STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC UTILITY CONTROL
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 97-04-10 **APPLICATION OF THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR APPROVAL OF TOTAL SERVICE LONG RUN INCREMENTAL COST STUDIES AND RATES FOR UNBUNDLED ELEMENTS**

May 20, 1998
By the following Commissioners:

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DECISION

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DECISION

I. INTRODUCTION

A. SUMMARY

The Southern New England Telephone Company (Telco) seeks approval of a set of unbundled network elements (UNE), which it alleges conforms to the requirement of the Telecommunications Act of 1996 (Telcom Act) and the First Report and Order (First Report). The Telco proposes that the Department of Public Utility Control (Department) approve its product descriptions for the Network Interface Device (NID), local switching, tandem switching, interoffice transmission facilities signally networks and call related data bases. The Telco also requests that the Department endorse the cost studies filed with the Department and the proposed rates for UNE offerings. Finally, the Telco requests that the Department defer implementation of the requirement of the Telco to provide common transport until the Eighth Circuit Court issues its ruling on that issue.

The other participants, which include competitive local exchange carriers (CLEC's) and the Office of Consumer Counsel have collectively raised several objections to the Telco proposal. The other participants object to the markups proffered by the Telco as excessive. The participants suggested that the Department set a uniform markup ranging from 15% to 25%. The various participants also argue that the Telco's pricing methodologies are not consistent with prior Department determinations and that the Telco cost studies are unreliable and should be rejected. Several of the CLEC's stated that the proposed switch costs were inaccurate and should be rejected. The other participants also objected to both the recurring and nonrecurring charges. The other participants also objected to the Telco's "fall out" (need for manual intervention) rates for mechanized functions as too lengthy and therefore more costly. Finally the other participants argue that the Telco should be required to provide UNE combinations and common transport as they believe is required by Federal law.

The Department has determined that the proposed cost studies are acceptable as a preliminary basis for determining unbundled network element rates for this proceeding. While the Department approves the request to offer unbundled elements, the Department made several modifications to the proposal. First the Department determined that the overall contribution level for both recurring and nonrecurring rates should be set at 35%. Next the Department determined that the Telco should file separate connection and disconnection charges for all unbundled services. The Department has also ordered the Company to file new cost studies to support nonrecurring UNE rates and charges, no later that September 1, 1998. The Telco shall also modify its nonrecurring cost studies as follows: 1) a one-time 2% fallout rate in the ordering and provisioning non recurring cost study; 2) an individual non recurring cost study for disconnection of CLEC service and removal of said costs from the nonrecurring charge for connection; and 3) modification of the nonrecurring cost study for connection of CLEC service by removing any and all costs associated with disconnection of Telco or CLEC service.

B. BACKGROUND OF THE PROCEEDING

On April 4, 1997, the Southern New England Telephone Company (Telco) filed with the Department of Public Utility Control (Department) a proposal to provide to certified local exchange carriers (CLEC) unbundled network elements (UNE) that comport with terms and conditions set forth by the Federal Communications Commission (FCC) First Report and Order in CC Docket No. 96-98, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and CC Docket No. 95-185, Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, (First Report and Order), released on August 8, 1996. Specifically, the Telco proposes to make available to certified competitors, a means of acquiring use of only those components of the Telco's network infrastructure to provide telecommunications services to CLEC subscribers. In so proposing, the Telco sought to respond to requirements set forth for unbundled elements in the FCC's Rules and Order, 47 C.F.R. §51.319. The Telco maintains that its proposal is consistent with its testimony during the February 4, 1997 Hearing in Docket No. 96-09-22, DPUC Investigation into the Southern New England Telephone Company for Approval to Offer Unbundled Loops, Ports, and Associated Interconnection Arrangements and Universal Service Fund in Light of the Telecommunications Act of 1996. The set of capabilities proposed in this proceeding for the

Department's consideration includes a network interface device (NID), local and tandem switching, interoffice transmission facilities (shared and dedicated); signaling networks and call-related databases.

On July 18, 1997, the United States Court of Appeals for the Eighth Circuit (Eighth Circuit or Court) issued an opinion regarding the validity of the First Report and Order wherein it upheld portions of the FCC Order and vacated other portions. Iowa Utilities Board v. FCC, 120 F.3d 753 (8th Cir. 1997). The Eighth Circuit Decision had a profound effect on the measure of discretion available to this Department in addressing the issue of UNEs. For purposes of this proceeding it is important to understand that the Court concluded that a standardized pricing methodology was an abridgment of the state's authority to set prices for service. The Court further determined that responsibility for recombining UNEs into marketable services was the singular responsibility of the requesting CLEC thereby freeing the incumbent local exchange carrier (ILEC) of certain duties and obligations sought by the FCC.[1]

Separately, on August 18, 1997, the FCC released its Third Order on Reconsideration, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, FCC No. 97-295, (Third Order). By provisions contained within the Third Order, the FCC revised its earlier instructions to comport with the terms of the Eighth Circuit's decision and redesignated Shared Interoffice Transmission facilities as "common transport" for purposes of applying its unbundling rules. On October 14, 1997, the Eighth Circuit granted petitions from ILECs to hear arguments on certain aspects of the Court's July 18, 1997 ruling and broadened its prohibition against rebundling by adding 47 C.F.R. 51.315(b) of the FCC's Rules to its earlier rejection of 47 C.F.R. 51.315(c)-(f).

C. CONDUCT OF THE PROCEEDING

By Notice of Hearing dated August 29, 1997, public hearings were held in the Department's offices, Ten Franklin Square, New Britain, Connecticut 06051, on September 15, 22, and 30, 1997. On September 30, 1997, the Telco requested the Department extend the time schedule to provide opportunity to correct and update certain assumptions employed in the UNE cost studies proposed for adoption in this proceeding. By Notice of Additional Hearing Sessions dated November 6, 1997, additional hearings were held on December 9, 10, and 12, 1997, at which time the hearing was continued to January 7, 1998. That hearing was continued to January 27, 1998, at which time the hearing in this matter was closed.

The Department issued a Draft Decision in this docket on April 14, 1998. All parties and intervenors were provided an opportunity to file written exceptions and to present oral argument on the Draft Decision.

D. PARTIES AND INTERVENORS

The Department recognized the following as Parties to this proceeding: Office of Consumer Counsel, Ten Franklin Square, New Britain, Connecticut 06051; The Southern New England Telephone Company, 227 Church Street, New Haven, Connecticut 06510; Cox Connecticut Telcom LLC, 9 J.P. Murphy Highway, West Warwick, Rhode Island, 02893-2381; Cablevision Lightpath of Connecticut, Inc. 111 New South Road, Hicksville, New York 11801; AT&T Communications of New England, 32 Avenue of the Americas, Room 2700, New York, New York 10013; TCI Telephony, Services of Connecticut, 5619 DTC Parkway, 8th Floor, Tower II, Englewood, Colorado 80111; MCI Telecommunications, c/o Ottenburg Dunkless Mandl & Mandl, 260 Franklin Street, Boston, Massachusetts 02110; Connecticut Telephone & Communications, 1271 South Broad Street, Wallingford, Connecticut 06492; MFS Intelenet, c/o Silverstone & Koonz, PC, 227 Lawrence Street, Hartford, Connecticut 06106; Sprint Communications Company, LP, 1850 M Street, NW, 11th Floor, Washington, D.C. 20036; and Frontier Communications, 180 South Clinton Avenue, Rochester, NY 14646.

The Department also recognized as intervenors: Brooks Fiber Communications of Connecticut; TCG Connecticut; New England Cable TV Association; Connecticut Ad Hoc Committee; Metropolitan Fiber Systems and WilTel, Inc.

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[1] The Eighth Circuit's decision, however, left intact 47 C.F.R. §51.315(b) which required ILECs to provide carriers with combinations of UNEs already combined in the network.

II. APPLICANT'S EVIDENCE

The Telco proposes to offer to any requesting CLEC UNEs as defined by the FCC in April, 1997. The Telco requests the Department to accept as fact that the FCC defined UNEs at that time as "the physical facilities of the network, together with the features, functions, and capabilities associated with those facilities." The Telco asserts that the FCC designated a minimum of seven network components which an ILEC must provide a CLEC as an unbundled service. These include: (i) local loops, (ii) NIDs; (iii) local and tandem switching capability; (iv) interoffice transmission facilities; (v) signaling and call-related databases; (vi) Operational Support System (OSS) functions; and (vii) operator services and directory assistance facilities. The Telco alleges that its proposed UNE offerings conform to requirements of the Telecommunications Act of 1996 (Telcom Act or Act) and the Telco's interpretation of the First Report and Order. Accordingly, the Telco asks that the Department approve the following set of Unbundled Network Elements:

A. NETWORK INTERFACE DEVICE

By terms of the definitions set forth by the FCC in April, 1997, an ILEC is legally obligated to provide and price NIDs as an unbundled service to requesting CLECs that choose to employ non-Telco facilities (loops) in constructing their service offerings. According to the Telco, the FCC defines a NID as "a cross-connect device used to connect loop facilities to inside wiring," and in the opinion of the FCC represents a discrete item in the Telco's physical plant specifically designed for bridging a separate loop facility to the inside wiring of a customer's premise. The Telco states however, that the model NID referred to by the FCC in its definitions is not universally deployed in the Telco's network and cannot, therefore be easily offered as an UNE. The Telco proposes to offer two interconnection methods for CLECs who require unbundled access to an end user's inside wiring: an adjoining NID (ANID) option or a shared NID (SNID) option. Each of the proposed approaches is described in more detail below.

1. Adjoining NID (ANID)

In those instances where access to the subscriber's premise is provided by an existent, discrete multi-chambered interface device, the Telco proposes that a CLEC connect its own loop facilities to the subscriber's premise by connecting the CLEC's own NID to the subscriber's wiring located inside the end user access chamber of the Telco multi-chambered network interface. In those circumstances where the Telco's network interface is not a partionable cross-connect device (e.g., multi-chambered) the Telco proposes to let the CLEC splice its loop directly to the end user's wiring at or adjacent to the Telco's point of demarcation. Under the terms of this proposal the requesting CLEC must terminate its facilities in an adjoining NID installed and maintained by the CLEC before bridging it into the Telco's facilities to ensure clear responsibility on the part of the conjoining providers.

The Telco states that a substantial number of current subscribers to its local exchange service have a continuous run of inside wire that spans from the Telco's serving terminal/protector to the subscriber's telephone set or jack. Continuous runs do not by design employ a discrete cross-connect device to connect premise wiring with loop plant and do not comport with the architecture envisioned by the FCC in its interconnection rules. Rather, continuous runs are composed of, in pertinent part: (i) a loop protection device that provides direct electrical protection and grounding of both the Telco's loop facility and the subscriber's premise wire; and (ii) inside wiring at the subscriber's premise that is not subject to state or federal regulation and is the property of the subscriber.

2. Shared NID (SNID)

The Telco purports that its representation of the network interface for a large portion of its subscribers differs significantly from the FCC's technical model and can be best addressed by CLECs with the ANID approach. The Telco notes, however, that for single tenant structures and multi-tenant structures built after June 1, 1991, the FCC's representation of the location of the NID component is reasonably accurate. The Telco accepts the FCC's representation because it introduced a new generation of terminal and protector hardware at that time for use in new construction. The Telco maintains that this new generation of interface hardware: (i) employs the discrete cross-connect device

that connects inside premise wire to the loop facility of either the Telco or the CLEC; (ii) integrates over-voltage protection; and (iii) encases the point of demarcation between the outside plant loop and the inside premise wire in a two-chambered box. The two-chamber interface device can be, and have been, attached on the exterior or interior of a subscriber's premise depending upon a determination by the field installer.

The Telco proposes to permit an authorized CLEC to access and use any spare capacity available on existing multi-chamber Telco NIDs to directly terminate their facilities. In the opinion of the Telco, the ANID approach offers CLECs a second means of securing access to their subscribers without significant retrofit or customer disruption. In the opinion of the Telco the ANID and SNID termination methods represent cost-effective approaches for CLECs to interconnect to the inside premise wiring of their prospective subscribers that were not envisioned by the FCC in their model but should be given serious consideration.

The Telco proposes that in those instances where the existing network interface is a discrete, multi-chambered device with spare capacity, a CLEC will terminate its loop facility on the side of the multi-chambered device historically occupied by the Telco and place appropriate protection and terminating units on its side of the network interface, effecting the SNID approach. With both network protection and a CLEC termination unit in place the CLEC will then access the subscriber's wiring presently terminated separately in the customer access chamber of the Telco's multi-chambered device.

In those instances where the subscriber's existing premise wiring is a continuous run of inside wire (or in instances where a two-chamber box has no excess capacity), the Telco proposes that the requesting CLEC assume all responsibility to install a discrete cross-connect device and drop wire at the premises effecting the ANID approach. The Telco proposes that the drop wire in the terminating unit remain in place indefinitely after CLEC service is initiated because any removal by the Telco of its property would entail removing fasteners, screws, and bolts leaving holes in the subscriber's exterior premises. Separately, the Telco asserts that leaving its network interface and drop wire in place provides the ability to service future retail and wholesale customers at the premises, without; (1) reinstalling the necessary hardware; (2) creating premises owner complaints and dissatisfaction; (3) incurring additional expense related to reinstallation; and (4) creating a delay in service. Telco Brief, pp. 5-8.

B. LOCAL SWITCHING CAPABILITY

The local switching component referenced by the FCC in its rules constitutes the point of physical interface/access at the Telco's network end offices where a CLEC gains access to the line-side and trunk-side capabilities provided by those end offices. Specifically, local switching is envisioned by the FCC as a multi-dimensional element providing a CLEC the means to transit within the Telco's local switch to connect: (i) lines to lines; (ii) lines to trunks; (iii) trunks to lines; and (iv) trunks to trunks all within a common end office. Local switching capability does not encompass applications where switching involves connections to another switch than the one in which the requirement for switching originates.

The Telco proposes to include within its local switching element trunk-side interfaces, line-side interfaces, traffic-sensitive and non-traffic-sensitive central office equipment considered essential to the CLECs. The Telco also proposes to provide CLECs local switching support via Stored Program Control (SPC) analog and digital central offices where technically feasible and where equipment and facilities are available.

The Telco indicates that "line-side" facilities will include the connection between an end office loop termination and a central office line card. The Telco proposes to facilitate line-side local switching of dialed numbers (dialing plan) by means of individualized routing for any requesting CLEC on a per service, per switch basis. The Telco indicates that those individualized dialing plans will dictate the routing path for all other dialed calls to the unbundled local switching trunk-side element to which the carrier wants calls routed. The Telco also indicates that its routing proposal provides CLECs call routing to other NXXs resident within the same local switch as part of the same local switching element offering.

The Telco states that it's "trunk-side" facilities include a connection between the CLEC trunk termination and the associated Telco trunk card. Depending on the specific type of trunk that is the

subject of the interconnection request, trunk-side local switching can be translated and used to support trunk groups for: (i) accepting routed calls from the carrier's unbundled line-side local switching element within the local switch; (ii) terminating calls to other NXXs resident in the same local switch; and (iii) establishing end user specific Direct Inward Dialing (DID) service.

As part of its proposed local switching feature set, the Telco intends to provide CLECs a telephone number, a directory listing for that telephone number, dial tone, and access to signaling support. In addition, the Telco's local switching offering includes access to all vertical features that the Telco's serving Central Office is equipped to provide including custom calling services (CCS), custom local area signaling services (CLASS), Centrex and any technically feasible customized routing function requested by the CLEC. Finally, the Telco proposes to make available local switching capability which, when combined with other unbundled elements, will provide the CLEC with the ability to process subscriber calls to 911, operator services, and directory assistance as well as the technical ability to provide competing telecommunication services. Telco Brief, pp. 8 and 9.

C. TANDEM SWITCHING CAPABILITY

The Telco proposes to offer CLECs tandem switching capability as an unbundled network element. According to the Telco tandem switching will consist of: (1) a connection between the termination point of the trunk and a switch trunk card at a cross-connect panel; (2) basic function of connecting trunks to trunks; and (3) those essential trunk-trunk switching functions consolidated at the tandem switch level. According to the Telco, the proposed set of activities contained within its tandem switching UNE comports with the FCC's definition and should be approved by the Department.

Separately, the Telco indicates that its proposed tandem switching UNE provides a requesting CLEC the ability to build a routing path within the Telco's central office switch for its subscribers' calls as well as the ability to connect trunks to trunks. The Telco notes that its tandem switching UNE provides a CLEC the ability to perform inter-office switch connections that was not specifically envisioned by the FCC as part of any tandem switched offering. The Telco's proposed tandem switching UNE provides not only an interface/access method for CLECs to the tandem switches of the Telco but also use of certain capabilities available from those switches. The Telco proposes to permit CLECs to interface with both access tandems and E-911 tandem offices.

The Telco also proposes to provide tandem switch routing of dialed numbers on an individualized basis (i.e., individualized translations) for each requesting CLEC on a per trunk group/per tandem switch basis. The translations developed by the Telco for each requesting CLEC will determine the CLEC's routing scheme of its subscribers' calls to the CLEC's tandem switch UNE designated by the CLEC as the preferred destination.

In such instances where a CLEC requests tandem switch UNEs the Telco proposes to limit availability to those locations where it is technically feasible to satisfy the CLECs request and where the essential Telco equipment and facilities are currently available. However, the Telco proposes to provide the CLECs tandem switching UNE in a manner that permits a CLEC to combine the tandem switching UNE with other unbundled network elements deemed essential to facilitate their subscriber's request for service. However, the Telco will not be responsible for combining any unbundled network elements except where such support is available under previously approved tariffs. Telco Brief, pp. 10 and 11.

D. INTEROFFICE TRANSMISSION FACILITIES

The Telco suggests that the FCC rules, by definition, require it to offer CLECs at least two types of interoffice transmission facilities as unbundled network elements. According to the Telco, the FCC defines interoffice transmission facilities as those transmission facilities of an ILEC that 1) are dedicated to a particular customer or carrier, or 2) shared by more than one customer or carrier and provide transport between wire centers owned by ILECs or requesting CLECs or central office switches owned by ILECs or requesting CLECs.

In the opinion of the Telco, dedicated interoffice transmission facilities are clearly defined as facilities committed for the exclusive use of a single customer or carrier. The Telco states however, that the definition of shared interoffice transmission facilities is considerably less clear and has been interpreted by some prospective competitors differently than the definition adopted by the Telco. Recognizing the differences in interpretation the Telco set forth in its proposal its views on both dedicated interoffice facilities and shared interoffice facilities.

1. Dedicated Interoffice Transmission Facilities

As indicated above the Telco proposes to make available dedicated interoffice transmission facilities, of various transmission levels and interfaces, for the exclusive use of a single customer or carrier between:

Telco wire centers;
Telco end offices and Telco wire centers;
Telco wire centers and a CLEC's wire center
Telco wire centers and IXC POPs.

The Telco proposes to make dedicated interoffice transmission available to CLECs at Telco specified interface levels. Additionally, the Telco proposes to offer DS3-level dedicated interoffice transmission facilities between Telco central offices (CO) for connecting CLECs to Telco-offered multiplexing options and/or the CLEC's physically collocated space. Where technically feasible, the Telco proposes to permit a CLEC to combine dedicated interoffice transmission facilities with local loops, as offered in previously filed tariffs.

2. Shared Interoffice Transmission Facilities

The Telco further proposes to offer a requesting CLEC shared interoffice transmission facilities between Telco end offices and their respective tandem switches for joint use by more than one CLEC customer or more than one CLEC. That is, the Telco will charge the initial requesting CLEC or CLEC customer the total cost of any shared facility. In so proposing, the Telco offers that the initial requesting customer or CLEC is free to recoup any portion of the Telco's facility charge from other subscribers sharing the same interoffice facility. In the Telco's opinion, this places responsibility for collecting any such charges on the requesting CLEC or customer. The Telco represents in its proposal that its shared interoffice transmission facilities UNE offering comports with the FCC's requirement that the Telco offer a CLEC the right: (1) to purchase a dedicated transmission facility; and (2) to resell access to that purchased facility to other carriers.

The Telco notes that in the FCC's Third Report and Order, the FCC revised an earlier definition of interoffice transmission facilities and required ILECs to offer to CLECs for the first time a third form of interoffice transmission facilities; this third option has been termed common transport. The Telco states that common transport is distinctly different from the previously defined shared interoffice transmission UNE and those proposed herein for use by CLECs.

Lastly, the Telco proposes to make its unbundled dedicated and shared interoffice transmission facilities available to CLECs with the proviso that the CLEC will be permitted to combine dedicated and shared interoffice facilities with other network elements as required by the CLEC to satisfy its subscribers' requests for service. However, the Telco will not be responsible for combining network elements, except where available under previously approved tariffs. Telco Brief, pp. 11-13.

E. SIGNALING NETWORKS

The Telco proposes to make available to CLECs access to and use of the Telco's Signal System 7 (SS7) network as an unbundled network element. The proposed offering allows a CLEC to rout its subscribers' calls through a Telco-maintained packet switching unit termed a signal transfer point (STP). The Telco contends that STPs are used by the Telco and the CLECs for call setup and call routing applications on inter-office traffic. The Telco proposes to connect the STP to other parts of the Telco's

network by 56 kbps data circuits acting as signaling links, thereby providing the subscribing CLEC a high-degree of capability.

Where technically feasible and where equipment and facilities are presently available, the Telco proposes to provide access to the signaling network associated with each of a requesting CLEC's switches. This access will be: (i) at the "A" link level for individual switches; (ii) on the "B/D" link level where the requesting carrier has previously deployed its own STPs; or (iii) through interconnection of an SS7 Hub provider.

Additionally, the Telco proposes to make access to its signaling network available to a CLEC when a requesting CLEC purchases unbundled switching from the Telco. This offer will, according to the Telco, include number-related services when a CLEC purchases line-side local switching, and call setup and routing where a CLEC purchases trunk-side facilities for message trunks. Telco Brief, pp. 13 and 14.

F. CALL-RELATED DATABASES

The Telco proposes that any UNE offering designed to provide access to the Telco's call-related databases only provide such access through the Telco's signaling network described above. According to the Telco, the proposed method of accessing the Telco's databases and facilitating queries by CLECs of the Telco's switches is the most appropriate means of accessing the Line Information Database (LIDB), Toll Free Calling Database and any future database associated with long-term number portability. Access will be provided by means of physical access at the STP linked to the unbundled database.

The Telco proposes to permit those requesting CLECs that have previously deployed their own switch, or a CLEC that has purchased local switching UNE from the Telco, to utilize the Telco's STP in the same manner, and via the same signaling links, as the Telco itself. Through such access, a CLEC may provide its end users with call-related database-supported services provided by the Telco to its own end users served by that switch. Lastly, the Telco states that its UNE offerings comport with the §§251 and 252 provisions of the Telcom Act and the First Report and Order as interpreted by the Telco in April 1997. Telco Brief, p. 14.

III. PARTICIPANTS' POSITIONS

A. THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY (TELCO)

The Telco states that the instant proceeding represents the final step in the Department's review of its efforts to provide competing carriers (CLECs) access to its network on an unbundled basis in compliance with requirements set out in the Telcom Act and the First Report and Order. Specifically, this proposal lists the terms and conditions for use of and Telco charges for use of the Telco's UNE offerings: NIDs, local and tandem switching, interoffice transmission facilities (dedicated and shared); signaling networks and call-related databases.

The Telco's proposal requests that the Department: (1) approve its product descriptions for the NID; local switching, tandem switching, interoffice transmission facilities (dedicated and shared), signaling networks, and call-related databases; (2) endorse the adequacy of the cost studies; (3) adopt the Telco's proposed rates as the rates for the UNE offerings; and (4) defer requiring the Telco to provide common transport until the Eighth Circuit rules on the issue. Telco Brief, pp. 1 and 2.

1. Common Transport

The Telco argues that the Department should not require it to file a tariff for common transport as defined by the Third Order until the Eighth Circuit definitively rules on the petitions for review of that order. The Telco asserts that it filed tariffs for dedicated and shared interoffice transmission facilities based on its interpretation of the First Report and Order that was subsequently modified/clarified by the FCC to require ILECs to provide "common transport," which includes a combination of the end office switching element, the tandem switching element and interoffice transmission facilities. While the FCC subsequently required ILECs to provide common transport for CLECs, the Telco maintains that the FCC did not provide a specific time frame for compliance. Accordingly, no FCC requirement exists that

necessitates the Department order the Telco to provide this common transport for CLECs as part of this decision. The Telco claims that the Court is expected to rule on this issue by the end of the first quarter of 1998 and therefore, deferring ruling on this issue one month would not adversely affect any party. Telco Brief, p. 15.

The Telco states that in the First Report and Order, the FCC implemented Congress' definition of a "network element" as "a" facility or equipment used in providing a telecommunications service or the "features, functions, and capabilities that are provided by means of such facility or equipment." In accordance with that definition, the FCC determined that ILECs have an obligation to provide CLECs each UNE facility or functionality "separate from the facility or functionality of other elements, for a separate fee." Furthermore, the Telco claims that the FCC specified in the First Report and Order that CLECs would have such unbundled access to seven categories of network elements, including the local loop, switching capability (both local switching and tandem switching), and interoffice transmission facilities. The FCC further concluded that ILECs have an obligation to provide unbundled local and tandem switching transmission facilities individually, as separate network elements, enabling a CLEC to buy access to the precise facilities (and only those facilities) on the particular routes that the requesting CLEC sought. According to the Telco, by requiring ILECs to provide unbundled access to interoffice transmission facilities, the FCC emphasized its conclusion that it was technically feasible for ILECs to unbundle those interoffice facilities as individual network elements. Therefore, ILECs must provide unbundled access to dedicated transmission facilities between LEC central offices or between such offices and those of competing carriers.

Regarding the assembly of individual network elements into functional combinations, the First Report and Order gives a requesting CLEC two options: (1) the CLEC can combine the elements itself pursuant to 47 C.F.R. §51.315(a), which restated the requirement of §251(c)(3) of the Telcom Act that ILECs provide the UNEs in a manner that allows requesting telecommunications carriers to combine such network elements to provide telecommunications services or (2) CLECs may require the ILEC to combine the elements. According to the FCC's interpretation of §251(c)(3) of the Act, an ILEC is required to combine network elements in any manner as required by a CLEC. The same FCC rules, according to the Telco, also forbid ILECs to separate any elements that were previously combined in their networks.

The Telco claims that it filed its proposal for dedicated and shared interoffice transmission facilities in accordance with the First Report and Order. According to the Telco's proposed definition shared facilities: (i) consist of interoffice transmission facilities; (ii) are purchased on an unbundled basis; and (iii) may be shared by more than one customer or requesting carrier.

The Telco did not file a "common transport" offering as part of its proposal which by definition would: (i) consist of interoffice transmission facilities and switching, (ii) be shared by ILECs and interexchange carriers (IXCs); and (iii) not be unbundled because it is not measured once it is separated from the switch. The Telco states its unwillingness to file such an offering is based upon (i) its interpretation of the First Report and Order, (ii) technical limitations associated with common transport and (iii) its opinion that shared interoffice transmission facilities is an unbundled element while common transport is not.

Since the Telco's filing, the Eighth Circuit and the FCC have issued rulings that materially affect the Telco's interpretation and understanding of shared transport and combinations of UNEs. The Telco asserts that two of the Eighth Circuit's rulings and FCC orders have central importance to this case. In particular, CLECs have the right to purchase network elements on an individual, unbundled basis and that ILECs cannot be required to combine such elements on the entrant's behalf. The Telco states that the Court concluded a requesting carrier must combine unbundled elements themselves and that the Telcom Act does not require the ILECs to do all the work. According to the Telco, the Court vacated FCC provisions that required ILECs to combine UNEs on behalf of CLECs on request. The Telco notes that the Court did not address the prohibition of ILECs from separating elements that were already combined in their networks.

Additionally, the Telco notes that the Court rejected the ILECs' argument that purchasers of UNEs must be required to provide some facilities of their own, as opposed to providing local service entirely through UNEs obtained from the ILEC. The Telco further notes however, that the Court made

clear that it did so not because UNEs and resale are interchangeable, but it discerned some critical differences between the two provisioning options available to CLECs. Specifically, the Court stated that, in light of its ruling on element combination, a purchaser of UNEs must assume any additional cost of recombining unbundled elements acquired from the CLEC. The Court also emphasized that any purchaser of UNEs must assume the business risk of selecting and making an up-front investment in particular facilities. That is, a carrier purchasing unbundled access would be required to make an up-front investment that is sufficient to pay for the cost of acquiring access to all of the unbundled elements absent knowing whether consumer demand will be sufficient to cover such expenditures.

The Telco asserts that the Court's decision confirmed that to qualify for the cost-based prices applicable to UNEs, and avoid the subsidies currently built into wholesale rates but not built into the prices of UNEs, a CLEC must be more than a passive reseller of the ILEC's services. The Telco also asserts that the Telcom Act requires a CLEC using UNEs to assume responsibilities, expending time and resources recombining unbundled elements and bearing greater risks in attempting to match its supply with its demand.

The Telco maintains that the Third Order requiring ILECs to provide "shared transport" materially affected this proceeding. According to the Telco, the newly defined shared transport, which the FCC claims is a network element, differs in two ways from the unbundled access to interoffice transmission facilities established in the First Report and Order and from the Telco's proposed tariffs. Foremost, the Third Order rejects the notion that CLECs must select in advance the specific interoffice transmission facilities of the ILEC to which they want access. The Telco states that the FCC's proposed shared transport offering does not limit or pre-identify a portion of the network that is within the scope of the requested service. Instead, the FCC's proposed shared transport offering provides a CLEC the right to use all of the ILEC's interoffice transport facilities collectively, on an undifferentiated basis. The Telco further contends that the Third Order suggests that a CLEC need not make an up-front investment in specific interoffice transport facilities prior to seeking shared transport from the ILEC but would permit CLECs to use such facilities on an "as-needed" basis for whatever traffic they give to the incumbent to transport.

The Telco concludes that the Third Order provides CLECs the right to use ILEC facilities on the same as-needed, unit-by-unit basis that characterizes resale authority granted CLECs by the Act. Rather than specifying and combining the particular interoffice transmission facilities that will be used to carry CLEC traffic, the Telco contends that the Third Order unfairly allows CLECs to obtain use of an ILEC's existing combination of interoffice facilities to transport each call from an originating end office to a terminating end office, relying on the routing instructions in the ILEC's switches to select the particular facilities to be used on a call-by-call basis.

In the opinion of the Telco, "shared transport" involves the act of provisioning all physical transport and switching facilities resident in an ILEC's interoffice network as a combined whole and on an as-needed basis to a CLEC but charged for at the cost-based rates reserved by the Act for UNEs. The Telco posits that an ILEC selects which links to use, as it does for its own traffic, by means of routing tables installed in the Telco's switches. Accordingly, the Telco maintains that a shared transport offering such as that proposed by the FCC, by definition, provides the CLEC access to switching functions as well as to the transmission links.

The Telco states that the last major ruling affecting its April 4, 1997 filing was the Rehearing Order issued on October 14, 1997 by the Eighth Circuit wherein it granted the petitions filed by the ILECs in Iowa Utilities Board with respect to the issue of UNE combinations not specifically addressed in the Court's original ruling earlier in the year. The Telco contends the FCC combination rule provided that ILECs not separate requested network elements that the ILEC currently combines except upon request of the CLEC. The Telco notes that the Court amended its opinion in Iowa Utilities Board to strike down §51.315(b) as contrary to the Telcom Act in its Rehearing Order. The Telco also notes that reinforcing its earlier decision regarding network element combinations, the Court ruled that §251(c)(3) of the Telcom Act requires an ILEC to provide access to the elements of its network only on an unbundled (as opposed to a combined) basis, and does not permit a CLEC to purchase an ILEC's assembled platform(s) of combined network elements, or any lesser existing combination of two or more elements. Further, the Court stated allowing any acquisition of already combined elements at cost based rates for unbundled

access would obliterate the distinction Congress drew in the Telcom Act at §§251(c)(3) and (4) between access to UNEs and a purchase at wholesale rates of an incumbent's retail services. Consistent with these principles, the Telco argues that the Court vacated §51.315(b) of the Telcom Act finding the specific regulation to be contrary to §251(c)(3) of the Telcom Act. Specifically, the FCC rule would permit a CLEC access to an ILEC's network elements on a bundled rather than an unbundled basis. Accordingly, the Telco requests that the Department not require it to provide CLECs a common transport offering until the Eighth Circuit resolves the common transport issues presently before it. Telco Brief, pp. 20-28.

Provisions of the Telcom Act dictate the methods of market entry available to CLECs. Two of three ways available for CLECs to compete in local markets involve the use of ILEC facilities (i.e., resale under §251(c)(4) of the Act and unbundled access to network elements under §251(c)(3)) of the Act. The Telco maintains that critical pricing differences exist between the two and must be recognized by the Department in this proceeding. Specifically, for resale the Telco argues that a CLEC receives a wholesale discount off the ILEC's retail price and leaves to the incumbent the costs and risks of provisioning the requested service. When requesting unbundled access to network elements, a CLEC generally receives a larger discount than offered on resale services but assumes responsibility for attendant technical support and financial investment. The Telco maintains that the Third Order collapses the statutory distinction between these two options, effectively nullifying the resale provision and giving a CLEC the benefit of unbundled access without the accompanying responsibilities assumed by the ILEC in a resale mode.

Likewise, the Telco argues that the FCC's interpretation of interoffice facilities in its Third Order eliminates any distinction between UNEs and resale in precisely this manner. As defined by the FCC, shared transport gives CLECs access to all of the individual network elements in an ILEC's entire interoffice network as a bundled whole. According to the Telco, AT&T admitted in this proceeding that each of the components comprising common transport are separate network elements and include end office switching, tandem switching, and interoffice transmission facilities. The Telco contends that, by virtue of the FCC definition, a CLEC does not need to commit any time or money combining the Telco's interoffice facilities with separately provided switching elements because shared transport will force the ILEC to provide and maintain an existing combination of network elements that the incumbent did the work to assemble. The Telco posits that a CLEC need not be concerned about selecting individual transport links because shared transport shifts all of the work of doing that job to the ILEC.

The Telco also contends that shared transport relieves a CLEC of the significant risk associated with any up-front investment in infrastructure because the risk of insufficient (or excessive) customer demand is assumed by the ILEC under the FCC interpretation. According to the Telco, the ILEC must forecast demand for its facilities and construct the necessary infrastructure to meet that anticipated demand bearing the risk that, if the forecast is inaccurate, its network will be either overbuilt or overloaded. This, according to the Telco, runs directly contrary to the Court's ruling in Iowa Utilities Board. The Telco states that the FCC, having lost in its efforts to make incumbents assemble networks for CLECs in the Court, does an abrupt about-face in the Third Order on the risk issue by protecting CLECs from the risk of misjudging demand.

The Telco asserts that the impracticality of a CLEC leasing specific interoffice facilities for small traffic volumes necessitates "shared transport." The Telco further argues that a shared transport facility, if defined as the FCC has, poses an immediate and real threat to the Telco's revenue base. By allowing CLECs the capability to purchase the Telco's combinations of UNEs at rates that are lower than comparable resale services, and bill all of the associated access charges, the FCC has created a significant risk to the wholesale revenues of the Telco. The Telco maintains that this in turn places a substantial burden on those services like residential local service which are subsidized by access revenues. According to the Telco, shared transport potentially allows CLECs to game the wholesale provisioning process and avoid the purchase of the products that provide the ILEC with higher levels of contribution thereby preventing the ILEC from offsetting the high costs of providing local service.

In summary, the Telco concludes that shared transport cannot be squared with the Telcom Act or the Court's decisions in Iowa Utilities Board and it should not be required to provide common transport until the Eighth Circuit makes a final ruling. Telco Brief, pp. 28-31.

2. Telco Cost Studies

Following the April 4, 1997 filing, the Telco states it reviewed its initial assumptions used in determining baseline costs for its proposed UNE offerings and concluded that modifications were needed to account for progress by the Telco in developing provisioning processes for the proposed services. The Telco also states that while it continues to benefit from the learning curve of competition its proposed service rates are based on the best cost information available today.

The Telco claims that its UNE cost studies are consistent with studies endorsed by the Department in Docket No. 96-09-22 and exceed the level of cost information filed by the Telco with the Department in that proceeding. According to the Telco, the UNE cost studies filed in this proceeding properly identify the long run incremental costs associated with providing the proposed UNEs. In support of that opinion, the Telco asserts that its costing methodologies are consistent with sound economic principles that all costs incorporated in the studies are forward looking in nature and don't contain joint or common costs as part of recurring or nonrecurring costs. The Telco contends that with the exception of market forecasts, the cost studies filed in this proceeding include sufficient documentation to enable the Department and the parties to review and authenticate the Telco's findings. The Telco also states that as in Docket No. 96-09-22, it utilized the Model for Incremental Cost and Revenue Analysis (MICRA) cost model as the basis for its study process. The Telco claims that cost studies in this proceeding contain new cost information, where available, and relevant existing data thereby improving upon the quality of the results. Furthermore only direct costs (i.e., costs specifically attributed to the provision of a service and which would not be incurred by the Telco if the service was not offered) were included in the Telco's study.

The Telco contends that its cost studies accurately represent (on a forward-looking basis) its work effort and provisioning flow required to support unbundled network element offerings. The Telco posits that flow-through rates contained within its studies fairly represent the order volumes that require manual assistance with work times only applicable to that portion of the orders requiring manual assistance of the Telco to complete. The Telco concludes that it has fulfilled the Department's pronouncements on the conduct of cost studies and has provided sufficient documentation to support each step in the cost study process. Telco Brief, pp. 32-34; Telco Reply Brief, pp. 2-4.

Regarding switching costs, the Telco asserts that its estimated costs, which incorporate any discounts it receives from switch vendors, should be approved by the Department as the basis for establishing its switching rates. The Telco requests the Department reject the parties' assertions that it is deploying the wrong types of central office technology and allow it to run its own business. According to the Telco, its recurring cost investment inputs were derived from the results of generally accepted Bellcore cost models. The Telco argues that switching costs presented in its studies were developed with the complement of switches currently installed in its network and not a theoretical model. The Telco maintains that the vast majority of its switches are and will continue to be 5ESS switches; accordingly, it has used that technology as the principal switch platform for its cost studies.

The Telco indicates in its proposal that when negotiating contracts with switch vendors it receives certain discounts associated with the growth and replacement of switches. In compiling its original April 4, 1997 filing, the Telco claims that it premised its cost studies on the existent switch discounts. In determining relevant investment costs, the appropriate discounts were applied and calculated outside of the Bellcore models. Concurrent with the commencement of hearings in this proceeding, the Telco entered into two new vendor switch contracts with Siemens and Lucent providing the Telco significantly different discounts than those employed in the earlier cost studies. Based on new contract terms, the Telco recalculated costs for all switching elements based on the prospective view of purchases for growth and switch replacement, determined aggregate discount levels, and reran the cost studies, filing revised cost study results on October 16, 1997.

The Telco contends that the CO switch investment costs included in the original filing were developed using the prices of the contracted switch vendors, Lucent Technologies, Siemens and Northern Telecom. The Telco states that Siemens provided a price per line figure from which the Telco could calculate a discount rate based on the vendor price table contained in the SCIS Model. Northern Telecom offered a direct discount from which a discounted price per line could be calculated. Lucent

offered two prices for the Telco to use: (1) a price per line for CO switches being replaced from which a discount is calculated based on the vendor price table in the SCIS Model and (2) a discount rate applicable to all other purchases from Lucent. The Telco claims that based on the number of lines that would be added under each contract, the Telco weighted the two Lucent prices to produce an aggregate cost for Lucent switching investments. According to the Telco, the respective average discounts were applied to: (1) the total lines added to existing analog switches being replaced by Lucent digital switches plus total existing lines being replaced; and (2) total lines added to the existing digital switches through 2001 plus the existing lines in service. The Telco, therefore concluded, that its cost studies correctly average both existing and growth lines to determine the proper aggregate economic value of all lines in service.

The Telco used a forecast period for its cost studies intended to ensure that all analog lines being replaced by digital switching would be captured in its analysis. The Telco maintains that its cost studies recognize the fact that all existing lines carry an economic cost equal to the cost of adding lines to each switch and they correctly average the existing and growth lines to determine the proper aggregate economic value of all lines in service producing a weighted average TSLRIC based on the total lines.

The Telco notes that the costing methodologies proposed by MCI Telecommunications (MCI) and AT&T Communications of New England (AT&T) have the net effect of calculating the switch discount based on purchased lines only, thereby placing an economic value of zero on existing switching lines. The Telco contends that the AT&T and MCI approaches ignore its network deployment and, therefore, should be rejected by the Department. According to the Telco, the MCI and AT&T approaches do not represent a realistic view of the actual number of lines the Telco expects to place into service by the end of a five-year cost study period. The Telco notes that the Department has rejected similar attempts to cost services based on hypothetical least cost technologies and has directed that telecommunications services be priced based on actually deployed technology.

Additionally, the Telco asserts that its cost studies incorporate economic and strategic foundations for a two-vendor switch architecture. The Telco claims that many factors enter into its decision process for the growth and modernization of the switching network. These factors include work force impacts, training, circuit card sparing levels, documentation, operations support systems interfaces, and the negotiated vendor discounts. The Telco also claims that these specific factors, along with the existing network configuration and specific location of the switches and ongoing provisioning and maintenance requirements affect the switch deployment program. According to the Telco, a commitment to the mixed technologies of two vendors translates into an increased maintenance expense, additional personnel, documentation and circuit card sparing while also providing for a better leveraging of pricing.

The Telco states that its technology deployment strategies take these considerations into account and that such decisions are reserved inherently for company management and should not be second-guessed through hypothetical switch deployment schemes with no correlation to its network. The Telco notes that the Department has previously deferred to its managerial decision-making and states that the same level of deference should be permitted to technology matters in this proceeding. See for example, the Department's April 23, 1997 Decision in Docket No. 96-09-22. Telco Brief, pp. 35-39; Telco Reply Brief, pp. 4 and 5.

Relative to UNE offerings, the Telco argues that its cost to provide unbundled elements is based on the development of the individual UNE products and the process flows used to provide them to CLECs. The Telco states that its April 4, 1997 filing reflected the best information it had available to it regarding the development and provisioning of UNEs. The Telco asserts that provisioning of UNEs often requires issuance of multiple related orders to handle a single network element thereby introducing additional manual effort not required by the Telco's internal provisioning processes. The Telco notes that the Mechanized Service Access Platform (MSAP) provides the CLECs certain electronic service ordering capabilities but manual work efforts remain necessary to provision the service. These additional activities include work required to assign facilities, program software, customize routing, design circuits, perform cross connects and coordinate work efforts. The Telco contends that its nonrecurring charges are appropriately based on the level of flow through and/or manual intervention.[2]

[2] Flow through, as used in the Telco's cost study, are orders that will flow through an individual system

Before filing its updated cost study, the Telco claims it re-evaluated the product descriptions, process flows, operational support systems and manual work efforts necessary to provision each element. As part of that re-evaluation, the flow-through rates used by the Telco were validated. The nonrecurring cost formulas were also validated for all non flow-through work efforts. The Telco contends that the cost studies it filed on October 16, 1997 represent the most up-to-date information on the development and provisioning of these elements. The Telco further states that its revised cost studies also provided changes to several nonrecurring cost elements and better reflect the efficiencies it expects to receive as it gains experience in provisioning its UNE offerings.[3] These changes affected all the nonrecurring costs, with the exception of the NID. Generally, the costs and rates covered by the cost studies decreased as a consequence of performing the reevaluation.

The Telco notes in its revised submission that its repair database costs in the original filing reflected 1994 cost levels associated with data processing; those costs, however, were subsequently revised to reflect current vendor prices to the Telco. The Telco also revised the line-side and trunk translations due to more aggressive forward-looking analysis that assumes CLEC orders will be 99-100% accurate and not require manual intervention. According to the Telco, this revision produced a 15% increase in the flow-through rate for line-side translations and a 40% decrease for time associated with trunk translations.

The Telco also notes that the WORD document is the design and provisioning document for trunk side connections, interoffice facilities and DID services. The Telco states that in the original filing, it used a cost per circuit to calculate expenses, equally distributing the costs across both initial and additional facilities for connection and disconnection. In the revised cost study the Telco relied upon actual time and functions performed to process a trunk or facility connection or disconnection and that the costs for the SS7 link, port and databases were also revised to reflect the costs associated on a per circuit basis. Additionally, translation costs and SCP database back-up expenses were appropriately removed.

Finally, the Telco re-examined its identifiable costs for establishing line class codes supporting CLEC specified traffic routing. In its April 4, 1997 filing, the Telco assumed 40-hours of analysis and preparation time would be required to properly provision customized routing for a CLEC. According to the Telco the time is needed to thoroughly review each CLEC order for accuracy, content and consistency before building any translations table needed for line class codes.

In its revised filing, the Telco eliminated the proposed time allotment adopting instead a forward-looking cost perspective. In the new filing, the Telco assumed CLEC orders such as those for line class codes will not require Telco review and that translation tables will be built in a manner and at a time requested by the CLEC. The Telco claims that despite AT&T's contentions, its revised cost study assumes costs for detailed design and engineering work to be performed only once by the Telco. According to the Telco, each CLEC currently has, and will continue to have, different routing requirements for its calls based upon the dialing patterns, handling requirements and proposed destination.

In addressing the issue of non-recurring charges in its cost studies, the Telco assumed a level of manual intervention in provisioning UNEs to continue to be necessary in the future therefore eligible for inclusion in its study. The Telco contends that relatively little of the CLEC provisioning process "flows through" or is just handled by mechanized systems. Despite that fact the Telco asserts that it has been able to achieve higher than industry-average flow-through rates for many of its provisioning systems supporting non-complex services, (i.e., plain old telephone service (POTS)). Conversely, the Telco acknowledges that it has experienced lower flow-through rates (relative to its non-complex services) for more complex services such as trunk side connections and interoffice transmission facilities. In its defense of this fact, the Telco suggests that its experience parallels that of the industry in general.

For more complex processes, (e.g., unbundled local switch trunk side connections), the Telco

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without manual assistance. If a service order requires manual assistance, at any level, it is not considered by the Telco to be flow through.

[3]Specifically, five cost elements changed as a result of this review: (1) repair costs; (2) line and trunk translations; (3) WORD document; (4) SS7 links ports and databases; and (5) customized routing.

claims the provisioning process is even more complex. According to the Telco, these more involved CLEC requests are where most of the unbundled elements "fall out" of the provisioning process. To date, only local switching line-side and NIDs do not require complex processing and do not exhibit the characteristic fall out associated with other unbundled elements.

The Telco notes in its representations that MCI does not accept its interpretation of "fallout" as characterized above. According to the Telco, MCI's definition of flow through is unreasonable because it does not classify orders that entail manual intervention or manual assistance for all or part of the order as "fallout." The Telco argues that MCI limits its interpretation of "fallout" as only those orders that are designed to flow through the OSS but don't because of a process failure. According to the Telco, MCI acknowledges the fact that manual intervention is characteristic of provisioning many unbundled elements, but notes that manual intervention alone is not sufficient cause to classify an order as "fallout" and the associated cost as eligible for inclusion in wholesale Telco prices.

Finally, the Telco argues that the improving flow through is a very complicated undertaking and cannot be summarily endorsed by the Department as imperative without giving due consideration to other factors that bear upon the quality of any such commitment. For example, the Telco states that the level of CLEC demand for products/services which experience "fallout" must be paired with the cost for manually processing those products/services and weighed against any investment necessary to support enhanced flow through. The Telco concludes that its cost studies accurately account for the manual effort involved in provisioning UNEs. Telco Brief, pp. 39-45.

3. Markups

The Telco indicates in its cost studies that it has proposed markups to its TSLRIC-based costs that are reasonable under the Telcom Act, comport with prior Department Decisions, and reflect in their design: (1) the market value of comparable services, (i.e., vertical features); and (2) the price of identical access services. The Telco, therefore, requests the Department approve its proposed markups and tariff rates.

In support of its request, the Telco reiterates its opinion that §251 of the Telcom Act imposes upon ILECs a duty to provide a requesting CLEC access to UNEs 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 §§251 and §252 of the Telcom Act. According to the Telco, §252 of the Telcom Act provides for determination solely by the Department of any rate for interconnection and unbundled access based on cost and may include a reasonable profit. According to the Telco, Congress intended for UNEs to incorporate both a cost and profit component which it has reflected in its proposed UNE prices. To further reinforce its position on this matter, the Telco indicates that prior Department Decisions on unbundled element pricing conform with that interpretation of Congress' intent to recognize the need for the Telco's prices to provide some level of contribution toward its joint and common costs .

The Telco notes in its submissions that it has no incentive to over- or under-price its offerings in the wholesale market and that its only goal is to keep as many subscribers as possible on its network. Given the fact that market alternatives to its UNEs exist, the Telco maintains that pricing its services too high could cause it to lose wholesale customers to other providers or encourage CLECs to build their own facilities. Accordingly, the Telco's approach to setting wholesale prices, whether for access facilities or unbundled elements, is to provide services at competitively attractive prices. Additionally, the presence of competitive alternatives to certain wholesale services means that any effort to price unbundled elements significantly above cost is a virtual impossibility. In theory, if the market is unwilling to support a substantial markup for unbundled elements, the ever-present competition will force prices for elements to drop.

The Telco contends that the positions of other parties in this proceeding regarding the question of markups are unrealistic and unsupportable. Specifically the Telco cites Cox's recommendation that reasonable profit be restricted to the cost of capital as an example of an unrealistic expectation. The Telco asserts that Cox's definition ignores the fact that profit margins vary according to the service or product offered in a competitive marketplace. The Telco maintains that cost of capital is a function of the average return on capital across a broad range of industries, and does not reflect the marginal

efficiencies and productivities of any one market participant. According to the Telco, if Congress or the FCC had intended for reasonable profit to be restricted to the market rate of return on capital, they could have specified so in their legislation. Telco Brief, pp. 46-48; Telco reply Brief, pp. 8-10.

The Telco also argues that it has proposed a markup above its costs for providing local switching which it considers to be reasonable given the value placed on vertical feature capabilities resident within its local switches by the market. According to the Telco, vertical features resident afford a CLEC the technical ability to provide a number of telecommunications services to a customer not otherwise available. Furthermore, the Telco notes that access to local switching provides a CLEC the ability to market additional features and functions to a customer at virtually no additional cost, making clear that the value of the features is dramatically larger than the cost to provide them. Therefore, the Telco concludes that the proposed markups on vertical features resident in its local switch are reasonable when compared to comparable services in the marketplace. Telco Brief, pp. 48 and 49.

In matters related to the pricing of interoffice transmission facilities, signaling networks and call-related databases, the Telco proposes that pricing for these elements be priced to conform with similar services provided to CLECs and IXCs by the Connecticut Access Service Tariff (Access Tariff). In requesting such approval, the Telco asserts that it can avert arbitrage by CLECs and further pressure on the Department for immediate access reform. The Telco maintains that these interoffice transmission facilities are physically and functionally identical to certain services provided IXCs and CLECs in the Telco's Access Tariff. Specifically, the Telco charges that dedicated interoffice transmission facilities are essentially identical to inter-wire center transport, components of POTS interconnection trunking and switched access offered under the Access Tariff; that shared interoffice transmission facilities are physically identical to dedicated interoffice transmission facilities provided for in the Access Tariff; that Dedicated Signaling Transport offered under the Access Tariff meets the FCC requirements for providing CLECs access to the Telco's signaling network; and that database queries are currently provided under the Access Tariff in a manner that satisfies the FCC's requirement to provide CLECs access to call-related databases. Based upon the general availability of these services in the Telco's Access Tariff the Telco concludes that pricing unbundled interoffice facilities UNEs at a contribution level that provides price parity with the Access Tariff offerings is reasonable.

Reiterating its strong opposition to limits on markups, the Telco states that any requirement by the Department to limit pricing UNEs to or near the respective incremental cost of the unbundled elements would be detrimental to its financial health. The Telco argues that if the Department were to set prices for these elements at a level lower than the rates provided for equivalent facilities by the Access Tariff, arbitrage by the CLECs would effectively nullify the need for an access tariff. While the CLECs cease to use the Access Tariff the Telco would continue to be required to expend invaluable resources unnecessarily to maintain the Access Tariff services. That requirement alone, according to the Telco would severely impact its ability to meet stated service commitments to both wholesale and retail customers. The Telco asserts that because a CLEC will undoubtedly choose to purchase lower-priced unbundled elements instead of wholesale services contained in the Access Tariff, prices set for unbundled elements will effectively supplant any pricing structure in place under the Access Tariff without opportunity for any adjustment by the Telco of its revenue sources.

The Telco also asserts that any threat to its revenue sources such as that posed by letting CLECs purchase access-related services as UNEs at prices that reflect their incremental cost plus a minimal markup is unsupportable. The Telco postulates that if the Department were to set UNE prices at levels that would permit CLECs to avoid using the Access Tariff for certain services would make it difficult for the Telco to continue maintaining its facilities at historic levels. Furthermore, it is the opinion of the Telco that such a decision would severely impair the Telco's ability to compete in the telecommunications marketplace. Finally, the Telco argues that its position on this issue is consistent with the First Report and Order which concluded that opening local exchange markets to broader competition before completing access charge reform could lead to abuse of the system by CLECs. Accordingly, the FCC introduced an interim charge to serve as a disincentive to CLECs considering arbitrage.

The Telco asserts that pricing unbundled elements such as interoffice transmission facilities, signaling networks, and call-related databases at levels that maintain parity with existing and future Telco access charges provides the same disincentive envisioned by the FCC while preserving the competitive

telecommunications marketplace envisioned by Congress. The Telco contends that by extending parity to both access charges and unbundled elements even as reform brings lower prices for access services, it will provide equally lower prices for their unbundled element equivalents. Thus, the goal of CLEC lower prices will be realized without endangering the Telco's ability to remain competitively viable, without circumventing the current access system, and without accelerating access reform. Telco Brief, pp. 50-52.

B. OFFICE OF CONSUMER COUNSEL (OCC)

1. Pricing

OCC recommends the Department retain its long-standing practice of setting prices based on forward-looking costs of the Telco. OCC maintains that by setting UNE prices in accordance with TSLRIC-based costing methodologies, the Department will move one step closer to realizing the competitive telecommunications market envisioned by Public Act 94-83, An Act Adopting the Recommendations of the Telecommunications Task Force, and the Telcom Act. While noting that the Department has historically provided the Telco opportunity to recover its common costs in the rates it has approved, OCC objects to the Telco's proposed markups in this proceeding deeming them unreasonable, inconsistent with the Department's prior directives and unsupported by any valid economic analysis. OCC urges the Department to reject the Telco's proposed markups, which range from 40% to 11,000% and adopt a uniform 25% markup above TSLRIC on all recurring UNE prices. OCC Brief, pp. 3 and 4; OCC Reply Brief, pp. 2-4.

OCC believes that pricing decisions made by the Department in this matter are critical to the development of local competition. Accordingly, OCC recommends that the Department price UNEs as close to their underlying TSLRIC to provide CLECs the most economic price while sufficiently compensating the Telco for costs incurred provisioning unbundled network elements. According to OCC, the Department will, by setting UNE prices close to TSLRIC, stimulate facilities-based competition by keeping CLEC costs for essential UNEs at a reasonable level. OCC maintains that an extraordinary markup above TSLRIC will unduly inflate prices for UNEs to the detriment of facilities-based competition and ultimately consumers. OCC concludes that the Telco's contribution must be made on true forward looking incremental costs and limited markups. OCC Brief, pp. 5 and 6.

OCC contends that the Telco is proposing network element prices that exhibit unreasonable markups above their incremental cost. Those markups, according to OCC, are inconsistent with the Department's previous positions on pricing UNEs under the Act, are unreasonable on their face, and artificially and inefficiently inflate the price of network elements in Connecticut.

OCC further argues that the Telco's proposed pricing methodology is inconsistent with explicit orders issued by the Department addressing the recovery of common costs for network elements. The OCC notes that the Telco has proposed rates substantially above their respective TSLRICs in order to provide contribution toward the Telco's common costs. Specifically, the Telco indicated that its prices must provide, on average, a 59% contribution toward joint and common costs to ensure that its revenue sources services will adequately cover the Telco's projected revenue requirement. OCC maintains that a 59% markup is the same level of contribution to common costs that the Department denied in Docket No. 96-09-22. OCC contends that like the Telco's pricing proposal in Docket No. 96-09-22, the Telco's pricing structure in this proceeding does not reflect forward-looking costs but rather pricing strategies intended to recover its embedded historical costs. OCC states that any decision by the Department to provide assured recovery of the Telco's embedded cost through contribution defeats the economic rationale for using TSLRIC methodologies. For the same reasons cited in the Decision in Docket No. 96-09-22, OCC recommends that the Department dismiss the Telco's proposed markups in this proceeding and apply markups to the Telco's UNE prices that provide a 25% contribution. OCC Brief, pp. 6-8.

OCC contends that the Telco's failure to present to the Department an appropriate common cost study renders its proposed markups above TSLRIC unreliable. OCC maintains that the Telco has not submitted a definitive forward-looking common cost study with which the Department can calculate an appropriate level of contribution. OCC notes that the Telco has not performed any sensitivity-analyses to determine the anticipated demand for the different elements at different price levels. OCC states that if one couples the substantial markups proposed by the Telco with its failure to forecast demand and

conduct a thorough common cost study, the reliability of the proposed contribution levels is questionable.

OCC offers the opinion that the Department faces the choice of adopting the Telco's proposed contribution levels thereby rewarding the Telco for failing to produce an acceptable cost study or it can order a 25% contribution level that is consistent with past Department Decisions. In the absence of an approved common cost study, OCC recommends that the Department limit the Telco's markups to 25% for all recurring UNE prices under consideration in this proceeding. OCC Brief, pp. 9 and 10.

In further support of its recommendation for limiting markups, OCC asserts that proposed prices for transmission, signaling and databases are not cost based as required by the Department. Noting that the Telco proposes to set prices for these functions at parity with equivalent service offerings found in its access tariffs, OCC maintains that the Telco's proposal violates the Department's directive that UNE rates be cost based. According to OCC, the Telco failed to set prices that conformed with the Department's rules of price construction which provide only for recovery of the cost of providing the service plus a reasonable profit. According to OCC, the Telco's proposed markup for these service functions do not constitute reasonable profit, are inconsistent with the Act and previous Department Decisions and therefore should be rejected. OCC Brief, pp. 10 and 11.

OCC is not persuaded by the Telco's arbitrage argument. In the opinion of the OCC, the arbitrage argument is a blatant attempt to gain unwarranted regulatory protection from competitive pressures. OCC contends the Telcom Act requires prices for unbundled services be based on cost, not the threat of arbitrage. OCC offers the opinion that the Telco fails to acknowledge that what it characterizes as arbitrage is actually a competitive alternative consistent with Public Act 94-83 and the Telcom Act. OCC asserts that the Telco is less concerned with limiting arbitrage or ensuring parity than it is with extending monopoly pricing techniques employed with access to the pricing of UNEs. OCC concludes that the Telco selectively supports parity as a means to sustain excessive prices but invokes arbitrage when parity works to lower prices. OCC Brief, pp. 11 and 12.

OCC further argues that the Telco's proposed contribution level creates inefficient and artificially inflated rates, thereby presenting harm to both consumers and the competitive process in Connecticut. OCC maintains that should the Department permit the Telco to markup its unbundled elements to a level that equates to parity with the equivalent access charge tariff rate, CLECs will experience the same economic problems in the future as those posed by the current Telco access charge structure.

OCC cites the experience of IXCs with high access charges as illustrative of the current problem. In the opinion of OCC, the retail price of interexchange toll service is unnecessarily high but dictated principally by the high price of access to the Telco's network. OCC contends that the Telco proposes in this proceeding to spread the current access pricing distortion to all intrastate telecommunications services for which UNEs are used effectively binding the prevailing price of local exchange services for Connecticut consumers and making them impervious to competitive forces. In the end, according to OCC, Connecticut consumers will be forced to pay unnecessarily high retail rates for all Telco services, effecting an improper transfer of real wealth and purchasing power from the general public to the Telco.

OCC further argues that inflated contribution levels cause an artificial and inefficient stifling of demand for all services that rely on UNEs by creating a distortion between UNE price and cost. By artificially and inefficiently suppressing consumption the Telco's markups will produce a deadweight loss to consumer welfare. According to OCC, there is no reason for the Department to permit such economic distortions. OCC Brief, pp. 12 and 13.

Lastly, OCC maintains that any deviation between UNE prices and their respective costs produced by the Telco's proposed markup conveys misleading signals to the competitive market resulting in an inefficient allocation of resources. OCC contends that CLECs and customers will wrongly entertain alternative suppliers for needed facilities because the Telco's prices are set so far above their real cost. This situation would not, according to OCC, occur if the Telco's contribution were set at a reasonable level based upon their cost. OCC contends the Telco's proposed markups create an artificial baseline for all CLECs, thereby increasing the actual cost for all CLECs to provide service, ultimately burdening consumers with the cost of inefficient investment.

Similarly, OCC argues that economic inefficiency discourages CLEC investment in alternative infrastructure and results in subscribers remaining with the incumbent's network only to pay higher average rates as the fixed costs of the network are spread over a smaller base. OCC asserts that by pricing contribution at many multiples above cost, the Telco is encouraging customers to abandon its network even where it may be more efficient than that offered by a CLEC.

OCC contends the Telco's excessive access charges are not only economically inefficient but serve to limit the ability for competition to develop in Connecticut's telecommunications market. OCC asserts that local exchange competitors will not be able to duplicate the Telco's network capability or capacity in the early stages of competitive development. For new entrants to provide ubiquitous local exchange service they would have to rely, according to OCC, on the Telco's UNEs and be required to absorb the Telco's inflated contribution contained in the Telco's UNE prices. OCC asserts that such excessive markups will frustrate the goals of competition by limiting the ability of the CLECs to exert pressure on the Telco to correct past inefficiencies. OCC claims that the Telco has wrongly relied upon its embedded costs to base its proposed rates and recommended markups above cost that do not reflect the forward-looking incremental costs needed by competitors to enter the market. OCC Brief, pp. 14-16.

C. AT&T COMMUNICATIONS OF NEW ENGLAND (AT&T)

1. Switch Costs

AT&T asserts that the Telco's switch costs are excessive and should not be accepted by the Department as representative of their real cost. It is the contention of AT&T that the Telco has understated the vendor discount it receives on switch purchases and does not take into account the total service demand supported by those switches. AT&T also asserts that the Telco improperly uses 1) the average, historical replacement cost of its switches in its submissions rather than the projected cost for its planned replacements and 2) where planned replacement is considered the Telco assumed a higher replacement cost than that charged by its vendors for two-thirds of its replaced switches.

AT&T predicates much of its criticism of the Telco's submissions on the lack of cooperation provided by the Telco to the CLECs. Noting the difficulty parties experienced in simply determining the factual basis for the Telco's calculation of switching element costs, AT&T posits that the experience reveals how unreliable the Telco's cost studies are. AT&T also notes that the Telco's April 4, 1997 filing did not provide CLECs either the computer models or essential design documentation for the models. AT&T claims that while some additional information was provided during the discovery phase of this proceeding much of the computer information provided by the Telco was unusable; essentially incompatible input data and models were provided to the CLECs according to AT&T. AT&T also claims that either the Telco's work product was sloppy or there was a deliberate attempt by the Telco to prevent intervenors from gaining access to any useful information.

AT&T further notes that a number of other deficiencies in the Telco's switch cost study emerged in cross-examination, most notably the fact that only a relatively minor discount off list price for the switch was reflected in the Telco's cost study but vendor discounts were, in fact, substantially larger. According to AT&T, the Telco acknowledged that it only included the smaller discount made available to it by vendors for new lines to be added to existing switches, totally failing to take account in the study methodology of much larger discounts generally available for new switches. AT&T comments that the Telco witness was not aware of any significant difference between the growth and placement discounts. AT&T also states that it was evident in performing its cross-examination that review of the Telco's actual switch vendor contracts was the only feasible way of determining what discounts were actually available to the Telco and not incorporated into their submissions.

AT&T criticizes the Telco because it submitted historic, embedded costs for switches not part of its future deployment plans for the Department to consider and failed to reflect the lower prices that the Telco acknowledged it would be deriving when deploying new switches. AT&T contends the Telco knew its switch cost study would not meet basic TSLRIC pricing principles previously adopted by the Department.

AT&T asserts that three major problems exist with the study even though subsequent revisions

by the Telco included some costs related to the switches it is presently deploying. Specifically, AT&T contends that the Telco improperly evaluated the costs of the separate switching contracts it maintains with Lucent Technologies and Northern Telecom. According to AT&T, the Telco calculated a cost for work classified as "replacement" at the much higher price generally applied to activities classified as "growth" lines added to existing CO switches; in so doing, the Telco misrepresented the cost for approximately half of the central office lines covered by the study assigning the higher price to everything.

AT&T further asserts that the higher average discount from list prices accorded to the Telco by its CO vendors is probably understated by the Telco in its studies. AT&T asserts that a true TSLRIC study would consider the total service demand and not just the future incremental cost the Telco expects to incur for its purchase over the next four years. Incorporating total service demand into the study framework produces still lower costs than that presented in this proceeding because it would reflect additional economies available with total demand. AT&T also asserts that weighting of the discount factor by the Telco distorts the TSLRIC investment. AT&T comments that it is obvious that the Telco's calculation does not reflect the scope economies that are actually derived by the Telco under its contract terms.

AT&T also suggests that the Telco's revised switch cost study is deficient in its relative weighting of the three switch types its study addresses. In the study, AT&T claims that the Telco assumed only a portion of its CO switches would be derived from the least expensive category. AT&T contends that differences in the Telco's technology plan suggests that it has employed an improper, back-looking allocation in the study submitted in this proceeding that is not consistent with TSLRIC pricing methodologies.

AT&T believes the last major deficiency with the switch study is the Telco's repeated refusal to provide vendor contracts to allow verification of the actual discounts used in the cost calculations for central office switches. AT&T argues that subsequent access to current Telco contracts revealed an error in its method of calculating switch discounts. According to AT&T, the Telco purported to weight the value of central office improvements by dividing the number of lines affected by improvements between its vendors in accord with their respective classification (growth or replacement) and their technology provider (Lucent Technologies, Northern Telcom, etc.). The Telco noted that it treats the cost of technology acquired to "replace" switches differently than it does technology acquired to accommodate "growth" in its existing switches. AT&T notes however, that the investment cost number used by the Telco in its submissions in this proceeding to reflect replacement switch cost was not the replacement switch cost set forth in the vendor's contract but was, in fact, the higher figure associated with growth.

AT&T asserts that the Telco excluded the lowest cost available for replacement switches in all of its calculations for this proceeding. AT&T offers the opinion that the Telco purposefully used a higher number to distort the cost-studies or it made a mistake and must be willing to correct its error. In either case, AT&T believes an adjustment by the Department to the representations of the Telco is warranted. AT&T maintains that the Telco failed to provide any record evidence in this proceeding to support its purported investment cost for lines in replacement switches. Therefore, AT&T recommends that the Department order the Telco to make still further adjustments to its representations of switch costs to reflect the lower vendor cost for replacement switch lines and then set final switching element prices on the basis of that further reduced cost. AT&T Brief, 8-14; AT&T Reply Brief, pp. 2-6.

2. Cost of Service Studies

AT&T recommends that the Telco's cost studies be rejected because it has provided the same deficient documentation in support of certain costs contrary to prior Department Decisions. AT&T comments that new documentation provided by the Telco for other costs also lacks the necessary detail previously ordered by the Department. In the opinion of AT&T, the Telco's repeated and continued failure to present fully documented cost studies should eliminate any presumption by the Department that it need use the costs submitted by the Telco as the basis for setting UNE rates in this proceeding.

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AT&T suggests that the Telco's studies are so user-unfriendly that it is reasonable to suggest that it is purposefully trying to prevent a meaningful review by the Department. AT&T maintains the view that the Telco continues to present the same confusing reports despite being ordered by the Department

repeatedly to provide sufficient documentation (e.g., underlying assumptions, data inputs and algorithms) to enable independent evaluation of both the methodology used and the results of its studies. According to AT&T, even the substantial revisions to the cost studies provided by the Telco in this proceeding only further confused the review process. Similarly, the Telco's failure to clearly identify the inputs to its cost studies and the sources of its numbers make it virtually impossible for intervenors to perform the independent evaluation and audit expected by the Department. One example of the difficulty intervenors have experienced with the Telco in this proceeding regards the Telco's refusal to make its switch vendor contracts available for review.

AT&T also suggests that the reports provided by the Telco in this proceeding tend to cloud, rather than clarify, how TSLRIC is actually calculated. AT&T suggests that the Telco's use of the MICRA model is of no help because the associated documentation does not disclose the data inputs used for the model's algorithms. In the opinion of AT&T, the record in this proceeding clearly reveals the many difficulties that intervenors have experienced in seeking access to the Telco's computer models and "runs." Prefacing its criticism of the Telco by noting that it has offered no explanation for the lack of comprehensible documentation, AT&T argues that if assumptions and inputs exist it is entirely reasonable to expect the Telco to commit them to writing in a manner that is understandable. Accordingly, AT&T proposes the Department order the Telco to revise both its study methodology and its manner of presentation to make the requisite information usable. In the interim period, AT&T suggests that the Telco not be allowed to benefit from its own failure to provide adequate support for its cost studies. Furthermore, AT&T asks the Department to revoke the presumption that the Telco's numbers are, in fact, supportable. Instead, in those instances where the parties have identified questionable assumptions or inputs to the cost studies, AT&T recommends that the Department accept the recalculations performed by the parties in place of the Telco's submissions. AT&T Brief, pp. 14-17.

3. Non-recurring Charges

AT&T holds that the Telco has failed to present supportable evidence of any forward-looking joint and common costs that it expects to incur in the provision of unbundled network elements; therefore, AT&T proposes that only minimal amounts of contribution, if any, be added to the Telco's TSLRIC costs when setting prices. AT&T notes that most of the recurring and nonrecurring rates for unbundled elements have been marked up by varying amounts with little substantiation for how the markup was determined. Although the markups are allegedly contribution to cover joint and common costs, AT&T contends that the Telco has admitted that it has presented no documentation to support the inflated and varying levels of contribution.

In the opinion of AT&T, the Telco's continuing failure to provide any support for its estimated forward-looking joint and common costs is outrageous in view of the Department's April 23, 1997 Decision in Docket 96-09-22 ordering that such a study must be produced. AT&T notes that while the final study was to have been produced by December 15, 1997, the Telco has yet to submit any study, claiming that it needs still more time to adequately develop it. According to AT&T, the Telco has known for years that it has to document its joint and common costs and has been under specific order from the Department to do so for more than nine months. AT&T argues that the only conclusion that can be drawn from the Telco's inaction is that its analysis does not support the exorbitant markups proposed in this proceeding. Based upon that conclusion, AT&T recommends that the Department approve a nominal markup above TSLRIC and apply it uniformly to all of the Telco's recurring rates. AT&T Brief, pp. 17 and 18; AT&T Reply Brief, pp. 6 and 7.

4. Recurring Rates

AT&T recommends that the Department not permit the Telco to institute recurring rates for unbundled elements that match intrastate access rates without better cost justification than has been presented in this proceeding. AT&T states that the Telco calculates "cost" using what it claims to be an accepted TSLRIC methodology and then applies a "markup" above the TSLRIC to derive a proposed rate equaling rates found in the Telco's Connecticut Access Service Tariff. AT&T holds that this method of constructing rates results in unsupportable markups above the calculated TSLRIC cost of the respective unbundled elements. According to AT&T, the practical effect of the Telco's method of calculating rates is to render a cost study superfluous. The Telco, in the opinion of AT&T, is simply proposing current tariffed

access rates be adopted by the Department as the rate standard applied to a CLEC seeking to enter the local market using unbundled elements. AT&T maintains that the only purpose served by "costs" generated in the Telco's study is to construct markup percentages that differ by service. This, according to AT&T, perpetuates the illusion that current access rates have some foundation in cost and relationship to unbundled elements. AT&T maintains that this approach evidences the transparent effort of the Telco to circumvent TSLRIC methodology mandated by the Department and must be rejected. AT&T also argues that rates must be based on the cost of providing elements and must be determined without reference to a rate-of-return or other rate-based proceeding if they are to conform with requirements of the Telcom Act.

AT&T also contends that TSLRIC intends for rates paid by competitors to correspond to costs incurred by the ILEC. According to AT&T, rates based on accurate costs provide consumers real benefit from market competition. AT&T posits that if the rate of a service is set a thousand times above its respective cost a competitor cannot offer the public a lower price. Effectively, an incumbent will have no reason to reduce its price in the face of competition, consumers will receive no benefits from competition, and the Telcom Act will be frustrated. AT&T concludes that the Telco has not, and cannot, offer plausible justification for proposing rates in this docket for unbundled elements at prices equivalent to its tariffed rates for access.

AT&T asserts that the method of pricing proposed by the Telco in this proceeding ignores the obvious fact that the telecommunications world is moving away from guaranteed rates of return and moving to a competitive, risk-attendant environment. AT&T claims that the pricing principles advocated by the Telco in this proceeding is simply one more attempt to preserve the margins it would realize in a monopoly environment. AT&T also asserts that actions which reduce the Telco's profit margins are not only consistent with the Telcom Act, but are imperative if the benefits of competition are to be realized by the general public.

Lastly, AT&T maintains that the Telco has not demonstrated how markups which provide a return on investment of many thousand percent above TSLRIC cost can be considered by competitors and the Department as "reasonable" profit. AT&T argues that the Telco's proposed rates ignore the fact that a return on capital is already built into the TSLRIC model which could be construed as sufficient to be deemed reasonable. In drawing that conclusion, AT&T states that the Telco has failed to present evidence of any forward looking joint and common costs which necessitate an additional contribution above TSLRIC. Coupled with the fact that the Telco cannot articulate the basis of its access rate calculations, the Telco simply shows there is no legitimate basis for connecting the proposed markups to any demonstrated need for recovery of joint and common costs. AT&T Brief, pp. 18-22.

5. Markups

AT&T acknowledges the Department's ruling that some level of contribution above TSLRIC will be permitted in the Telco's pricing but requests that the Department hold any markup to a minimum. AT&T cites the failure of the Telco to submit a set of forward-looking common costs and the economic inefficiency created by adding markups to the TSLRIC as sufficient to limit any markup. AT&T states that the large markups proposed by the Telco will unduly prevent development of an efficient competitive marketplace in Connecticut. AT&T also states that by perpetuating economic inefficiency in the Telco and passing the cost of that inefficiency to the CLEC, competitors will not be able to offer consumers the economically efficient prices they expect from competition.

As an alternative approach to setting rates for unbundled elements, AT&T proposes that the Department limit the Telco's markup to 25% above TSLRIC. In so recommending, AT&T contends that in limiting the Telco's markup the Department not be concerned that a smaller markup will somehow endanger the Telco's continued existence. AT&T maintains that in competitive markets, firms are not guaranteed a specified markup over their incremental cost and must effectively manage their joint and common costs down to efficient levels. AT&T further suggests that the Telco is seeking assurances that it will realize an inordinately large contribution as well as its inflated incremental cost. If allowed to do so, AT&T asserts that competition will be further harmed because competitors will then be forced to financially absorb the same inefficient costs in their own costs structure as the Telco. AT&T Brief, pp. 22 and 23; AT&T Reply Brief, pp. 8-10.

AT&T also argues that the proposed nonrecurring rates for unbundled elements are severely overstated because they are constructed upon an assumption that a substantial amount of manual intervention is required on the part of the Telco in the process of ordering and provisioning elements. AT&T states that pre-ordering, ordering and provisioning of elements is a computerized process that should entail only minimal manual intervention. According to AT&T, because activities for which nonrecurring rates are proposed are Telco-specific activities, nonrecurring costs present an opportunity for the Telco to inflate its actual costs. AT&T states that inflated nonrecurring rates present a serious barrier to competitive entry into the local market because such rates are incurred by a CLEC each time a new service order is processed. AT&T notes the Telco has a history of presenting inflated nonrecurring cost studies, citing to Docket 96-09-22, wherein the Department concluded that the nonrecurring cost study for loop elements was unacceptable because it overstated costs. AT&T claims that its proposed rates eliminate assumptions about manual intervention and incorporate a number of revisions applicable to essential manual activities. AT&T also argues in its submissions that the formulas used to calculate nonrecurring charges employ labor rates with unusually high loading factors. Accordingly, AT&T requests that its proposed nonrecurring rates be adopted by the Department.

Further, AT&T argues that computer systems and software (i.e., OSS), have transformed a very labor-intensive provisioning process into an automated computer-controlled process. AT&T maintains that those systems have virtually eliminated the need for manual intervention in processing CLEC orders. AT&T references the experience of other ILECs that expect 99% automated flow-through of orders in the relatively near future as indicative of the Telco's own goal and a reason to substantially reduce the level of manual cost factored into the rates for unbundled elements. AT&T contends that some level of fallout (or failure to flow-through) will exist even in a fully automated OSS environment proposing a 2% fallout rate into its own calculations.

AT&T proposes that the Department reject the Telco's high fallout rates and excessive manual intervention used to justify its nonrecurring rate proposal. AT&T states that despite evidence that OSS systems can and should eliminate most manual intervention, the Telco is asking the Department to tolerate its inefficiencies and incorporate them into its nonrecurring rates. AT&T comments that even if the high level of manual intervention purported by the Telco is in fact present in the system it is developing for competition, the improvements projected by other ILECs should be factored into forward-looking nonrecurring rates as surrogate incentives to the Telco.

For those undertakings that require manual work, AT&T contends that time estimates used by the Telco are inordinately high. Similarly, AT&T claims that time estimates adopted by the Telco for calculating its Line Class Code nonrecurring cost overstate the actual time to perform the associated task which AT&T determined to be approximately 10 hours. Similarly, AT&T's study of the time necessary for the Telco to perform a cross-connection is lower than that reflected in the Telco study.

AT&T concludes that the Telco continues to inflate its nonrecurring costs in the submissions offered in this proceeding. AT&T maintains that its proposed rates reflect downward adjustments to the Telco's proposed rates to address the obvious flaws. Although AT&T acknowledges that its proposed nonrecurring rates may even be inflated it suggests their deficiency is due to lack of access to Telco information and improper labor loading rates. AT&T requests that the Department adopt its proposed nonrecurring charges in place of those proposed by the Telco.

Moreover, AT&T proposes that the Department deny the Telco any additional contribution to joint and common costs other than that already provided by the recurring charges of the Telco. According to AT&T, the Telco has not established an adequate factual basis for determining what its forward looking joint and common costs are and is, therefore, not entitled to additional recovery. Furthermore, AT&T argues that it is inappropriate to recover recurring joint and common costs by means of nonrecurring charges. The Telco, according to AT&T, has not argued in this proceeding that any of its joint and common costs can be considered "nonrecurring" and, therefore, eligible for inclusion in its nonrecurring charges. AT&T notes that a danger with placing a significant mark-up on nonrecurring charges is that it will provide the Telco with over-recovery of any joint and common cost to which it is entitled. That is, if the customer churn rate increases, resulting in repeated orders, the Telco will obtain a significant contribution each time a nonrecurring charge is applied.

AT&T maintains that the proposed nonrecurring charges reflect an effort by the Telco to have the CLEC pay for both the connection and disconnection cost associated with a subscriber change in service at the time service is initially ordered by the CLEC. In the opinion of AT&T, this constitutes improper over-recovery of costs by the Telco. In this particular case, customers subscribing to service from a CLEC will be forced to reimburse the Telco for costs associated with disconnection services that may never be provided. AT&T states that even in the cases where there is a subsequent change in retail service provider, the Telco obtains the significant benefit of the time value of money for the entire period of time between origination and disconnection of the service. AT&T posits that the value of receiving money before having to perform any disconnection activity is significant.

AT&T asserts that its proposal to separate installation charges from disconnection charges provides important procompetitive benefits as well. For example, it minimizes the initial barrier to competitive entry presented to CLECs by Telco policies. Separation also links cost recovery closer to the way in which the Telco incurs cost thereby avoiding the need to make difficult assumptions about the future level of customer churn. AT&T further suggests that separating installation from disconnection charges will send the right economic signals to CLECs. That is, those CLECs who provide superior service, and thus experience less customer churn, will incur lower disconnection charges. Conversely, a CLEC providing poor service will experience greater customer churn and higher disconnection costs as a consequence of its poor performance. In the opinion of AT&T, blended nonrecurring charges such as those proposed by the Telco send an opposite and economically ineffective signal penalizing a CLEC providing good service and unfairly rewarding a poor service provider. AT&T notes that the Department previously recognized this improper incentive in Docket 96-09-22, and ordered the Telco to separate disconnection charges from connection charges. AT&T Brief, pp. 24-29.

6. UNEs and Shared Transport

AT&T claims that the Telco witness, while professing that the Telco did not want to provide CLECs combinations of elements, confirmed that it would abide by terms and conditions set forth in its arbitration agreement with AT&T which specified certain combinations of elements. AT&T notes, however, that the witness later testified that the Telco was not going to provide any of the UNE combinations it had agreed to provide in the AT&T Interconnection Agreement unless the Department formally required it to do so. AT&T further claims that the Telco announced its intention to only sell individual elements and force purchasers to use cumbersome and inefficient interconnection techniques, such as collocation, to recombine network elements that already exist in a combined form in the Telco's network. AT&T proposes that the Department require the Telco, as a matter of state law, to provide all CLECs combinations of unbundled elements similar to those provided to AT&T by their arbitration agreement. AT&T also recommends that the Department prevent the Telco from dismantling any existing network connections at the time a subscriber is being switched to a new carrier who wants to provision that service using a combination of UNEs. Lastly, AT&T requests the Department prevent the Telco from requiring collocation as a condition for purchasing a UNE combination.

AT&T contends that the issue in question in this proceeding is not whether the Telco can be forced to combine UNEs for the benefit of CLECs, but whether the Telco can be prevented from affirmatively harming competition by requiring unnecessary, costly and destructive disassembly of network elements that already exist in a combined form. In the opinion of AT&T, the Department must address whether it will permit the Telco to disconnect those facilities and then require them to be reconnected through a cumbersome mechanism if that customer chooses to purchase service from a CLEC using a combination of UNEs to provide service.

AT&T claims that the Eighth Circuit Court of Appeals ruling that the FCC does not have authority to require incumbents to provide UNE combinations to CLECs merely transfers the issue of combination to the Department for review and consideration. According to AT&T, the Eighth Circuit ruling affirms that Congress intended to preserve the states' traditional authority to regulate local telephone markets. AT&T indicates that Michigan, the only state to issue a final decision addressing this subject, concluded that it had the statutory power to prevent an ILEC from disassembling previously bundled elements and it opted to do so to avoid unnecessarily damaging the market.

According to AT&T, the Connecticut General Assembly expressly directed the Department to encourage shared use of existing facilities and cooperative development of new facilities as a goal of the state. AT&T asserts that the Department has sufficient authority to require the Telco to make combinations of unbundled elements available and to prohibit the Telco from imposing unreasonable and discriminatory barriers on the use of such combinations. Noting that the Department has repeatedly expressed strong support for the development of competition in Connecticut, AT&T claims that the Telco's unilateral decision to dismantle existing combinations of UNEs rather than make them available to CLECs is fundamentally inconsistent with the development of efficient competition. AT&T recommends that the Department resolve this issue at the earliest possible opportunity.

With regard to nonrecurring charges, AT&T argues that the most appropriate nonrecurring charge for a recombined set of elements may not be simply the sum of the nonrecurring charges for each individual unbundled element. AT&T notes that even the Telco acknowledges this as fact and proposed that a UNE-platform (UNE-P) nonrecurring charge mirror the nonrecurring charge associated with the business resale offering. While noting that there is no cost support for that amount, AT&T posits that any future proceeding on nonrecurring charges for the UNE platform be limited to an examination of the actual costs of provisioning a combination of elements that already exists on the Telco's network. According to AT&T, any such amount should be relatively small, if not nonexistent.

AT&T also disagrees with the Telco's claim that it will lose money if it is required to provide combinations of unbundled elements in the fashion proposed by AT&T. AT&T states that the Telco's claim is wrong, irrelevant and should be ignored by the Department in addressing the issue of recombination. In AT&T's opinion, the purported loss is meaningless because there is no chance that 100% of Connecticut customers will switch to a competitor providing service via the UNE-platform as suggested by the Telco's analysis. AT&T maintains that the Telco's parent company will receive the full financial benefit of all subscribers served by SNET America, Inc. (SAI), the Telco's retail arm. AT&T states that the amount of revenue loss incurred by the Telco should not be cause for concern because the loss would primarily be in the form of access revenues which are already overstated by the Telco. AT&T also states that the high markups associated with access historically have been allowed to provide a subsidy to keep residential rates low. AT&T argues that there is no reason that the Telco should be able to retain any such subsidy if another carrier is providing the retail service. AT&T concludes that the Telco is endeavoring to retain its monopoly profits and suggests that the Department not aid the Telco in this effort. AT&T Brief, pp. 29-34; AT&T Reply Brief, pp. 11 and 12.

Lastly, the FCC explicitly required in its Third Report that ILECs offer CLECs access to the same interoffice transport facilities that it uses for its own traffic. AT&T states that the FCC designated shared transport as a separate unbundled element that includes both transport links in the network as well as access to the routing tables in the incumbent's switches deemed essential by a CLEC to effectively access the links on a shared basis. According to AT&T, the FCC emphasized that shared aspects of an unbundled element means that an ILEC must share the facilities it uses itself with others and rejected a counter argument that shared transport can consist of facilities other than those used by the incumbent that need only be available for sharing between competitive carriers. AT&T notes that the Telco has refused to offer shared transport to competitors as defined by the Third Report and offers instead what it calls dedicated and shared interoffice transmission facilities. According to AT&T, the Telco's interpretation of what is meant by "shared" is the same one previously rejected by the FCC as inappropriate and unreasonable. AT&T also notes that the Telco acknowledges dedicated and shared transport offered by the Telco is not what was required by the Third Report. AT&T argues that the Telco's cost study is based on a proposition that CLECs pay for new transmission facilities to route traffic between the Telco's switches.

AT&T asserts that the Telco is not currently prepared to provide the CLECs with access to the routing tables they use to channel traffic between Telco switches even though the Telco recognizes the necessity of routing tables to the CLECs. AT&T maintains that it was the FCC's concern that economic inefficiency would result if duplicate routing plans for transport were required by lack of CLEC access to the ILEC routing tables.

AT&T maintains that there is no legitimate economic or technical justification to account for the Telco's refusal to provide shared transport to CLECs. AT&T asserts that the Telco is simply attempting to

make it more difficult and expensive for competitors to challenge its local service monopoly. AT&T contends that should the Telco be successful in placing unreasonable and indefensible roadblocks in the way of competition, the Department's efforts to bring competition to the local telephone market and lower prices to consumers will be frustrated.

AT&T also claims that the Telco is relying heavily on the possibility that the FCC's shared transport directive will be reversed by the Court. Acknowledging the Telco's argument that it was improper for the FCC to effectively define a new network element, AT&T states that the Telco fails to recognize that the Court has affirmed the view that §251 (d)(2) of the Telcom Act expressly vests authority with the FCC to define and identify network elements.

Moreover, even if the Department concluded that the FCC does not have jurisdiction to define network elements such as shared transport, AT&T posits that the Department still can require the Telco to provide shared transport as defined by the FCC under state law.[4] AT&T recommends that the Department prevent the Telco from placing CLECs at a competitive disadvantage given the economic inefficiency created when CLECs have to pay for dedicated transport facilities where they could use the existing interoffice transport facilities of the Telco

Lastly, AT&T proposes that the Department order the Telco to provide a CLEC shared transport over existing facilities between the Telco's end office and tandem switches and further order it to provide a CLEC with the routing tables of the incumbent provider's switches. In so ordering, AT&T contends that CLECs would avoid paying for unnecessary construction of separate dedicated links between existing switches, connecting links to existing switches and creation of new routing tables. Additionally, AT&T recommends that CLECs not be responsible for costs incurred by the Telco for providing shared transport other than a proportional, traffic-sensitive, share of the facility cost that the Telco applies to all users of a shared transport facility, including the incumbent local service provider. According to AT&T, any policy that does otherwise places the CLEC at a competitive disadvantage and denies consumers the benefit of true competition. AT&T Brief, pp. 34-38; AT&T Reply Brief, pp. 12-15.

D. COX CONNECTICUT TELCOM L.L.C. (COX)

1. UNEs

Cox notes that the Act and the FCC regulations require that UNE rates be based on the forward-looking costs of providing them without any reference to traditional rate of return regulation and should provide the Telco a reasonable profit. The end result is rates constructed upon their respective TSLRIC and a reasonable contribution toward joint and common costs of the Telco. Cox argues that the Telco is not permitted to propose rates, and the Department is not permitted to approve rates, that vary from this standard. According to Cox, the Department must clearly and simply state to the Telco that it must adhere to this relatively simple standard for filing rates. Cox Brief, p. 2.

2. Markups

Acknowledging that the Telco departed from its actual costs when determining its proposed rates, Cox states that the only justification offered by the Telco was that the Act permitted it to include a reasonable profit in its proposed rates. However, Cox contends that the Telco's method of determining rates without regard to relevant cost constitutes nothing more than an attempt to impose a competition tax on CLECs. According to Cox, the Telco's methodology inflates rates over costs ostensibly to provide contribution toward joint and common costs of the Telco but in reality violates the Telcom Act and FCC Regulations.

Cox holds that the Telco has made no showing in this proceeding that its proposed markups are justifiable and disagrees with the Telco's claim that the amount of the markup is *de minimis*. Cox notes that the Telco proposes markups ranging from a low of 30% to a high of 6974% and that the amount of

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[4] Cox concurs and recommends that the Department order the Telco to provide common transport. Cox Reply Brief, pp. 2 and 3.

contribution represented by these markups is not pennies as claimed by the Telco. Cox suggests that contributions for unbundled elements range from a low of $2.03 to a high of $786.00. Cox argues that such contributions can hardly be characterized as *de minimis*. Cox further notes that even rates for unbundled elements not specifically set to provide price parity with the Telco's access tariff reflect contributions of 40% to 65%. Cox concludes that while justification for elements set at parity with access is weak there is absolutely no justification that can be offered for the high markups on the other unbundled elements.

Cox draws further attention of the Department to the fact that the Telco has yet to conduct a cost-study that narrows the range of joint and common costs that must be addressed by unbundled element prices. Cox notes that the Telco's markups for other unbundled elements not part of this docket (e.g., local loops) already exceed 25% above TSLRIC, thereby providing some contribution toward joint and common cost. Cox contends that the Telco has no idea if the markups proposed in this proceeding recover more than, less than, or an amount equal to the remaining joint and common costs not already addressed by the Department's prior pricing Decisions. Cox argues that the Telco has not provided any credible statutory rationale for its proposed markups nor has it provided any credible economic or financial justification to support its request. According to Cox, the Department must reject the Telco's effort to impose a competition tax; and therefore, recommends the Telco be denied any opportunity to impose markups in excess of 20% to 25% for any recurring or nonrecurring charges. Cox Brief, pp. 2-5.

3. Cost Studies

Referencing the cost studies, Cox notes that the Telco has assumed a cost of capital of 10.15% for purposes of constructing its cost studies because that was the same rate used by the Telco in its submissions in Docket No. 96-09-22. However, Cox argues that unlike the cost of capital historically utilized by the Department to address the issue of cost recovery, a rate of return in this proceeding must support efficient pricing of services and network elements. Cox, therefore, proposes that rates must be constructed on forward-looking capital costs and reflect a market value capital structure as opposed to the traditional book value capital structure if they are to be relevant to the competitive market.

Cox argues that the 10.15% cost of capital makes little sense in an era where the Telco is providing a vast array of telecommunications services which range from truly competitive to theoretically competitive to non-competitive. Cox cites the Telco's CATV business as an example of a truly competitive business which faces higher risks of failure and, therefore warrants higher rewards for success. Conversely, Cox cites the Telco's UNE business line as an example of a line of business that is only subject to relatively little real competition from far less developed facilities-based competitors. By using a uniform cost of capital the Telco understates the required return on its investment in riskier business lines and overstates the return required by less competitive businesses such as the provision of interconnection services and UNEs.

Based on its analysis, Cox recommends that the Telco's 10.15% cost of capital should be reduced to 9.24%. Cox asserts that this adjustment is supported by the Telco's own data as well as the actions of other state commissions who have previously addressed this issue. Cox posits that while the difference between 9.24% and 10.15% may appear small, it can have a significant effect on the magnitude of cost claimed by the Telco as recoverable. For example, in pricing the NID, the investment cost represents one third of the total cost. Cox argues that a reduction in the cost of capital from 10.15% to 9.24% would drop the investment cost by almost 10%, providing a 3% reduction in the proposed tariffed rate itself. Cox states that 9.24%, although lower than the Telco's proposed cost of capital, remains an inflated figure because it represents an average across all the Telco's various businesses. Cox recommends that the Department adopt its cost of capital for this proceeding, contending that it is neither statutorily permitted nor equitable to allow the Telco to use the 10.15% cost of money in calculating TSLRIC costs for UNEs.

Separately, Cox offers the Department its perspective on the definition of a Switching UNE. Cox argues that switching UNE embraces line side facilities, trunk side facilities, and all features, functions and capabilities of the switch essential to the performance of the switching function. Cox notes that the Telco's narrow definition of the Switching UNE is contrary to that dictated by the FCC and materially affects the cost paid by a CLEC for interconnection with the Telco's infrastructure. By virtue of the

Telco's definition, Cox asserts that a CLEC will incur additional design cost to replicate the Telco's dialing plan and to have the Telco install the developed dialing plan into its CO switch. Cox further claims that the Telco has improperly removed all forms of termination except intra-office termination in its definition of a Local Switch UNE. In so doing, Cox contends that the Telco has effectively created an additional charge for CLEC traffic not served by the same Telco switch, but which originates and terminates within the local calling area. Cox agues that this unfairly burdens the CLEC for the network design of the Telco.

Separately, Cox suggests there are instances where the results of the Telco's cost studies simply make no sense at all and must be questioned by the Department. These include references to the maintenance cost for the Inter Office Transport UNE and the cost of Automatic Recall feature as compared to the Per Call Blocking feature. According to Cox, these specific examples and others that are not cited suggest that the Telco cost studies have generated cost data which lacks essential internal correlation and should be significantly modified by the Department before any adoption as fact. Cox Brief, pp. 5-8.

4. NID

Cox states that the potential harm to competition caused by the Telco's disregard of unbundling requirements set forth in the Telcom Act is significant. Cox maintains that nowhere is this clearer than the Telco's treatment of the NID. Cox fundamentally disagrees with the Telco's assertion that an NID and a loop constitute a single UNE and are inseparable. According to Cox, the FCC specifically defined each of these components as separate and distinct entities. As such, Cox contends that representing these two unbundled elements as one UNE violates the FCC's First Report and Order restriction on recombining previously uncombined elements.

Cox asserts that the Telco will offer a NID independent of the associated loop but will not offer a loop independent of the associated NID because it would violate its interpretation of the National Electric Code (NEC) safety standards. Cox notes, however, that the Telco subsequently acknowledged that all the NEC requires is that the loop (i.e., dropwire) be connected to a "proper protective device," (i.e., be grounded) to be in conformance with its safety standards. Cox argues that the national code does not require that the Telco's dropwire be connected to a CLEC via a NID. Cox states that although the Telco conceded a CLEC NID could technically satisfy the required grounding prerequisite, the Telco steadfastly refused to allow its loop to be directly connected to a CLEC NID.

Cox argues that the Telco's intransigence provides no benefit to an end user but does present harm to the CLECs from both cost and service perspectives. Cox asserts that the Telco NID is a non-electronic, electromechanical device providing the means to interconnect wire pairs, voltage protection and grounding of the service provider. It serves as the primary interface to customer wiring for the service provider. Cox contends that CLECs, such as CATV companies, use Network Interface Units (NIU) instead of NIDs. According to Cox, the NIU is an electronic signal processing device capable of providing sophisticated support for a broad range of requirements like signal separation and integration as well as voltage protection and grounding. Cox states that when a provider deploys an NIU at the subscriber's premise, a NID constitutes an unnecessary investment by the Telco, serves no useful purpose for the CLEC and only serves to increase the cost of service to the subscriber. However, pursuant to the Telco's proposal, a CLEC must accept, use and pay for the Telco NID's even when it is not needed or necessary to discharge its service obligations to its customer.

Cox further argues that the Department should affirm the rights of a CLEC, as proposed by the FCC, to provide both the loop and the NID to its subscribers. Cox claims that such flexibility is extremely important for a CATV-affiliated CLEC which has access to loops in its affiliate's CATV franchise area but will generally seek use of Telco loops elsewhere in the state. In such a scenario, Cox suggests that a CLEC serving a customer in its franchise area may require only a NID from the Telco while outside its franchise area the CLEC may simply want a loop from the Telco.

In its submissions, Cox charges the Telco with engaging in anti-competitive behavior by insisting that any kind of Telco NID at a customer's premise must remain even if the CLEC installs its NIU or NID to serve a present or prospective subscriber. According to Cox, this position poses a logistical problem to the CLEC (no room for two devices or the Telco NID covers access to customer wiring), a customer

relations problem (customer doesn't want two boxes on the premises), and a reliability problem (need extra cross connection from CLEC device to the Telco device) which is avoidable. Added to this is the fact that even though a CLEC may not want the NID it must pay for it and it must pay the cost of cross connecting it to the CLEC's NIU/NID.

According to Cox, the Telco's estimated cost to a CLEC for a loop with an associated NID is based on the multi-chambered, late model Keptel NID, which has been installed in only 20% of customer premises served by the Telco. The remaining 80% of NIDs available to CLECs from the Telco are earlier versions of the NID which do not have sufficient room for shared use by the CLECs and the Telco. Cox asserts that the Telco requires a NID to be purchased by the CLEC 100% of the time it purchases a loop but 80% of the NIDs are effectively incapable of supporting the CLEC's requirements because of the age and design limitations of the NID. Cox argues that regardless of whether it can use a particular NID, if a CLEC wants to install its own NIU it must pay for the cost of cross connecting the existing Telco NID and the CLEC NIU.

Lastly, Cox holds that the Telco's position will force CLECs to pay for NIDs they neither want nor need in provisioning services to their subscribers. According to Cox, the Telco's NID requirement may adversely affect service to customers. According to Cox, the only solution is to: (1) follow the Telcom Act and the FCC mandate by requiring loops and NIDs to be regarded as separate UNEs, (2) permit CLECs to use the Telco NID with a CLEC loop and (3) require the Telco to remove its NID at its own cost when requested by the customer or the CLEC. Cox claims that requiring the Telco to assume the cost for removing its equipment is perfectly appropriate in a competitive environment and consistent with business practice in other business. Cox argues that the Telco should not be able to hold a customer hostage by threatening a removal charge if the subscriber changes telephone providers, especially since a customer had no choice in the past if it wanted phone service but to allow the Telco to install its NID. Cox Brief, pp. 4-8; Cox Reply Brief, pp. 1 and 2.

E. MCI TELECOMMUNICATIONS CORPORATION (MCI)

1. Cost Studies

MCI claims that the Telco's revised switching cost studies do not comport with the Department's detailed cost study criteria issued in this and prior proceedings. In particular, the Telco's original switching cost study does not comply with the Department's directive that TSLRIC cost studies be accompanied with "sufficient documentation" to enable independent evaluation of both the methodology used and the results of its studies. According to MCI, the Telco not only failed to comply with that directive, but it ignored the Department's requirement that it submit sufficient documentation to readily discern an audit trail.

MCI also claims that the Telco is unwilling or unable to provide any readily discernible or documented audit trail showing the manner in which it determined switching investments, net of the discounts any switching vendor offers to buyers in the competitive central office equipment market. MCI contends that such switching investments determine the recurring switching cost used as the cost basis by the Telco for its proposed unbundled switching elements. MCI further contends that any determination of reasonableness for "switching" is highly dependent upon the reviewing body's ability to scrutinize exactly how switching investment inputs were determined by the Telco.

MCI cites deficiencies in the documentation provided by the Telco for its switching investment. MCI alleges that the Telco's backup documentation exhibited no connection to the cost study and appeared to have been compiled at random and merely labeled as backup for the cost study. MCI also contends that the backup was incomplete, and in some cases, not relevant to the cost study which it was said to support. Regarding the Telco's revised cost study, MCI comments that the Telco failed to provide a hard copy of the computer runs on which it based its cost analysis. MCI argues that the Telco's non-compliance is further illustrated by its decision to withhold switching contracts from the parties until ordered by the Department to produce them. Therefore, in light of the Telco's non-compliance with previous Department directives, MCI requests the Department reject the Telco's original and revised cost studies and adopt the recommendations proposed by MCI's witness.

MCI asserts that the Telco's revised switching cost studies must be further modified in order to be of any use to the Department in determining costs of UNEs. According to MCI, the revised studies contain significant flaws carried over from the original cost study and base Telco switching investment on a misapplication of the terms contained in the Telco's switching contracts. MCI comments that both the original and revised switching cost studies fail to properly reflect a forward-looking mix of switching technology. Accordingly, MCI proposes that the Department modify the Telco's technology mix to better reflect the Telco's proposed technology planned to be deployed. MCI claims that this change provides the Department an approach and technology assumptions that comport with technology decisions the Telco has already made. MCI also claims that its recommendation is consistent with the Department's TSLRIC methodology and with the actual technology deployment plan of the Telco.

MCI also argues that switch investment figures used in the Telco's SCIS/MO cost analysis must be reduced by the Department to reflect the correct application of pricing terms contained within the Telco's switching contracts. According to MCI, the Telco misapplied basic pricing provisions of its switching contracts in its cost studies overstating the actual switching investment of the Telco. MCI contends that the Telco's principal errors relate to a misapplication of the pricing provisions of two Lucent contracts, the May 5, 1997 Megabid and the September 11, 1997 General Purchase Agreement. The errors include an overstatement of switch replacement cost per line; misapplication of the General Purchase Agreement instead of the Megabid to growth lines; and incorrect classification of the existing base of 5ESS switch lines as a product of "growth" investment.

Additionally, MCI claims that switching contract terms were not properly applied to the Telco's forecast of growth and replacement requirements. Noting discrepancies in the Telco's per line price for replacement of its 1AESS switches with 5ESS switches, MCI states that the Telco erred by selecting discounted switching costs in its cost studies that do not match up with the Telco's forward-looking modernization activities. Because of the above noted discrepancies, MCI asks the Department to adjust the value of the switching discount included in the Telco's cost study to conform to switch contract pricing terms and to revise the Telco's switching investment per line.

Further, MCI argues that the Department should reject the markups proposed by the Telco for inclusion in its unbundled switching element price. MCI contends that the Telco failed to provide any evidence of its forward looking joint and common costs that could be used to determine a proper markup. Instead, the Telco introduced the same embedded cost analysis rejected by the Department in Docket No. 96-09-22. MCI further contends that the Telco's markups are unsupported by any valid economic analysis, are inconsistent with the Department's orders and must be rejected. MCI recommends that the Department require unbundled switching elements to be priced on the basis of no more than a 15% markup above TSLRIC.

Moreover, MCI states that an allowable level of markup could be further reduced by the Department. According to MCI, the Telco failed to compare the actual cost per line provided by its current vendor contract to the discounted switching investment per line produced by the SCIS/MO costing model. MCI argues that the Telco's efforts to obscure the pricing terms of its switching contracts warrants a markup below 15%. MCI maintains that if the Telco is enjoying still deeper discounts from its switch vendors than it has acknowledged and is using the SCIS/MO to avoid disclosure of those deeper discounts, the Telco has misused the SCIS/MO cost model to represent its forward looking costs. Accordingly, MCI recommends that the Department apply a markup of less than 15% to switching costs because a 5% markup would be generous to the Telco based on the circumstances of this proceeding.

MCI further argues that the Telco's revised switching cost study includes a provision for testing, marketing and maintenance expenses that are excessive and warrant reduction by the Department. MCI recommends that the Department adjust the TSLRIC formula used by the Telco to exclude marketing expense or, in the alternative, order that the maximum loading for marketing expense be no more than one percent. MCI also requests the Department to consider adjusting the level of maintenance expense and testing expense in the TSLRIC analysis to reflect the reduction in expenses claimed by the Telco in other proceedings.

Separately, MCI requests the Department to adjust the Telco's cost study for switching as a means to eliminate any double-counting for costs associated with Caller ID and MDF. MCI notes the

Telco admitted it had double-counted certain costs for Caller ID and accepted an adjustment to its earlier submission. MCI requests the Department formally find the switching cost study results be modified to eliminate the double-counting of Caller ID-related costs. Separately, MCI asserts that numbers derived by the Telco in its study of MDF-related costs could only be a product of double-counting. MCI asserts that based on the record in this proceeding, the Department must correct the double-counted MDF and line protector investment to ensure fair treatment of the CLECs.

MCI requests the Department require the Telco to file a cost-based element for common transport given that the Telco has refused to provide CLECs an unbundled common transport element charged at the same rate regardless of whether the facility is shared amongst carriers or dedicated to a single carrier. MCI states that the Telco's position essentially forces a CLEC to build its own network, even if there is a shared benefit to the Telco and a CLEC if a CLEC were afforded common transport. MCI also states that the Telco's pricing policy effectively denies CLECs the ability to acquire common transport service as required of all ILECs by the FCC. MCI contends that the Telco's position is legally indefensible and that none of the legal opinions rendered to date concerning the Telcom Act alter the obligation of local exchange carriers to provide shared transport as a UNE.

MCI, therefore, requests the Department order the Telco to file a proper and cost-based rate for unbundled common transport within 30 days. MCI also expresses its support for AT&T's suggestion that an interim rate for common transport be established by the Department to expedite availability of common transport on a reasonably economic basis. MCI also recommends to the Department that it reject the Telco's proposal to price UNEs on the basis of parity with its access charges because such an action would be a violation of the Telcom Act and inconsistent with the Department's previously stated TSLRIC requirements. MCI Brief, pp. 9-23; MCI Reply Brief, pp. 4-8.

2. Nonrecurring Charges

Regarding the issue of the Telco's proposed nonrecurring charges, MCI asserts that the proposed charges reflect not only the costs associated with initially provisioning UNEs to CLECs but also evidence a significant level of markup previously rejected by the Department as inconsistent with its TSLRIC pricing rules. MCI contends the Telco's proposed nonrecurring charges are excessive and should be reduced to 15% across the board. MCI posits that irrespective of its findings and ruling regarding the amount of nonrecurring cost incurred by the Telco, the Department should find and rule that the rates and charges for nonrecurring activities need not reflect more than 15% markup above TSLRIC.

MCI alleges that the Telco did not utilize a forward looking study for determining its common costs as required by the Department; rather, the Telco based its markups on revenue requirement analysis and embedded cost data, neither of which reflects present or projected efficiency gains. According to MCI, embedded cost analysis has been previously rejected by the Department because it does not provide a sound economic basis for the level of markup above TSLRIC for its UNEs. MCI claims that had the Telco simply applied a 15% markup, consistent with past Department directives in the case of essential network elements, its proposed nonrecurring charges for UNEs would be considerably lower than those contained in its alternative nonrecurring cost studies.

MCI posits that whatever nonrecurring cost study results the Department adopts in this proceeding, it should limit any added markup to 15% or less. MCI asserts that such limitations are consistent with the Department's policy on markups for essential services, which UNE nonrecurring services most certainly are at this time. MCI claims that the use of such a base line markup will provide the Telco an incentive to comply with the Department's prior directive to produce forward-looking common cost studies. Lastly, MCI claims that the establishment of a markup no greater than 15% will, in contrast to the Telco's proposal, avoid creation of unwarranted economic barriers to market entry by those CLECs that choose to construct their own and purchase only UNEs from the Telco.

In reviewing the Telco's nonrecurring cost studies and UNEs, MCI observes that the revised submission continues to overstate and misapply the fallout effect on nonrecurring costs. MCI requests the Department to limit the fallout factor to 2% and assure that costs reflect the forward-looking efficiency gains which can be anticipated from improvements in the Telco's OSS. MCI argues that "fallout" represents a major cost driver in the Telco's nonrecurring cost studies and that the level of fallout

reflected in the studies represents what the Telco expects to experience in 1998. This, according to MCI, is not a generally accepted time frame for measuring forward-looking costs. MCI notes that the Telco assumed throughout the study that it would experience fallout at its historic levels at each step of the provisioning process, thereby compounding the impact and producing excessive nonrecurring costs.

MCI contends that the Telco's current and ongoing OSS improvements should improve its flow through experience on a forward-looking basis. According to MCI, the Department has sufficient evidence from the Telco that its recurring cost study can be predicated on having efficient OSS technology in place for use in provisioning CLECs' needs. According to MCI, the Telco overstated the magnitude of fallout in its provisioning processes and the associated cost impact in its nonrecurring cost study. It is MCI's contention that the Telco factored fallout into each and every step in a particular process flow, thereby assuming that every step of every service order will experience fallout in every instance. MCI requests that the Department find the Telco's fallout assumptions to be in error and, instead, adopt a 2% fallout factor once to the entire provisioning or disconnect process.

MCI notes the Telco's revised cost study utilizes a computer processing cost per order that is 7½ times the cost used in the originally submitted cost study.[5] Absent any justifiable support for this increase, MCI requests that the Department substitute the lower cost reflected in the Telco's original filing.

MCI also asserts that the Telco has overstated the labor time associated with the installation of a plug in card and requests that it be reduced from the level proposed by the Telco in the study to an average of 15 minutes. Similarly, MCI claims that the Telco has overstated translation expenses in its nonrecurring cost study and recommends that the Department adjust the Telco's costs by splitting the 10-hour allotment 50/50, the same as it did for CO technicians and clerical staff. MCI Brief, pp. 23-30.

3. Cross Connect

MCI suggests that the Telco has overstated it cross-connect expense and recommends that the Department order a reduction in this cost category. According to MCI, the Telco predicated its estimates of cross connect expense on a videotape portraying how cross connect activity will be performed by the Telco in a multi-provider market. The Telco claims that the procedures illustrated in the tape offer a fair representation of a forward-looking cross connect activity. MCI argues that the videotape does not support the time estimates claimed by the Telco because there are inconsistencies between the videotape activity and the tasks reflected by the Telco in the nonrecurring cost study. MCI recommends that a reuse factor be applied during connection. MCI Brief, pp. 31.

IV. DEPARTMENT ANALYSIS

A. STATUTORY FRAMEWORK

The principal purpose of this proceeding is to establish unbundled rates and charges for the acquisition and use of Telco UNEs and network feature enhancements for the purpose of repackaging, rebranding or reselling such services or features by a CLEC in direct competition with the retail offerings of other CLECs. The specific UNE rates in question in this proceeding include the NID, local and tandem switching, interoffice transmission facilities (both dedicated and shared), signaling networks and call related databases. In determining the most appropriate unbundled rates, the Department is bound by the mandates of Conn. Gen. Stat. § 16-247b which provides:

[5] The Telco stated that this increase was based on an increased outside vendor's charge, but did not provide any reviewable support for this statement.

(a) On petition or its own motion, the department shall initiate a proceeding to unbundle the noncompetitive and emerging competitive functions of a telecommunications company's local telecommunications network that are used to provide telecommunications services and which the department determines, after notice and hearing, are reasonably capable of being tariffed and offered as separate services. Such unbundled functions shall be offered under tariff at rates, terms and conditions that do not unreasonably discriminate among actual and potential users and actual and potential providers of such local network services.

(b) Each telephone company shall provide reasonable nondiscriminatory access to all equipment, facilities and services necessary to provide telecommunications services to customers. The department shall determine the rates that a telephone company charges for equipment, facilities and services which are necessary for the provision of telecommunications services. The rate that a telephone company charges for a competitive or emerging competitive telecommunications service shall not be less than the sum of (1) the rate charged to another telecommunications company for a noncompetitive or emerging competitive local network service function used by that company to provide a competing telecommunications service and (2) the applicable incremental costs of the telephone company.

(c) A telephone company shall not use the revenues, expenses, costs, assets, liabilities or other resources derived from or associated with providing a noncompetitive service to subsidize its provision of competitive, emerging competitive or unregulated telecommunications services.

Conn. Gen. Stat. § 16-247b.

Subsequently, the 1996 Telcom Act required that rates for the interconnection of facilities and equipment and network elements:

(A) shall be--

(i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.

1996 Federal Act, §251(d)(1).

The unbundled elements and services subject to review in this proceeding are noncompetitive, nonessential functions of the Telco's local telecommunications network that will be used by CLECs to provide retail telecommunications services in Connecticut. Furthermore, the elements and capabilities at issue in this proceeding are reasonably capable of being tariffed and offered to CLECs as separate services. Some of the elements and capabilities are presently available from the Telco in the retail environment, or are close substitutes for existing access services that it makes it virtually impossible to distinguish between an unbundled element and access services.

Prior Department Decisions have established resale rates for a fully operational basic local service offering to CLECs as well as certain unbundled network service elements (UNEs) deemed necessary by CLECs to interconnect their facilities and networks to retail customers.[6] The purpose of this proceeding is to examine the Telco's proposal to offer additional UNEs to CLECs as described above.

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[6]See for example the Department's April 23, 1997 Decision in Docket No. 96-09-22, and the March 25, 1997 Decision in Docket No. 95-06-17, Application of the Southern New England Telephone Company for Approval to Offer Unbundled Loops, Ports and Associated Interconnection Arrangements - Reopened.

B. THE TELCO PROPOSAL

The Telco requests the Department's approval to offer a complement of unbundled elements in addition to those previously approved by the Department. The Telco proposes rates for the new unbundled elements constructed upon one of two foundations, the TSLRIC of the respective service or price parity with current access rates for like services in the Connecticut market. Network elements based on TSLRIC include the NID, local switching and tandem switching. Parity with intrastate access is used for interoffice transmission facilities, signaling networks and call-related databases.

1. Cost of Service Studies

The Telco submitted several cost studies in this proceeding each time correcting for errors in prior submissions or the discovery of improved data sources. The Department has historically encouraged the Telco's effort to improve and correct its cost studies, recognizing the fact that the provision of unbundled service elements is a new proposition and the costs associated with provisioning them will undoubtedly change as service is actually rendered.

The Department is of the opinion that the Telco's cost study has undergone detailed examination by the respective parties to this proceeding. The Telco submits that all necessary supporting information for its cost studies has been provided, while the parties to this proceeding have suggested otherwise. A review of the earlier submissions tended to support the initial assessment of the parties as the Department found a number of supporting materials to be incomplete. However, the Telco has corrected these problems and provided the Department and all parties with sufficient documentation to support its cost studies.

The Department acknowledges the expressed willingness of the Telco to further review and modify its cost analysis in this proceeding and to review the cost results in the future to correct deficiencies. The Department does not question the fact that modifications and supplemental submissions by the Telco have resulted in better cost detail and improved cost analyses over that originally available to the parties. However, the Department is extremely disappointed that the efficiency of the review process has been compromised by the continuing need to revise Telco submissions or study parameters. The Department will accept the Telco's cost studies as a preliminary foundation for constructing unbundled element rates in this proceeding subject to modifications addressed later in this Decision.

In the non-recurring cost area, a considerable amount of testimony was provided by parties to this proceeding on the subject of mechanized provisioning processes projected for deployment by the Telco in the near future. Parties suggested that the cost studies of the Telco failed to give sufficient benefit to those mechanized systems for reducing current provisioning costs of the Telco. Both the parties and the Telco have acknowledged that mechanized systems will significantly improve the efficiency and effectiveness of the provisioning process. The Department previously instructed the Telco that rules of construction dictate that it take future process improvements into consideration when calculating its costs. It is the opinion of the Department that the Telco did not fully incorporate planned process improvements that it was aware of at the time its cost studies were conducted and which would have significantly reduced the cost structures it was presenting to the Department.

The Department expects that as the Telco introduces mechanization and processing improvements to its CLEC provisioning systems sufficient empirical evidence will be available to validate the assumptions made by the Department in this proceeding. The Department will hold the Telco responsible to warrant that all such improvements are accurately reflected in any future cost of service studies prior to any consideration by this Department of a change in price level for unbundled network elements.

A number of parties to this proceeding have presented ideas on how to further reduce future Telco costs for supporting unbundled elements. After careful consideration of the cost and consequences of the proposed changes the Department is of the opinion that the proposals warrant serious consideration by the Telco and should be explored. The suggestions of the CLECs are not legitimately within the scope of this Department's interest in the instant proceeding. However, the ideas presented by

the CLECs suggest the possibility that a number of process improvements have been overlooked or dismissed by the Telco which warrant further consideration, especially if those improvements present the opportunity for further reduction in the cost of unbundled network elements to the CLECs.

After examining the proposed non-recurring costs relevant to service provisioning processes, the Department finds merit in the parties' criticisms of the Telco's submission with respect to flow through. AT&T and MCI contend that increased mechanization is both necessary to improve the efficiency of the provisioning processes for CLECs but also will substantially reduce the cost of such provisioning as well. Based upon those conclusions, both parties recommend that the unbundled network elements and their associated provisioning services be priced to reflect those efficiencies. The Telco, with little acknowledged experience in this area, concedes that its provisioning processes will evolve from a manual base to a highly mechanized automatic process but wants to recover the investment that it believes it will incur in providing such mechanized capabilities and effecting such a transition in its business processes.

The Department has considered the parties' arguments and maintains some disagreement with the arguments set forth by both groups on this matter. First, the Department strongly disdains the suggestion of the Telco that without assured recovery of its investment in additional mechanized support for CLECs it will effectively limit process enhancements and systems development. The Telco remains under state and federal statutory requirement to provide support to CLECs in a manner determined by the Department and the FCC to comport with those statutory requirements, not in a manner of the Telco's choosing. The Department is of the opinion that it has sufficient authority to order the Telco to make the necessary mechanization improvements without regard for recovery but will forbear from exercising such authority until it is clear that the Telco has abrogated its commitment to mechanizing and improving the CLEC provisioning process. Separately, the Department finds that most of the recommendations of the CLECs as equally unsupportable. The parties have not shown that because the current provisioning processes are heavily reliant upon manual involvement that such reliance poses a market impediment and warrants immediate mechanization by the Telco. Although the Department accepts the parties' argument that mechanized processes offer a potential for substantially lower unit processing costs, there is no basis for concluding that the current order volumes submitted to the Telco by the CLECs warrants the investment required for further mechanization at this time. Therefore, any estimate of reduced cost for provisioning must be regarded as speculative and unsubstantiated for purposes of this proceeding. Accordingly, the Department will accept the Telco's cost studies used for non-recurring charges for the limited purpose of this proceeding only and will do so with the proviso that the studies are subject to modifications by the Department to ensure they comport with its rules of construction and statutory requirements.

This Department has affirmed its commitment to the development of facilities-based competition on a number of previous occasions. The Department has also affirmed its opinion that it is the responsibility of the Telco to ensure that it does not impose unwarranted barriers to the development of facilities-based competition in the state. The Department considers that provisioning processes and policies can serve as such barriers and such impediments will not be tolerated by the Department. Accordingly, the Department will seek comment from interested parties in Phase II of its investigation in Docket No. 97-08-06, DPUC Investigation into the Southern New England Telephone Company's Operational Support Systems, regarding process improvements that can be implemented by the Telco that improve the cost, efficiency and effectiveness of support provided to the CLECs in provisioning unbundled network elements. In addition, six months from the conclusion of the Local Exchange Election Process currently authorized by this Department in Docket No. 97-08-12, DPUC Administration of the Local Exchange Company Election Process, or January 1, 2000, whichever is sooner, the Department will initiate a supplemental investigation of all rates, charges and costs associated with unbundled network elements provided to CLECs by the Southern New England Telephone Company. This supplemental investigation will provide this Department the opportunity to better assess the level of support provided by the Telco in a wholesale market. At that time the Department will expect to see new cost studies from the Telco which a) reflect considerable improvement in the underlying costs for provisioning unbundled network elements; b) comport with the Department's rules of construction; and c) provides auditable support material for the parties' review.

The Department hereby adopts the Telco's nonrecurring costs with the exception of certain modifications. These modifications will be incorporated into the nonrecurring cost studies of the Telco and

reflected in the associated service rates and charges. Specifically, the Department finds that the Telco's cost studies err in design or assumption and must be modified to reflect the following:

- a one-time 2% fallout rate in the ordering and provisioning non-recurring cost study
- an individual nonrecurring cost study for disconnection of CLEC service and removal of said costs from the nonrecurring charge for connection
- modification to the nonrecurring cost study for connection of CLEC service by removing any and all costs associated with disconnection of Telco service or CLEC service

Further modification of the Telco's nonrecurring studies beyond these points indicated above would entail action on the part of the Department that is neither needed nor necessary to further the development of a competitive market in Connecticut. The Department considers the proposed modifications to the Telco's nonrecurring cost studies to be warranted at this time. At such time as a supplemental examination of the Telco's cost structures is conducted by the Department, any and all of these actions will be subject to reconsideration and revision if the evidence presented in that proceeding warrants such treatment. Accordingly, the Department places the Telco and CLECs on notice that the revised costs and associated rates will be effective until September 1, 1998.

The efforts of the Department to elicit the full cooperation of the Telco in this matter have been less than stellar. The Department's experience to date suggests that additional measures are needed to ensure that cost studies filed in the supplemental proceeding comport with the Department's instructions and exhibit supportable data. In the event the Telco is unable to present new nonrecurring cost studies that withstand scrutiny by the parties, the Telco will be ordered to immediately reduce the instant rates and charges by 50% for all UNE nonrecurring charges. Although this action is unprecedented on the part of the Department, it does not consider such action to be punitive. Sufficient evidence has been presented in this proceeding and in Docket No. 97-08-06 to suggest that as mechanized systems presently under development by the Telco and the CLECs are implemented a reduction in the associated nonrecurring costs is not unreasonable to expect. The Department does not presume that such improvements will necessarily provide for full recovery of the lost revenues that would result from any mandated reduction in nonrecurring charges. Instead, the Department presumes that supplemental cost studies provided at that time will reflect actual cost reductions realized by such mechanization; and that any adjustments made at the conclusion of that proceeding to nonrecurring charges will reflect only those cost reductions proven to fact. The Department intends to utilize the Telco's recurring cost studies for this proceeding. However, the Department is placing the Telco on notice that it will also have to provide continuing and additional support for its assumptions and costs in the area of an appropriate discount for equipment purchases.

The Telco incorporated a vendor discount into its calculations for equipment costs in the initial recurring cost study of CO switching. When the Telco revised its cost study, it again used the equipment discount method and supplied additional supporting documentation for the discounts to the parties. The associated documentation provided to the parties included copies of contracts for the equipment the Telco purchased and is the subject of the discount contained within the study. The Department has reviewed the specific contracts supplied to it and the parties, and reviewed the analyses presented by the Telco and the opposing parties. After doing so, the Department finds that the Telco reflected in its cost studies the discount that it currently receives from its vendors and expects to receive in the future for similar purchases. However, the Department must qualify its opinion of the discount rate used by the Telco in this proceeding to ensure no misunderstanding about its use. By its finding, the Department does not mean to suggest that it believes the discount method submitted for consideration is the only method, or the preferred method of reflecting the first cost of technology in the Telco's cost study. Neither does it mean to suggest that the level of discount represented in the contract is, in fact, the totality of discounts, rebates or other benefit provided the Telco by the vendor and not reflected in the agreement. Finally, it does not mean to suggest that the Telco need not revise its cost studies in the future to reflect further adjustments to the terms and conditions of its vendor agreements that directly or indirectly affect the first cost of new technology. Consequently, the Department reserves the right in any future examination of the Telco's cost studies to demand modifications in both its design and its assumptions that will better reflect the actual cost of developing and deploying new telecommunications technologies.

Additionally, the Department finds that the technology mix assumed by the Telco in its cost

studies and to which the discount referenced above is applied sufficiently corresponds to the Telco's projected modernization plan to warrant use in this proceeding. The Department has stated previously, most recently in Docket No. 96-09-22, that it will not challenge the technology assumptions or decisions, nor will the Department accept responsibility if those assumptions or decisions are subsequently proven wrong.

It is evident from testimony in this proceeding that some parties believe that certain technology options available to the Telco but not yet adopted, can substantially lower its costs of provisioning unbundled network elements to the CLECs. It appears from the testimony of the parties that they are not necessarily interested in whether the Telco adopts the particular technologies for their use so long as the Department adopts the respective cost structures of those technologies as surrogate costs in the Telco's cost studies. The Department is unwilling to make such a commitment in this proceeding. To do so would be stretching the constructs associated with TSLRIC costing beyond the realm of generally accepted practice. Both the Department and the FCC envisioned cost floors premised on the technology platforms currently available from the Telco. Neither agency envisioned costs built upon a "greenfield" or "scorched node" policy. Both of those have been rejected by the Department in the past and will not be reconsidered in this proceeding.

The Department has stated on a number of occasions its interest in seeing additional infrastructure made available to CLECs in the state. The Department has even proposed a number of ways in which such infrastructure could be realized. However, to date, no one has stepped forward with plans to address the apparent need of the CLECs for network alternatives.

The only comment the Department has heard on this subject is that the cost of the Telco's infrastructure to the CLEC is too high and it is too high because its costs are overstated. If that statement were true and the cost to build and maintain facilities is less than the substantiated costs experienced by the Telco, then why has the state not seen the emergence of one or more alternative infrastructure providers? Lower cost, facilities-based CLEC alternatives are necessary if viable competition is going to develop in the Connecticut marketplace. The goal of additional infrastructure will never be realized if wholesale prices for unbundled network elements are set at levels that 1) do not reflect the real cost of providing the element or 2) deny a provider using better, lower-cost technology sufficient margin to be successful. Under either scenario the Department would be in violation of its responsibilities to promote efficient and effective competition.

The Department addressed the issue of an appropriate cost study methodology in Docket No. 94-10-01, DPUC Investigation into the Southern New England Telephone Company's Cost of Providing Service, and determined at that time the Telco's TSLRIC methodology provided valid, usable cost information. The Department addressed the TSLRIC studies for UNEs in Docket No. 96-09-22 and found them to be generally reasonable and the Telco to have corrected the problems identified in Docket No. 95-06-17. The Department finds the cost studies presented by the Telco in this proceeding to be disappointing but usable for its limited purposes here. Nevertheless, the Department will re-examine all of the Telco's rates for unbundled elements after some experience in provisioning these services. Accordingly, the Department accepts the Telco's cost study with the provisos mentioned above.

2. Proposed Rates

a. Recurring Rates

Having found that the Telco's cost studies are usable, the principal issue remaining is to determine an appropriate level of contribution toward joint and common costs of the Telco. The parties to this proceeding have expressed a common concern that the amount proposed by the Telco to charge for UNEs above their respective costs to recover a portion of their joint and common costs is excessive and ask for it to be substantially reduced by the Department. The Department previously addressed this issue in its July 17, 1996 Decision in Docket No. 95-11-08, Application of the Southern New England Telephone Company for Approval to Offer Interconnection Services and other Related Items Associated with the Company's Local Exchange Access Tariff, and must do so again at this point in this proceeding. In that Decision the Department limited the contribution level for attribution to joint and common costs to 15% for those services it determined to be essential to the development of local competition. (See the July 17,

1996 Decision, Docket No. 95-11-08, p. 59). The Department considered the specific services covered by that Decision to be sufficiently unique and determined that prospective purchasers of the services warranted special pricing protections against potential abuse by the Telco. The Department, however, has not been presented with evidence or argument that the unbundled network elements that are the subject of this proceeding constitute essential facilities and warrant similar price protections as afforded in that earlier Decision.

Independent of that proceeding the Department addressed the general issue of unbundled network elements in Docket No. 96-09-22, wherein it set the aggregate level of overall contribution for UNEs not considered essential facilities at 35% above TSLRIC. (Docket No. 96-09-22 Decision, April 23, 1997, p. 54; Docket No. 96-09-22 Decision, Errata May 21, 1997, p. 54). In that proceeding, the Department found on average, that a 35% level of contribution is both reasonable and sustainable .

Consistent with the distinctions set forth in those two Decisions for treating unbundled network elements, the Department has concluded that the network elements that are the subject of this proceeding are not essential facilities and will not be accorded special pricing protections accorded essential facilities in Docket No. 95-11-08. Instead, this Department finds the unbundled elements that are the subject of this proceeding to be replicable. Therefore, the Department will limit contribution on the subject network elements to 35% until such time as the Telco submits to this Department an acceptable study of the joint and common costs of the wholesale business unit. This position effectively lowers the overall contribution level assumed by the Telco in its proposal for this proceeding and will, accordingly, require modification to the wholesale prices of the affected elements. Therefore, the Telco will be directed below to modify its rates to generate an overall 35% level of contribution for each of the proposed rates based on TSLRIC costs.

The Department continues to believe that, until the Telco provides a forward looking joint and common cost analysis, the contribution level of 35% should be utilized as a surrogate price ceiling. However, the Department cannot permit that level of earning to continue ad infinitum. Therefore, the Department will authorize the Telco to establish rates for the affected unbundled network elements to provide a contribution of 35% with the proviso that such rates will remain in effect only until the Department has concluded its analysis and decision on the common cost study filed on April 1, 1998.

b. Nonrecurring Charges

For the same reasons stated above, the Department proposes to treat the Telco's nonrecurring charges similarly to the way it intends to address its recurring charges. Specifically, the Department is of the opinion that the level of contribution on nonrecurring charges should be limited to 35% on an interim basis. However, as indicated earlier the Department will require the Telco to provide CLECs separate nonrecurring charges for connection and disconnection services. AT&T properly argues that disconnection charges should be separated from connection charges, just as the Department directed in the April 23, 1997 Decision in Docket 96-09-22. The Department reaffirms that requirement in this proceeding for the unbundled services that are the subject of this proceeding. Therefore, the Telco will be directed to immediately file separate wholesale connection and disconnection charges at the conclusion of this proceeding for all wholesale services. In consequence of the Department's decision on this issue, CLECs will incur charges for connection when placing end user customers into service and incur a corresponding disconnection charge at such time as the end user terminates service with the serving CLEC irrespective of the reason.

c. Other Rates

Separately, the Department finds merit in the arguments raised by Cox relative to the limitations placed upon CLECs for access to and use of the Telco NID. Cox Brief, p. 10. The Department has reviewed the positions set forth by the parties on this issue and finds that the loop and NID are separate network elements and therefore, subject to individual provisioning processes. The Department agrees with those parties who expressed the belief that facilities-based competition will only emerge when the limitations on entry are few. This particular issue is one which demands revision. Therefore, this Department finds it consistent with both Public Act 94-83, An Act Implementing the Recommendations of the Telecommunications Task Force, and the Telcom Act to treat loops and NIDs to be distinct and

separate network elements for purposes of pricing and provisioning to CLECs. Therefore, the Telco shall at the conclusion of this proceeding develop and submit to this Department rates for NIDs and loops that conform to this Decision.

The Department has also considered the matter of Telco cross-connection charges. In those instances when a CLEC chooses to provide its own NID at the subscriber's premise, the Department believes that it is inappropriate for the Telco to impose cross-connection charges unless the Telco does, in fact, perform a cross-connection on behalf of the CLEC. If, however, the CLEC performs such cross-connection itself, the Telco has no basis for charging a cross-connection fee and the Department will not permit it to do so.

With those conditions as reference points the Department is of the opinion that a CLEC that wants to provide its own NID/NIU may do so at its own expense and at its own risk. The CLEC, however, will assume all responsibility for maintaining quality of service and installation standards currently imposed by the Department and other governmental agencies on the Telco. Furthermore, any NID/NIU deployed by a CLEC in its infrastructure must conform to accepted industry standards and be grounded in such manner that it conforms with local, state and national code requirements.

Additionally, the Department is of the opinion that both the Telco and a CLEC may keep any unoccupied NID/NIU in-place after termination of their respective service by a subscriber as long as the subscriber does not object with the respective providers' devices remaining in place. Should the end user customer want one or more of the NID/NIUs removed from their premises, each of the affected parties will be required to remove their respective NID/NIUs at their own expense.

The Telco will also be permitted by this Decision to inspect the grounding of its drop and loop provided to a CLEC for its use. If grounding is not properly performed in accordance with generally accepted standards and code, the Telco will notify the CLEC of the condition and it will be that CLEC's responsibility to immediately correct the unsafe condition before service using the Telco provided loop is restored.

On the subject of common transport the Department notes that the Telco has not provided UNE rates for common transport and shared facilities in this proceeding. The Telco defends that decision by citing the threat of arbitrage created by common transport. The Department acknowledges that common transport and shared facilities' offerings do present potential alternatives to the dedicated offerings of the Telco and could threaten the Telco's access revenues, although the degree of such is debatable. All things being equal, any loss in access revenue experienced by the Telco in consequence of arbitrage would most likely be transferred to the Telco's local exchange service subscribers or stockholders for recovery.

The parties to this proceeding claim the Telco is legally obligated to provide common transport as supported by AT&T's arbitration tariff. While understanding the Telco's reluctance to provide these shared services, the Department believes that both state and federal law dictate that CLECs should be provided with the services that they demand so long as those services do not constitute individual subelements of a UNE. The Department finds that the issues raised by the parties in this proceeding warrant more extensive examination before any determination can be made by the Department. Therefore, the Department will conduct a separate proceeding, Docket No. 98-02-27, DPUC Investigation Into the Provision of Shared Transport, wherein the parties can address the relative merits of shared transport on the development of a competitive market. In that docket the Department intends to address common transport and shared facilities in the context of existing federal rules and judicial opinions.

d. Tariffed Rates as Unbundled Rates

In the context of this proceeding, there are several network elements that the Telco proposes to introduce into its unbundled tariff at rates which reflect parity to those currently contained in its access tariff for comparable functionality. Specifically, the affected services include the recurring rate for dedicated and shared facilities; the rate for signaling materials and call related databases; and rates for line information databases. The proposed services represent services currently contained in Section 4 and Section 12 of the Telco's Connecticut Access Service Tariff, respectively. Additionally, the

nonrecurring charges for dedicated and shared interoffice transmission facilities are contained in Section 4 of the Telco's Connecticut Access Service Tariff, and nonrecurring charges for signaling transfer print and system control point rates are contained in Section 12 of the Telco's Connecticut Access Service Tariff.

The Department has considered the petition of the Telco in this proceeding to regard certain of its unbundled elements as nothing different, functionally, than these services contained in its Connecticut Access Service Tariff. After examining the evidence offered in this proceeding the Department must conclude that the above noted unbundled elements constitute identical services and perform identical functions to those services currently contained in Sections 4 and 12 of the Telco's Connecticut Access Tariff. None of the parties to this proceeding have alleged otherwise. Accordingly, the Department will treat the services proposed in this proceeding and their correspondent access offering as one and the same for purposes of this proceeding.

The parties to this proceeding argue that the rates applied to all subject elements in this proceeding must be based on TSLRIC and that establishing any element rate at parity with a rate contained within the Connecticut Access Tariff is a violation of law and of this Department's own rulings. The Department agrees with the parties that the existing access tariff rates were not set by this Department using a TSLRIC methodology. However, the Department remains of the opinion that the rates for access services are based on Telco costs that have been deemed reasonable in a formal proceeding and are, without question, above their respective cost. If the latter statement were not a generally accepted fact this Department and others like it would not be inundated with requests by the IXCs to reduce access charges that in their view are grossly overpriced.

The issue before the Department is not, however, the basis upon which access charges are constructed or set. The issue in this proceeding is the merit of setting the price of certain unbundled elements which have a correspondent service offering elsewhere in the Telco's product family at a price level which affords the service offerings price parity with each other. The Department has already stated its opinion that unbundled rates for UNEs should be based on TSLRIC plus 35% contribution to encourage facilities-based competition. The Department, however, does not consider that standard applicable to those services delineated above which have correspondent offerings in Sections 4 and 12 of the Connecticut Access Tariff. The Department is not of the opinion that pricing these elements on the basis of TSLRIC in any way encourages facilities-based competition and may prove damaging to the market balance that currently exists between local and long distance services.

Although the Department continues to hold that TSLRIC principles are appropriate for establishing new unbundled rates for services that have not been previously offered, the Department's overriding concern is that prices for these services and parity services (i.e., access service rate elements) do not fall below TSLRIC. Likewise, the Department does not want any actions taken in this proceeding to act as precedents for the Department's treatment of access charges currently under review by this Department in a separate proceeding. If price changes to the services contained in the Connecticut Access Tariff are deemed necessary, then proposals will be fully analyzed in Docket No. 96-04-07, DPUC Investigation into the Intrastate Rates and Charges Incurred by Long Distance Carriers to Access the Public Switched Telecommunications Network. Should these rates require adjustment, then that adjustment must be done in a manner that does not harm customers, the market, or the only existing ubiquitous telephone system in Connecticut. Indeed, the entire purpose of these unbundled proceedings has been to create new rates for new components of service, not service that is already available to the CLECs. In instances such as this when the Department determines a comparable service already exists the use of parity pricing is both an efficient and effective means of maintaining discipline in the market.

The Department notes the views expressed by the parties in this proceeding on the issue of access charges and will not prejudice the evidence presented in Docket No. 96-04-07 by subjecting the unbundled elements in question to the 35% contribution limitation introduced earlier in this Decision. Were it to do so, the Department would be effectively ordaining an outcome in Docket No. 96-04-07 and denying the parties due process in that proceeding.

The Department, however, will require the Telco to adjust its correspondent rates introduced in

this proceeding to a level that maintains price parity with their respective Connecticut Access Tariff Sections 4 and 12 counterparts at the conclusion of Docket No. 96-04-07. The Telco has conceded its willingness to change UNE rates if the access rates are changed to maintain parity. Telco Brief, p. 52. The Department accepts this concession and notes that the findings made in Docket No. 96-04-07 will be applied to these UNE rates. The Department finds that any further changes to access charge must also be reflected immediately in the respective UNEs to maintain price parity with Sections 4 and 12 of the Connecticut Access Tariff.

V. FINDINGS OF FACT

1. The principal purpose of this proceeding is to establish rates and charges for the acquisition and use of Telco UNEs and network feature enhancements for the purpose of repackaging, rebranding or reselling such services or features in direct competition with the Telco.

2. The proposed unbundled elements and services are noncompetitive, nonessential functions of the Telco's local telecommunications network that are used to provide telecommunications services and are reasonably capable of being tariffed and offered as separate services, unless the service is already offered under tariff.

3. The cost studies submitted by the Telco are auditable and documented.

4. The Telco did not fully incorporate known planned process improvements which would have significantly reduced the cost structures it was presenting in support of its proposed rates and charges.

5. As mechanized systems presently under development by the Telco and the CLECs are implemented, a reduction in the associated nonrecurring costs is not unreasonable to expect.

6. The Telco reasonably reflected in its cost studies the discount that it currently receives from its vendors and expects to receive in the future for similar purchases.

7. The technology mix assumed by the Telco in its cost studies sufficiently correspond to its projected modernization plan.

8. The unbundled network elements that are the subject of this proceeding do not constitute essential facilities and do not warrant the price protections afforded in the July 17, 1996 Decision in Docket No. 95-11-08.

9. Local loops and NIDs are distinct and separate network elements for purposes of pricing and provisioning to CLECs.

10. Dedicated and shared facilities, signaling material and call related databases, and information databases constitute identical services and perform identical functions to those services currently contained in Sections 4 and 12 of the Telco's Connecticut Access Tariff.

11. The rates for access services are based on Telco costs that have been deemed reasonable in a formal proceeding and are above their respective costs.

VI. CONCLUSION AND ORDERS

A. CONCLUSION

The Department has accepted the cost studies as a preliminary basis for determining unbundled network element rates in this proceeding. Therefore, the Telco's request to offer the unbundled elements, is hereby approved as modified, subject to the orders below.

B. ORDERS

For the following Orders, please submit an original and 12 copies of the requested material identified by Docket Number, Title and Order Number to the Executive Secretary.

1. No later than June 1, 1998, the Telco shall submit to the Department proposed rates for NIDs and local loops.

2. No later than June 1, 1998, the Telco shall file separate connection and disconnection charges for all unbundled services.

3. The Telco shall modify its recurring rates and nonrecurring charges to generate an overall 35% level of contribution for each of the proposed rates based on TSLRIC costs.

4. Until such time as the Department analyzes the Telco's forward looking common cost analysis, the overall contribution level of 35% should be utilized.

5. The Telco shall provide a complete reexamination of all of its UNE rates and offerings and submit the results of that examination to the Department by April 1, 1999.

6. No later than September 1, 1998, the Telco will file new cost studies to support nonrecurring UNE rates and charges.

7. The Telco shall modify its nonrecurring cost studies to reflect the following:

   - a one-time 2% fallout rate in the ordering and provisioning nonrecurring cost study
   - an individual nonrecurring cost study for disconnection of CLEC service and removal of said costs from the nonrecurring charge for connection
   - modification of the nonrecurring cost study for connection of CLEC service by removing any and all costs associated with disconnection of Telco service or CLEC service.

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DOCKET NO. 97-04-10 **APPLICATION OF THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR APPROVAL OF TOTAL SERVICE LONG RUN INCREMENTAL COST STUDIES AND RATES FOR UNBUNDLED ELEMENTS**

This Decision is adopted by the following Commissioners:

Jack R. Goldberg

John W. Betkoski, III

Glenn Arthur

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Department of Public Utility Control, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

Robert J. Murphy
Executive Secretary
Department of Public Utility Control

Date