lines to the customer premises. The T-1s are commonly configured as ISDN-PRI lines. The T-1s are often multiplexed onto DS-3 facilities. Multiplexing is the use of electronic equipment which allows two or more signals to pass over one communications circuit. Focal also places SONET nodes in buildings and then uses the buildings' cable and riser facilities to connect to the customer's premises. Ameritech switching is not involved.

In addition to this typical network configuration, Focal also serves some end users by placing SONET switching equipment in a building and then using the building's cable and riser facilities to connect to the customer's premises. Calls that terminate through this architecture are carried over Focal's interconnection facilities from the point of interconnection ("POI") with the originating carrier to Focal's DMS-500 switch. The traffic is then transported over Focal facilities to the SONET switching node generally located in the basement of the building. The SONET node then passes the traffic from the inter-office transport fiber to the appropriate building cable terminating at the customer's premises.

If a Focal customer collocates in Focal's facilities, which most Focal customers do not do, additional facilities are deployed to connect the customer's facilities to the Focal switch. When traffic is terminated to collocated customers, Focal transports calls from the point of interconnection with the originating carrier to the Focal switch. The traffic is then switched onto facilities connected to the end user's collocated equipment.

In some cases, the collocation space may be located near the switch room, and in others, it may be located on a different floor, a different building, or even in a different town. For example, Focal has customers in collocation space located in its Chicago office, but, in some instances, those customers may receive dial tone from Focal's Arlington Heights switch. Focal also utilizes SONET-based fiber optic transport systems to carry these calls, regardless of the distance of the transport.

On the network interconnection side, i.e., on the network side of Focal's switch, Focal typically obtains two-way trunk facilities not only between the Focal switch and the Ameritech tandems, but also between numerous Ameritech end offices and the Focal switch. These trunk facilities range from DS-1 connections to DS-3 and higher order optical facilities, depending upon the purpose and volume of traffic. The facilities, like the transport facilities to the customer premises, are obtained by third party transport providers such as MCI WorldCom, AT&T or Nextlink. Focal picks up the traffic at the POI between the two networks and carries it over Focal's transport network to separate trunk ports at the Focal switch. Focal's switch performs the aggregation function from the multiple end offices and other trunk groups onto facilities for the delivery of the traffic to the Focal customer. While the traffic may be handed over to Focal at an Ameritech tandem office because that is where the POI is located, it usually does not traverse an Ameritech tandem switch. In other words, according to Focal, for the vast majority of traffic, it is Focal's switch that performs the traffic aggregation for traffic originating from Ameritech's end offices, not the Ameritech tandem switch.

In terms of Ameritech's definition of tandem functionality, which according to Focal necessitates a showing of trunk-to-trunk switching or a switching operation that connects two network switches to each other, Focal argues that no competitive local exchange carrier ("CLEC") could ever meet the definition unless it deployed an identical hub and spoke architecture as used by ILECs. Because CLECs generally do not have separate end office and tandem switches, there is no way to perform trunk to trunk switching and the only way to satisfy the test would be for Focal to add a tandem switch to its network. Focal argues that such a result is directly contrary to numerous actions and pronouncements of the FCC and regulatory bodies generally and a step backward in terms of technological advancement of the system.

In terms of the actual contract language proposed by Ameritech, Focal first notes that the end office interconnection requirement is not imposed on CLECs by any statute, rule or regulation and is, in effect, a request to interconnect at a point other than the agreed upon point of interconnection, i.e., Focal's end office. In addition, the proposal is inconsistent with Focal's network architecture, most notably the fact that Focal does not have end offices at which Ameritech can interconnect. In terms of the second, non-discrimination requirement, Focal finds it unnecessary and asserts that it currently provides non-discriminatory access to its entire system to all comers and that if Ameritech believes this to be untrue in a given instance, it should avail itself of the Commission's complaint process.

Staff agrees with Ameritech that Focal must meet both a geographic and system functionality test before being granted the opportunity to receive reciprocal compensation at the tandem rate for the transport and termination of local traffic. Staff agrees with Focal that it meets both tests.

b. Commission's Conclusion

The Commission is of the opinion that, while a fair reading of the relevant portions of the First Report and Order may lead to the conclusion that the functionality test has application only where a state commission is desirous of setting disparate reciprocal compensation rates for the transport and termination of traffic depending upon whether the traffic is terminated to an end office switch or a tandem switch, the Commission need not reach that issue here, because Focal has satisfied both tests. In terms of satisfying the geographic test, the overwhelming evidence is that Focal is able to and is serving customers throughout the relevant geographic area. In terms of satisfying the functionality test, the Commission agrees with both Focal and Staff that the test has been met. The Commission rejects, out of hand, Ameritech's arguments based upon the NXX application filed by Focal. The NXX application is probative only of the fact that Focal made an application for NXX numbers and has nothing to do with the function of its switches. The Commission also rejects Ameritech's arguments that the Focal system operates as an "end office"/"local loop" system, dependent upon Ameritech's tandem switches to provide the switching function. The FCC, in utilizing a "functionality" test, was obviously addressing the disparity between the modern CLEC fibre option/SONET ring system and the hub and spoke architecture utilized by most ILECs. If it were not, it would have simply directed state commissions to set reciprocal compensation rates at the ILEC tandem switching rate if the CLEC utilized tandem switches. Here, the evidence is that Focal's network architechure performs in a functionally equivalent manner to Ameritech's. The conclusion that must be drawn is that Focal is entitled to be compensated for the additional costs of terminating local calls from Ameritech customers at Ameritech's tandem rate of $0.005175 per minute.

2. Should Ameritech pay reciprocal compensation to Focal when Focal terminates a call made by an Ameritech customer to an Internet Service Provider customer of Focal? (Section 4.7)

a. Positions of the Parties

Ameritech's primary position is that it should not be required to pay Focal reciprocal compensation when Focal terminates a call made by an Ameritech customer to an internet service provider ("ISP") customer of Focal. In support of this position, Ameritech makes several arguments. Ameritech first argues that the Commission is without jurisdiction to decide the issue, noting that the 1996 Act empowers state commissions to arbitrate issues relating to interconnection agreements, but nowhere addresses issues involving the delivery of traffic to the internet. Ameritech also argues that Internet traffic is interstate telecommunications and without the purview of the

Illinois Commerce Commission, which is limited to deciding issues of an intrastate nature.

In the event that the Commission finds it has jurisdiction to decide this issue, Ameritech urges the Commission to find no compensation is due Focal. Ameritech, noting that the FCC is currently considering this very issue, urges the Commission to find that the interconnection agreement should contain language deferring the issue of reciprocal compensation for internet traffic until the FCC finally speaks to the matter. Ameritech also urges the Commission to decide that Internet traffic is not local and, therefore, not subject to reciprocal compensation. Ameritech notes that the FCC, in numerous decisions, has held that internet traffic is not local and that, while ISPs should be paying access charges to the originating carrier, the FCC has, thus far, exempted them from the access charge regime. Ameritech also posits that Internet bound traffic displays many cost characteristics not found in local traffic. Ameritech notes, in particular, that, when an Ameritech local exchange customer makes a local call, the customer is availing itself of contract rights existing between the customer and Ameritech. In this situation, Ameritech admits that it should compensate carriers that complete the call. Ameritech argues that this is distinct from an Internet bound call, where the caller is exercising contract rights existing between the customer and the ISP. Under this scenario, Ameritech concludes that the ISP should compensate all carriers that aid it in completing the call.

Turning to another line of argument, Ameritech indicates that, even if the Commission were to conclude that Ameritech should compensate Focal for the costs of completing a call, Focal should receive nothing in this docket, because Focal failed to prove what the costs of completing such a call were. In support of this position, Ameritech points to FCC Docket 96-325 (the "First Report and Order") wherein the FCC decided that competing carriers could use proxies in setting reciprocal compensation rates only for local traffic and, as Ameritech argues repeatedly, internet bound traffic is not local. In the event that proxies are not allowed, the competing carrier must prove its costs, which Focal did not do in this docket.

Ameritech's final position is that, in the event the Commission determines that reciprocal compensation is appropriate, it cannot be at the same rate the parties pay each other for the transport and termination of local traffic, because the rates are based upon costs that do not reflect the true costs of transporting and terminating internet bound traffic, primarily because of the longer hold times associated with this type of traffic. In addition, Ameritech argues that allowing Focal to recover at the ordinary reciprocal compensation rate would have anti-competitive effects and would serve to discourage Focal from seeking to serve customers that originate traffic because it would put Ameritech at risk of paying similar reciprocal compensation to other terminators of internet bound traffic.

In terms of establishing an economically rational reciprocal compensation rate, Ameritech argues that Focal should look first to its ISP customers as the source for

recovery of the costs they cause. Ameritech also argues that, while its costs must serve as the starting point for any discussion of cost recovery (because they are the only costs of record in the docket), the costs must be adjusted to reflect the differences in the type of the traffic they reflect. The primary adjustment proposed by Ameritech involves re-allocating the fixed set-up costs over the entire 26 minute average hold time of an ISP call, which would reduce the compensation rate to reflect the fact that all calls cost the same to set up, but that termination rates are based upon minutes of use calculations. Ameritech initial proposal, in the event the Commission concludes that some form of reciprocal compensation is to be included in the contract, is as follows:

(1) As of the Effective Date of the parties' agreement, and for a period of three months thereafter, the parties would compensate each other at the rate of $0.001333 per minute for the delivery of Internet traffic to each other's ISP customers. That rate gave Focal the benefit of Ameritech's end office switching rate, with the set-up component of the rate correctly adjusted to account for the long hold times of ISP calls.

(2) That rate would be reduced to zero over a period of one year. After the initial three-month period at $0.001333 per minute, the rate would be reduced to 75% of that rate for months 4-6; to 50% for months 7-9; to 25% for months 10-12; and to zero thereafter.

(3) Because Ameritech should not be required to pay out all of the revenues it receives for originating Internet access calls while retaining nothing to cover the costs it incurs to deliver the traffic, each party's payment to the other for delivery of ISP traffic originated by a particular end user customer of the paying party would be capped at one-half of the local usage revenues that the paying party derives from that customer.

Staff took the position that Focal, in cooperation with Ameritech, should first undertake efforts to segregate and identify ISP bound traffic for rating. In addition, Staff recommended that Focal be compensated for ISP bound traffic at a composite rate to reflect the longer hold times of ISP bound traffic. Staff's position rests upon the following distinctions it found between ISP bound traffic and the remainder of all other local traffic: (1) longer hold times; (2) potentially lower costs incurred by Focal because some ISPs collocate at Focal central offices and; (3) Focal's switch does not serve as a tandem when terminating ISP bound traffic.

Focal's position on this issue is that it should be compensated for the costs it incurs for terminating local calls originated by Ameritech regardless of the entity to whom the calls are terminated. Focal argues that because the costs it incurs for terminating calls to ISPs are the same as those for any other call, the reciprocal compensation rate should be the same.

In response to Ameritech's arguments relating to the Commission's jurisdiction over ISP calls, Focal argues that the FCC has explicitly recognized and sanctioned state commission continuing jurisdiction over the issue of reciprocal compensation for termination of ISP bound traffic. Focal goes on to argue that ISP bound calls are subject to reciprocal compensation because they definitionally involve telephone exchange service, which is the use of the local network to allow an originating local subscriber (here, a local service customer of Ameritech) to reach a terminating local subscriber (here, an ISP local service customer of Focal). Based upon this premise, Focal concludes that ISP bound calls are technically no different than any local calls and must be treated the same from a regulatory perspective, and that the Commission has jurisdiction to consider the issue. Staff recommends that Focal receive a reciprocal compensation rate of $0.001333 per minute.

In response to Staff's proposal, Ameritech argues that $0.001333 per minute is inappropriate as a permanent rate for the duration of the interconnection agreement. Ameritech asserts that compensation paid at this rate would amount to a cost to Ameritech of almost 3.5 cents on a 26 minute ISP access call, which is more than 80% of the revenue that would be typically received for such calls. In addition, Ameritech emphasizes that it bears the cost of providing original switching for the call and transporting it to Focal's point of interconnection, as well as any associated billing and administrative costs. Ameritech concludes that payment to Focal at Staff's recommended rate would not come close to allowing it to recover its costs of ISP access calls under its current untimed local calling area rates. As an alternative to Staff's proposal, Ameritech proposed a compensation rate of $0.000946 per minute. Ameritech states that this rate equals the cost of the tandem switching element of reciprocal compensation, adjusted to reflect the impact of a 26-minute average hold time on the allocation of setup and duration costs to a melded per-minute rate. Ameritech states that the compensation received under its alternative rate for a 26 minute ISP call ($0.02496) would be approximately one-half of the basic tariff rate (5 cents) for an untimed call in the Chicago LATA, but would represent more than 50% of the average per call revenues received by it in light of volume and time-of-day discounts to the basic rate.

Ameritech indicates that if the Commission orders inter-carrier compensation for ISP traffic, the Commission should require that the parties' interconnection agreement allow for a prompt adjustment to meet changed circumstances. Ameritech proposes that any inter-carrier compensation provisions for ISP traffic be subject to renegotiation on 60 days notice by either party, with an effective date of any replacement provisions no earlier than one year after the initial effective date of the interconnection agreement. Ameritech states that the parties would then negotiate a replacement compensation arrangement, subject to the dispute resolution process in the agreement with the ultimate possibility of a resolution mediated or arbitrated by the Commission. Ameritech concludes that to remove any incentive to slow down the negotiation process, the agreement should specify that the replacement compensation

arrangement will be applied retroactively (if necessary) to the date of cancellation of the initial arrangement.

In terms of the level of compensation to be allowed, Focal notes that, because calls to ISPs are functionally indistinguishable from any other local call, the inference is that they impose the same cost on Focal's system and should result in the same compensation. Focal disputes Ameritech's contention that the cost causer in the equation is the ISP, noting that, if an Ameritech local customer did not pick up the phone to dial an ISP, there would be no issues about reciprocal compensation in the first place. Focal further notes that Ameritech's proposed cost recovery mechanism (whereby Focal should look to the ISP for cost recovery) is inconsistent with well established rate-making principles under which the costs of terminating local costs are embedded in the price of local usage rates. Focal also notes that there are currently a plethora of regulatory restraints which would serve to prevent it from recovering termination costs from its ISP customers, not the least of which is that the FCC, while exerting jurisdiction over ISP bound traffic, has specifically exempted this traffic from being assessed access charges.

In response to Ameritech's arguments relating to the anti-competitive effects of imposing reciprocal compensation requirements on ISP bound traffic, Focal argues that the ISP market is the most logical market for CLECs to enter because new entrants are usually most successful in attracting customers that: (1) are most disaffected by the services or quality offered by the incumbent; (2) have technological capabilities or other specific requirements that are not easily met by the incumbent's often overly-generic service offerings; and (3) do not have a long history of taking service from the incumbent, which, according to Focal, describes ISPs. Focal argues that its success in attracting these customers points to a void in the market that is not being filled by the ILEC and that Ameritech's proposal would inhibit or destroy the nascent market for ISP bound traffic. Focal also notes the Commission has previously determined that reciprocal compensation should be paid for internet-bound traffic in Docket Nos. 97-0404, 97-0519 and 97-0525 (cons.) and has been offered no reason to depart from that conclusion here.

In terms of the rate to be paid in the event reciprocal compensation is ordered, Focal argues that the appropriate rate is the Ameritech tandem rate of $0.005175 per minute of use. Focal notes that the FCC has specifically sanctioned the use of ILEC costs as reasonable proxies for requesting carriers' costs in setting reciprocal compensation rates for the transport and termination of traffic. Focal notes that using Ameritech's current rates would likely understate Focal's costs because the current rates were developed using TELRICs, which are forward looking costs and assume the most efficient network. Because Focal is a new entrant, it posits that it likely has a lower switch utilization rate than was assumed in Ameritech's TELRIC study, which would lead to a lower rate of recovery.

In response to the suggested modification of Ameritech's rates to attempt to reflect the different characteristics of ISP bound calls, Focal argues that such a modification would not take into account all of the different characteristics of the two company's systems and costs and would be contrary to law.

In response to Ameritech's suggestion that the Commission defer consideration of this issue until the FCC finally decides the manner in which reciprocal compensation is to be paid for ISP bound calls, Focal responds that such an outcome would likely deprive Focal of cost recovery to which it is entitled for an extended period of time, noting that it took the FCC almost two years to respond to the request for clarification that resulted in its last attempt at addressing the ISP issue. Focal further argues that the suggestion is unworkable because it would require Focal to track ISP bound traffic until such time as the FCC acts, while its Chief Operating Officer testified that such tracking is impossible.

b. Commission's Conclusion

Consistent with our earlier findings in Docket 97-0404/0519/0525, this Commission finds that ISP bound calls are local and should be due reciprocal compensation. However, the Commission also takes note of the evidence in the record which suggests dramatic shifts in the utilization of the local exchange network, associated with the explosion in Internet traffic, and the resultant effects these changes are having upon the issue of reciprocal compensation. Due to these changes, the issue of reciprocal compensation demands further scrutiny by this Commission in order to ensure that just and reasonable rates are in place in Illinois.

Furthermore, since the issues raised here related to reciprocal compensation are likely to be very similar to those raised in other arbitration proceedings and other market participants have not been party to this proceeding, we conclude that this arbitration decision is not the proper place for the Commission to adopt a position which will have far-reaching competitive and economic effects upon the telecommunications marketplace. Therefore, the Commission hereby directs Staff to initiate a proceeding in order to further address the issue of reciprocal compensation. At this time, we will adopt Focal's proposed reciprocal compensation rate of $0.005175 per minute. However, the companies should take note that the Commission may subject this reciprocal compensation rate to an adjustment, including a possible true up or retroactive payment, based on its ultimate conclusion reached in the reciprocal compensation proceeding. Should the Commission order an adjustment to this reciprocal compensation rate, including a possible true up or retroactive payment, it will not apply to any period of time prior to the approval of this interconnection agreement.

3. Should Focal be allowed to count ISP bound traffic as local exchange service for the purpose of self-certifying that it provides a significant amount of local exchange traffic? (Section 9.2)

a. **Positions of the Parties**

Focal has requested that Ameritech convert special access circuits to an unbundled network element loop/transport ("UNE") combination known as an enhanced extended link ("EEL"). The obligation to provision loop transport combinations was addressed by the FCC in a Supplemental Order to CC Docket 96-98. The FCC concluded that LECs would not be required to provision loop/transport UNEs unless the requesting carrier certified that it provided a particular customer with a "significant amount of local exchange service."

The parties originally disagreed over several issues involved with the provisioning of EELs. These included: whether Focal should be required to self certify that it was, in fact, providing a customer with a significant amount of local exchange service, the propriety of including particular parameters for defining "significant" in the contract, the compensation to be paid for termination and service ordering charges, the manner in which the EELs would be collocated and finally, whether Focal could count ISP bound traffic in making its certification. Because the initial briefs of Focal and Ameritech addressed some, but not all of these issues, a status hearing was held on March 31, 2000. Prior to the hearing, the parties, via e-mail, submitted their understanding of outstanding issues. At the hearing, representatives of Focal and Ameritech indicated that the only outstanding matter to be determined under issue three was the counting of ISP traffic toward the "significant" benchmark. The e-mail was marked as Hearing Examiners' Exhibit 1, and admitted into the record.

Focal argues that ISP bound traffic is local exchange service and should be counted as such in determining whether or not Focal provides such service to customers. Because the majority of Focal's traffic is ISP bound traffic, counting it would, in all likelihood satisfy the "significant" benchmark. Focal first notes that the 1996 Act defines only two types of telephone traffic (1) exchange access (long distance) and (2) telephone exchange service (local calls). According to Focal, telephone exchange service calls are defined primarily by virtue of the fact that they are made between endusers in the same calling area. Focal argues that the FCC, in the Universal Service Report (13 FCC Rcd 11501 et seq), recognized that an Internet bound call has two components. The first component is the enduser dial up call which, according to Focal, is functionally equivalent to a telephone exchange service call because it is made by an enduser to an ISP that is in the same calling area. The second component of an Internet bound call is the two way communications between the ISP and the many websites that make up the Internet. Focal argues that the FCC, in the Universal Service Report, determined that this component of an Internet call is the provision of information services and not telephony at all. Focal goes on to note that this approach is consistent with various other pronouncements of the FCC and conclusions of various Federal Courts, all of which have recognized that the Internet is based primarily upon the ability of endusers to access the Internet on a non-access exchange service basis.

Focal also argues that, in the event the Commission were to conclude that the FCC has spoken on the issue of ISP calls to Focal's detriment, the 1996 Act as well as section 13-505.6 of the Public Utilities Act (220 ILCS 5/13-505.6) allows the Commission to ignore the FCC's conclusions and reach its own independent determination on the ultimate nature of Internet calls. Focal also notes that a determination that it could not include ISP bound calls as telephone exchange service would result in an impossible burden because there is currently no technology available that would it allow it to segregate ISP bound traffic from any other traffic coursing across its network.

Staff agrees with Focal that it should not be required to self certify that it is not treating ISP calls as local for purposes of requesting EELs. Staff notes that the FCC did not include this requirement in the Supplemental Order. Staff goes on to note that such a certification may have unforeseen long range legal implications relating to proceedings involving inter-carrier compensation arrangements for ISP traffic. Staff suggests that Focal only be required to self certify that the tabulations relied upon are consistent with current state and federal statutes, rules and regulations.

Ameritech argues that that the FCC has, in a number of dockets, held that the service CLECs provide ISPs is exchange access service, not local exchange service. In addition, Ameritech notes that the FCC, in the Supplemental Order, specifically deferred the issue of whether CLECs could employ unbundled network elements solely to provide exchange access service. Ameritech concludes that allowing Focal to use an unbundled special access line to serve an ISP, would, by definition, be providing solely exchange access service.

Ameritech argues that both Focal and Staff have misconceived the distinction between treating IPS traffic as local exchange traffic for the purposes of reciprocal compensation and the treatment of service to an ISP as local exchange traffic for the purpose of unbundling special access circuits into EELs. Ameritech acknowledges that the FCC has indicated that ISP traffic might, in some circumstances, be treated as local; however, Ameritech asserts that this does not transform the underlying nature of the traffic which is, according to Ameritech, interstate access service from which ISPs have been excused from paying access charges.

In response to Focal's arguments urging the Commission to ignore a detrimental conclusion of the FCC, Ameritech argues that such a result would be contrary to the Supremacy Clause of the United States Constitution and that the argument is simply an improper collateral attack on various decisions of the FCC. In response to Focal's "technical infeasibility" argument, Ameritech first notes that other jurisdictions have ruled that requesting carriers need not receive compensation for terminating ISP calls which, of necessity, calls for segregating this traffic from all other traffic. From this, Ameritech concludes that there must be some way to accomplish this task. In addition, Ameritech notes that Focal agreed to percentage based measurement in its communication to the FCC detailing the parameters it endorsed as the basis for making

the determination that it was providing a significant amount of telephone exchange service to an enduser. The implication of this, according to Ameritech, is that measurement of ISP and non-ISP traffic is possible. Ameritech concludes by arguing that if, in fact, Focal cannot identify ISP bound traffic, this is enough reason to deny it the opportunity to obtain the unbundled loop/transport combination.

b. Commission's Conclusion

In this issue, the Commission must address the conundrum created by the FCC in its quest to maintain jurisdiction over matters relating to the Internet. Here, similarly to its position in issue two, Focal urges us to find that ISP calls are local in nature. Ameritech disagrees. In issue two, we were faced with deciding the manner in which Focal and Ameritech were to be compensated for terminating calls. The issue before us here is distinct because it does not deal with the functionality or costs of the calls but rather with the local or long distance nature of the calls, which has been muddied considerably by the FCC. Staff's view that we should not require Focal to self certify that it is not treating ISP call as local because the FCC has not imposed this requirement not only misses the issue, which is whether Focal should be allowed to count such calls as local exchange service, but seems to admit that Ameritech is correct in its position, since Staff indicates that it does not expect Focal to count ISP calls as local, which is exactly what Focal is asking to be allowed to do.

Based upon the record before us, we must agree with Focal that, for purposes of complying with the FCC's directive in the Supplemental Order, Focal should be allowed to count ISP bound traffic as local exchange service in self certifying that it will be providing a significant level of local exchange service through an EEL. While the issue is distinct from our consideration of reciprocal compensation, much of the same reasoning applies. Here, the FCC, for whatever reason, has tied the LEC's obligation to unbundle a special access circuit to the CLEC's obligation to provide significant amounts of local exchange service to a particular customer. The FCC, through a number of proceedings, has specifically held that it is vested with jurisdiction over ISP bound traffic because, when analyzed on and "end to end" basis, it is not local exchange traffic. Nonetheless, as noted previously in this order, the FCC has continued to allow the states to imposed reciprocal compensation requirements, as if it were local exchange traffic. Here, based upon the totality of the circumstances, we conclude that, for purposes of the self-certification requirement, Focal should be allowed to count ISP traffic as local exchange service. The parties are directed to amend the interconnection agreement to reflect this conclusion and, if necessary, to reflect the agreed upon resolution of the remaining issues relating to requests for EELs as represented at the status hearing held on March 31, 2000.

4. Should Focal be required to establish a point of interconnection within 15 miles of the rate center for any NXX code that Focal uses to provide foreign exchange service? (Section 4.3.12)

a. **Positions of the Parties**

Foreign exchange ("FX") service allows a customer to obtain an NXX code (the first three digits of a seven-digit telephone number) that is assigned to a different geographic area than where the customer is actually located. People in the geographic area assigned to the particular NXX code can reach the FX customer for the price of a local call, even though the call is actually transported much further than a local call. Ameritech indicates, for example, that a call from Aurora to downtown Chicago travels more than 15 miles and would thus normally be a Band C toll call. Ameritech states that if the recipient of the call in downtown Chicago is an FX customer assigned to the same NXX code as the originating caller in Aurora, the originating caller would only be billed for a local call since Ameritech's billing systems recognize an intra-NXX call as a local call.

Ameritech notes that both it and Focal provide FX services. Ameritech indicates that when a call is originated by an Ameritech customer and terminated to an Ameritech FX customer, Ameritech charges the originating caller for a local call, and charges the FX customer a rate for FX service that includes the transport costs that Ameritech incurs to carry the call from the originating NXX area to the FX customer's location.

Ameritech indicates that when the call is originated by an Ameritech local customer and delivered to a Focal FX customer, the originating customer still pays Ameritech for a local call. Ameritech emphasizes, however, that unless Focal has a point of interconnection ("POI") with Ameritech somewhere within the originating caller's local calling area, Ameritech must bear the cost of transport (and, in some cases, switching) to carry the call from the calling party's local calling area to Focal's nearest POI outside that local calling area. Ameritech states that this situation forces Ameritech to subsidize Focal's competing FX service with free interexchange transport. Ameritech asserts that the free interexchange transport is plainly uneconomic and anti-competitive. Ameritech concludes that Focal should bear the costs of interexchange transport for Focal's FX service.

To remedy this problem, Ameritech proposes that Focal be required to maintain a POI within 15 miles of the rating point of any NXX code that Focal uses to provide FX service. Ameritech states that a POI needs to be within 15 miles of the rating point for an NXX because calls between central offices that are less than 15 miles apart are considered local, whereas calls transported over a longer distance are Band C toll calls. Ameritech indicates that if Focal maintains a POI within the 15 miles, Ameritech will not have to transport an FX call more than 15 miles, and thus will no longer have to provide Focal with what amounts to free interexchange transport and switching. Ameritech states that it would also no longer be forced to collect only Band A local exchange charges from its own customers for calls that are actually toll calls.

Focal contends that Ameritech's proposed requirement would impose unlawful and unreasonable interconnection obligations on Focal and would impair Focal's ability

to offer FX service. Focal states that Ameritech's proposal would require Focal to construct or lease interconnection facilities solely for the purpose of transporting FX traffic, regardless of whether such interconnections are warranted by overall traffic volumes or any other network reasons.

Focal disputes Ameritech's claim that Focal receives a free ride on Ameritech's network for FX service. Focal indicates that Ameritech's argument is belied by the manner in which traffic is exchanged between Ameritech and Focal. Focal states that when the customer of one carrier originates a call, that carrier is obligated to bring that traffic to the POI associated with the terminating number. Focal indicates that once the call is handed off, the other carrier is responsible to deliver the call to the called party. For example, Focal states that if an Ameritech customer calls a Focal customer physically located in Kankakee, Ameritech is obligated to deliver the call to the POI associated with Kankakee. Focal indicates that if Ameritech's customer in Kankakee calls a Focal customer physically located in Chicago that has an FX derived phone number in Kankakee, Ameritech has the same obligation to deliver the call to the POI associated with Kankakee. Focal states that in both cases, Focal would transport the call from the POI to its switch. Focal emphasizes that in both cases, Ameritech carries the call the same distance and incurs the same transport costs.

Focal concludes that there is no justification to impose different interconnection obligations on FX service than on all other local service. Focal indicates that it generally establishes POIs in the areas that it serves, and that the POIs are usually within the 15 mile distance advocated by Ameritech. Focal notes that it and Ameritech established 19 POIs for the exchange of traffic under their first interconnection agreement and have agreed to establish more than 100 POIs under the implementation plan for the new interconnection agreement. Focal states that the establishment of POIs should continue to be based on traffic patterns and reasonable engineering practices.

In response, Ameritech indicates that any speculative inconvenience to Focal in adding POIs for FX service pales in comparison to the significant uncompensated transport costs that Focal is already shifting to Ameritech. Ameritech further asserts that the establishment of POIs is not onerous.

Ameritech indicates that Focal's argument that Ameritech is obligated to transport all calls to Focal's nearest POI is a red herring. Ameritech asserts that Focal in essence argues that because the free ride problem could exist for both FX and non-FX service, the Commission is precluded from accepting Ameritech's proposal because it is limited to FX service. Ameritech indicates that it focused on FX service because such service has resulted in the most significant free ride problem. Ameritech concludes that federal or state law does not require that it provide the free ride to Focal.

b. Commission's Conclusion

affect a competing service provider's performance or would affect the incumbent's interoperability with other service providers.

Staff takes the position that Ameritech could satisfy Focal's concerns if it flagged all conditioned loops that are being used for DSL service as an alert that the service interrupting equipment should not be reinstalled. Ameritech noted that the loops are already flagged.

b. Commission's Conclusion

The Commission finds that Ameritech's current flagging of conditioned loops and the public notice requirements of Rule 51.325 are sufficient to address Focal's concerns over the possibility of "de-conditioning" a previously conditioned loop. We therefor decline to adopt the notice requirement propounded by Focal.

8. Stricken

9-14. Resolved

Compliance with Arbitration Standards

As noted in the "Jurisdictional" section of this Arbitration Decision, state commissions must apply three standards in resolving open issues and imposing conditions upon parties to an agreement subject to arbitration. The first standard requires the state commission to assure compliance with Section 251 and any rules promulgated under Section 251. The Commission has reviewed each of the conclusions reached above and finds that they are in compliance with the relevant statutes and rules. The second standard requires the state commission to establish rates according to Section 252(d). The rates for transport and termination adopted with respect to Issues 1 and 2 comply with the criteria in Section 252(d)(2). The final standard requires the state commission to provide a schedule for implementation of the terms and conditions by the parties to the agreement. Adoption of Article XVIII, "Implementation Team and Implementation Plan," and Section 19.1, "Compliance with Implementation Schedule," of Article XIX, "General Responsibilities of the Parties," establishes a schedule for implementation as required by the Act.

As a final implementation matter, the parties shall file, no later than 15 calendar days from the date of service of this Arbitration Decision, the complete Interconnection Agreement for Commission approval pursuant to §252(e) of the Act.

By order of the Commission this 8th day of May, 2000.

Chairman

DOCKET NO. 10692-U

ORDER

In re: Generic Proceeding to Establish Long-Term Pricing Policies For Unbundled Network Elements

BY THE COMMISSION:

The Georgia Public Service Commission ("Commission") initiated this docket to establish long-term pricing policies for combinations of Unbundled Network Elements (UNEs) and to establish recurring and nonrecurring rates for particular combinations of UNEs.

I. INTRODUCTION

A. Background

On December 4, 1996, the Commission issued its Order on the AT&T Petition for Arbitration. In that Order, the Commission set interim rates for unbundled network elements (UNEs). The Commission stated in the AT&T Arbitration Order: "The Commission further rules that it shall conduct a generic proceeding to develop appropriate long-term pricing policies regarding recombination of unbundled capabilities." Docket 6801-U, AT&T Arbitration Order, p. 52.

On December 6, 1996, the Commission issued a Procedural and Scheduling Order to consider cost-based rates in Docket 7061-U, In Re: Review of Cost Studies, Methodologies, and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services. The Commission issued its final order in that case on December 16, 1997 setting permanent rates for stand-alone UNEs. In its order, the Commission stated: "The Commission reaffirms its corollary decision in Docket 6801-U that it shall conduct a generic proceeding to develop long-term pricing policies regarding recombination of UNEs. . . . Indeed, the Commission notes that this proceeding

is not, and was not intended to be the 'Generic Proceeding' to develop appropriate long-term pricing policies regarding recombination of unbundled capabilities that was envisioned in the Commission's December 4, 1996 order ruling on Arbitration in docket 6801-U." Docket 7061-U, UNE Cost Order, pp. 48-49.

Various parties have continued to show an interest in this issue. For example, on April 10, 1998, AT&T filed a petition with this Commission to commence a generic proceeding to establish long-term pricing policies for UNEs. See Docket 9097-U. On January 23, 1999, MCIMetro Access Transmission Services, LLC, filed a complaint against BellSouth to obtain DS1 Loop - Transport combinations at UNE prices. See Docket 6865-U.

On January 25, 1999, the Supreme Court issued its decision in AT&T Corporation v. Iowa Utilities Board, 119 S.Ct. 721 (1999). This matter had come before the Supreme Court on writs of certiorari from the decision of the Eighth Circuit Court of Appeals which had vacated portions of the Federal Communications Commission's First Report and Order issued on August 8, 1996. Among other provisions, the Eighth Circuit had vacated FCC Rule 315(b) which prohibited ILECs from separating elements which are already combined. The Supreme Court reversed the Eighth Circuit on this issue, reinstating Rule 315(b). The Supreme Court affirmed the ruling of the Eighth Circuit that CLECs can provide local service relying solely on the elements in an incumbent's network. The Supreme Court ruled, however, that the FCC did not adequately consider the "necessary and impair" standard in determining which network elements incumbents must provide to CLECs. As a result, the Supreme Court vacated the FCC's Rule 319.

On September 15, 1999, the Federal Communications Commission (FCC) completed its reconsideration of Rule 319, adopting its Third Report and Order and Fourth Further Notice of Proposed Rulemaking (Third Report and Order), Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98. The FCC's written order was released on November 5, 1999. In this Third Report and Order, the FCC revised, in light of the Supreme Court's order, the list of the network elements that ILEC must provide on an unbundled basis and issued a new Rule 319. The FCC ruled that the following elements must be unbundled: Loops, subloops, network interface device (NID), circuit switching, interoffice transmission facilities, signaling and call-related databases, and operations support systems (OSS). For circuit switching, the FCC ruled that Incumbent LECs must offer unbundled access to local circuit switching, except for switching used to serve business users with four or more lines in FCC access density zone 1 (the densest areas) in the top 50 Metropolitan Statistical Areas (MSAs), provided that the incumbent LEC provides non-discriminatory, cost-based access to the enhanced extended link (EEL, a combination of an unbundled loop, multiplexing/concentrating equipment, and dedicated transport.). The FCC ruled that, pursuant to section 51.315(b) of the FCC's rules, incumbent LECs are required to provide access to combinations of loop, multiplexing/concentrating equipment and dedicated transport if they are currently combined. The FCC did not readdress whether an incumbent LEC must combine network elements that are not already combined in the network, because that issue is pending before the Eighth Circuit Court of Appeals.

Finally, the FCC sought comment on the legal and policy bases for precluding requesting carriers from substituting dedicated transport for special access entrance facilities.

On November 24, 1999, the FCC issued a Supplemental Order to its Third Report and Order. In this Supplemental Order, the FCC modified its conclusion in paragraph 486 of the Third Report and Order to allow incumbent LECs to constrain the use of combinations of unbundled loops and transport network elements as a substitute for special access service. Supplemental Order, ¶ 4. IXCs may not convert special access services to combinations of unbundled loops and transport network elements, whether or not the IXCs self-provide entrance facilities, unless the IXC uses the combination "to provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer." Id. at ¶ 5.

B. Statement of Proceeding

On May 18, 1999, the Commission issued its Procedural and Scheduling Order that set forth the scope of the hearing in this matter. The Scheduling Order stated that the purpose of this proceeding was to establish long-term pricing policies for combinations of Unbundled Network Elements (UNEs). The Scheduling Order stated that the Commission would set recurring and non-recurring rates for certain combinations of UNEs. In addition, it stated that the Commission would set pricing policies for combinations of UNEs generally. Finally, the Scheduling Order stated that the Commission would consider, and parties testimony should address, the following issues:

1. How should the recurring and nonrecurring charges for UNEs combinations be determined?

2. What are the appropriate recurring and nonrecurring charges for the following combinations:

    i. DS1 Loop - Transport combination
    ii. 2-wire analog loop-port combination

3. What other UNE combinations have CLECs requested from BellSouth and what are the appropriate recurring and nonrecurring charges for these combinations?

The Scheduling Order provided that any party submitting a cost study was required to provide comprehensive and complete work papers that fully disclosed and documented the process underlying the development of each of its economic costs, including the documentation of all judgments and methods used to establish every specific assumption employed in each cost study. The Scheduling Order required that the work papers clearly and logically represent all data used in developing each cost estimate, and be so comprehensive as to allow others initially unfamiliar with

the studies to replicate the methodology and calculate equivalent or alternative results using equivalent or alternative assumptions. The Scheduling Order required that the work papers be organized in such a manner as to clearly identify and document all source data and assumptions, including investment, expense, and demand data assumptions.

BellSouth and AT&T filed cost studies in this proceeding. BellSouth presented recurring and non-recurring cost studies which used basically the same methodology adopted by the Commission in its December 16, 1997 Order in Docket 7061-U. Most, but not all, of the adjustments that were ordered by the Commission in Docket 7061-U were incorporated into the new studies. AT&T presented the HAI Model 5.1 (HAI or Hatfield) for a limited number of the recurring costs and the AT&T and MCI Non-Recurring Cost Model for a limited number of the non-recurring costs. For those costs, not covered by its models, AT&T recommended that use BellSouth's cost studies with modifications.

In hearings commencing July 13, 1999, the Commission heard testimony from witnesses for AT&T Communications of the Southern States (AT&T), Inc., BellSouth Telecommunications, Inc. (BellSouth), the Competitive Telecommunications Association (Comptel), the United States Department of Defense and All Other Federal Executive Agencies (collectively referred to as DOD), Excel Telecommunications, Inc. (Excel), Intermedia Communications, Inc. (Intermedia), MCI WorldCom, Inc. (MCI WorldCom), Sprint Communications Company, L.P. (Sprint), and Qwest Communications (Qwest). After the conclusion of the hearings, the Commission received closing briefs from interested parties. In addition to receiving briefs from most of the parties sponsoring witnesses, the Commission received briefs from the Consumers' Utility Counsel Division (CUCD), ICG Telecom Group, Inc. (ICG), and NEXTLINK Georgia, Inc. (NEXTLINK).

As discussed above, on November 5, 1999, the FCC issued its Third Report and Order. On December 7, 1999, the Commission issued its Order Setting Briefing Schedule which allowed any interested parties to file briefs addressing the impact of the FCC's Third Report and Order on the issues in this case. The Commission received Briefs from AT&T, BellSouth, Certain Facilities-Based CLECs (Focal Communications Corp. of Georgia, ICG, Intermedia, and NEXTLINK), CUCD, KMC Telecom, Inc. and KMC Telecom II, Inc. (KMC), MCI, and Sprint.

C. Jurisdiction

Under the Federal Telecommunications Act of 1996 (Federal Act), State Commissions are authorized to set rates and pricing policies for interconnection and access to unbundled elements. In addition to its jurisdiction of this matter pursuant to Sections 251 and 252 of the Federal Act, the Commission also has general authority and jurisdiction over the subject matter of this proceeding, conferred upon the Commission by Georgia's Telecommunications and Competition Development Act of 1995 (Georgia Act), O.C.G.A. §§46-5-160 *et seq.*, and generally O.C.G.A. §§ 46-1-1 *et seq.*, 46-2-20, 46-2-21, and 46-2-23.

II. FINDINGS AND CONCLUSIONS

A. UNE Combinations Generally

Before determining the actual rates for any combinations of unbundled network elements, the Commission must address certain underlying issues. In particular, the Commission must determine the scope of BellSouth's obligation to provide combinations of UNEs and the applicable pricing standards that apply to combinations of UNEs.

1. Rule 319 / Necessary and Impair Standard

In January 1999, the Supreme Court ruled that the FCC did not adequately consider the "necessary and impair" standard in determining which network elements incumbent LECs must provide to CLECs. As a result, the Supreme Court vacated the FCC's Rule 319. In the hearings held before this Commission, BellSouth argued that this Commission should consider the necessary and impair standard in making its determination. Since the hearing was held, the FCC has completed its reconsideration of Rule 319 and specified a national list of UNEs that ILECs must provide: Loops, subloops, network interface device (NID), circuit switching[1], interoffice transmission facilities, signaling and call-related databases, and operations support systems (OSS).

For UNEs on the national list, there is no need for this Commission to consider the necessary and impair standard since the FCC already made that determination. Indeed, the FCC stated that the goals of the Act would better be served if network elements are not removed from the national list on a state-by-state basis, at this time. The FCC order did recognize that state commissions are authorized to require incumbent LECs to unbundle additional elements as long as the obligations are consistent with the requirements of section 251. Accordingly, this Commission would apply the necessary and impair standard to the extent it considered a request to expand the unbundling requirements under the Federal Act. Since this Commission is not expanding the national list in this order, there is no need for this Commission to undertake such an analysis. Some CLECs have requested that the Commission define the enhanced extended link (EEL) as a UNE. Joint Supplemental Brief of Certain Facilities-Based CLECs, p. 7. The EEL is a UNE combination consisting of a loop, transport and a cross-connect. Like the FCC, the Commission declines to

[1] For circuit switching, the FCC ruled that Incumbent LECs must offer unbundled access to local circuit switching, except for switching used to serve business users with four or more lines in FCC access density zone 1 in the top 50 Metropolitan Statistical Areas (MSAs), provided that the incumbent LEC provides non-discriminatory, cost-based access to the enhanced extended link.

define the EEL itself as a UNE. Third Report and Order, ¶ 478. However, as discussed below, CLECs can obtain at UNE rates combinations of UNEs that BellSouth ordinarily combines in its network.

2. Applicability of FCC Rules to Pricing UNE Combinations

In its First Report and Order, the FCC had required that prices for unbundled network elements be developed using the TELRIC methodology. The Eighth Circuit had vacated the FCC's pricing rules on the grounds that pricing was outside of the FCC's jurisdiction and was reserved for the states. The Supreme Court overturned the Eighth Circuit on this issue, ruling that the FCC had jurisdiction to design a pricing methodology that the States must use. Since it had determined that the FCC lacked the jurisdiction to require a particular pricing methodology, the Eighth Circuit never reached the issue of whether TELRIC complies with the Act. The Supreme Court remanded this issue back to the Eighth Circuit. The FCC's pricing rules have been reinstated by the Supreme Court and are currently in effect pending the Eighth Circuit's review of TELRIC.[2]

BellSouth had argued in this proceeding that while "the FCC was very specific to establish pricing rules for the provision of individual UNEs. The FCC did not establish pricing rules to govern the provision of currently combined UNEs." (Pre-filed Direct Testimony of Varner, p. 24). The Commission disagrees.

The FCC's pricing rules provide:

Rule 51.501 Scope.

(a) The rules in this subpart apply to the pricing of network elements, interconnection, and methods of obtaining access to unbundled network elements, including physical collocation and virtual collocation.
(b) As used in this subpart, the term "element" includes network elements, interconnection, and methods of obtaining access to unbundled elements.

Rule 51.503 General Pricing Standard.

(a) An incumbent LEC shall offer elements to requesting carriers at rates

2 As discussed below, the portion of the pricing rules which requires geographic deaveraging has been stayed by the FCC.

terms and conditions that are just, reasonable and nondiscriminatory.

(b) An incumbent LEC's rates for each element it offers . . . shall be established, at the election of the state commission-

(1) pursuant to the forward-looking economic cost-based pricing methodology set forth in §§51.505 and 51.511 of this part; or

(2) consistent with the proxy ceilings and ranges set forth in §51.513 of this part.

(c) The rates that an incumbent LEC assesses for elements shall not vary on the basis of the class of customers served by the requesting carrier, or on the type of service that the requesting carrier purchasing such elements uses them to provide.

The rules clearly apply to the pricing of all network elements. Nowhere in the rules does the FCC imply that they apply only to network elements that are physically separated from other network elements. The rules do refer to "unbundled" elements; however, the Supreme Court specifically rejected BellSouth's argument that the term unbundled means physically separated:

> Nor are we persuaded by the incumbents' insistence that the phrase "on an unbundled basis" in §251(c)(3) means "physically separated." The dictionary definition of "unbundled" (and the only definition given, we might add) matches the FCC's interpretation of the word: "to give separate prices for equipment and supporting services." Webster's Ninth New Collegiate Dictionary 1283 (1985).

Iowa Board, (Emphasis added).

In its Third Report and Order, the FCC made it clear that it considered its pricing rules for UNEs to be applicable to combinations of UNEs. Third Report and Order ¶¶ 480 and 486. Based on the FCC's statements in its Third Report and Order, BellSouth has stated that "[w]hile the merits of the FCC's pricing rules are currently on appeal, BellSouth will provide currently combined network elements at cost-based rates in accordance with the FCC's TELRIC pricing rules." BellSouth's Brief on the Impact of the FCC's Third Report and Order, p. 8.

The Commission finds that the FCC pricing rules do apply to combinations of network elements.

3. Reasonable Profit

The cost model that BellSouth presented in this proceeding includes the return on equity which this Commission adopted in Docket 7061-U. Thus, the costs that the model generates includes as profit a reasonable return on BellSouth's investment. In addition to the costs plus profit generated by its cost model, however, BellSouth has argued that its rates should include an additional sum, which it refers to as a "reasonable profit." BellSouth argues that the "reasonable

profit" for a 2-wire analog loop-port combination should be an additional recurring charge of $9.19. For a 4-wire DS1 loop-transport combination, BellSouth argues that it should be an additional $78.25. While BellSouth's cost models generate costs for other combinations, it has not recommended a rate or an amount of "reasonable profit" for them.

In Docket 7061-U, the Commission addressed the issue of the meaning of the term "reasonable profit" as it is used in 47 U.S.C. § 252(d)(1)(B). The Commission stated:

> The Commission does not accept BellSouth's assertion that the "reasonable profit" referred to in 47 U.S.C. § 252(d)(1)(B) means a profit over and above the cost including cost of capital. . . . [T]he Commission notes that BellSouth's interpretation would run counter to established pricing principles that the reasonable profit is incorporated within the concept of cost of capital.

Order in Docket 7061-U, p. 24. The Commission hereby reaffirms its finding in Docket 7061-U.

BellSouth argued that the best way to provide for a reasonable profit is to set the price of currently combined UNEs at the resale rate. BST's Brief, p. 24. While this Commission previously ruled that UNE combinations that replicate a retail service should be priced as resale, in light of the court decisions rejecting BellSouth's arguments that UNE combinations are, or should be treated as, resale, this position is no longer tenable. The Eighth Circuit rejected the ILEC argument that when a CLEC uses only leased network elements to provide a service that the wholesale rate should apply. Instead, the Eighth Circuit affirmed the FCC's "all elements" rule, ruling that even when a CLEC used only leased elements to provide service, the elements would be priced at the cost-based rates, not the wholesale rate. 120 F.3d at 814. The Supreme Court affirmed the Eighth Circuit's holding on the "all elements" rule. The Supreme Court went even further. When it reinstated Rule 315(b), the Court explicitly recognized that this rule would allow CLECs to lease a complete, preassembled network at cost-based rates (assuming the list of elements under Rule 319 was not changed). As the Court stated:

> Rule 315(b) forbids an incumbent to separate already-combined network elements before leasing them to a competitor. As they did in the Court of Appeals, the incumbents object to the effect of this rule when it is combined with others before us today. TELRIC allows an entrant to lease network elements based on forward-looking costs, Rule 319 subjects virtually all network elements to the unbundling requirement, and the all-elements rule allows requesting carriers to rely only on the incumbent's network in providing service. When Rule 315(b) is added to these, a competitor can lease a complete, preassembled network at (allegedly very low) cost-based rates.
>
> The incumbents argue that this result is totally inconsistent with

the 1996 Act. They say that it not only eviscerates the distinction between resale and unbundled access, but that it also amounts to Government-sanctioned regulatory arbitrage. Currently, state laws require local phone rates to include a "universal service" subsidy. Business customers, for whom the cost of service is relatively low, are charged significantly above cost to subsidize service to rural and residential customers, for whom the cost of service is relatively high. Because this universal-service subsidy is built into retail rates, it is passed on to carriers who enter the market through the resale provision. Carriers who purchase network elements at cost, however, avoid the subsidy altogether and can lure business customers away from incumbents by offering rates closer to cost. This, of course, would leave the incumbents holding the bag for universal service.

As was the case for the all-elements rule, our remand of Rule 319 may render the incumbents' concern on this score academic. Moreover, §254 requires that universal-service subsidies be phased out, so whatever possibility of arbitrage remains will be only temporary. In any event, we cannot say that Rule 315(b) unreasonably interprets the statute.

Iowa Board, (Emphasis added).

While BellSouth proposed several other alternative theories which it claimed could be used to calculate its proposed "reasonable profit" of $9.19, no such calculation appears in the record. BellSouth merely makes a conclusory statement as to what its reasonable profit should be without any showing of how it arrived at the number. In addition, as discussed in the prior section, the FCC's UNE pricing rules apply to UNE combinations. BellSouth's "reasonable profit" proposals are contrary to FCC rules that prohibit the consideration of certain factors when setting rates:

§ 51.505(d) Factors that may not be considered. The following factors shall not be considered in a calculation of the forward-looking economic cost of an element:

(1) Embedded costs. Embedded costs are the costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC's book of accounts.

(2) Retail costs. Retail costs include the costs of marketing, billing, collection, and other costs associated with offering retail telecommunications services to subscribers who are not telecommunications carriers, described in § 51.609 of this part.

(3) Opportunity costs. Opportunity costs include revenues that the incumbent LEC would have received for the sale of telecommunications services, in the absence of competition from telecommunications carrier that purchase elements.

(4) Revenues to subsidize other services. Revenues to subsidize other services include revenues associated with elements or telecommunications service offerings other than the element for which a rate is being established.

Based on the above, the Commission rejects BellSouth's so-called reasonable profit adjustment.

4. Currently Combines

FCC Rule 315 addressed combinations of unbundled network elements. Rule 315(b) provides:

> Except upon request, an incumbent LEC shall not separate requested network elements that the incumbent currently combines.

Emphasis added. BellSouth has interpreted the term "currently combines" as "currently combined." BellSouth defines the term to mean those elements "that are physically in a combined state as of the time the CLEC requests them and which can be converted to UNEs on a 'switch as is' or 'switch with changes' basis. . . . Currently combined elements only include loops, ports, transport or other elements that are currently installed for the existing customer that the CLEC wishes to serve." BellSouth's Posthearing Brief, p. 9. The CLECs have interpreted the term to mean elements that are typically combined in the ILECs network, even if the particular elements being ordered are not actually combined at the time the order is placed.

When the Supreme Court reinstated Rule 315(b), it stated its understanding of the intent of the rule:

> The reality is that §251(c)(3) is ambiguous on whether leased network elements may or must be separated, and the rule the Commission has prescribed is entirely rational, finding its basis in §251(c)(3)'s nondiscrimination requirement. As the Commission explains, it is aimed at preventing incumbent LECs from "disconnect[ing] previously connected elements, over the objection of the requesting carrier, not for any productive reason, but just to impose wasteful reconnection costs on new entrants." Reply Brief for Federal Petitioners 23. It is true that Rule 315(b) could allow entrants access to an entire preassembled network. In the absence of Rule 315(b), however, incumbents could impose wasteful costs on even those carriers who requested less than the whole network. It is well within the bounds of the reasonable for the Commission to opt in favor of ensuring against an anticompetitive practice.

Iowa Board.

It appears clear that the Supreme Court believed that at least one major purpose of Rule 315(b) was to prevent the incumbent from ripping apart elements which were already connected to each other. The Commission agrees that at the very least, Rule 315(b) requires BellSouth to provide combinations of elements that are already physically connected to each other regardless of whether they are currently being used to serve a particular customer. The Supreme Court, however, did not state that it was reinstating Rule 315(b) only to the extent it prohibited incumbents from ripping apart elements currently physically connected to each other. It reinstated Rule 315(b) in its entirety, and it did so based on its interpretation of the nondiscrimination language of Section 251(c)(3). See Third Report and Order, ¶¶ 481 and 482.

Indeed, the Ninth Circuit Court of Appeals has recently ruled that it "necessarily follows from AT&T that requiring [the ILEC] to combine unbundled network elements is not inconsistent with the Act . . . the Act does not say or imply that network elements may only be leased in discrete parts." U.S. West Communications v. MFS Intelenet, Inc, 1999 WL 799082, *7 (9th Cir. Oct. 9, 1999). In response to U.S. West's argument that the Eighth Circuit's invalidation of FCC Rules 315(c)-(f) required the Ninth Circuit to conclude that a state commission's order requiring an ILEC to provide combinations violates the Act, the Ninth Circuit stated:

> The Supreme Court opinion . . . undermined the Eighth Circuit's rationale for invalidating this regulation. Although the Supreme Court did not directly review the Eighth Circuit's invalidation of § 51.315(c)-(f), its interpretation of 47 U.S.C. § 251(c)(3) demonstrates that the Eighth Circuit erred when it concluded that the regulation was inconsistent with the Act. We must follow the Supreme Court's reading of the Act despite the Eighth Circuit's prior invalidation of the nearly identical FCC regulation.

Id.

Rule 315(b), by its own terms, applies to elements that the incumbent "currently combines," not merely elements which are "currently combined." In the FCC's First Report and Order, the FCC stated that the proper reading of "currently combines" is "ordinarily combined within their network, in the manner which they are typically combined." First Report and Order, ¶ 296. In its Third Report and Order, the FCC stated that it was declining to address this argument at this time because the matter is currently pending before the Eighth Circuit. Third Report and Order, ¶ 479.[3]

3 While the FCC declined to address this argument again in its Third Report and Order, significantly the FCC did not disavow the position it took in the First Report and Order. BellSouth argues that "the FCC made clear that 'currently combined' elements are those elements physically combined as of the time the CLEC requests them and which can be converted to UNEs on a 'switch as is' or 'switch with changes basis." BellSouth's Brief on Impact of Third Report and Order, p. 5. The FCC, however, was not stating that Rule 51-315(b) is limited only to currently

Accordingly, the only FCC interpretation of "currently combines" remains the literal one contained in the First Report and Order. The Commission finds that "currently combines" means ordinarily combined within the BellSouth network, in the manner which they are typically combined.[4] Thus, CLECs can order combinations of typically combined elements, even if the particular elements being ordered are not actually physically connected at the time the order is placed. However, in the event that the Eighth Circuit Court of Appeals determines that ILECs have no legal obligation to combine UNEs under the Federal Act, the Commission will reevaluate its decision on this issue. The Commission further finds that the particular loop/port and loop/transport combinations at issue in this case are ordinarily combined in BellSouth's network.

Based on the FCC's Third Report and Order, even if this Commission were to limit the definition of "currently combines" to the more restrictive "currently combined" interpretation, CLECs would still be able to obtain and use the same UNE combinations. The process of obtaining them would be more cumbersome, however, and would serve no purpose except to complicate the ordering process and impede competition. According to the FCC, CLECs can purchase services such as special access and resale even when the network elements supporting the underlying service are not physically connected at the time the service is ordered. At the point when the CLEC begins to receive such service, the underlying network elements are necessarily physically connected. The CLECs can then obtain such currently combined network elements as UNE combinations at UNE prices. Third Report and Order, ¶¶ 480, 486. The Commission finds that even assuming arguendo that "currently combines" means "currently combined," rather than go through the circuitous process of requiring the CLEC to submit two orders (e.g., one for special access followed by another to convert the special access to UNEs) to receive the UNE combination, the process should be streamlined to allows CLECs to place only one order for the UNE combination.

5. BellSouth's Proposed Restrictions

BellSouth had proposed in its testimony in this matter numerous restrictions on the use of UNE combinations. These proposed restrictions included:

- Combinations would be available for only two years, beginning only after BellSouth obtains Section 271 approval;

- Customers must be in service for six months before they may be served through a UNE combination;

---

combined elements. Instead, the FCC was stating that since, at the least, Rule 51-315(b) includes currently combined elements, and since when a CLEC purchases special access the elements are currently combined, that even under the more restrictive "currently combined" interpretation, CLECs would be able to convert special access to loop-transport combinations at UNE rates. Third Report and Order ¶ 480.

4 BellSouth's argument that the cost studies it presented in this matter are based on its definition of "currently combined" is discussed below in Section II.B.4, below.

- Combinations would only be available in the areas defined by BellSouth rate groups 2 and 5;

- Loop/Transport combinations must terminate on a CLEC circuit-switched, local voice switch;

- Loop/Transport combinations can only be used to provide local voice switched service.

- Loop/Transport combinations cannot be used by the entrant to provide special access service; and,

BellSouth's justification for proposing these restrictions was that they were necessary to create "the appropriate economic incentives." BellSouth's Posthearing Brief, p. 27. BellSouth also stated that the restrictions were necessary "to ensure that the use of combinations does not stifle the growth of competition." Id. at 31.

As previously discussed, BellSouth is required by the Federal Act and the FCC's rules to allow CLECs to purchase combinations of UNEs. Further, the nondiscriminatory provisions of the Federal Act and the FCC's rules are applicable to such combinations. With a limited exception discussed below, BellSouth's proposed restrictions would violate the Federal Act and the FCC's rules.

Section 251(c)(3) of the Act establishes:

> The duty to provide, to any requesting telecommunications carrier for the provision of telecommunications service, nondiscriminatory access to network elements.

Emphasis Added. More specifically, FCC Rule 51.309(a) provides:

> An incumbent LEC shall not impose limitations, restrictions or requirements on requests for, or the use of unbundled network elements that would impair the ability of a requesting telecommunications carrier to offer a telecommunications service in the manner the requesting telecommunications carrier intends.

Emphasis added. Accordingly, except as discussed below, the Commission rejects BellSouth's proposed restrictions on the use of UNE combinations.

One of BellSouth's proposed restrictions was that Loop/Transport combinations cannot be used by the entrant to provide special access service. On November 24, 1999, the FCC issued a Supplemental Order to its Third Report and Order. In this Supplemental Order, the FCC modified its conclusion in paragraph 486 of the Third Report and Order to now allow incumbent LECs to

constrain the use of combinations of unbundled loops and transport network elements as a substitute for special access service. Supplemental Order, ¶ 4. IXCs may not convert special access services to combinations of unbundled loops and transport network elements, whether or not the IXCs self-provide entrance facilities, unless the IXC uses the combination "to provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer." Id. at ¶ 5. Accordingly, the Commission finds that in order for a CLECs to use a loop/transport combination to provide special access service, the CLEC must provide a significant amount of local exchange service over the combination. Such CLECs must "self-certify that they are providing a significant amount of local exchange service over combinations of unbundled loops and transport network elements" in order to convert special access facilities to UNE pricing. Id. at footnote 9. The FCC did not find it to be necessary for ILECs and requesting carriers to undertake auditing processes to monitor whether requesting carriers are using UNEs solely to provide exchange access service. Id. The Commission finds that BellSouth shall not make auditing a precondition to converting special access to UNEs; thus the conversion of facilities will not be delayed. The Commission finds, however, that BellSouth shall be allowed to audit CLEC records in order to verify the type of traffic being transmitted over EELs. If, based on its audits, BellSouth concludes that a CLEC is not providing a significant amount of local exchange traffic over the facilities, BellSouth may file a complaint with this Commission.

6. Commercial Agreements

BellSouth has stated that it is willing to make certain UNE combinations available to CLECs through "Commercial Agreements." BellSouth claims that these commercial agreements are not subject to Commission review or approval. As explained in the prior sections, BellSouth has an obligation under the Act to provide elements that it currently combines to CLECs at cost-based rates. A review of the Commercial Agreements filed with the Commission in this matter indicates that the combinations provided under the Commercial Agreements include combinations of elements that BellSouth currently combines. In addition, the combinations provided under the Commercial Agreements include combinations that are analogous to services that could be purchased at resale rates or under an existing tariff.

All interconnection agreements must be submitted to the Commission for approval. Section 252(e)(1). For negotiated agreements, the primary purpose of this requirement is so that the Commission can insure that the agreement does not "discriminate against a telecommunications carrier not a party to the agreement" and to insure that "implementation of the agreement [is consistent] with the public interest." Section 252(e)(2)(a)(i) and (ii). Obviously, the Commission cannot fulfill its obligations if it cannot even look at the agreements.[5] Accordingly, the Commission finds that BellSouth's commercial agreements are subject to Commission review and approval.

5 Certainly, BellSouth cannot seriously suggest that the Commission simply ignore allegations that BellSouth is giving more favorable rates to CLECs that agree not to invest in facilities in Georgia than to those that do invest in Georgia. This is particularly the case where, for all practical purposes, BellSouth is simply selling a UNE

B. Cost Study Methodology and Major Assumptions

Both BellSouth and AT&T filed cost studies in this proceeding. BellSouth presented recurring and non-recurring cost studies which used basically the same methodology adopted by the Commission in its December 16, 1997 Order in Docket 7061-U. Most, but not all, of the adjustments that were ordered by the Commission in Docket 7061-U were incorporated into the new studies. AT&T presented the HAI Model 5.1 for a limited number of the recurring costs and the AT&T and MCI Non-Recurring Cost Model for a limited number of the non-recurring costs. For those costs not covered by its models, AT&T recommended that use BellSouth's cost studies with modifications. Other parties to this proceeding have recommended that the Commission make various adjustments to the proffered models.

1. Openness and Documentation

The Scheduling Order provided that any party submitting a cost study was required to provide comprehensive and complete work papers that fully disclosed and documented the process underlying the development of each of its economic costs, including the documentation of all judgments and methods used to establish every specific assumption employed in each cost study. The Scheduling Order required that the work papers clearly and logically represent all data used in developing each cost estimate, and be so comprehensive as to allow others initially unfamiliar with the studies to replicate the methodology and calculate equivalent or alternative results using equivalent or alternative assumptions. The Scheduling Order required that the work papers be organized in such a manner as to clearly identify and document all source data and assumptions, including investment, expense, and demand data assumptions.

BellSouth contends that AT&T has failed to support the basic underpinnings of the HAI Model and has failed to submit the documentation required by the Scheduling Order. BellSouth's Posthearing Brief, pp. 40- 42.

PNR and Associates (PNR) generated data for AT&T that was used to create inputs to the HAI cost proxy model for AT&T. In essence, when customers cannot be located by a mailing address (e.g., a customer has a rural P.O. Box), PNR uses mathematical processes to place the customers in surrogate locations. The customers are grouped into "clusters." This grouping process is considered by PNR to be a proprietary process. The clusters are then reconfigured to "serving areas." This process is also considered to be proprietary.

---

combination at a rate other than the cost-based rate or is providing a resale discount other than the avoided cost discount set by the Commission.

These processes are relevant to the Hatfield model because Hatfield builds its hypothetical network to these "serving areas." Since loop length is a major cost driver, the distribution of customers can greatly affect the costs generate by a model. BellSouth sought access to the PNR processes and data to determine whether the model designs these serving areas in a way that reflects the way customers are actually distributed and, if it does not, whether this results in an understatement of the costs. As BellSouth has stated, however, "AT&T has not produced a single document, study, or report that in any way validates or verifies the geocoding and clustering work performed by PNR for purposes of Hatfield version 5.1, even though AT&T was specifically requested to do so by BellSouth." BellSouth's Posthearing Brief, pp. 40-41.

AT&T, not BellSouth, must carry the burden of proof in regards to the HAI model. It is AT&T's responsibility to demonstrate to this Commission that its model produces costs in a well-reasoned way based on data shown to be reliable. See Docket 5825-U, January 20, 2000 Order. As the Commission's Order in Docket 7061-U demonstrated, when adopting a cost model, the Commission must weigh various competing factors, including, but not limited to, openness. Order in Docket No. 7061, p. 16. The Commission finds that AT&T has not adequately supported the basic underpinnings of the Hatfield Model in this proceeding. The Commission finds that while some of the principles used in constructing the Hatfield model are useful to consider in evaluating and in making adjustments to BellSouth's model, the Hatfield model itself has not been demonstrated to be a reliable method for computing the cost-based rates.

2. Conformance with TELRIC

CLECs have alleged that because the BellSouth models are premised on an assumption of the existing network configuration, while the FCC's pricing rules require the use of a "scorched node" network configuration, that the Commission should not use the BellSouth models. The Commission's options in this matter are limited to accepting or adjusting the competing models presented to it. As discussed in the prior section, from the standpoint of documentation in the record, AT&T's network configuration is essentially pulled out of thin air. In contrast, BellSouth's network configuration has verifiable underpinnings that have an objective basis. The Commission has previously approved the use of this model and has found it to be reliable, consistent, and accurate in computing forward-looking costs. The Commission finds that the costs generated by the BellSouth models, with the proper modifications and inputs, best reflect the forward-looking costs of UNE Combinations.

In addition, because HAI Model 5.1 and the AT&T and MCI Non-Recurring Cost Model only produce costs for a limited number of UNEs, even if the Commission were to approve the use of such models, the Commission would still have to use the BellSouth models for the remaining elements. Even without the openness problem discussed above, the Commission would not be inclined to use two completely different sets of methodologies to compute the costs of different UNE.

Most importantly, however, after reviewing the costs generated by the various models using different sets of inputs, the Commission is of the opinion that the decisions most effecting the costs generated are the inputs and adjustments used, rather than the choice of the basic model itself. As AT&T demonstrated, when BellSouth's recurring cost model is modified to include AT&T's proposed inputs, the cost generated for a 2-wire analog loop/port UNE combination, $11.94, is virtually identical to the HAI cost of $11.75. AT&T's Post hearing Brief, p. 19. Regardless of which model the Commission selected, the Commission would need to adjust the model and modify the inputs. The Commission has selected to use the BellSouth model and has made adjustments which reduce the costs generated by that model. However, even if the Commission were to choose the HAI model, it could not do so without modifications.[6] It appears that, after all the necessary adjustments were made, the costs ultimately produced by either model to would be very similar.

3. Geographic Deaveraging

Some parties in this proceeding have recommended that the Commission geographically deaverage UNE rates. See DOD Brief, pp. 8-10. In Docket No. 7061-U, the Commission found that it should not implement geographical deaveraging until it addressed universal service. At the time the Order in Docket 7061-U was issued, Rule 51.507, which required geographic deaveraging, had been stayed by the Eighth Circuit. While the Supreme Court's Iowa decision resulted in reinstating the FCC's pricing rules, the FCC itself subsequently stayed Rule 507. Since Rule 507 is stayed until this spring, the Commission currently has no obligation to set deaveraged UNE rates. The Commission intends to deaverage UNE rates at the appropriate time.

4. Nonrecurring Costs

Nonrecurring costs are one-time charges associated with UNEs. For example, costs associated primarily with the ordering and provisioning of UNEs are reflected as nonrecurring charges for such elements. In Docket 7061-U, the Commission approved the use of BellSouth's non-recurring cost model, subject to certain modifications. The Commission finds that the non-recurring costs generated by the BellSouth models best reflect the appropriate cost-based non-recurring charges. The key assumptions underlying the AT&T nonrecurring model are flawed; thus, the costs generated by that model are suspect. For example, the model assumes that BellSouth's current OSS can be transformed to permit a fallout rate of only 2 percent, even though BellSouth has not achieved that kind of flowthrough for its own orders. Further, it assumes that not a single CLEC order will require manual handling by BellSouth due to CLEC error. Finally, it is not consistent with the HAI model. Post-hearing Brief of BellSouth, pp. 42-45.

BellSouth has stated that its cost studies presented in this matter are based on its definition of "currently combined." Direct Testimony of Mr. Varner, p, 10; Direct Testimony of Ms. Caldwell,

6 For example, while the Commission finds that the BellSouth model does not use enough IDLC, the HAI model's use of 100% GR-303 IDLC is also inappropriate.

pp. 8, and 12-14. MCI WorldCom argued that the results of the BellSouth cost studies are not a result of the application of BellSouth's definition of currently combined; instead, they are the result of no longer assuming that elements must be physically separated and recombined in a collocation space. See Rebuttal Testimony of Mr. Wood, pp. 15-17. The Commission finds that BellSouth's recurring cost models are not impacted by BellSouth's definition of currently combined; and, as discussed elsewhere in this order, the Commission finds that, subject to certain modifications, the recurring rate for UNE combinations should be set using BellSouth's model. The Commission also finds that BellSouth's non-recurring cost models should be used to set the nonrecurring costs for those UNE combinations where the UNEs are currently in place. However, the non-recurring costs generated by BellSouth's model may be inappropriate for those UNE combinations where the elements are not, in fact, currently in place. The Commission finds, on an interim basis, that for those UNE combinations where the elements are not currently in place, the nonrecurring charge for such UNE combinations shall be the sum of the stand-alone NRCs of the UNEs which make up the combination. These interim rates shall be subject to true-up. Within 45 days of the date of this order, BellSouth shall file a cost study for nonrecurring charges for such new UNE combinations. The Commission shall conduct a review of the cost study.

C. Input Assumptions

1. Inputs Set in Docket No. 7061-U.

In Docket 7061-U, the Commission adopted a pricing methodology and resulting cost-based rates for the unbundling of BellSouth's network elements. As part of that proceeding, the Commission made several findings regarding the appropriate model inputs to be used in determining UNE rates. The Commission has taken judicial notice of the administrative record in Docket 7061-U during the hearing in this matter. Tr. 1019.

Many of the model inputs that the Commission adopted in Docket 7061-U have already been incorporated into the model that BellSouth has filed in this proceeding. For example, BellSouth has used the Commission approved rate of return and the plant lives and depreciation rates as prescribed by the FCC for BellSouth's operations in Georgia. The Commission finds that, except as otherwise specified in this order, all input adjustments to the BellSouth model which the Commission made in Docket 7061-U shall be approved for purposes of this proceeding and shall be properly incorporated into BellSouth's model.

2. Loop Sample and the inclusion of ESSX

In Docket 7061-U, the Commission recognized that the length of loops and their types of construction are major cost drivers. Order in Docket 7061-U, p. 34. Thus, the Commission rejected BellSouth's omission of shorter business-type loops, including ESSX, because exclusion of these shorter loops would result in an overstatement of loop costs. Order in Docket 7061-U, pp. 36-37. In the cost study filed in this case, BellSouth incorporated PBX trunks in its loop sample, but did not incorporate ESSX Service loops. Tr. at 431. AT&T and MCI argue that the ESSX loops should be included. The Commission agrees that ESSX should be included in the loop sample. BellSouth currently combines the loop and port used to provide ESSX service and this UNE combination should be available for use by the CLEC to provide the customer with local service. Rebuttal Testimony of Mr. Don Wood, pp. 24-25.

Including ESSX loops results in two adjustments to the TELRIC Calculator. Adding in the ESSX loops results in a reduction of the average cost of business loops since ESSX loops tend to be shorter. Adding in the ESSX loops also increases the total number of business loops by 367,997 (Docket 7061-U, BellSouth's response to Staff's Third Data Request, Item No. STF-3-5), thus increasing the proportion of business loops to total loops. Since business loops are cheaper than residential loops, as the percentage of business loops increases, the average loop cost decreases. The Commission finds that adding ESSX loops requires modifying BellSouth's model to reflect 68% residential loops and 32% business loops. This adjustment would result in a $0.55 decrease to the 2-wire loop/port UNE combination price.

3. Integrated Digital Loop Carrier (IDLC)/GR-303 IDLC

BellSouth's model assumes that 49% of digital loop carrier (DLC) loops are served by IDLC. AT&T and MCI argue that BellSouth's model should be adjusted so that all DLC loops are served by IDLC. BellSouth counters by arguing that an assumption of 100% IDLC ignores the realities of network design since BellSouth states that it will continue to deploy universal DLC in its network for the foreseeable future. Tr. 346. While the Commission agrees that an assumption of 100% IDLC ignores the realities of network design, the Commission finds that the percentage of IDLC currently assumed by BellSouth is not forward-looking. The Commission finds that BellSouth's model should be adjusted to reflect 98% IDLC. This adjustment would result in a $0.71 decrease to the 2-wire loop/port UNE combination price.

AT&T also advocates that BellSouth's cost studies be adjusted so as to assume GR-303 for all IDLC loops. BellSouth states that currently less than 1% of its access lines are served by GR-303, while 99% are served on TR-008. BellSouth states that it still deploys TR-008 in its network and will continue to do so throughout the study period. Tr. at 336. Bellcore estimated that, in 1997, 16% of BellSouth's lines were GR303 capable digital loop carriers. Tr. 372. BellSouth's model assumes 0% GR-303. While GR-303 is the forward-looking technology, the Commission finds that

the replacement of TR-008 will be too gradual to warrant modifying BellSouth cost study to assume 100% GR-303 at this time. On the other hand, since GR-303 is already being deployed on a limited basis by BellSouth and is the forward-looking technology, 0% is also inappropriate. Based on its review of the evidence, the Commission finds that BellSouth's model should be modified to reflect 20% GR-303. This would result in a $0.18 decrease to the 2-wire loop/port UNE combination price.[7]

4. Rate Design for Switch Features (Vertical Features)

In Commission Docket 7061-U, the Commission reaffirmed its earlier decision in the AT&T-BellSouth arbitration (Docket No. 6801-U), that there should be no additional, separate charges for switch features. The Commission found "that switch vertical features should not be priced separately as individual elements, but should instead be incorporated within the unbundled switch port element." Docket 7061-U, Order, p. 39. The Commission noticed this proceeding to determine pricing for UNE combinations, not to revisit its decision on vertical features. In any event, the Commission finds no reason to change its prior decision on this matter. Accordingly, the Commission does not approve BellSouth's proposed additional costs for switch features. This would result in a $4.28 decrease to the 2-wire loop/port UNE combination price.

D. Rates For Combinations of Network Elements

1. Electronic versus Manual Orders

BellSouth has proposed different non-recurring charges for electronic orders versus manual orders. It does not appear that any party has objected to separately pricing orders based on the type of order. More importantly, the Commission finds that manual orders are more expensive for BellSouth to process than electronic orders. Accordingly, the Commission approves BellSouth's proposal to price manual orders and electronic orders separately.

2. Pricing of Specific UNE Combinations

Based on the adjustments discussed above, the Commission hereby approves the recurring and non-recurring rates for certain combinations of UNEs.

a. 2-wire loop/port UNE combination.

7 AT&T had proposed an adjustment to the TELRIC Calculator to make up for the lack of using GR-303 in multiplexer inputs. See Rebuttal of Donovan, pp. 21-22. The adjustment, which assumes 100% GR-303, resulted in a reduction in the price of $0.91. Based on AT&T's reasoning, an assumption of 20% GR-303 results in a reduction of $0.18 (0.20 x 0.91 = 0.18).

The Commission has made the following adjustments to BellSouth's proposed rate for the 2-wire loop/port UNE combination:

(i).	Eliminate Reasonable Profit Additive		$9.19
(ii).	Eliminate Vertical Feature Additive	$4.28	
(iii).	Adjust for addition of ESSX loops	$0.55	
(iv).	Adjust for use of 98% IDLC	$0.71	
(v).	Adjust for use of 20% GR-303	$0.18	

These adjustments result in a total recurring cost for 2-wire loop/port combination of $14.34. As discussed above, this combination (sometimes referred to as UNE-Platform or UNE-P) shall be available statewide and shall not be subject to the restrictions proposed by BellSouth in this matter.

As discussed above, the Commission finds that BellSouth's non-recurring cost model should be used to set the nonrecurring costs for those UNE combinations where the UNEs are currently in place. Accordingly, the nonrecurring cost for an existing 2-wire loop/port combination is $2.01 when ordered electronically. The non-recurring charges for additional orders and for manual orders for existing 2-wire loop/port combinations are set forth in Attachment A hereto.

The non-recurring costs generated by BellSouth's model may be inappropriate for those UNE-P combinations where the elements are not, in fact, currently in place. The Commission finds, on an interim basis, that for those UNE-P combinations where the elements are not currently in place, the nonrecurring charge for such UNE combinations shall be the sum of the stand-alone NRCs of the UNEs which make up the combination. These interim rates shall be subject to true-up. Within 45 days of the date of this order, BellSouth shall file a cost study for nonrecurring charges for such UNE combination. The Commission shall conduct a review of the cost study.

b. Loop/Transport Combinations.

BellSouth computed recurring and non-recurring costs for various loop/transport combinations:

2-wire voice grade extended loop with DS1 Dedicated Interoffice Transport;
4-wire voice grade extended loop with DS1 Dedicated Interoffice Transport;
4-wire 56 or 64 kbps extended digital loop with Dedicated DS1 Interoffice Transport;
Extended 2-wire VG Dedicated Local Channel with Dedicated DS1 Interoffice Transport;
Extended 4-wire VG Dedicated Local Channel with Dedicated DS1 Interoffice Transport;
Extended 4-wire DS1 Digital Loop with Dedicated DS1 Interoffice Transport;
Extended 4-wire DS1 Digital Loop with Dedicated DS3 Interoffice Transport; and,
Extended DS1 Dedicated Local Channel with Dedicated DS3 Interoffice Transport.

As discussed above, BellSouth had proposed a "reasonable profit" additive of $78.25 for the 4-wire DS1 loop-transport combination, which the Commission has disallowed.

The Commission finds that BellSouth shall provide these loop/transport combinations to CLECs. These combinations shall be available statewide and shall not be subject to the restrictions proposed by BellSouth in this matter except as specifically set forth in this order. The recurring rates for such combinations, whether currently in place or new, are set forth in Attachment A. BellSouth's non-recurring cost models should be used to set the nonrecurring costs for those loop/transport combinations where the UNEs are currently in place. These non-recurring charges are set forth in Attachment A hereto.

On an interim basis, for those loop/transport combinations where the elements are not currently in place, the nonrecurring charge for such UNE combinations shall be the sum of the stand-alone NRCs of the UNEs which make up the combination. These interim rates shall be subject to true-up. Within 45 days of the date of this order, BellSouth shall file a cost study for nonrecurring charges for such new loop/transport combinations. The Commission shall conduct a review of the cost study.

3. Pricing of UNE Combinations Not Costed In This Proceeding

To the extent that CLECs seek to obtain other combinations of UNEs that BellSouth ordinarily combines in its network which have not been specifically priced by this Commission when purchased in combined form, the Commission finds that the CLEC can purchase such UNE combinations at the sum of the stand-alone prices of the UNEs which make up the combination. If the CLEC is dissatisfied with using the sum of the stand-alone rates, the CLEC is free to pursue the bona fide request process with BellSouth to seek a different rate.

III. CONCLUSION AND ORDERING PARAGRAPHS

The Commission finds and concludes that the rates, terms and conditions as discussed in the preceding sections of this Order should be adopted for the interconnection with and unbundling of BellSouth's telecommunications services in Georgia, pursuant to Sections 251 and 252 of the Telecommunications Act of 1996 and Georgia's Telecommunications and Competition Development Act of 1995.

WHEREFORE IT IS ORDERED, that all findings, conclusions, statements, and directives made by the Commission and contained in the foregoing sections of this Order are hereby adopted as findings of fact, conclusions of law, statements of regulatory policy, and orders of this Commission.

ORDERED FURTHER, the cost-based rates determined by the Commission in this Order are established as the rates for BellSouth's unbundled network elements. BellSouth shall submit such compliance filings as are necessary to reflect and implement the rates and policies established by this Order. BellSouth shall file a revised Statement of Generally Available Terms and Conditions (SGAT) reflecting and implementing the rates and policies established by this Order and reflecting the unbundling requirements of the FCC's Third Report and Order within thirty (30) days of the date of this Order.

ORDERED FURTHER, that, as set forth in the body of this Order, BellSouth shall file the cost studies for those loop/port and loop/transport combinations that are not currently in place within 45 days of the date of this Order.

ORDERED FURTHER, the Commission shall reevaluate the availability of UNEs every three years in a manner consistent with the Third Report and Order.

ORDERED FURTHER, that if the Eighth Circuit Court of Appeals determines that ILECs have no legal obligation to combine UNEs under the Federal Act, the Commission will reevaluate its decision with regard to the requirement that BellSouth provide combinations of typically combined elements where the particular elements being ordered are not actually physically connected at the time the order is placed. Further, this docket shall remain open in the event the FCC's rules are modified to mandate different requirements for Enhanced Extended Links.

ORDERED FURTHER, that a motion for reconsideration, rehearing, or oral argument or any other motion shall not stay the effective date of this Order, unless otherwise ordered by the Commission.

ORDERED FURTHER, that jurisdiction over these matters is expressly retained for the purpose of entering such further Order or Orders as this Commission may deem just and proper.

The above by action of the Commission in Administrative Session on the 1st day of February, 2000.

Helen O'Leary Executive Secretary	Bob Durden Chairman
Date	Date

Cost Element		Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequ
M.0	ENHANCED OPTIONAL DAILY USAGE FILE (EODUF)						
M.1	Enhanced Optional Daily Usage File	$0.0034555					
M.1.1	Enhanced Optional Daily usage File: Message Processing, Per Message						
P.0	UNBUNDLED LOOP COMBINATIONS						
P.1	2-WIRE VOICE GRADE LOOP WITH 2-WIRE LINE PORT	$12.55					
P.1.1	2-Wire Voice Grade Loop	$1.79					
P.1.2	Exchange Port - 2-Wire Line Port			$2.01	$0.3108		
P.1.3	2-Wire Voice Grade Loop / Line Port Combination - Non-recurring Costs			$33.67	$7.88		
P.1.4	2-Wire Voice Grade Loop / Line Port Combination - Incremental Cost - Manual Svc Order vs. Electronic						
P.6	2-WIRE VOICE GRADE EXTENDED LOOP WITH DS1 DEDICATED INTEROFFICE TRANSPORT	$17.89					
P.6.1	2-Wire Voice Grade Loop	$0.3088					
P.6.2	Interoffice Transport - Dedicated - DS1 - Per Mile	$63.39					
P.6.3	Interoffice Transport - Dedicated - DS1 - Facility Termination	$18.23					
P.6.4	Interoffice Transport - Dedicated DS1 System			$12.97	$11.27		
P.6.5	2-Wire Voice Grade Extended Loop / DS1 Interoffice Combination - Non-recurring Costs			$45.46	$15.72		
P.6.6	2-Wire Voice Grade Extended Loop / DS1 Interoffice Combination - Incremental Cost - Manual vs. Electronic	$2.20					
P.6.8	Interoffice Transport - Voice Grade Plug-In			$12.61	$12.61		
P.6.79	2-Wire Voice Grade Extended Loop / DS1 Interoffice Combination - Non-recurring Costs - Disconnect						
P.7	4-WIRE VOICE GRADE EXTENDED LOOP WITH DS1 DEDICATED INTEROFFICE TRANSPORT	$28.58					
P.7.1	4-Wire Voice Grade Loop	$0.3088					
P.7.2	Interoffice Transport - Dedicated - DS1 - Per Mile	$63.39					
P.7.3	Interoffice Transport - Dedicated - DS1 - Facility Termination	$18.23					
P.7.4	Interoffice Transport - Dedicated DS1 System			$12.97	$11.27		
P.7.5	4-Wire Voice Grade Extended Loop / DS1 Interoffice Combination - Non-recurring Costs			$45.46	$15.72		
P.7.6	4-Wire Voice Grade Extended Loop / DS1 Interoffice Combination - Incremental Cost - Manual vs. Electronic	$2.67					
P.7.8	Interoffice Transport - Voice Grade Plug-In			$12.61	$12.61		
P.7.79	4-Wire Voice Grade Extended Loop / DS1 Interoffice Combination - Non-recurring Costs - Disconnect						
P.8	4-WIRE 56 OR 64 KBPS EXTENDED DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPC	$30.72					
P.8.1	4-Wire 56 or 64 Kbps Digital Grade Loop	$0.3068					
P.8.2	Interoffice Transport - Dedicated - DS1 - Per Mile	$63.39					
P.8.3	Interoffice Transport - Dedicated - DS1 - Facility Termination	$18.23					
P.8.4	Interoffice Transport - Dedicated DS1 System			$12.97	$11.27		
P.8.5	4-Wire 56 or 64 kbps Extended Loop / DS1 Interoffice Combination - Non-recurring Costs			$45.46	$15.72		
P.8.6	4-Wire 56 or 64 kbps Extended Loop / DS1 Interoffice Combination - Incremental Cost - Manual vs. Electronk	$1.06					
P.8.8	Interoffice Transport - Voice Grade Plug-In						

Attachment A

Cost Element		Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional / Initial	Non-Recurring Subsequ
P.8.79I	4-Wire 56 or 64 kbps Extended Loop / DS1 Interoffice Combination - Non-recurring Costs - Disconnect			$12.61	$12.61	
P.9	EXTENDED 2-WIRE VG DEDICATED LOCAL CHANNEL WITH DEDICATED DS1 INTEROFFICE TRAN					
P.9.1	Local Channel - Dedicated - 2-Wire Voice Grade	$16.28				
P.9.2	Interoffice Transport - Dedicated - DS1 - Per Mile	$0.3068				
P.9.3	Interoffice Transport - Dedicated - DS1 - Facility Termination	$83.39				
P.9.4	Interoffice Transport - Dedicated DS1 System	$16.23				
P.9.5	Extended 2-wire Voice Grade Dedicated Local Channel / DS1 Interoffice Combination - Non-recurring Costs			$12.97	$11.27	
P.9.6	Extended 2-wire Voice Grade Dedicated Local Channel / DS1 Interoffice Combination - Incremental Cost - Ma			$45.46	$15.72	
P.9.8	Interoffice Transport -Voice Grade Plug-In	$2.20				
P.9.7I	Extended 2-wire Voice Grade Dedicated Local Channel / DS1 Interoffice Combination - Non-recurring Costs -			$12.61	$12.61	
P.10	EXTENDED 4-WIRE VG DEDICATED LOCAL CHANNEL WITH DEDICATED DS1 INTEROFFICE TRAN					
P.10.1	Local Channel - Dedicated - 4-Wire Voice Grade	$17.16				
P.10.2	Interoffice Transport - Dedicated - DS1 - Per Mile	$0.3068				
P.10.3	Interoffice Transport - Dedicated - DS1 - Facility Termination	$83.39				
P.10.4	Interoffice Transport - Dedicated DS1 System	$16.23				
P.10.5	Extended 4-wire Voice Grade Dedicated Local Channel / DS1 Interoffice Combination - Non-recurring Costs			$12.97	$11.27	
P.10.6	Extended 4-wire Voice Grade Dedicated Local Channel / DS1 Interoffice Combination - Incremental Cost - Ma			$45.46	$15.72	
P.10.8	Interoffice Transport - Voice Grade Plug-In	$2.67				
P.10.7I	Extended 4-wire Voice Grade Dedicated Local Channel / DS1 Interoffice Combination - Non-recurring Costs-			$12.61	$12.61	
P.11	EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT					
P.11.1	4-Wire DS1 Digital Loop	$60.88				
P.11.2	Interoffice Transport - Dedicated - DS1 - Per Mile	$0.3068				
P.11.3	Interoffice Transport - Dedicated - DS1 - Facility Termination	$83.39				
P.11.4	Extended 4-wire DS1 Digital Loop / DS1 Interoffice Combination - Non-recurring Costs			$12.97	$11.27	
P.11.5	Extended 4-wire DS1 Digital Loop / DS1 Interoffice Combination - Incremental Cost - Manual vs. Electronic			$45.46	$15.72	
P.11.6I	Extended 4-wire DS1 Digital Loop / DS1 Interoffice Combination - Non-recurring Costs - Disconnect			$12.61	$12.61	
P.13	EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT					
P.13.1	4-Wire DS1 Digital Loop	$60.88				
P.13.2	Interoffice Transport - Dedicated - DS3 - Per Mile	$6.46				
P.13.3	Interoffice Transport - Dedicated - DS3 - Facility Termination	$717.60				
P.13.4	Interoffice Transport - Dedicated DS3 System	$202.91				
P.13.5	Extended 4-Wire DS1 Digital Loop / DS3 Dedicated IOF Transport - Non-recurring Costs			$12.97	$11.27	
P.13.6	Extended 4-Wire DS1 Digital Loop / DS3 Dedicated IOF Transport - Incremental Cost - Manual vs. Electronic			$45.46	$15.72	
P.13.8	Interoffice Transport - DS1 Card or W-DCS port	$0.6670				
P.13.7I	Extended 4-Wire DS1 Digital Loop / DS3 Dedicated IOF Transport - Non-recurring Costs - Disconnect			$12.61	$12.61	
P.14	EXTENDED DS1 DEDICATED LOCAL CHANNEL WITH DEDICATED DS3 INTEROFFICE TRANSPOR					
P.14.1	Local Channel - Dedicated - DS1	$38.57				
P.14.2	Interoffice Transport - Dedicated - DS3 - Per Mile	$6.46				
P.14.3	Interoffice Transport - Dedicated - DS3 - Facility Termination	$717.60				

Cost Element		Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequ
P.14.4	Interoffice Transport - Dedicated DS3 System	$202.91					
P.14.5	Extended 4-wire DS1 Dedicated Local Channel / DS3 Interoffice Combination - Non-recurring Costs			$12.97	$11.27		
P.14.6	Extended 4-wire DS1 Dedicated Local Channel / DS3 Interoffice Combination - Incremental Cost - Manual vs.			$45.46	$15.72		
P.14.8	Interoffice Transport - DS1 Card or W-DCS port	$0.6670					
P.14.7I	Extended 4-wire DS1 Dedicated Local Channel / DS3 Interoffice Combination - Non-recurring Costs - Discon			$12.81	$12.81		
F.0	OPERATIONAL SUPPORT SYSTEMS						
F.1	OPERATIONAL SUPPORT SYSTEMS	$0.0001275					
F.1.2	OSS OLEC Daily Usage File: Recording, Per Message	$0.0082648					
F.1.3	OSS OLEC Daily Usage File: Message Processing, Per Message	$28.85					
F.1.4	OSS OLEC Daily Usage File: Message Distribution, Per Magnetic Tape Provisioned	$0.0000434					
F.1.5	OSS OLEC Daily Usage File: Data Transmission (CONNECT:DIRECT), Per Message						
L.0	ACCESS DAILY USAGE FILE (ADUF)						
L.1	Access Daily Usage File (ADUF)	$0.0136327					
L.1.1	ADUF, Message Processing, per message						
L.1.2	ADUF, Message Distribution, per Magnetic Tape provisioned	$28.85					
L.1.3	ADUF, Data Transmission (CONNECT:DIRECT), per message	$0.0000434					

ALJ/TRP/avs

Mailed 9/3/99

Decision 99-09-029 September 2, 1999

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion Into Competition for Local Exchange Service.	Rulemaking 95-04-043 (Filed April 26, 1995)
Order Instituting Investigation on the Commission's Own Motion Into Competition for Local Exchange Service.	Investigation 95-04-044 (Filed April 26, 1995)

TABLE OF CONTENTS

TITLE	PAGE
INTERIM OPINION	2
I. Background	2
II. Review of the Pac-West Serving Arrangement	4
III. Overview of Parties' Positions	8
IV. Substantive Issues	10
A. Is The Use of Different Rating and Routing Points Appropriate?	10
1. Parties' Position	10
2. Discussion	14
B. Does the Pac-West Approach Provide a Legitimate Basis For the Rating of Calls as Local?	18
1. Parties' Positions	18
2. Discussion	21
C. Intercarrier Compensation	29
1. Parties' Positions	29
2. Discussion	32
V. Comments on Draft Decision	37
Findings of Fact	37
Conclusions of Law	40
INTERIM ORDER	42

INTERIM OPINION

By this decision, we address the policy relating to the use of central office (NXX) codes to provide locally-rated calling to customers which physically reside beyond the local calling area of the designated NXX code. To the extent customers are assigned NXX prefixes which correspond to a rate center in a different exchange from where the customer physically resides, we resolve the dispute as to how such calls should be rated. In addition, we order further hearings to consider questions concerning the appropriate intercarrier compensation for the transport and delivery of these types of calls.

I. Background

Our consideration of this generic issue was initiated in response to a dispute over the propriety of certain rating and routing practices as brought before the Commission in a complaint (C.96-10-018) filed by Pac-West Telecom, Inc., (Pac-West) a competitive local carrier (CLC). Pac-West filed a second complaint (C.98-04-046) raising similar issues. The dispute in these complaints involved the manner in which NXX prefixes are assigned to end-use customers located in foreign exchanges, and the resulting effects on call rating and intercarrier compensation. The dispute raised questions about the traditional way in which the rating and routing of calls has been determined, and the issue of whether the methods of rating and routing advocated by Pac-West should be permitted, prohibited, or allowed with some modifications. We resolved C.96-10-018 in Decision (D.) 97-12-094, but also noted that the disputed issues raised in the Pac-West complaint had implications for the local exchange market as a whole, and directed that the issues be examined on a generic basis in this rulemaking proceeding. Although these generic issues have applicability to

telephone number assignments generally, the dispute in the Pac-West complaint arose specifically in the context of number assignments made to Internet Service Providers (ISPs). An ISP offers Internet access to the public typically through a telephone line dial-up linking the customer and the ISP modem. By virtue of the type of service offered by an ISP, telephone calls are always originated from a caller seeking Internet access and terminated to the ISP. In addressing the disputes raised by the Pac-West complaint on a generic basis, we shall consider the effects as they relate to telephone customers generally, with particular attention to ISP customers.

As a framework to address these issues, a brief review of industry practices for the rating and routing of telephone traffic is in order. The rating of telephone calls by wireline carriers is based on a geographically determined system which classifies calls as local, intra local access and transport area (LATA) toll, or interLATA long distance. Telephone numbers are assigned by a neutral Code Administrator[1] to telephone carriers in blocks of 10,000 numbers based upon the North American Numbering Plan (NANP). Each 10,000-number block is identified by a three-digit area code (or Number Plan Area, NPA), followed by a three-digit (NXX) central office code. Every NPA-NXX code corresponds to a unique "rate center," which is a designated geographical point within an exchange from which calling distances are measured to determine any retail toll charges for calls between telephone numbers. Every rate center is identified by vertical and horizontal (V&H) coordinates analogous to longitude and latitude

[1] The NANP Administrator is an industry-neutral representative responsible for assigning NXX codes to telecommunications service providers upon their request. The service providers include in their request the designated rate center to be associated with the NXX prefix for call rating purposes.

lines used in navigation. These V&H coordinates are used to calculate mileage between rate centers for rating purposes.

Within the traditional local exchange monopoly setting, the practice of rating and routing of calls was generally not controversial. Calls were rated based upon geographically defined rate centers within local exchanges established by the Incumbent Local Exchange Carriers (ILECs). In the event a customer wanted callers in a distant location to be able to reach them by dialing a local number, the customer could pay an additional charge for foreign exchange service which was provided through separate dedicated facilities.

Since the opening of the local exchange market to competition, new questions have arisen concerning the proper rating, routing, and associated intercarrier compensation for telephone traffic. Issues relating to rating and routing practices and associated intercarrier compensation have become more controversial as multiple carriers become involved in the delivery of a telephone message from its origination to its termination, and with the proliferation of new technologies and specialized markets, particularly for Internet usage.

II. Review of the Pac-West Serving Arrangement

Since the generic consideration of the issues before us resulted from a dispute over the specific transactions at issue in the Pac-West complaints, we review the events which gave rise to the complaints, and the serving arrangement devised by Pac-West.

In early 1996, the Commission opened the local exchange market to competition within the service territories of Pacific Bell (Pacific) and GTEC California (GTEC). Pac-West was among the CLCs entering the local exchange market. In response to the growing demand for Internet access, Pac-West designed a service offering targeting the ISP market. Specifically, Pac-West

offered ISPs in Stockton with locally-rated telephone access to prospective customers residing in outlying rural exchanges which would otherwise incur toll charges to call Stockton.

Pac-West designed the service so that a Stockton-based ISP could simply obtain telephone number prefixes which were rated as local numbers within the Crows Landing and Jackson exchanges which were located beyond the local calling radius of Stockton. In order to offer this service, Pac-West obtained a NXX code with the same rate center as an existing Pacific NXX code in Crows Landing, and another NXX code with the same rate center as an existing Pacific Bell rate center in Jackson.

The ISP located in Stockton, thereby gained a local presence in these exchanges without having to install facilities there. Pac-West likewise had neither customers nor facilities physically located in the Crows Landing or Jackson Exchanges at the time. Pac-West's switch was located in Stockton and connected to Pacific's Stockton access tandem. Pac-West entered instructions in the Local Exchange Routing Guide [2]that calls to these NXXs be routed to Pacific's tandem switch in Stockton.

In this manner, Pac-West intended that callers within the local calling radius of the Crows Landing and Jackson exchanges could avoid toll charges by dialing the Stockton-based ISP's access number locally rated from those exchanges.[3] This strategy particularly targeted customers located in the

---

[2] Once an NXX code is assigned to a carrier, instructions are entered into the Local Exchange Routing Guide (LERG), a centralized industry database system prescribing the call's rating and physical routing to its ultimate destination. Carriers involved in the routing of calls refer to the LERG instructions to determine call routing pathways.

[3]. By D.90-11-058, the Commission established an extended local calling area (ELCA) of up to 12 miles between rate centers. Calls within 12 miles are treated as local calls and

Footnote continued on next page

Patterson and Volcano exchanges (which were adjacent to the the Crows Landing and Jackson exchanges, respectively).

Since the Jackson and Volcano rate centers are within a 12-mile radius, a call from a Volcano NXX to a Jackson NXX would be rated as a local call. Customers could thus place calls between these exchanges without a toll charge and without a charge for Extended Area Service (EAS). Similarly, a call from a telephone customer in Patterson to a Crows Landing NXX is rated as a local call. By contrast, calls from customers located in the Volcano or Patterson exchanges to Pacific's Stockton rate center would be rated as intraLATA toll calls since the calling distance extends beyond 12 miles.

Telephone customers in the Patterson and Volcano exchanges are served by two small independent local exchange carriers, Evans Telephone Company (Evans) and Volcano Telephone Company (Volcano), respectively. Evans and Volcano viewed Pac-West's rating and routing practices as an improper manipulation of the telecommunications network intended to cause calls to be carried on intraLATA toll facilities while denying Evans and Volcano the ability to collect toll charges from their end-use customers. Evans and Volcano initially declined to follow Pac-West's routing instructions to deliver the calls to ISPs in Stockton while billing their own customers as if the calls were local calls to Crows Landing and Jackson.[4] Evans and Volcano routed the traffic to the Jackson and Crows Landing exchanges. Since the called parties were ISPs

---

do not entail toll charges. Calls beyond 12 miles do incur toll charges, based on the distance between the rate centers of the calling and called parties.

[4] Traffic between Volcano Telephone's Volcano exchange and Pacific Bell's Jackson exchange is carried on direct cross-boundary Volcano-Pacific Bell trunks between the Volcano and Jackson central offices. This traffic does not pass though Stockton.

actually located in Stockton, however, the calls failed to complete and never reached the ISPs. This dispute over call routing gave rise to C.96-10-018 filed by Pac-West, a complainant against Evans and Volcano.

We subsequently issued D.97-11-024 in the Local Competition Docket, prescribing that all carriers must complete calls where it is technically feasible to do so regardless of whether they believe that the underlying intercarrier compensation arrangement or call rating designation is proper. While carriers are entitled to just and reasonable compensation for the completion of calls over their facilities, D.97-11-024 specified that the resolution of such disputes over compensation must necessarily be resolved after the physical routing of calls has been completed.

D.97-12-094 was subsequently issued in C.96-10-018, requiring Evans and Volcano to route the disputed calls to their Stockton destination even though the designated rate centers were located elsewhere. D.97-12-094 reached no final conclusions on intercarrier compensation, but permitted Evans and Volcano to file separate applications to seek recovery of any intercarrier compensation for calls from their customers to Pac-West's ISP customers.

While Evans and Volcano complied with D. 97-12-094 by routing calls to the Stockton ISPs, they began rating the calls as toll calls based upon the distance from the call origination point to its termination point in Stockton. Pac-West filed a subsequent complaint in response (C.98-04-046), arguing that the calls should be rated as local calls based upon the designated rate center of the assigned NXX prefix of the called number. A preliminary injunction was issued by D.98-07-095 enjoining Evans and Volcano from charging toll rates for calls in question. A subsequent decision closing the complaint, D.99-02-096, directed that the disputed calls should continue to be rated as local at least on an interim basis pending the outcome of the Commission's generic deliberations on this

issue in the Local Competition rulemaking. D.99-02-096 reached no conclusions, however, as to the ultimate policy issue of whether calls of this nature should be rated as local calls as a generic industry practice, and if so, what intercarrier compensation or other relevant issues needed to be addressed.

An ALJ ruling was issued in this proceeding on July 22, 1998, soliciting parties' comments on the disputed rating and routing issues noted above in the generic context of how these rating and routing issues should be addressed in terms of industry-wide rules. Opening comments were filed on August 31, 1998, and reply comments were filed on September 18, 1998. Comments were filed by the several ILECs, including Pacific Bell, GTE California, Inc., and Citizens, as well as two groups of small independent ILECs. Comments were also filed by various CLCs, and by two Certificated Mobil Radio Sense (CMRS) carriers. The Commission's Office of Ratepayer Advocates (ORA) also filed comments.

III. Overview of Parties' Positions

Parties' representing the interests of ILECs generally claim that Pac-West, and potentially other CLCs, have misused the assignment of NXX prefixes so as to avoid payment of intercarrier compensation and to prevent originating carriers from charging toll rates to their customers for calls to those NXX prefixes. The ILECs generally believe evidentiary hearings are warranted before the Commission adopts any policy permitting the Pac-West arrangement on a general basis.

On the other side of the argument are the CLCs, CMRS providers, and ORA, all of which argue that carriers should be free to establish different rating and routing points for NXX prefix assignments in the interests of network efficiency and competition. The CLCs claim that any disputes over intercarrier compensation issues are best left to negotiations between parties to

interconnection agreements, and should not be the subject of a generic Commission rule.

The parties' dispute raises the following questions: (1) how much flexibility should telecommunications carriers have in how they provide a local presence to customers which are physically located in a distant exchange? (2) does the Pac-West arrangement provide such service in a technologically and economically efficient manner? (3), if so, how should compensation for the provisioning of such service be determined, both in terms of retail rates and wholesale intercarrier compensation for routing, switching, and termination of the call to its destination?

The question of whether, or under what conditions, a carrier may designate different rating and routing points for the same NXX prefix could have multiple consequences both to carriers and to customers. Separate effects must be considered on the carrier and its associated customer originating a call, as well as the carrier and its associated customer receiving the call. The rating of the call as local or toll may potentially affect how intercarrier compensation is provided for under the terms of carriers' interconnection agreements

For business customers such as ISPs, which seek to provide a local presence to their own customers located in multiple exchanges, we shall consider how changes in the terms or cost of providing such service may affect business profits and, more broadly, the competitive choices for Internet service available to the public.

IV. Substantive Issues

A. Is The Use of Different Rating and Routing Points Appropriate?

1. Parties' Position

Parties dispute whether a carrier seeking to provide customers (such as ISPs) with a local presence in a foreign exchange may do so by simply assigning the customer a NXX prefix rated in a different exchange from where calls are routed. Such an arrangement avoids the need for the serving carrier to construct separate dedicated facilities between the home exchange of the ISP and the foreign exchange.

We have permitted this arrangement for calls between customers of Evans and Volcano and ISPs served by Pac-West at least on an interim basis as prescribed in D.97-12-094. We stated therein, however, that Pac-West's ability to assign NXXs out of Jackson and Crows Landing to Stockton-based ISPs was subject to change pending the outcome of our generic deliberations in this generic proceeding.

CLCs generally support carriers' rights to utilize the serving arrangement developed by Pac-West, characterizing it as a competitive innovation. CLCs oppose being required to conform to the same foreign exchange serving arrangements used by an incumbent provider as being economically inefficient and anticompetitive.

Parties representing CLCs argue that the Commission should allow CLCs to obtain NXX codes in a rate center where the CLCs do not have customers physically present and to assign numbers from those NXX codes to the CLCs' customers located in a different exchange so as to allow CLCs to compete with ILEC foreign exchange service.

As described in D.94-09-065:

> "Foreign Exchange Service (FEX) permits a customer in Exchange "A" (home exchange) to have a telephone number associated with Exchange "B" (foreign, or dial tone exchange). This allows a customer to have a telephone number presence in a community other than the one where the terminating customer equipment is physically connected to the network.
>
> (D.94-09-065, 1993 Cal PUC LEXIS 649, 87, emphasis added.)

CLCs generally serve large geographic areas with a single switch, due to the use of both fiber optics and digital technologies, while the ILECs continue to use their legacy architecture. Accordingly, CLCs are able to directly route traffic to their switch rather than routing it through multiple switches as the ILECs do. The CLCs characterize this approach as a more efficient functional equivalent of foreign exchange service.

The CLCs argue that it would be grossly unfair and contradictory to the competitive environment the Commission has sought to foster, and illegal under the 1996 Telecommunications Act, were the Commission to enact rules preventing CLCs from actually offering foreign exchange service and competing in the marketplace. Thus, CLCs argue that they must be able to open NXX codes in exchanges where they do not have customers and then assign numbers from those NXX codes, and route calls made to them to customers physically located in a different area.

Incumbent providers generally object to a CLC's use of such arrangements to provide foreign exchange service, arguing that the arrangement is merely aimed at avoiding payment for the use of other carriers' facilities and services. Foreign exchange service has traditionally been provided through dedicated facilities linking the customer's home exchange with the foreign exchange. The carrier providing such service would thereby bear the cost of

transporting calls over the dedicated private line connection and recover such costs from its end user (e.g., the ISP) subscribing to the service.

Unlike traditional foreign exchange service, no dedicated facilities are provided by Pac-West linking the ISP's home and foreign exchanges. As such, parties complain that Pac-West and the ISP subscribers get a "free ride" at the expense of other carriers who must use their own facilities to deliver the calls from the foreign exchange to the ISP.

Pacific and the smaller LECs characterize Pac-West's rating and routing arrangement as a substitute for traditional foreign exchange service and/or "800" wide area toll-free service in a manner which is intended to avoid paying additional costs as would normally be required for such services. Industry standard practices for providing inbound toll-free wide area calling service offerings, entail the use of an 800 or 888 NXX prefix by the customer. The calls would be transmitted to Pac-West over the network, and Pac-West would pay access charges for the origination and transmission of the traffic to the Pac-West point of interconnection. Pac-West could charge its customer based on hours of usage or whatever other rate structure Pac-West chose to use.

The small LECs contend, however, that Pac-West and other CLCs are attempting to provide "800-equivalent" inbound wide area toll-free calling service without paying the tariffed access charges (as would be paid for an "800" service) to the carriers originating the traffic or tariffed toll charges for long distance service.

If Pac-West desires to provision the calls as toll-free inward long distance traffic, then Pac-West is obliged to pay to the originating carriers the same tariffed access charges as are applicable to other "800" traffic, according to the small LECs. Pacific argues that such rating and routing practices are merely an attempt to portray toll-free calling as a local call so as to circumvent

obligations to pay intercarrier compensation which would otherwise be required under an interconnection agreement. The CLC may thereby sell the service to ISPs at little or no additional charge. Typically, a customer pays more for foreign exchange or "800" service than for basic service.

Pacific recommends that the Commission prohibit disparate rating and routing of calls to NPA NXX codes as a way to ensure the efficient use of NPA NXX codes. Pacific argues that it is an inefficient use of numbering resources for a carrier to obtain a 10,000-number NXX code merely to provide a few numbers to ISPs on a foreign exchange basis while the remaining numbers go unused. Pacific is not suggesting, however, that Pac-West or any other carrier wanting to create incoming call networks are limited to building dedicated facilities to each office from which the ISP wants to receive incoming calls. Pacific does suggest a "wide-open consideration of solutions" through evidentiary hearings. Pacific suggests consideration of solutions involving call forwarding type features with reasonable pricing of the forwarded call, and any other solution to creatively resolve the issue.

GTEC believes CLCs and ILECs should both be permitted to designate rate centers for NXX codes in exchanges where there are no physical customers served provided two prerequisites are satisfied: (1) the carrier assumes responsibility for managing the transport of the traffic from the exchange area associated with the NPA/NXX back to the location of the switch; and (2) "appropriate" interconnection agreements are negotiated with all other potential interconnecting carriers specifying procedures for the exchange of traffic in the rate center area where the NPA/NXX is opened. In addition, GTEC believes the NXX code must have a rate center (V&H coordinates) consistent with the ILEC's listing of state approved rate centers.

GTEC argues that it is unfair to place the operational and financial burden for delivering the traffic to the requesting carrier on the originating carrier in a manner that permits the requesting carrier to avoid its responsibility to jointly manage the interconnection of its network with the networks of other carriers. GTEC believes that these issues should be resolved up-front in a negotiated interconnection agreement to ensure that all affected parties jointly participate in determining how best to accomplish the exchange of traffic and the appropriate level of compensation for doing so.

2. Discussion

In the interests of opening the local exchange market to competition, we have provided flexibility to CLCs in how they design their networks and service offerings. As long as a CLC does not violate requirements of the Telecommunications Act nor breach provisions of its interconnection agreement with other carriers, CLCs have been permitted to configure their network facilities as they choose.

In order to limit CLCs to offering foreign exchange service only through provision of their own dedicated facilities, the CLCs argue they would have to construct switching facilities in every local exchange where service was to be offered. It would be technologically and economically inefficient, however, to require the CLC to construct switching facilities in every local exchange in which it sought to provide a local presence to its customers. Such a requirement would be inconsistent with the way in which many CLCs have engineered their networks. Various CLCs have achieved efficiencies by locating a small number of concentrated switches near Pacific's tandems, as opposed to locating switches in a large number of wire centers. As a result, such

CLCs typically serve a much larger number of rate centers and their associated NXX codes from a single switch than do the ILECs.

In the present instance, we find no basis to require a CLC to establish separate switching facilities in each exchange where it seeks to offer foreign exchange service merely because that is how the ILEC configures its network. CLCs should have the discretion to negotiate interconnection agreements consistent with differences in the CLC's network configuration relative to that of the ILEC. Depending on the network configuration involved, it may make economic sense for carriers to negotiate interconnection agreements whereby the ILEC performs the transport of traffic to a centralized switch, rather than the CLC installing a separate switch in every exchange where it seeks to offer telephone service. In such a situation, the CLC could arrange for calls to be rated in a different exchange from where the calls are routed, and would not have to construct its own dedicated private line to link an ISP to a foreign exchange. Moreover, a number of interconnection agreements already executed between ILECs and CLCs explicitly provide that the rating and routing points for calls need not match, although they must be in the same LATA as the rate center of the called party's NXX prefix. AT&T provides examples of such agreements in its reply comments. Thus, a prohibition on the use of different rating and routing points would be in conflict with those existing interconnection agreements.

Citizens claims that the provision for 911 emergency services will be adversely impacted if PacWest's rating/routing system is extended to

apply to all residential and traditional business services.[5] As Pac-West notes, however, the rating or routing criteria published in the LERG, which is the source typically used by interconnecting carriers to route and rate calls, is irrelevant to E-911 functionality. Instead, the routing of E-911 calls and the provision of address information to the appropriate Public Service Answering Point ("PSAP") is based on specific records entered into the E-911 Database Management System. These records identify the actual geographic location of the terminating point of any E-911 capable end-user lines, i.e., the actual physical location of customers' premises, not their assigned rate centers. Therefore, we conclude that the provision of foreign exchange services provided by Pac-West utilizing switch-based routing technology does not adversely affect E-911 service.

We disagree with Pacific's claim that the Pac-West service arrangement should be prohibited because it contributes to the inefficient use of NXX number resources. While we are acutely aware of the statewide numbering crisis and are actively taking steps to address it, we do not believe that imposing restrictions or prohibitions on CLC service options is a proper solution to promote more efficient number utilization. Under present industry rules, a carrier seeking to provide service in a given rate center must obtain NXX codes in blocks of numbers no smaller than 10,000. This requirement applies whether the customer being served is an ISP or any other customer. Moreover, there is no reason to conclude necessarily that a carrier will use any NXX code only to provide service to ISPs which are located outside of the assigned NXX rate

[5] In the case of ISP access service, as offered by Pac-West, the facilities are one way in the inbound direction. In such cases, since an ISP would not make an outgoing call the question of E-911 capability is not implicated at all.

center. For example, both Pac-West and WorldCom report they are actively pursuing numerous opportunities to provide profitable telecommunications services throughout their service areas. Their current subscribers include paging companies that have a significant demand for local DID numbers, which they, in turn, assign to local end users who typically are physically located in the assigned rate centers. Customers also include banks, retail stores, and other businesses, both located inside and outside the assigned rate centers.

Rather than imposing policies restricting carriers' service options, we believe the proper approach is to provide incentives for carriers to expand their service offerings so that NXX codes will become more fully utilized.

Accordingly, we find no basis to prohibit carriers from assigning NXX prefixes rated for one exchange to customers located in another exchange as a means of offering a local presence where such an arrangement is technologically and economically efficient, and where intercarrier compensation is fairly provided. We shall not prohibit CLCs from designating different rating and routing points just because such an approach may differ from traditional methods used by ILECs. Such a prohibition could undermine the incentives for carriers to develop innovative service alternatives in the most economically and technologically efficient manner.

While we recognize carriers' discretion to make such use of NXX prefix assignments from a foreign exchange where economic efficiencies warrant it, we expect carriers to negotiate reasonable intercarrier compensation arrangements for the routing, switching, and for the use of facilities to deliver such calls. The compensation provided to carriers involved in the transaction may be influenced by how compensation is provided by end use customers originating and receiving such calls. Accordingly, we address the question of

end-user retail compensation and associated call rating issues below. We address the issue of intercarrier compensation in Section C below.

B. Does the Pac-West Approach Provide a Legitimate Basis For the Rating of Calls as Local?

The issue of how calls should be rated under the Pac-West arrangement previously arose in the context of the Pac-West v. Evans and Volcano complaint (C.98-04-046) In D.99-02-096, we required that such calls not be rated as toll, at least on an interim basis, but should be rated from the rate center of the assigned NXX prefix. We deferred to this rulemaking, however, the generic question of how such calls should be rated as a prospective industry policy.

1. Parties' Positions

Parties dispute how to rate calls which are terminated beyond the local calling area of the originating caller even though the assigned telephone numbers have a local NXX prefix. The ILECs generally argue that calls should be rated based on the physical location of the calling and called parties. They would rate a call as toll when the physical distance between the originating and terminating points of a call exceed the 12-mile local calling limit, even if the NXX prefix has been designated for a rate center within the 12-mile local calling area.

The small LECs characterize the practice of disparate rating and routing of calls as "false labeling" of the call destination. The small LECs argue that call rating should reflect the actual points of origination and termination of a call and not a "fictitious" NXX rating "destination." The small LECs claim a call is properly rated as either "local" or "long distance" based on

the distances between the exchanges in which the calling and called party are located.

Volcano and the other small LECs generally concur in Pacific Bell's intraLATA toll tariff, which defines a toll call as a "telephonic communication between two exchange stations located in different local service areas." (Emphasis added.)[6] Based on this tariff description, the small LECs claim that the rating of calls is based on the physical proximity of the parties, such that calls between parties located in different local exchanges must be rated as toll calls. Under their premise, toll charges thus apply to calls made by Evans and Volcano customers to Stockton ISPs.

The small ILECs also express concern that the establishment of disparate rating and routing points threatens their system of cost recovery from pooled toll and access revenue as prescribed by the FCC in its Part 36 rules entitled "Jurisdictional Separation Procedures For Telecommunications Companies." (See 47 CFR §§ 36.1 et. seq.) The small LECs raise the concern that CLCs will increasingly use disparate rating and routing practices to reclassify what would otherwise be toll traffic as local. The small LECs warn that as more and more traffic is reclassified as local, the rate of return of the toll and access pool will correspondingly be reduced. The Commission would then be faced with the need to raise local service rates to make up for the cost of transporting this traffic, according to the small LECs.

The CLCs argue that the rate center designation of the called party's NXX prefix should determine the rating of the call as local or toll. Pac-West's use of different rating and routing points for the same call destination

---

[6] Pacific Bell Tariff Schedule A6 Message Telecommunications Service, Sec. 6.2.1 (A)(1).

is entirely premised on calls originating within 12 miles of the designated rate center for the NXX prefix of the called party being rated as local. If, in fact, such calls were rated as toll to end-users, it would defeat the underlying purpose of using different rating and routing points. Thus, resolving the dispute over call rating has a decisive impact on whether the basic Pac-West arrangement is feasible at all.

Comments were also filed by the Allied Personal Communications Industry Association of America (Allied) and by Los Angeles Cellular Telephone Company (LACTC), representing the views of commercial mobile radio service (CMRS) carriers. LACTC argues that any alleged problem (if one exists) with Pac-West's manner of rating and routing calls is carrier-specific, and does not warrant any industry-wide changes in call rating or routing methods.

LACTC takes issue with the claim of the small LECs that call rating "should reflect the actual points of origination and termination of a call" arguing that such a rigid call rating rule would be in conflict with call rating practices of CMRS carriers. Mobile technologies are designed to carry telephone messages to and from customers whose location is constantly changing. A mobile customer may travel from one exchange area to another during a single telephone call. Yet as long as carriers choose to file distance-sensitive tariffs, a fixed rating point must be assigned to the called number. For mobile technologies, such a rating point will always be "fictitious." Any attempt to substitute a rating system based on the actual physical location of the mobile customer is not possible under current technology. Whether the terminating carrier is a CLC or CMRS provider, the principles of network efficiency require routing to the nearest point of presence of the terminating carrier, and not to the physical location of the called party, or to the rate center assigned to the called

number. This principle is especially important in a CMRS context because the mobile unit will seldom, if ever, be physically located within the designated rate center. LATC warns that any rule requiring physical links between terminating carriers and each rate center, and further requiring originating carriers to route calls to the rate center, rather than directly to the terminating carrier, would result in an unnecessary duplication of facilities, and additional transport obligations for both originating and terminating carriers.

In the case of LACTC's interconnection agreements, Pacific and GTEC may route calls to the LACTC mobile telephone switching office (MTSO) which is nearest to the originating tandem. At the same time, LACTC is permitted to designate separate rating points for each of its NXX codes. This allows LACTC cellular customers to obtain numbers which, for rating purposes, are located in the geographic area from which the mobile customer expects most of its calls. Under these agreements, there is no obligation for the originating carrier actually to transport calls to either the rating point, or the actual location of the mobile unit. Instead, Pacific and GTEC simply transport all of their calls in the least costly way to the nearest LACTC point of Interconnection. LACTC then assumes transport and termination responsibilities.

2. Discussion

As discussed below, we conclude that the rating of calls as toll or local should be based upon the designated rate center of the NXX prefix of the calling and called parties' numbers. Even if the called party may be physically located in a different exchange from where the call is rated, the relevant rating point is the rate center of the NXX prefix.

The basis for rating calls generally is set forth in carriers' retail tariffs. Typically, the smaller independent LECs have concurred in the toll tariff provisions applicable to Pacific Bell wherein a "toll message" is defined as:

"A completed call or telephonic communication between two exchange stations located in different local service areas, between toll stations, or between a toll station and an exchange station to which rates are applicable in accordance with the provisions of the toll rate tariff." (See footnote 7.)

This tariff language expresses the underlying principle that toll rates are based upon the geographic location of the exchanges of the calling and called parties. More specifically, toll rates are measured based on the distance between the rate centers of the calling and called parties. Yet, the tariff also prescribes that rates are applicable "in accordance with the provisions of the toll rate tariff." The applicable provisions of the toll rate tariff appear in Pacific's Tariff Section A6, "Message Telecommunications Service." Under Subsection 6.2.1.A.4(1), the tariff prescribes that: "Toll rates between points (cities, towns, or localities) are based on the airline distance between *rate centers."*(emphasis added). Each rate center, in turn, is identified by tariff with a unique NPA NXX code. Thus, it is the applicable rate center as identified by telephone number prefix, not the physical location of the calling or called party that is used to rate calls.

Where the designated rate center of the called party's NXX prefix is in the same exchange as the called party resides, the rating of the call would be toll if the distance from the originating caller's rate center exceeded 12 miles. The toll tariff language, however, does not explicitly address the situation where the rate center of the assigned NXX prefix of the called party is in a different exchange from the physical location of the called party.

Yet, there are established types of calling arrangements where the rate center used for rating of calls is located in a different exchange from where the called party resides, as noted above. One notable example involves called parties who are customers of CMRS providers. As previously noted, in the case of interconnection agreements involving CMRS providers, there is no obligation for the originating carrier to route calls to either the rating point or the actual location of the mobile unit. No party has challenged the validity or fairness of such interconnection arrangements with CMRS providers. We find no reason to question the reasonableness of those arrangements.

Another generally recognized exception to the matching of rating and routing points is foreign exchange service. We conclude that under a foreign exchange service arrangement, it is consistent with the applicable tariffs to rate calls in reference to the rate center of the assigned NXX prefix even though it is in a different exchange from where the called party is located. The use of foreign exchange service does not contradict the principle of geographically-based rating of calls, but is a way to transfer the geographic rating point of the called party from one exchange to another. By designating the service as "foreign" exchange, the reference point for rating remains geographically based even though it has been relocated. Thus, foreign exchange service provides for a called party to reside in one exchange, but still to have a telephone number rated as local served from a foreign exchange.

An underlying dispute over Pac-West's use of different rating and routing points is whether the rating of calls as local can be justified as a form of foreign exchange service. Pac-West claims calls to its ISPs should be rated as local since its service is merely a form of foreign exchange service which has been offered by the ILECs for years. Pac-West, however, does not identify its ISP tariff by name as "foreign exchange service," but merely as "Type 6" service.

Opposing parties object to the characterization of Pac-West's service as foreign exchange since Pac-West has failed to pay for any dedicated facilities. One method of providing foreign exchange service involves dedicated facilities connecting the central office associated with the customer's assigned NXX prefix and the central office where the customer wishes to have the new "foreign exchange" NXX prefix, i.e., in a location where the customer is not physically located.[7] Under this method, the carrier typically has charged the customer for the costs of providing the dedicated facilities necessary to transport the call from the home exchange to the foreign exchange. The customer has paid these additional charges through a tariff designated as "foreign exchange service". The Pac-West service provides no such designation, nor separately stated charges for providing the foreign exchange prefix.

For purposes of considering the issue of call rating, it is not necessary to deliberate at length over whether Pac-West's service conforms to some particular definition of "foreign exchange service" based upon specific provisioning arrangements. Although the Pac-West form of service differs from certain other forms of foreign exchange service in how it is provisioned, the ultimate end-user expectation remains the same, namely to achieve a local presence within an exchange other than where the customer resides. From the end-use customer's perspective, Pac-West's service is a competitive alternative to other form of foreign exchange service.

---

[7] Another traditional method to provide toll-free calling is "800" service, which allows the called party to pay for incoming calls to that number. If Pac-West had provided "800" service to ISPs for calls made from Volcano or Patterson, Pac-West would have paid intercarrier switched access charges to be shared by use of their respective networks.

Typically, a customer pays more for foreign exchange service or 800 service than for basic service, to compensate the telephone company for the added costs, principally for transport incurred for the foreign exchange or 800 service. Pacific argues that while the added charges to the customer ordering foreign exchange or 800 service normally forces the customer to make rational decisions as to whether the benefits outweigh the costs, there is nothing in the pricing of the arrangement to the Pac-West ISP customer to cause the customer to make rational cost-benefit buying decisions. Pacific claims that the Pac-West ISP in Stockton wanting end-users to have free local calling from distant locations may pay almost nothing extra for the higher costs incurred by the carriers providing the service.

The fact that a CLC does not charge the end user for dedicated facilities does not necessarily negate the fact that foreign exchange service is being provided. We have previously determined that Commission regulation of tariff rates charged by CLCs is not necessary in view of CLCs' lack of market power. Therefore, we find no basis to require specific minimum rates which CLCs must charge end-users for the service to qualify as "foreign exchange." Likewise, we find no basis to require the specific title "Foreign Exchange Service"as long as the substantive intent to provide the customer with a local presence in a foreign exchange is disclosed in the CLC's tariff.

We conclude that the assigning of NXX prefixes to ISPs in the manner used by Pac-West constitutes a form of foreign exchange service from the perspective of the end user. As such, the Pac-West arrangement warrants rating of the calls from the rate center of the foreign exchange in similar fashion to more traditional forms of foreign exchange service. Accordingly, such calls would be rated as local calls if originated from a rate center within 12 miles of the rate center of the designated foreign exchange of the called party's NXX prefix.

This principle is consistent with the underlying intent of the tariffs governing the rating of calls as toll or local, applied in the context of foreign exchange service.

We agree that the pricing of services should be determined in an economically efficient manner to provide an incentive for economically rational decisions. We do not believe this result is properly achieved, however, by dictating what a CLC is to charge its end-users. Rather, we believe the CLC will set its prices to end-users in an economically rational manner if the CLC is held financially responsible to compensate other carriers for routing and delivering foreign exchange calls as provided for in the relevant interconnection agreements. We discuss the issue of intercarrier compensation separately in Section V.A. below.

The rating of a call, therefore, should be consistently determined based upon the designated NXX prefix. Abandoning the linkage between NXX prefix and rate center designation could undermine the ability of customers to discern whether a given NXX prefix will result in toll charges or not. Likewise, the service expectations of the called party (i.e., ISPs) would be undermined by imposing toll charges on such calls since customers of the ISPs would be precluded from reaching them through a local call. Consequently, the billing of toll charges for Internet access which is designed to be local could render an ISP's service prohibitively expensive, thus limiting the competitive choices for Internet access, particularly in rural areas.

The small LECs have objected to rating calls as local when terminated to an NXX prefix of a customer physically located in a separate exchange, claiming such NXX prefixes constitute a "false labeling" of the call destination. A "false labeling" implies an intent to deceive or mislead. If such labeling were used to maliciously misrepresent the actual location of the called party with an intent to defraud others, a deceptive intent could be inferred. Yet,

we find nothing inherently misleading nor deceptive in the use of different rating and routing points as long as the arrangement is clearly identified to customers and in applicable interconnection agreements as a form of foreign exchange service and as long as a provision for fair intercarrier compensation is made. The designation of an NXX prefix rated from a foreign exchange is simply necessary to provide for a local presence in that exchange and still conform with the calling rating conventions as discussed above.

The independent LECs have also argued that rating of such calls as local causes the originating carrier to lose toll revenue from its customer originating the call. This argument raises two issues: (1) the loss of profit opportunities and (2) compensation for costs of providing service. To the extent that the LECs object to the local rating of calls on the basis that it results in a loss of profit opportunities through the collection of greater toll revenues, we find such objection unpersuasive. A customer is entitled to choose to make either a local call (through a foreign exchange arrangement) or a toll call based on the competitive choices available. If the customer's choice to make a local call results in lower toll revenues being collected by the serving carrier, that result is a consequence of the competitive market and is not a basis to restrict the competitive options available to the customer. The local service tariffs under which LEC customers are billed are designed to provide a reasonable compensation for the origination of calls to other local NXX prefixes.

Moreover, the loss of such toll revenue presupposes that the originating customer would still make the same call if it were rated as toll rather than local. In the case of ISPs, however, customers generally can find an ISP offering access on a toll-free basis. Thus, if a call to an ISP were rated as toll, the caller would likely not make the call in the first place, but would chose a competing ISP accessible through a local call. Internet users are unlikely to make

toll calls in order to access the Internet for extended periods. Thus, given the availability of toll-free ISP alternatives, there would be no toll revenue to lose from the Pac-West service arrangement. Consequently, the Pac-West service arrangement for ISPs should not adversely impact the small LECs' toll pool revenue recovery.

If the competing ISP was also a customer of the same carrier as of the originating caller, that carrier could gain a competitive advantage by making its service more attractive for ISPs. An ISP would obviously prefer a carrier who could enable it to offer local-rated access. Conversely, the originating carrier could face competitive losses in terms of ISPs who might choose to subscribe to the competing carrier offering service to ISPs through a less costly foreign exchange arrangement. Particularly in rural regions, such a service offering enhances customer choice and affordability of Internet access, encouraging more flexible alternatives for ISPs seeking market expansion.

In summary, at least in the case of ISPs, we do not find the claims of lost toll revenue justify a deviation from accepted call rating protocols as outlined above.

The other objection raised by the small LECs involves claims that the rating of calls as local deprives them of compensation for actual costs incurred in the delivery of such calls beyond the local calling area using facilities which are designed to carry toll traffic. The proper remedy for this objection is for the LEC to seek any appropriate compensation from other carriers involved in the call delivery. Disputes over intercarrier compensation, however, do not justify exacting a toll charge from end-user customers for a call intended to be rated as local. We address intercarrier compensation below.

C. Intercarrier Compensation

1. Parties' Positions

Parties are in dispute regarding what intercarrier compensation obligations exist associated with Pac-West's serving arrangement, assuming the Commission does not prohibit the use of such arrangements as some parties propose.

Parties disagree over whether or how the actual costs incurred by carriers are impacted by changes in the routing distance of calls between the called party and the originating caller and what resulting intercarrier compensation is appropriate. CLCs filing comments generally believe the Commission should simply defer to the independent negotiation process, and not issue any policy pronouncement as to what compensation obligations may be appropriate for the sorts of foreign exchange arrangements Pac-West has offered. To the extent the Commission intends to consider rules in this regard, however, CLCs generally oppose paying any additional compensation to the ILECs. Pac-West claims, for example, that the facilities used and related costs are the same whether a call is routed over a local 12-mile distance or a longer distance within a LATA. Based on this claim, Pac-West then argues that it shouldn't have to compensate more for a call routed over the longer distance as long as the call is defined to be a local call.

Pac-West argues that its serving method has not caused other carriers to incur costs they would not otherwise have incurred, nor has it interfered with other carriers' facilities or impaired their own provision of services. Pac-West claims it has not unfairly deprived any carrier of revenues, nor, unreasonably impeded competition in any way. To the contrary, Pac-West argues, this serving method enables ISPs and others to expand their service

offerings throughout California far more economically and quickly than otherwise would have been possible, thereby increasing consumers' choices for services, and enhancing the quality of services, particularly in sparsely populated rural areas where affordable high speed Internet access previously had not been available.

Pac-West argues that the facilities used by ILECs and other interconnecting carriers to originate and route traffic for completion by Pac-West, WorldCom, and other CLCs are exactly the same whether the ISP or other called party is physically located in the rate center area with which its telephone number is associated, or not. Pac-West claims that the originating carrier experiences no difference in cost, and that the appropriate rates, terms, and conditions for the exchange of traffic, in both cases, are already addressed in interconnection agreements currently on file with the Commission.

Parties representing CLCs generally argue that the Commission should not set intercarrier compensation rates for any form of foreign exchange service that ILECs or CLCs may offer, but rather that a CLC and other telecommunications carriers involved in handling the transport and/or termination of foreign exchange service calls should negotiate intercarrier compensation rates, including rates and terms for interconnection trunking, as part of interconnection agreements. Since Section 251 requires all telecommunications carriers to interconnect with each other, either directly or indirectly, all carriers are obligated to negotiate any and all requisite intercarrier rates as part of an interconnection agreement.

The CLCs argue that if the Commission sets intercarrier rates as requested by the ILECs, the ILECs will simply maintain their monopoly position, rather than negotiating fairly as called for in the Telecommunications Act. Pac-West thus draws a distinction between a carrier compensating for

actual usage-sensitive incremental costs versus paying intercarrier rates which merely contribute to the fixed costs and to the additional profit margin of the ILEC.

The ILECs generally object to Pac-West's use of different rating and routing points, claiming that they are being used to avoid the payment of intercarrier compensation to the ILECs for the routing and switching of calls beyond local calling area boundaries. Pacific claims that by using the disparity between rating and routing, carriers avoid paying proper compensation to other connecting carriers in order to obtain LATA-wide local calling, causing serious financial harm to the industry because of the overuse of NPA NXX codes.

Pacific claims that the Pac-West service arrangement is actually a form of intraLATA toll-free calling, and, as such, should be subject to the same compensation provisions as all other intraLATA toll-free calls as prescribed in Pacific's various interconnection agreements. Under those agreements, compensation is to be charged by the party originating the call rather than terminating the call. Thus, under Pacific's interpretation, Pac-West—or any other CLC with a similar arrangement—would be required to pay compensation to Pacific for calls originated by Pacific's customers and terminated to the CLC's ISP customers, with the traffic being treated as intraLATA toll-free calling.

Pacific and other ILECs dispute Pac-West's claim that there are no additional costs incurred by the telephone companies that must transport the calls over longer distances beyond a local calling area, such as to Stockton from Crows Landing. Pacific argues that if the Commission continues to permit this disparity between rating and routing without proper compensation, all LECs will experience a revenue shortfall as costs increase without any compensating

increase in revenue. In addition, more and more carriers will be encouraged to establish local calling areas for incoming calls to their customers that may be as large as the LATA. And each of these newly created local calling areas for incoming calls will require significant numbers of NPA NXX codes.

The Small Independent LECs claim that the present Commission policy regarding rating and routing is unjust since it requires carriers to complete calls even if they are not properly compensated. The Small Independent LECs recommend that the Commission require CLCs to arrange for interconnection and compensation arrangements with all other affected carriers before they establish exchanges with disparate routing and rating points to allow the Commission to resolve how the ILECs will replace potential lost revenues and cover the cost of completing calls to exchanges where the rating point may be local, but the routing point is distant.

2. Discussion

We conclude that, whatever method is used to provide a local presence in a foreign exchange, a carrier may not avoid responsibility for negotiating reasonable intercarrier compensation for the routing of calls from the foreign exchange merely by redefining the rating designation from toll to local.

The provision of a local presence using an NXX prefix rated from a foreign exchange may avoid the need for separate dedicated facilities, but does not eliminate the obligations of other carriers to physically route the call so that it reaches its proper destination. A carrier should not be allowed to benefit from the use of other carriers' networks for routing calls to ISPs while avoiding payment of reasonable compensation for the use of those facilities. A carrier remains responsible to negotiate reasonable compensation with other carriers with whom it interconnects for the routing of calls from a foreign exchange.

On the other hand, we do not believe that existing tariffed switched access rates such as those which Pacific charges other carriers for the transport of intraLATA toll traffic necessarily provide a fair or economically efficient basis for intercarrier compensation under the foreign exchange arrangement used by Pac-West. A requirement for CLCs to pay intercarrier compensation for foreign exchange arrangements based on such rates could serve to undermine the efficiencies which CLCs have sought to achieve through the design of their own network architecture as described above. Perpetuating the payment of such tariff charges in such instances could drive up the rates which CLCs charge to ISPs which may, in turn, be passed on to Internet end-users.

The use of the ILEC's existing switched access rates would also base intercarrier compensation on the legacy architecture which has traditionally been deployed by the ILECs. It would not promote the most economically efficient outcome simply to require the CLCs to pay currently existing tariffed switched access rates to the ILEC on the same basis as would be required for a traditional intraLATA toll call.

In short, we find that neither the position of the CLCs nor that of the ILECs provides a completely satisfactory resolution of the intercarrier compensation issue. Incumbents are entitled to fair compensation for the use of their facilities in the transport and termination of foreign exchange traffic. At the same time, it would not be competitively neutral or economically efficient to impose a system of intercarrier compensation which is exclusively tied to any one particular carrier's network architecture. Rather, the appropriate compensation arrangement should aim to be technology neutral, and should be applicable both to CLCs and to ILECs whether traffic is originating or

terminating. The compensation arrangement should take into account the costs that arise from the service offered.

The means by which intercarrier compensation is determined for the mutual exchange of traffic on each others' networks is through interconnection agreements negotiated in conformance with the 1996 Telecommunications Act. Interconnection agreements typically include provisions for each carrier to compensate the other based on the respective cost of facilities used to originate, transport, switch, and terminate traffic. Different compensation provisions may apply depending on whether the call is defined as local, intraLATA toll, foreign exchange, or long distance. All such compensation, however, is tied to costs incurred or avoided.

We believe the Pac-West arrangement is equivalent to foreign exchange service, not to intraLATA toll-free calling as claimed by Pacific. Just as with other forms of foreign exchange service, the Pac-West arrangement relocates the rate center from which incoming calls are rated as either local or toll. Unlike intraLATA toll-free calling, however, the Pac-West arrangement does not permit a caller from any location to dial the ISP toll-free. The calling party would still incur toll charges if the call was made from a location whereby the rate center of the calling party was more than 12 miles from the rate center for the ISP's NXX prefix. The Pac-West arrangement is not equivalent to intraLATA toll-free calling. Therefore, a carrier thus may not claim compensation for the origination of calls by its customers to the ISPs served by a CLC under the Pac-West type of arrangement under the provisions applicable to toll-free intraLATA calling. On the other hand, a carrier may be entitled to compensation for the transport of such traffic as a form of foreign exchange service.

Of course, the complaint which initiated this inquiry involved a dispute between Pac-West and Evans and Volcano, carriers that had not

executed interconnection agreements with each othe
Volcano had an interconnection agreement with Pac-
did not physically interconnect with those of Pac-W
their customers' originating traffic to Pacific for furth
destined for Stockton. As a general matter, howe
in the switching or routing of calls originated by its c
has recourse to negotiate compensation to recover t
interconnection agreements with other carriers with w

In any event, we find that the maxi
impacts of rating and routing differences theorized by
overstated. Hypothetical examples posited by the sit
telephone message with a local rating point could
point as far away as Los Angeles or New York City. I
agreements typically limit the distance that a call may
boundaries of a single LATA. Therefore, any routi
point beyond the LATA boundaries would gene
the agreement.

What we are concerned with in thi
the question of what intercarrier compensation is ap
a call is defined as local (via the use of a foreign NXX

---

[8] In D. 97-12-094 (C.96-10-018), we authorized Evans an
Companies each to file a separate application to seek co
any alleged revenue losses associated with Pac-Wes
service between the date such service commenced and
issues. To date, no such applications have been file

This issue has already arisen in previous complaints and arbitration proceedings before the Commission. Parties to various complaint and arbitration proceedings have been unable to agree on whether disparate rating and routing of calls is proper, and if so, how compensation for such calls should be arranged. Rather than repeatedly litigate the same issue in each disputed interconnection agreement, a more efficient approach is to establish generic principles in this proceeding which can be applied in specific negotiations.

We have previously adopted rules in this proceeding to be applied as preferred outcomes, while leaving parties the discretion to negotiate their own unique interconnection agreements tailored to the circumstances facing individual carriers. The adoption of preferred outcomes, has provided carriers with broad guidance and has reduced the potential for disputes between carriers. The present dispute is likewise appropriate for generic policy guidance from the Commission in the interest of minimizing future disputes and facilitating negotiations between carriers.

We conclude that all carriers are entitled to be fairly compensated for the use of their facilities and related functions performed to deliver calls to their destination, irrespective of how a call is rated based on its NXX prefix. Thus, it is the actual routing points of the call, the volume of traffic, the location of the point of interconnection, and the terms of the interconnection agreement – not the rating point – of a call which properly forms a basis for considering what compensation between carriers may be due.

We conclude, however, that the record at this point does not provide a sufficient basis to adopt appropriate preferred outcomes for intercarrier compensation arrangements for the transport and delivery of traffic involving different rating and routing points. The record shall be augmented through evidentiary hearings to determine a fair resolution of the disputes

concerning intercarrier compensation for the transport and delivery of calls using NXX codes to provide locally-rated calling to customers residing beyond the local calling area of the designated NXX code. Our ultimate aim is to arrive at an intercarrier compensation arrangement which is fair to all carriers involved in the transport, switching, and delivery of calls utilizing different rating and routing points. The resulting intercarrier compensation arrangements should not result in a windfall to either ILECs nor CLCs, but should provide economically efficient price signals to stimulate a competitive market among all carriers. We shall direct the ALJ to schedule a prehearing conference to initiate this hearing process.

V. Comments on Draft Decision

The draft decision of the assigned ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code Section 311(g) and Rule 77.1 of the Rules of Practice and Procedure. Comments on the draft decision were filed on July 22, 1999, and reply comments were filed on July 27, 1999. We have taken the comments into account, as appropriate, in finalizing today's order.

Findings of Fact

1. In D.97-12-094, the Commission found that the issues raised in C.96-10-018 involved industry-wide issues which should be examined on a generic basis in this rulemaking.

2. C.96-10-094 involved a dispute over the propriety of certain rating and routing of calls as brought before the Commission in a complaint (1) filed by Pac-West Telecom, Inc., a competitive local carrier (CLC).

3. Although the generic issues raised in the Pac-West complaints have applicability to telephone number assignments generally, the dispute in the

Pac-West complaints arose specifically in the context of number assignments made to Internet Service Providers (ISPs).

4. To limit CLCs to offering foreign exchange service only in the manner traditionally used by the ILECs, is unreasonable.

5. It could be technologically and economically inefficient to require a CLC to construct switching facilities in every local exchange in which it sought to provide a local presence to its customers.

6. Various interconnection agreements between the major ILECs and CLCs already provide for the use of separate rating and routing points.

7. The interconnection agreements between the major ILECs and cellular carriers Los Angeles Cellular Telephone Company have provisions enabling cellular customers to obtain numbers for rating purposes which are located in the geographic exchange in which the cellular customer expects most of its calls even though it differs from where the customer is physically located.

8. The use of different rating and routing points does not adversely impact the 911 emergency calling system since the routing of relevant information is not based on rating points, but on separate records entered into the E-911 Database Management System.

9. Toll rates between localities are based on the airline distance between the calling and called parties' rate centers. Each rate center, in turn, is identified, by tariff, with one or more specific NXX codes.

10. The provision of foreign exchange service is a generally recognized exception to the practice of rating calls from the rate center of the exchange in which the called party resides since it is designed to relocate a called party's designated rate center for rating purposes from a home exchange to a foreign exchange.

11. Although the Pac-West form of service differs from certain other forms of foreign exchange service in how it is provisioned, the end-user expectation remains the same, namely to achieve a local presence within a foreign exchange.

12. From the end-user customer's perspective, Pac-West's service is a competitive alternative to traditional foreign exchange service.

13. Since Internet users are unlikely to make toll calls in order to access the Internet for extended periods given the availability of toll-free ISP alternatives, there would be no toll revenue to lose from the Pac-West type of service arrangement.

14. D.97-12-094 (C.96-10-018) authorized Evans and Volcano Telephone Companies each to file a separate application to seek compensation from Pac-West for any alleged revenue losses associated with Pac-West's provisioning of ISP Type 6 service.

15. The provision of a local presence using an NXX prefix rated from a foreign exchange may avoid the need for separate dedicated facilities, but does not eliminate the obligations of other carriers to physically route the call so that it reaches its proper destination.

16. The means by which intercarrier compensation is determined is through mutually negotiated interconnection agreements in conformance with the Telecommunications Act, and different compensation provisions may apply depending on whether the call is defined as local, intraLATA toll, or long distance.

17. Disputes as to how actual costs are impacted by a particular serving arrangement and how such costs should be compensated is a factual question for resolution through negotiations and/or arbitration among parties to interconnection agreements.

18. As a general matter, any carrier that is involved in the switching or routing of calls originated by its customers over toll facilities has recourse to negotiate compensation to recover those costs through wholesale charges under interconnection agreements with other carriers with whom it interconnects.

19. Interconnection agreements typically limit their applicability to the routing of calls within the boundaries of a single LATA.

20. Parties to various complaint and arbitration proceedings before this Commission have been unable to agree on whether disparate rating and routing of calls is proper, and if so, how compensation for such calls should be arranged.

21. The record in this proceeding does not provide a sufficient basis to adopt appropriate preferred outcomes for intercarrier compensation arrangements for the transport and delivery of traffic involving different rating and routing points.

Conclusions of Law

1. Carriers should not be prohibited from designating different rating and routing points for call destinations since such a prohibition could undermine the incentives for carriers to develop innovative service alternatives in the most economically and technologically efficient manner.

2. The rating of calls as toll or local should be based upon the designated rate center of the NXX prefix of the calling and called parties' numbers, even if the called party may be physically located in a different exchange from where the call is rated.

3. It is up to carriers through their negotiations to determine specifically how much they will be mutually compensated for the exchange of various kinds of traffic.

4. This rulemaking is concerned with the broad principle of what are the obligations for revenue compensation based on whether a call is defined as local

(via the use of a foreign NXX prefix) even though the routing distance may be equivalent to that of a toll call.

5. Carriers are entitled to be fairly compensated for the use of their facilities and related processing functions for the actual delivery of a call, irrespective of how a call is rated based on its NXX prefix.

6. There is nothing inherently "false" in the labeling of NXX prefixes from foreign exchanges as long as the arrangement is not used to mislead or deceive, and a fair provision for intercarrier compensation is made for the delivery of calls in the applicable interconnection agreements.

7. If the customer's choice to make a local call results in lower toll revenues being collected by the serving carrier, that result is a consequence of a competitive market and is not a basis to restrict the competitive options available to the customer.

8. The Pac-West arrangement is equivalent to foreign exchange service, but not to intraLATA toll-free calling.

9. Since the Pac-West service type of arrangement is not equivalent to intraLATA toll-free calling, on a prospective basis, carriers may not claim compensation for the origination of calls by its customers to ISPs under that arrangement under the provisions for toll-free intraLATA calling.

10. The record should be augmented through evidentiary hearings as a basis to adopt preferred outcomes concerning the proper intercarrier compensation for the transport and delivery of calls utilizing NXX codes to provide locally rated incoming calling to customers residing beyond the local calling area of the designated NXX code.

11. The proper compensation arrangement should take into account the fact that the ILECs and CLCs may use different network architectures to transport

and deliver calls, and should strike a fair balance in considering the differing network architectures used.

12. D.98-10-057 ordered that reciprocal compensation provisions of interconnection agreements are to apply to the termination of ISP traffic which would otherwise qualify as a local call measured by the distance between the rate centers of the telephone number of the calling party and the telephone number used to access the ISP modem.

INTERIM ORDER

IT IS ORDERED that:

1. The following preferred outcomes shall be used by the Commission in resolving disputes over the provisions of interconnection agreements involving the use of different rating and routing points.

2. Carriers shall not be prohibited from designating different rating and routing points for the delivery of telephone calls for purposes of providing customers a local presence within a foreign exchange.

3. The compensation exchanged between carriers related to the origination, switching, and routing of calls shall consider the actual routing points of the call, the volume of traffic, the location of the point of interconnection, and the terms of the interconnection agreement in situations where different rating and routing points are used.

4. Any currently effective interconnection agreements which are inconsistent with the principles set forth above shall be subject to renegotiation to conform to principles adopted in this rulemaking regarding rating and routing issues.

5. Calls shall be rated in reference to the rate center of the assigned NXX prefix of the called party pursuant to the conclusions of law above.

6. The assigned Administrative Law Judge is directed to convene a prehearing conference for the purpose of the defining the scope and procedural schedule for evidentiary hearings regarding intercarrier compensation among wireline carriers for the transport and delivery of calls utilizing NXX codes to provide locally-rated incoming calling to customers residing beyond the local calling area of the designated NXX code.

This order is effective today.

Dated September 2, 1999, at San Francisco, California.

RICHARD A. BILAS
President
HENRY M. DUQUE
JOSIAH L. NEEPER
JOEL Z. HYATT
CARL W. WOOD
Commissioners

ATTACHMENT 5

INTERMEDIA COMMUNICATIONS INC.'S INTERCONNECTION AGREEMENTS WITH THE INCUMBENT LOCAL EXCHANGE CARRIERS

NAME OF ILEC	STATE IN WHICH AGREEMENT IS APPLICABLE	DATE AGREEMENT WAS SIGNED
Ameritech	Illinois	7/25/97
Ameritech	Indiana	7/7/97
Ameritech	Ohio	7/7/97
Bell Atlantic (South)	Delaware, Maryland, New Jersey, Pennsylvania, Virginia, Washington, D.C., West Virginia	2/19/97
Bell Atlantic (North)	Massachusetts and New York	12/9/96
BellSouth	Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Florida, Alabama	6/21/96
Cincinnati Bell	Ohio	10/17/97
GTE	Florida	1/31/97
GTE	California	3/05/97
GTE	North Carolina	7/28/97
GTE	Ohio	1/15/98
GTE	South Carolina	1/15/98
GTE	Texas	7/8/97
Pacific Bell	California	10/28/99
SNET	Connecticut	1/20/98
SWBT	Texas	11/9/99
SWBT	Missouri	11/18/99
Sprint	Florida	12/19/96
Sprint	North Carolina	1/7/97
US West	Arizona	12/4/98
US West	Minneapolis	12/4/98