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November 13, 2000

VIA ELECTRONIC MAIL

David Waddell, Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *Generic Docket to Establish UNE Prices for Line Sharing per FCC 99-355 and Riser Cable and Terminating Wire as Ordered in TRA Docket No. 98-00123*
Docket No. 00-00544

Dear Mr. Waddell:

Enclosed are electronic versions of the Direct Testimony of the following witnesses:

John Ruscilli	Keith Milner
Daonne Caldwell	Ronald Pate

The original and 13 copies will be hand delivered to the Authority today. Pursuant to the agreement of the parties, copies of the enclosed are being provided to counsel of record for all parties electronically and by mail, with the exception of Exhibit 1 to Daonne Caldwell's testimony. Caldwell Exhibit 1 is a cost study comprised of both a paper document of approximately 200 pages and a CD Rom. That exhibit is being hand delivered or faxed (as appropriate) to counsel of record.

Very truly yours,

Guy M. Hicks

GMH:ch
Enclosure

235939

CERTIFICATE OF SERVICE

I hereby certify that on November 13, 2000, a copy of the foregoing document was served on the parties of record, via electronic mail and the method indicated below:

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BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF JOHN A. RUSCILLI

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

NOVEMBER 13, 2000

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS ADDRESS.

A. My name is John A. Ruscilli. I am employed by BellSouth as Senior Director for State Regulatory for the nine-state BellSouth region. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR BACKGROUND AND EXPERIENCE.

A. I attended the University of Alabama in Birmingham where I earned a Bachelor of Science Degree in 1979 and a Master of Business Administration in 1982. After graduation I began employment with South Central Bell as an Account Executive in Marketing, transferring to AT&T in 1983. I joined BellSouth in late 1984 as an analyst in Market Research, and in late 1985 moved into the Pricing and Economics organization with various responsibilities for business case analysis, tariffing, demand analysis and price regulation. I served as a subject matter expert on ISDN tariffing in various commission and public service commission ("PSC") staff meetings in Tennessee, Florida, North Carolina and Georgia. I later moved into the State

Regulatory and External Affairs organization with responsibility for implementing both state price regulation requirements and the provisions of the Telecommunications Act of 1996 ("the Act"), through arbitration and 271 hearing support. In July 1997, I became Director of Regulatory and Legislative Affairs for BellSouth Long Distance, Inc., with responsibilities that included obtaining the necessary certificates of public convenience and necessity, testifying, Federal Communications Commission ("FCC") and PSC support, federal and state compliance reporting and tariffing for all 50 states and the FCC. I assumed my current position in July 2000.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The Tennessee Regulatory Authority ("Authority") opened this docket to establish rates for certain unbundled network elements ("UNEs"). My testimony addresses the policy issues related to the cost studies and price development for the UNEs that BellSouth offers to Competitive Local Exchange Carriers ("CLECs") outlined by the FCC in its Third Report and Order in CC Docket No. 96-98, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, issued November 5, 1999 ("UNE Remand Order") and its Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98 ("Line Sharing Order"). The following areas are discussed in my testimony: 1) the policy foundations underlying the proposed rates; 2) the effect of the proposed rates on implementation of those policies; and 3) the development of the proposed rates.

Q. GENERALLY, WHAT IS THE PURPOSE OF THIS PROCEEDING?

A. The FCC's UNE Remand Order identified additional UNEs that must be offered to

CLECs and the Line Sharing Order identified the high frequency portion of the loop, also referred to as line sharing, as a new UNE. Also, pursuant to the requirements of FCC Rule 51.507(f), state commissions must establish different rates (prices) for certain UNEs in at least three cost-related rate zones within the state to reflect geographic cost differences. Therefore, the primary goal of this proceeding is to establish rates (including geographically deaveraged rates where appropriate) for the additional UNEs that the FCC identified in its UNE Remand Order and its Line Sharing Order. The rates the Authority establishes is this proceeding will replace, subject to true-up, the interim rates that the Authority has previously established.

Q. BRIEFLY DESCRIBE THE COST STUDIES BELLSOUTH IS SUPPORTING IN THIS PROCEEDING.

A. In Docket No 97-01262, the Authority instructed that various adjustments be made to the Total Element Long Run Incremental Cost ("TELRIC") initially filed by BellSouth. BellSouth's witness Ms. Daonne Caldwell sponsors the cost studies that BellSouth filed on October 2, 2000 in this proceeding. As she explains in detail, these studies are based on forward-looking economic costs, and the same adjustments previously ordered by the Authority have been incorporated into these studies.

Q. WHAT RATES (RECURRING AND NON-RECURRING) DOES BELLSOUTH PROPOSE IN THIS PROCEEDING?

A. BellSouth proposes rates that are equal to the forward-looking economic cost as defined in the FCC's current pricing rules. These rates equal the sum of: (1)

TELRIC (based on the efficient network requirement) plus, (2) a reasonable allocation of forward-looking common costs. BellSouth, however, continues to maintain that the FCC's pricing rules do not permit full cost recovery. The rates BellSouth proposes are contained in Exhibit JAR-1 attached to my testimony. Exhibit JAR-1 contains BellSouth's proposed rates for the additional UNEs that resulted from the FCC's UNE Remand and Line Sharing Orders. The cost study reference number is provided with the description of the corresponding rate element.

Q. HOW WILL THE PRICES ESTABLISHED IN THIS PROCEEDING AFFECT THE DEVELOPMENT OF LOCAL COMPETITION IN TENNESSEE?

A. The prices established in this proceeding will have profound effects on the continued development of competition in Tennessee. The outcome of this docket will affect:

- the nature and extent of competition;
- how local competition will continue to develop;
- which companies will choose to participate;
- which customers will benefit from local competition;
- economic development and the availability of advanced technologies.

All of these issues will be significantly impacted by the Authority's decision in this proceeding.

Q. PLEASE BRIEFLY COMMENT ON HOW PRICES FOR UNES AND INTERCONNECTION SERVICES AFFECT THE ISSUES IDENTIFIED ABOVE.

A. In order to maintain an environment in which efficient competition will occur and provide the maximum benefit to consumers, local competition must be implemented in a fair and balanced manner. If prices for UNEs and interconnection services are set either too high or too low then:

- new investment will not materialize and economic development will be thwarted;
- market entry and investment decisions of competitors, including BellSouth, will be distorted;
- the development of efficient competition in the local market, as intended by Congress, will not prosper, and
- such incorrect pricing will not, in the long run, benefit the consumer.

Q. HOW WILL INCENTIVES TO INVEST IN NEW TECHNOLOGY BE AFFECTED BY PRICES THAT ARE NOT JUST AND REASONABLE?

A. Generally, incentives to invest in new technology are reduced if prices for UNEs and interconnection services are not just and reasonable. As explained further below, such incentives to both CLECs and Incumbent Local Exchange Companies ("ILECs") are reduced.

One consequence of establishing prices that are not just and reasonable is that such pricing causes inefficient decisions. Prices that are understated deter the ILEC from undertaking investments because it guarantees that the costs of those investments will not be recovered. An ILEC only has an obligation to unbundle its existing network.

If UNE prices are too low, investment decisions associated with expanding or upgrading that network become more speculative. Accordingly, incentives to expand that network into new areas and upgrade it with new technology are reduced. Where UNEs are available, CLECs will over-consume the ILEC's facilities and under-invest in their own facilities, even when investing in their own facilities is the efficient choice.

Another consequence of inadequate UNE prices is that it results in inefficient entry of CLECs into the local market by placing all of the risks of building and maintaining a network on the ILEC. In effect, the CLECs get a "free ride" on BellSouth's network without having to make any substantial investment or commitment. While CLECs have the <u>option</u> to use the ILEC's facilities for the economic life of those facilities, CLECs don't have to. The CLEC can utilize BellSouth's facilities for a limited period, e.g., until the CLEC builds its own facilities to serve a customer. Since BellSouth established the facilities, however, BellSouth must recover its costs whether a CLEC uses the facilities or not. Any costs not recovered from the CLEC who caused the costs become a burden upon BellSouth's end users. If prices are not set to cover costs, then CLECs don't bring to the marketplace anything more than an arbitrage mechanism. This arbitrage allows them to avoid paying the costs they would otherwise have to pay in a competitive marketplace. End user customers are ultimately the losers in this arrangement.

Q. ARE THERE ANY OTHER ASPECTS TO THIS RATE-SETTING PROCEEDING OF WHICH THE AUTHORITY SHOULD BE AWARE?

A. Yes. Another troublesome outcome of setting prices too low would be the marginalization of the ILEC. As discussed later in my testimony, marginalization occurs as a result of price differences between rural residential and urban businesses. The prices of the latter have historically subsidized the high cost of providing service to the former, serving public policy purposes to ensure affordable local service for all consumers. Setting UNE and interconnection services prices at unreasonably low levels will hinder BellSouth's ability to compete because the CLECs will have an artificial pricing advantage over BellSouth. The CLEC will, therefore, be in a better position to "cherry pick" the more profitable, mainly business customers, and the ILEC will lose the low cost, high margin, urban customers to competition. The ILEC will be left to serve the high cost, low (or negative) margin, rural customers. Ultimately, since only the low margin customers will be left to cover the full cost of the network, prices for these predominantly rural customers would have to increase.

Q. PLEASE EXPLAIN FURTHER HOW INADEQUATE UNE PRICES AFFECT RETAIL PRICES.

A. If the prices of the services provided to competitors do not cover the costs of providing the services, BellSouth's retail customers and shareholders will end up subsidizing its competitors. In that event, BellSouth must attempt to recover certain wholesale costs through its retail prices. Unfortunately, however, attempts to recover the shortfall in this manner will ultimately be unsuccessful and BellSouth will have no choice but to recover the shortfall from its retail customers. The competitor who is using the subsidized facilities will not have to recover this shortfall through its retail prices. Hence, the competitor's prices will remain lower than the incumbent's retail prices. By partially utilizing a subsidy provided by BellSouth's retail customers and shareholders, the competitor can undercut BellSouth's retail prices. To respond to this competitive pressure, BellSouth must lower certain retail prices, and attempt to recover wholesale costs from a smaller group of retail customers. The result is that this subsidy to competitors would ultimately be borne by those end users that have the fewest competitive options, e.g., rural residential customers.

Q. WHAT ARE SOME OF THE CONSEQUENCES IF PRICES ARE SET TOO HIGH?

A. As I mentioned earlier, the FCC's current pricing rules result in prices being understated. Therefore, setting prices too high is not currently a condition the Authority will encounter. Nonetheless, setting prices too high would result in uneconomic decisions such as a CLEC constructing its own facilities (rather than purchasing UNEs from the ILEC) when the CLEC is not the most efficient provider. Of course, the result would be that infrastructure competition would develop sooner, even though the CLEC may not be the most efficient provider.

The ultimate goal is to establish prices that are neither too low nor too high; to do otherwise will result in inefficient decisions, and, ultimately, consumers will suffer the consequences. Again, however, given the current pricing rules, the Authority can only minimize the extent to which prices are set too low.

Q. ARE THERE ANY UNIQUE CONCERNS SURROUNDING NONRECURRING PRICES?

A. Yes. While all of the issues previously discussed apply both to recurring and nonrecurring prices, the impact of inappropriate nonrecurring prices is felt immediately. Nonrecurring prices principally recover labor cost and direct expenses incurred when a specific element or service is provisioned as the result of a service order. These expenses are paid immediately by the ILEC. Thus, setting nonrecurring prices too low will immediately begin to create the negative consequences that I previously discussed. Consequently, the Authority should be very careful to ensure that nonrecurring prices fully recover the cost that an ILEC is expected to incur on a going-forward basis.

In particular, the Authority should ensure that the obligations of the ILEC are accurately reflected in the cost study. For example, BellSouth's nonrecurring costs reflect the work times typically required to perform the various functions required to provision a particular element. Therefore, if the Authority were to establish performance requirements that require additional work activities, BellSouth's cost studies would not accurately reflect its costs.

Finally, nonrecurring costs should reflect the activities actually undertaken to provide the element. For example, a new technology that <u>could</u> reduce nonrecurring costs should only be used as a basis for prices to the extent that it will be actually used by BellSouth to provide the element on a going-forward basis.

<u>Geographic Deaveraging</u>

Q. WHAT OBLIGATION DOES THE AUTHORITY HAVE TO ESTABLISH GEOGRAPHICALLY DEAVERAGED RATES FOR UNBUNDLED NETWORK ELEMENTS?

A. The FCC's Rule 51.507(f) requires state commissions to establish different rates (prices) for elements in at least three cost-related rate zones within the state to reflect geographic cost differences. With the November 2, 1999 release of the FCC's Order in CC Docket No. 96-46, the stay of Rule 51.507(f) was lifted effective May 1, 2000.

Q. PLEASE DISCUSS THE GENERAL POLICY CONSIDERATIONS ASSOCIATED WITH GEOGRAPHIC DEAVERAGING OF UNEs.

A. UNEs are generally used by CLECs to compete with services offered at retail rates by incumbent local exchange carriers ("ILECs"). Consequently, the relationship between UNE rates and retail rates affects competitive development. Historically, it has been the intent and practice of regulators to deaverage rates for basic service in an inverse relationship to costs. For example, for basic residence local exchange service in Tennessee, Rate Group 1 has the lowest rate, and Rate Group 5 has the highest rate. The wire centers in Rate Group 1, however, are generally rural and have much higher costs than the urban wire centers in Rate Group 5. Such pricing practices served both regulatory and public policy purposes and incorporated implicit subsidies to ensure affordable local service for all customers. Conversely, UNE prices are based on costs and will be geographically deaveraged in a direct relationship to cost.

Geographically deaveraging UNE rates will result in a rate structure that is inconsistent with the existing pricing practices for retail rates for basic local exchange service as established by this Authority. The present rate structure in Tennessee incorporates long-standing policies of purposefully pricing some services markedly above costs in order to price other services, such as residential basic local exchange service, at or below cost. Further, basic local exchange service rates have been established with a direct relationship to the number of lines in an exchange's local calling area – the greater the number of lines in a particular exchange's local call area, the higher the price for the basic service. Geographic deaveraging will create loop prices that vary inversely from the prices for retail services.

Q. WHAT SHOULD THE AUTHORITY DO TO ADDRESS THE PROBLEMS DISCUSSED ABOVE?

A. The Authority should encourage rate rebalancing and establish a universal service fund as quickly as possible. This is important because unbundled loops will be used by CLECs to compete for these retail customers. Geographically deaveraging loop prices would result in lower UNE loop prices in the urban area where retail prices are currently the highest. In rural areas, the reverse would be true. However, in rural areas, geographically deaveraged unbundled loop prices set high enough to cover costs would be irrelevant because the CLEC could simply resell the low priced retail service to rural customers. As a result, deaveraging, without concomitant rate rebalancing or creation of a state universal service fund, simply creates another opportunity for CLECs to engage in inappropriate arbitrage of the pricing schedule. This arbitrage will ultimately lead to higher prices for rural customers as CLECs usurp the contribution contained in the prices charged in urban areas that currently make lower rural prices possible.

It is very important to recognize that CLECs use unbundled loops to compete with residence and business retail local exchange services. As such, the pricing implications of geographically deaveraging the loop cannot be divorced from the price of local exchange services.

Q. PLEASE EXPLAIN HOW BELLSOUTH DERIVED ITS PROPOSED DEAVERAGED RATES.

A. The geographically deaveraged rates BellSouth proposes were derived using the methodology adopted by the Authority in their decision of April 25, 2000, in Docket No. 97-1262. In using the methodology adopted by the Authority, customers who are located in the same geographic area and who have similar calling areas will be in the same geographically deaveraged zone for UNE pricing. Utilizing local exchange rate groups to define geographically deaveraged zones for UNEs meets the requirements set forth by the FCC and provides consistency between the structure of BellSouth's retail, resale and UNE rates. Further, "rate group-to-zone" mapping best represents the competitive market environment in Tennessee, thereby promoting competition in all areas of Tennessee.

Q. WHAT DOES BELLSOUTH PROPOSE AS ITS GEOGRAPHICALLY DEAVERAGED RATES IN THIS PROCEEDING?

A. The geographically deaveraged rates being proposed by BellSouth are contained in Exhibit JAR-1. Also, when deaveraging the loop/port combination, only the loop component is deaveraged since switching (port) costs do not vary by geographic location.

UNE Remand Order Requirements

Q. PLEASE BRIEFLY DESCRIBE THE FCC'S UNE REMAND ORDER.

A. As the result of a Court Remand, the FCC was required to review its previously established national list of UNEs. The FCC was instructed to apply the "Necessary and Impair Standards" of Section 251(d)(2) of the Act to determine which network elements an ILEC must unbundle. The FCC's UNE Remand Order resulted from this further review, and it provided a national list of network elements that ILECs must unbundle and make available at cost-based rates for CLECs. The resulting list is similar, but not identical, to the original UNE list. Generally, loops, subloops, network interface devices (NIDs), circuit switching, interoffice transmission facilities, signaling and call-related databases and operations support systems (OSS) must be unbundled. However, certain network elements contained in the original UNE list no longer must be unbundled. These items are operator services and directory assistance (OS/DA), packet switching (per specified exemption) and circuit switching (per specified exemption).

Q. WHAT IS THE RELEVANCE OF THE FCC'S UNE REMAND ORDER TO THIS PROCEEDING?

A. As previously noted, this Authority is establishing permanent cost-based rates for numerous UNEs in Docket No. 97-01262. Since the FCC has added some UNEs, this Authority must establish permanent cost-based rates for these new UNEs. The permanent cost-based rates that will be established in Docket No. 97-01262 are unaffected by the UNE Remand Order.

Q. WERE ANY ADDITIONAL UNBUNDLED LOOP TYPES REQUIRED BY THE FCC'S UNE REMAND ORDER?

A. Yes. While the Authority is preparing to establish rates for numerous types of unbundled loops, the FCC's UNE Remand Order requires BellSouth to provide unbundled copper loops, dark fiber loops and unbundled loops at high capacity speeds such as DS3 and OC3. Because the Authority has not yet addressed prices for these types of loops, BellSouth proposes the rates contained on Exhibit JAR-1.

Q. WHAT IS THE BASIS FOR THE PRICES BELLSOUTH PROPOSES FOR PROVIDING UNE COMBINATIONS?

A. Prices for the elements that comprise the UNE combinations that BellSouth makes available to CLECs when such combinations are currently combined will be established by the Authority. Some of the prices will be established by the Authority in Docket No. 97-01262 and some of the prices will be established in this proceeding. Exhibit JAR-2 attached to my testimony contains a chart that identifies the UNEs that are included in various UNE combinations along with the identification of the TRA docket number in which the rate will be established. As I will discuss in greater detail later in my testimony, BellSouth has elected to provide access to new enhanced extended loop ("EEL") combinations when specific circumstances exist so that BellSouth is not required to provide unbundled local switching. As such, BellSouth is proposing in this proceeding nonrecurring cost studies and prices for providing new EEL combinations. BellSouth's nonrecurring cost study for providing new EEL combinations was filed on October 20, 2000. The proposed recurring and nonrecurring prices for the UNE combinations being addressed in this proceeding are contained in Exhibit JAR-1.

Q. PLEASE EXPLAIN WHY BELLSOUTH IS PROPOSING NONRECURRING RATES FOR ADSL AND HDSL LOOPS IN THIS DOCKET WHEN RATES FOR THESE LOOPS WERE ALREADY BEING CONSIDERED IN DOCKET NO. 97-01262?

A. The nonrecurring rates BellSouth proposed in Docket No. 97-01262 for ADSL and HDSL loops were based on a cost structure that only allowed for a manual service inquiry process and assumed that loop makeup information would always be required for xDSL loops. Since BellSouth's filing in Docket No. 97-01262, BellSouth has implemented a mechanized provisioning process associated with its xDSL loop offerings. As such, BellSouth will offer both a manual and a mechanized provisioning process for service inquiry and access to loop makeup information.

Q. PLEASE EXPLAIN HOW RESTRUCTURING THE NONRECURRING COSTS IMPACTS THE RECURRING RATES FOR XDSL LOOPS.

A. Because of the Authority's requirement that nonrecurring costs associated with testing be recovered on a monthly recurring basis, the restructuring of the nonrecurring ADSL and HDSL costs impacts the amount of nonrecurring testing costs. Since the nonrecurring testing costs have decreased, the testing cost to be included in the recurring rates for the ADSL and HDSL loops has also decreased. As such, the proposed recurring rates for ADSL and HDSL loops being considered in Docket No. 97-01262 should be modified to reflect the impact of the restructured nonrecurring cost study.

Q. PLEASE DESCRIBE THE SITUATIONS WHEN CHARGES FOR LINE CONDITIONING, ALSO REFERRED TO AS LOOP MODIFICATION, WOULD APPLY.

A. Unbundled loop modification charges are applicable when a CLEC requests that BellSouth remove equipment that has been placed on copper loops (i.e., load coils, low-pass filters, range extenders, etc.) and/or by removing bridged tap attached to the copper loop. The FCC permits BellSouth to charge CLECs for loop conditioning. The FCC's UNE Remand Order states, "[w]e agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops." [See Paragraph 193, Footnote deleted]

Obviously, since the FCC allows the recovery of costs for conditioning loops under 18,000 feet, rates for conditioning loops greater than 18, 000 feet are also appropriate. A CLEC may use BellSouth's unbundled loop modification offering to remove bridge tap and/or equipment from any copper loop within BellSouth's network for the purposes of providing advanced data services.

Q. WHAT ARE THE APPROPRIATE RATES FOR LOOP MODIFICATION?

A. BellSouth's proposed rates for unbundled loop modification are contained in Exhibit JAR-1. These proposed rates are supported by cost studies sponsored by Ms. Caldwell.

Q. PLEASE EXPLAIN WHICH SUBLOOP ELEMENTS BELLSOUTH IS OBLIGATED TO UNBUNDLE.

A. The FCC's UNE Remand Order defines the subloop network element as any portion of the loop that is technically feasible to access at terminals in the ILEC's outside plant, including inside wire. Consistent with this order, BellSouth makes the following subloop elements available to CLECs on an unbundled basis:

> The *Network Interface Device* ("NID") provides a single line termination device or that portion of a multiple line termination device required to terminate a single line or circuit. The NID, located on the customer's premises, establishes the official network demarcation point between a telecommunications company and its end user customer. BellSouth provides access to the NID on an unbundled basis; therefore, a CLEC may order a stand alone NID from BellSouth. However, when a CLEC orders an unbundled loop, BellSouth provides the NID also. In all cases where BellSouth provisions a loop, it must be properly grounded.
>
> *Loop feeder* provides a transmission path between the feeder distribution interface and the telephone company central office.
>
> *Loop distribution or distribution media* provides a transmission path between a feeder distribution interface and the NID at the customer's premises. If the CLEC were to take loop distribution as an unbundled

element, then the CLEC would presumably provide its own feeder facilities to its own switch.

Loop concentration enables CLECs to concentrate up to 96 sub-loops on 2 DS1s for the purpose of connecting the sub-loops (at a concentrated level) to BellSouth's feeder system.

Inside Wire, as described by the FCC in its UNE Remand Order, includes wire owned and controlled by the ILEC on or near an end user customer premises. Such inside wire would include access to BellSouth's Network Terminating Wire ("NTW") and Intrabuilding Network Cable ("INC"). Inside wire on the customer's side of the demarcation point (typically the NID) is owned and controlled by the customer.

Q. HOW SHOULD THE PRICES FOR UNBUNDLED SUBLOOP ELEMENTS BE SET?

A. The prices for unbundled subloop elements should be established using the same cost methodology used for other unbundled network elements. Ms. Caldwell sponsors BellSouth's cost studies for subloop elements. Prices for the subloop elements that BellSouth makes available to CLECs on an unbundled basis are contained in Exhibit JAR-1 attached to my testimony.

Q. IN ITS UNE REMAND ORDER, DID THE FCC MODIFY ITS DEFINITION OF THE NID?

A. Yes. Initially, in its First Report and Order in CC Docket No. 96-98 issued August 8, 1996 ("Local Competition Order"), the FCC defined the NID network element as a cross-connect device used to connect loop facilities to inside wiring. In its UNE Remand Order at ¶ 233, the FCC modified its original definition of the NID to "include all features, functions, and capabilities of the facilities used to connect the loop distribution plant to the customer premises wiring, regardless of the particular design of the NID mechanism." The FCC's stated goal was to have the NID definition "be flexible and technology neutral." (Id. ¶ 234) The FCC noted that its "rules permit considerable variation in the interconnection facilities between carrier and customer-controlled facilities," and that "evolution in network design and technology will likely cause additional design variations among the hardware interfaces between carrier and customer premises facilities." (Id.)

Therefore, in its NID definition, the FCC's use of the terms "features, functions and capabilities" means that, regardless of the type of device used to connect the loop distribution plant to the customer premises wiring, competitors will be able to obtain access to any such facilities as an unbundled network element. Indeed, the FCC stated that its "intention is to ensure that the NID definition will apply to new technologies, as well as current technologies, and to ensure that competitors will continue to be able to access customer premises facilities as an unbundled network element, as long as that access is required pursuant to section 251(d)(2) standards." (Id.)

The FCC also specified that its definition of the NID includes any means of interconnection of customer premises wiring to the incumbent LEC's distribution plant, such as a cross-connect device used for that purpose. However, the FCC specifically declined to include inside wiring in the definition of the NID, or to include the NID as part of any other subloop element.

Q. DOES THE FCC'S CURRENT DEFINITION OF THE NID HAVE ANY AFFECT ON THE PRICES THE AUTHORITY IS CURRENTLY CONSIDERING FOR THE NID?

A. No, it does not. The costs the Authority is considering for the NID are equal to the forward looking economic cost as developed using the Authority's cost study adjustments. The only additional element required by the FCC in its UNE Remand Order is a NID cross-connect, and BellSouth's proposed rate for this element is found on Exhibit JAR-1.

Q. HOW IS THE FCC'S DEFINITION OF INSIDE WIRE IN ITS UNE REMAND ORDER DIFFERENT FROM THE GENERALLY ACCEPTED MEANING OF INSIDE WIRE?

A. Since it was deregulated, inside wire has been defined as wire on the customer's side of the demarcation point. Consequently, inside wire is considered to be owned and controlled by the customer. In its UNE Remand Order, however, the FCC used the term "inside wire" when discussing access to BellSouth's Unbundled Network Terminating Wire ("UNTW") and Unbundled Intrabuilding Network Cable ("UINC"). Inside Wire, as described by the FCC in its UNE Remand Order, includes wire owned and controlled by the ILEC on or near an end user customer premises. Although BellSouth does not agree that the term "inside wire" appropriately encompasses UNTW and UINC, BellSouth does agree that UNTW and UINC are subloop elements, which CLECs are entitled to purchase on an unbundled basis, and for which BellSouth should be compensated.

Q. DOES BELLSOUTH'S PETITION FOR RECONSIDERATION ON THE DEFINITION OF INSIDE WIRE AFFECT THE RATES PROPOSED IN THIS PROCEEDING?

A. No. On February 17, 2000 BellSouth petitioned the FCC to reconsider its definition of inside wire adopted in the UNE Remand Order. Specifically, BellSouth has requested the FCC to continue to use its historic definition of inside wire and not expand its definition to include UNTW and UINC. Regardless of the outcome of BellSouth's Petition, UNTW and UINC would remain subloop elements, and the rates BellSouth proposes in this proceeding for UNTW and UINC comply with the FCC's rules.

Q. PLEASE EXPLAIN HOW THE PROVISION OF UNBUNDLED LOCAL SWITCHING IS AFFECTED BY THE FCC'S UNE REMAND ORDER.

A. BellSouth, like other incumbents, is required to unbundle local loops and local switching in certain instances so that CLECs can purchase these elements for use in their networks. However, in its UNE Remand Order the FCC determined that, in certain geographic areas, and under specific circumstances, the incumbent LEC can elect not to provide unbundled switching. The geographic area that is involved is what is referred to as Density Zone 1 in a top 50 Metropolitan Statistical Area ("MSA"). The specific circumstances involve two considerations. First, the incumbent LEC has to agree to provide, at TELRIC-based rates, enhanced extended links ("EELs") in this geographic area to CLECs that serve end users with four or more lines. The EEL is a specific combination of loop and transport UNEs. What this means is that the ILEC will combine a UNE loop and UNE transport to assist the CLEC in getting to the switch that the CLEC will use to provide local switching. Second, the incumbent is only relieved of the obligation to provide local switching for customers of the CLEC who have four or more lines.

The FCC's logic here is that the biggest part of the consumer market involves customers who have three or fewer lines. By the time a customer has four or more lines, the customer is either a mid-sized or a large customer, and CLECs are not impaired without access to BellSouth's unbundled switching to address the telecommunications needs of these classes of customers.

Q. WHY DOES THE INCUMBENT LEC HAVE TO PROVIDE ACCESS TO EELS IN ORDER TO TAKE ADVANTAGE OF THIS EXEMPTION?

A. Basically, the thought is that, if the incumbent LEC is willing to provide an EEL, the CLEC can haul the call anywhere in the area to a switch. The FCC obviously concluded that, at least in the top 50 MSAs, switching is available from any number of sources. As long as the incumbent LEC allows the CLEC to have an EEL so that the end user could be connected to a switch, it is not necessary for the incumbent LEC to unbundle local switching.

The FCC's Rule 51.319(c)(2) is quite clear. It simply states that if the incumbent LEC provides nondiscriminatory access to the EEL in Density Zone 1 in a top 50 MSA, then the incumbent LEC is not required to unbundle local circuit switching in that area for end users having four or more lines. In adopting this position in its UNE Remand Order at ¶ 293, the FCC found that a rule that provides access to unbundled local circuit switching to requesting carriers when they serve customers with three lines or fewer captures a significant portion of the mass market. The FCC rejected the CLECs' contrary arguments.

Q. DOES THE FCC'S UNE REMAND ORDER IMPACT THE RATES THIS AUTHORITY INTENDS TO ESTABLISH FOR LOCAL SWITCHING?

A. No, it does not. The rates the Authority intends to establish in Docket No. 97-01262 do not impact those situations where BellSouth is required to provide CLECs with access to unbundled local switching. When BellSouth elects to take advantage of the switching exemption I just discussed, BellSouth will offer CLECs access to new EELs for qualifying customers at the sum of the recurring rates for the elements that comprise an EEL as established in Docket No. 97-01262. The nonrecurring prices for BellSouth to provide these new EEL combinations are contained on Exhibit JAR-1 and are supported by the cost studies BellSouth filed on October 20, 2000.

Q. DOES THE FCC'S UNE REMAND ORDER HAVE ANY EFFECT ON THE UNBUNDLING OF VERTICAL FEATURES?

A. No. Nothing in the UNE Remand Order modified any previous FCC decisions or other rulings concerning the unbundling of vertical features. The Authority intends to establish rates for unbundled vertical features in Docket No. 97-01262.

Q. DID THE FCC'S UNE REMAND ORDER IDENTIFY ADDITIONAL UNBUNDLING REQUIREMENTS FOR INTEROFFICE TRANSMISSION FACILITIES?

A. The FCC's UNE Remand Order determined that high capacity interoffice transmission facilities should be provided on an unbundled basis. Further, the Order required that ILECs provide unbundled access to dark fiber. In order to comply with those requirements, BellSouth is proposing rates for unbundled interoffice transport at levels such as DS3, OC3 and OC48, and is also proposing rates for unbundled dark fiber. Please see Exhibit JAR-1 for BellSouth's proposed rates that are supported by cost studies sponsored by Ms. Caldwell.

Q. PLEASE DESCRIBE BELLSOUTH'S OBLIGATIONS RELATIVE TO PROVIDING CLECS WITH ACCESS TO BELLSOUTH'S SIGNALING NETWORKS AND CALL-RELATED DATABASES.

A. The FCC's Rule 51.319 requires BellSouth to provide nondiscriminatory access to signaling networks and call-related databases. When a CLEC purchases unbundled switching, BellSouth provides access to its signaling network from that switch in the same manner in which BellSouth obtains such access itself. When a CLEC provides its own switching facilities, BellSouth also provides access to its signaling network for each of the CLEC's switches in the same manner as BellSouth connects one of its own switches. For query and call-related database response, BellSouth provides access to its call-related databases.

Q. WHAT ARE THE RATES BELLSOUTH PROPOSES FOR ACCESS TO ITS SIGNALING NETWORK AND CALL-RELATED DATABASES?

A. BellSouth proposes the rates contained in Exhibit JAR-1, attached to my testimony, for access to BellSouth's signaling network and the following call-related databases:

- BellSouth Calling Name Database Service (CNAM)
- BellSouth Access to E911 Service
- Local Number Portability (LNP) Query Service

Q. WHAT DOES THE FCC'S UNE REMAND ORDER SAY ABOUT OPERATIONS SUPPORT SYSTEMS ("OSS")?

A. Basically, in its UNE Remand Order, the FCC reaffirmed that incumbent LECs must provide access to OSS functions on an unbundled basis to requesting carriers. As Mr. Pate discusses in his testimony, BellSouth provides such access. The UNE Remand Order does not impact the existing CLEC OSS interfaces or require any modifications to these interfaces. The UNE Remand Order does not impact the rates that CLECs will pay for access to the OSS functions that the Authority intends to establish in Docket No. 97-01262. The FCC clarified in its UNE Remand Order that its definition of OSS includes access to loop qualification information. As a result, the Authority must establish rates for CLECs to access this information in this proceeding

Q. WHAT IS LOOP MAKE-UP INFORMATION?

A. As defined in the FCC's UNE Remand Order, loop make-up information (also referred to as loop qualification information) identifies the physical attributes of the loop plant (such as loop length, the presence of analog load coils and bridge taps, and the presence and type of Digital Loop Carrier), which then enables carriers to determine whether the loop is capable of supporting xDSL and other advanced technologies. BellSouth witness Mr. Ron Pate describes the processes BellSouth makes available to CLECs for access to such loop make-up information.

Q. WHAT RATES DOES BELLSOUTH PROPOSE TO COVER THE COST OF PROVIDING ACCESS TO LOOP MAKE-UP INFORMATION?

A. On Exhibit JAR-1, BellSouth proposes rates for two elements – access to the loop make-up database (Cost Ref. No. J.3.1 - Mechanized Loop Make-up) and a service inquiry with loop make-up (Cost Ref. Nos. J.3.3 and J.3.4 - Manual Loop Make-up with or without Facility Reservation Number). The proposed rates are based on BellSouth's cost studies as sponsored by Ms. Caldwell.

Q. IS BELLSOUTH REQUIRED TO PROVIDE ACCESS TO PACKET SWITCHING UNEs?

A. No. With regard to the obligation to unbundle packet switching, the FCC stated in its Third Report and Order:

> We decline at this time to unbundle the packet switching functionality, except in limited circumstances. Among other potential factors, we recognize that the presence of multiple requesting carriers providing service with their own packet switches is probative of whether they are impaired without access to

unbundled packet switching. The record demonstrates that competitors are actively deploying facilities used to provide advanced services to serve certain segments of the market – namely, medium and large business – and hence they cannot be said to be impaired in their ability to offer service, at least to these segments without access to the incumbent's facilities. (Order at ¶ 306)

Q. WHAT ARE THE "LIMITED CIRCUMSTANCES" REFERRED TO BY THE FCC?

A. The FCC's Rule 51.319(c)(3)(B) regarding packet switching requires that an ILEC provide unbundled packet switching only where each of the following conditions are satisfied:

(i) The incumbent LEC has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems; or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section (e.g., end office to remote terminal, pedestal or environmentally controlled vault);

(ii) There are no spare copper loops capable of supporting the xDSL services the requesting carrier seeks to offer;

(iii) The incumbent LEC has not permitted a requesting carrier to deploy a Digital Subscriber Line Access Multiplexer at the remote terminal, pedestal or environmentally controlled vault or other interconnection point, nor has the requesting carrier obtained a virtual collocation arrangement at these subloop interconnection points as defined under § 51.319(b); and

(iv) The incumbent LEC has deployed packet switching capability for its own use.

Q. DOES BELLSOUTH OFFER THE DSLAM AS A UNE? ?

A. No. At paragraph 304 of its Third Report and Order, the FCC defines a DSLAM as a component of packet switching. BellSouth knows of no instance in which all of the conditions required by the FCC, stated above, will be satisfied. Therefore, BellSouth is not required to offer packet switching components; e.g., DSLAMs, on an unbundled basis.

Q. IS BELLSOUTH OBLIGATED TO PROVIDE CLECS WITH ACCESS TO OPERATOR SERVICES AND DIRECTORY ASSISTANCE ("OS/DA") AS UNES?

A. No. The FCC's UNE Remand Order found that CLECs are not impaired without access to BellSouth's OS/DA as UNEs so long as BellSouth provides customized routing (also referred to as selective routing). BellSouth offers selective routing; therefore, certain elements on the BellSouth Tennessee Rate Sheet that BellSouth submitted to the Authority on June 9, 2000 in Docket No. 97-01262 should be removed (specifically, all elements shown under Cost Reference Nos. G.1 through G.8).

Q. WHAT RATES DOES BELLSOUTH PROPOSE FOR SELECTIVE ROUTING?

A. BellSouth offers CLECs two methods for selective routing: selective routing using line class codes, or selective routing utilizing BellSouth's Advanced Intelligent Network ("AIN") solution. Mr. Milner's testimony describes BellSouth's selective routing offerings. BellSouth's proposed rates for selective routing using line class codes are being considered in Docket No. 97-01262. BellSouth's proposed rates for selective routing using BellSouth's AIN solution are contained in Exhibit JAR-1. The proposed rates for BellSouth's AIN solution for selective routing are based on BellSouth's cost studies as sponsored by Ms. Caldwell.

Q. PLEASE EXPLAIN "LINE SHARING" AND "SPECTRUM MANAGEMENT."

A. The local loop from the central office to the customer's premises can be used to provide both voice and packet data service. There are a number of carriers who want to use that loop to provide packet data service while the ILEC would continue to provide voice service. Inserting specific equipment on the line enables the spectrum to be "shared" by the voice provider and the data provider, a functionality also known as "line sharing." In its Line Sharing Order, the FCC specifically states "[t]he provision of xDSL-based service by a competitive LEC and voiceband service by an incumbent LEC on the same loop is frequently called 'line sharing.'" (Line Sharing Order at ¶ 4)

Q. UNDER WHAT CONDITIONS IS AN ILEC SUCH AS BELLSOUTH OBLIGATED TO PROVIDE LINE SHARING?

A. ILECs are only obligated to provide line sharing to a single requesting carrier at the same customer address as the traditional POTS analog voice service provided by the incumbent. Line sharing as ordered by the FCC is available under the following conditions:

- Two carriers – one voice provider (ILEC) and one data provider (CLEC) – serve one customer per loop (Id. ¶ 74);
- The ILEC provides traditional POTS analog voiceband service to the customer on the line to be shared (Id. ¶ 19);
- The CLEC provides xDSL-based service to the customer (Id. ¶ 13);
- The CLEC's xDSL technologies do not use the frequencies immediately above the voiceband, thereby preserving them as a "buffer" zone to ensure the integrity of the voiceband traffic (Id. fn 136);
- The CLEC's xDSL technology does not interfere with analog voiceband transmission (Id. ¶ 70-71); and
- If the ILEC's retail customer disconnects his/her POTs service, the data provider must purchase the entire stand-alone loop if it wishes to continue providing xDSL service to the customer. Similarly, ILECs are not required to provide line sharing to a requesting carrier when the CLEC purchases a combination of network elements known as the UNE platform. (Id. ¶¶ 72-73)

The "platform" referred to in the preceding reference is the loop/port combination. When a CLEC purchases the loop/port combination, the CLEC becomes the voice service provider. In order for BellSouth to provide access to the high frequency portion of the loop when the CLEC has purchased the loop/port combination, BellSouth would have to physically separate the loop/port combination, add in a splitter, and then recombine. BellSouth is not required to perform these functions for CLECs.

Further, the FCC's Line Sharing Order specifically concluded in paragraph 72 "that incumbent LECs must make available to competitive carriers only the high frequency portion of the loop network element on loops <u>on which the incumbent LEC is also providing analog voice service.</u>" (emphasis added) In that same paragraph, the FCC stated that "incumbent carriers are not required to provide line sharing to requesting carriers that are purchasing a combination of network elements known as the platform. In that circumstance, the incumbent no longer is the voice provider to the customer." The platform referred to is the loop/port combination. Also, the FCC's Line Sharing Order thoroughly examined whether CLECs would be impaired without access to line sharing when the ILEC is not providing the voice service. The FCC determined that no such impairment exists.

Finally, the FCC reiterated its position in its Order dated June 30, 2000 in CC Docket No. 00-65 (SBC – Texas Section 271 Application). At paragraph 324 the Order states, "the obligation of an incumbent LEC to make the high frequency portion of the loop separately available is limited to those instances in which the incumbent LEC is providing, and continues to provide, voice service on the particular loop to which the requesting carrier seeks access."

Q. WHAT ARE THE RATES BELLSOUTH PROPOSES FOR LINE SHARING?

A. BellSouth's proposed rates for line sharing, including rates for CLEC owned splitters, are contained in Exhibit JAR-1. The proposed rates are supported by cost studies sponsored by Ms. Caldwell.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes. #231084

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.0	***UNBUNDLED LOCAL LOOP***						
A.2	**SUB-LOOP**						
A.2.11	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop	1	$7.30	$147.93	$75.11	$99.96	$16.98
		2	$9.54	$147.93	$75.11	$99.96	$16.98
		3	$12.47	$147.93	$75.11	$99.96	$16.98
A.2.13	Network Interface Device Cross Connect			$11.11	$11.11		
A.2.14	2-Wire Intrabuilding Network Cable (INC)		$1.47	$107.63	$34.81	$94.41	$13.09
A.2.15	4-Wire Intrabuilding Network Cable (INC)		$2.55	$119.40	$46.58	$99.96	$16.98
A.2.17	Sub-Loop - Per Cross Box Location - CLEC Feeder Facility Set-Up			$517.25			
A.2.18	Sub-Loop - Per Cross Box Location - Per 25 Pair Panel Set-Up			$42.68			
A.2.19	Sub-Loop - Per Building Equipment Room - CLEC Feeder Facility Set-Up			$358.04			
A.2.20	Sub-Loop - Per Building Equipment Room - Per 25 Pair Panel Set-Up			$105.13			
A.2.21	Sub-Loop - Per Cross Box Location - CLEC Distribution Facility Set-Up			$517.25			
A.2.24	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only	1	$21.52	$137.31	$61.93	$118.04	$30.13
		2	$28.11	$137.31	$61.93	$118.04	$30.13
		3	$36.76	$137.31	$61.93	$118.04	$30.13
A.2.25	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only	1	$16.11	$142.83	$67.45	$104.67	$18.53
		2	$21.04	$142.83	$67.45	$104.67	$18.53
		3	$27.51	$142.83	$67.45	$104.67	$18.53
A.2.29	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only	1	$26.06	$116.00	$40.62	$106.82	$18.91
		2	$34.03	$116.00	$40.62	$106.82	$18.91
		3	$44.50	$116.00	$40.62	$106.82	$18.91
A.2.30	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only	1	$9.52	$114.27	$38.89	$104.67	$18.53
		2	$12.43	$114.27	$38.89	$104.67	$18.53
		3	$16.26	$114.27	$38.89	$104.67	$18.53
A.2.32	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only	1	$14.37	$123.41	$48.03	$110.44	$22.53
		2	$18.76	$123.41	$48.03	$110.44	$22.53
		3	$24.53	$123.41	$48.03	$110.44	$22.53
A.2.40	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only	1	$5.16	$110.71	$37.89	$94.41	$13.09
		2	$6.74	$110.71	$37.89	$94.41	$13.09
		3	$8.81	$110.71	$37.89	$94.41	$13.09

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.2.42	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only	1	$6.52	$117.12	$44.30	$99.96	$16.98
		2	$8.52	$117.12	$44.30	$99.96	$16.98
		3	$11.14	$117.12	$44.30	$99.96	$16.98
A.2.44	Network Interface Device (NID) - 2 line			$89.69	$54.56	$0.6391	$0.6391
A.2.45	Network Interface Device (NID) - 6 line			$129.65	$94.51	$0.6522	$0.6522
A.3	**LOOP CHANNELIZATION AND CO INTERFACE (INSIDE CO)**						
A.3.12	Unbundled Loop Concentration - System A (TR008)		$500.18	$613.60			
A.3.13	Unbundled Loop Concentration - System B (TR008)		$54.82	$255.67			
A.3.14	Unbundled Loop Concentration - System A (TR303)		$539.00	$613.60			
A.3.15	Unbundled Loop Concentration - System B (TR303)		$92.37	$255.67			
A.3.16	Unbundled Loop Concentration - DS1 Line Interface Card		$6.23	$74.39	$53.07	$30.23	$8.46
A.3.17	Unbundled Loop Concentration - POTS Card		$2.32	$8.69	$8.65	$9.71	$9.65
A.3.18	Unbundled Loop Concentration - ISDN (Brite Card)		$8.46	$8.69	$8.65	$9.71	$9.65
A.3.19	Unbundled Loop Concentration - SPOTS Card		$12.45	$8.69	$8.65	$9.71	$9.65
A.3.20	Unbundled Loop Concentration - Specials Card		$7.53	$8.69	$8.65	$9.71	$9.65
A.3.21	Unbundled Loop Concentration - TEST CIRCUIT Card		$35.77	$8.69	$8.65	$9.71	$9.65
A.3.22	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data		$11.03	$8.69	$8.65	$9.71	$9.65
A.5	**2-WIRE ISDN DIGITAL GRADE LOOP**						
A.5.6	Universal Digital Channel	1	$21.15	$228.92	$152.42	$110.01	$21.63
		2	$27.62	$228.92	$152.42	$110.01	$21.63
		3	$36.12	$228.92	$152.42	$110.01	$21.63
A.6	**2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP**						
A.6.5	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop **(Nonrecurring with Loop Makeup)**			$198.59	$88.13	$111.76	$20.81
A.6.6	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop **(Nonrecurring without Loop Makeup)**			$123.38	$54.30	$94.14	$15.36
A.7	**2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP**						
A.7.5	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring with Loop Makeup)**			$201.24	$88.80	$111.76	$20.81
A.7.6	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring without Loop Makeup)**			$123.38	$54.30	$94.14	$15.36

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.8	**4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP**						
A.8.5	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring with Loop Makeup)**			$214.20	$101.76	$117.67	$24.85
A.8.6	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring without Loop Makeup)**			$136.35	$67.27	$99.69	$19.29
A.9	**4-WIRE DS1 DIGITAL LOOP**						
A.9.21	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop	1	39.74	$116.00	$40.62	$106.82	$18.91
		2	51.90	$116.00	$40.62	$106.82	$18.91
		3	67.86	$116.00	$40.62	$106.82	$18.91
A.12	**CONCENTRATION PER SYSTEM PER FEATURE ACTIVATED (OUTSIDE CENTRAL OFFICE)**						
A.12.1	Unbundled Loop Concentration - System A (TR008)		$554.30	$384.75	$209.58	$229.31	$72.71
A.12.2	Unbundled Loop Concentration - System B (TR008)		$79.61	$384.75	$209.58	$229.31	$72.71
A.12.3	Unbundled Loop Concentration - System A (TR303)		$590.18	$384.75	$209.58	$229.31	$72.71
A.12.4	Unbundled Loop Concentration - System B (TR303)		$115.49	$384.75	$209.58	$229.31	$72.71
A.12.5	Unbundled Sub-loop Concentration - USLC Feeder Interface		$60.89	$116.00	$40.62	$106.82	$18.91
A.12.6	Unbundled Loop Concentration - POTS Card		$2.43	$8.69	$8.65	$9.71	$9.65
A.12.7	Unbundled Loop Concentration - ISDN (Brite Card)		$8.93	$8.69	$8.65	$9.71	$9.65
A.12.8	Unbundled Loop Concentration - SPOTS Card		$13.14	$8.69	$8.65	$9.71	$9.65
A.12.9	Unbundled Loop Concentration - Specials Card		$7.94	$8.69	$8.65	$9.71	$9.65
A.12.10	Unbundled Loop Concentration - TEST CIRCUIT Card		$37.78	$8.69	$8.65	$9.71	$9.65
A.12.11	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data		$11.64	$8.69	$8.65	$9.71	$9.65
A.13	**2-WIRE COPPER LOOP**						
A.13.1	2-Wire Copper Loop - short **(Nonrecurring with Loop Makeup)**	1	$13.21	$199.70	$87.26	$111.76	$20.81
		2	$17.25	$199.70	$87.26	$111.76	$20.81
		3	$22.56	$199.70	$87.26	$111.76	$20.81
A.13.1	2-Wire Copper Loop - short **(Nonrecurring without Loop Makeup)**	1	$13.21	$121.84	$52.77	$94.14	$15.36
		2	$17.25	$121.84	$52.77	$94.14	$15.36
		3	$22.56	$121.84	$52.77	$94.14	$15.36
A.13.7	2-Wire Copper Loop - long **(Nonrecurring with Loop Makeup)**	1	$42.00	$187.34	$74.90	$111.76	$20.81
		2	$54.85	$187.34	$74.90	$111.76	$20.81
		3	$71.72	$187.34	$74.90	$111.76	$20.81
A.13.7	2-Wire Copper Loop - long **(Nonrecurring without Loop Makeup)**	1	$42.00	$109.48	$40.41	$94.14	$15.36
		2	$54.85	$109.48	$40.41	$94.14	$15.36
		3	$71.72	$109.48	$40.41	$94.14	$15.36

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.14	**4-WIRE COPPER LOOP**						
A.14.1	4-Wire Copper Loop - short **(Nonrecurring with Loop Makeup)**	1	$18.18	$212.67	$100.22	$117.67	$24.85
		2	$23.74	$212.67	$100.22	$117.67	$24.85
		3	$31.05	$212.67	$100.22	$117.67	$24.85
A.14.1	4-Wire Copper Loop - short **(Nonrecurring without Loop Makeup)**	1	$18.18	$134.81	$65.73	$99.69	$19.29
		2	$23.74	$134.81	$65.73	$99.69	$19.29
		3	$31.05	$134.81	$65.73	$99.69	$19.29
A.14.7	4-Wire Copper Loop - long **(Nonrecurring with Loop Makeup)**	1	$56.62	$200.31	$87.86	$117.67	$24.85
		2	$73.94	$200.31	$87.86	$117.67	$24.85
		3	$96.69	$200.31	$87.86	$117.67	$24.85
A.14.7	4-Wire Copper Loop - long **(Nonrecurring without Loop Makeup)**	1	$56.62	$122.45	$53.37	$99.69	$19.29
		2	$73.94	$122.45	$53.37	$99.69	$19.29
		3	$96.69	$122.45	$53.37	$99.69	$19.29
A.15	**UNBUNDLED NETWORK TERMINATING WIRE (NTW)**						
A.15.1	Unbundled Network Terminating Wire (NTW) per Pair		$0.3878	$59.77		$0.5814	
A.16	**HIGH CAPACITY UNBUNDLED LOCAL LOOP**						
A.16.1	High Capacity Unbundled Local Loop - DS3 - Facility Termination		$374.24	$595.37	$304.50	$234.83	$170.16
A.16.2	High Capacity Unbundled Local Loop - DS3 - Per Mile		$9.19				
A.16.3	High Capacity Unbundled Local Loop -DS3 -Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
A.16.4	High Capacity Unbundled Local Loop - OC3 - Facility Termination		$618.88	$787.84	$262.31	$109.04	$105.91
A.16.5	High Capacity Unbundled Local Loop - OC3 - Per Mile		$6.97				
A.16.6	High Capacity Unbundled Local Loopl - OC3 - Incremental Cost Manual Svc Order vs Electronic			$36.84	$36.84	$19.01	$19.01
A.16.7	High Capacity Unbundled Local Loop - OC12 - Facility Termination		$2,246.28	$992.37	$262.31	$109.04	$105.91
A.16.8	High Capacity Unbundled Local Loop - OC12 - Per Mile		$8.58				
A.16.9	High Capacity Unbundled Local Loop -OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
A.16.10	High Capacity Unbundled Local Loop - OC48 - Facility Termination		$1,490.11	$1,190	$255.01	$128.05	$124.92
A.16.11	High Capacity Unbundled Local Loop - OC48 - Per Mile		$28.14				
A.16.12	High Capacity Unbundled Local Loop - OC48 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
A.16.13	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48		$678.67	$177.59	$163.78	$109.04	$105.91
A.16.14	High Capacity Unbundled Local Loop - OC48 - Interface-Incremental Cost-Manual Svc Order vs Electronic			$36.84	$36.84	$19.01	$19.01
A.16.15	High Capacity Unbundled Local Loop - STS-1 - Facility Termination		$389.35	$595.37	$304.50	$215.82	$151.15
A.16.16	High Capacity Unbundled Local Loop - STS-1 - Per Mile		$9.19				
A.16.17	High Capacity Unbundled Local Loop - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84	$19.01	$19.01

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.17	**LOOP CONDITIONING**						
A.17.1	Unbundled Loop Modification - Load Coil / Equipment Removal - short		$61.45				
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Removal - long - First and Additional			$321.99			
A.17.3	Unbundled Loop Modification - Bridged Tap Removal		$61.49				
A.17.4	Unbundled Loop Modification - Additive			$12.36	$12.36		
A.17.5	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Load Coil/Equipment Removal First/Add'l			$335.36	$7.82		
A.17.6	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Bridged Tap Removal First/Add'l			$528.48	$9.74		
A.19	**LOOP TESTING BEYOND VOICE GRADE**						
A.19.1	Loop Testing Beyond VG - Basic per 1/2 hour			$115.94	$55.45		
A.19.2	Loop Testing Beyond VG - Overtime per 1/2 hour			$151.69	$72.75		
A.19.3	Loop Testing Beyond VG - Premium per 1/2 hour			$187.43	$90.06		
A.19.198	Loop Testing Beyond VG - Basic per 1/2 hour - Testing			$53.31	$53.31		
A.19.298	Loop Testing Beyond VG - Overtime per 1/2 hour - Testing			$69.93	$69.93		
A.19.398	Loop Testing Beyond VG - Premium per 1/2 hour - Testing			$86.56	$86.56		
D.0	***UNBUNDLED TRANSPORT AND LOCAL INTERCONNECTION***						
D.5	**LOCAL CHANNEL - DEDICATED**						
D.5.7	Local Channel - Dedicated - DS3 - Per Mile		$7.15				
D.5.8	Local Channel - Dedicated - DS3 - Facility Termination		$611.30	$595.37	$304.50	$215.82	$151.15
D.5.9	Local Channel - Dedicated - DS3 -Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.10	Local Channel - Dedicated - OC3 - Per Mile		$6.00				
D.5.11	Local Channel - Dedicated - OC3 - Facility Termination		$1,320.28	$787.84	$262.31	$109.04	$105.91
D.5.12	Local Channel - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.13	Local Channel - Dedicated - OC12 - Per Mile		$8.58				
D.5.14	Local Channel - Dedicated - OC12 - Facility Termination		$7,849.28	$992.37	$262.31	$109.04	$105.91
D.5.15	Local Channel - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.16	Local Channel - Dedicated - OC48 - Per Mile		$28.14				
D.5.17	Local Channel - Dedicated - OC48 - Facility Termination		$1,908.11	$985.07	$255.01	$109.04	$105.91
D.5.18	Local Channel - Dedicated - OC48 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
D.5.19	Local Channel - Dedicated - OC48 - Interface OC12 on OC48		$644.82	$382.12	$163.78	$109.04	$105.91
D.5.20	Local Channel - Dedicated - OC48 - Interface - Inc. Cost - Man. Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.21	Local Channel - Dedicated - STS-1 - Facility Termination		$599.59	$588.07	$297.20	$215.82	$151.15
D.5.22	Local Channel - Dedicated - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.23	Local Channel - Dedicated - STS-1 -Per Mile		$7.15				
D.6	**INTEROFFICE TRANSPORT - DEDICATED - DS3**						
D.6.1	Interoffice Transport - Dedicated - DS3 - Per Mile		$2.34				
D.6.2	Interoffice Transport - Dedicated - DS3 - Facility Termination		$848.99	$395.29	$176.56	$109.04	$105.91
D.6.3	Interoffice Transport - DS3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.7	**INTEROFFICE TRANSPORT - DEDICATED - OC3**						
D.7.1	Interoffice Transport - Dedicated - OC3 - Per Mile		$4.43				
D.7.2	Interoffice Transport - Dedicated - OC3 - Facility Termination		$2,361.11	$689.30	$163.78	$130.87	$130.87
D.7.3	Interoffice Transport - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$109.04	$105.91
D.8	**INTEROFFICE TRANSPORT - DEDICATED - OC12**						
D.8.1	Interoffice Transport - Dedicated - OC12 - Per Mile		$14.41				
D.8.2	Interoffice Transport - Dedicated - OC12 - Facility Termination		$9,124.11	$893.84	$163.78	$130.87	$130.87
D.8.3	Interoffice Transport - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$109.04	$105.91
D.9	**INTEROFFICE TRANSPORT - DEDICATED - OC48**						
D.9.1	Interoffice Transport - Dedicated - OC48 - Per Mile		$26.52				
D.9.2	Interoffice Transport - Dedicated - OC48 - Facility Termination		$13,229.11	$893.84	$163.78	$109.04	$105.91
D.9.3	Interoffice Transport - Dedicated - OC48 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.9.4	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48			$382.12	$163.78	$109.04	$105.91
D.9.5	Interoffice Transport - OC48 Interface - Incremental Cost-Manual Svc Order vs Elec			$36.84	$36.84	$19.01	$19.01
D.10	**INTEROFFICE TRANSPORT - DEDICATED - STS-1**						
D.10.1	Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.34				
D.10.2	Interoffice Transport - Dedicated - STS-1 - Facility Termination		$849.30	$395.29	$176.56	$109.04	$105.91
D.10.3	Interoffice Transport - STS-1 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring First	Nonrecurring Additional	Disconnect First	Disconnect Additional
D.12	**INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE**						
D.12.1	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile		$0.0054				
D.12.2	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination		$24.09	$37.87	$26.02	$30.78	$13.07
D.12.3	Interoffice Transpor t- Dedicated - 4-Wire VG-Incremental Cost-Manual Svc Order vs Elec			$15.08	$15.08	$8.66	$8.66
E.0	***SIGNALING NETWORK, DATA BASES, & SERVICE MANAGEMENT SYS.***						
E.3	**CCS7 SIGNALING TRANSPORT**						
E.3.7	CCS7 Signaling Connection, Per link (A link) (Same as E.3.1)		$17.84	$130.84			
E.3.8	CCS7 Signaling Connection, Per link (B link) (also known as D link)(Same as E.3.1)		$17.84	$130.84			
E.3.9	CCS7 Signaling Usage, Per ISUP Message(Same as E.3.3)		$0.0000373				
E.3.10	CCS7 Signaling Usage Surrogate, per link per LATA per mo (9)(Same as E.3.5)		$352.30				
E.3.11	CCS7 Signaling Point Code, Establishment or Change, per STP affected			$121.77			
E.4	**BELLSOUTH CALLING NAME (CNAM) DATABASE (DB) SERVICE**						
E.4.1	CNAM for DB Owners - Service Establishment, Manual			$43.27		$39.79	
E.4.2	CNAM for Non DB Owners - Service Establishment, Manual			$43.27		$39.79	
E.4.3	CNAM for DB Owners Service Provisioning with Point Code Establishment			(I) $1,868	(S) $1,382	(I) $507.09	(S) $372.86
E.4.4	CNAM for Non DB Owners Service Provisioning with Point Code Establishment			(I) $645.50	(S) $462.23	(I) $519.01	(S) $372.86
E.4.5	CNAM for DB and Non DB Owners, Per Query		$0.0010541				
E.5	**BELLSOUTH ACCESS TO 911 SERVICE**						
E.5.1	BellSouth E911 Access - Local Channel - Dedicated - 2-wire Voice Grade (Same as D.5.1)	1	$17.18	$199.33	$24.16	$54.81	$4.80
		2	$22.44	$199.33	$24.16	$54.81	$4.80
		3	$29.34	$199.33	$24.16	$54.81	$4.80
E.5.2	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire Voice Grade Per Mile (Same as D.2.1)		$0.02				
E.5.3	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire VG Facility Term (Same as D.2.2)		$18.58	$55.39	$17.37	$27.96	$3.51
E.5.4	BellSouth E911 Access - Local Channel - Dedicated - DS1 (Same as D.5.3)	1	$36.24	$277.35	$233.26	$33.18	$22.30
		2	$47.33	$277.35	$233.26	$33.18	$22.30
		3	$61.89	$277.35	$233.26	$33.18	$22.30
E.5.5	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Mile (Same as D.4.1)		$0.36				
E.5.6	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Facility Termination (Same as D.4.2)		$77.86	$112.40	$76.27	$19.55	$14.99

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
E.6	**LNP QUERY SERVICE**						
E.6.1	LNP Cost Per query		$0.0009277				
E.6.2	LNP Service Establishment Manual			$23.60		$21.71	
E.6.3	LNP Service Provisioning with Point Code Establishment			(I) $1,119	(S) $571.71	(I) $507.09	(S) $372.86
G.0	***SELECTIVE ROUTING***						
G.11	SELECTIVE CARRIER ROUTING (AIN SOLUTION)						
G.11.1	Service Establishment per CLEC			$190,638		$16,200	
G.11.2	Service Establishment per End Office			$317.55		$3.19	
G.11.4	Query Cost		$0.0206047				
H.0	***COLLOCATION***						
H.3	**ASSEMBLY POINT**						
H.3.1	Assembly Point: 2-Wire Cross Connects		$1.29	$11.03	$10.09	$11.29	$10.19
H.3.2	Assembly Point: 4-Wire Cross Connects		$2.22	$11.21	$10.22	$11.58	$10.40
H.3.3	Assembly Point: DS-1 Cross Connects		$12.77	$28.30	$16.79	$11.61	$10.50
H.3.4	Assembly Point 2-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87	$1.13	$1.13
H.3.5	Assembly Point 4-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87	$1.16	$1.16
H.3.6	Assembly Point DS1 Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87	$1.16	$1.16
H.6	**PHYSICAL COLLOCATION IN THE REMOTE TERMINAL (RT)**						
H.6.1	Physical Collocation In The Remote Terminal - Application Fee			$580.20		$312.76	
H.6.2	Physical Collocation In The Remote Terminal - Per Rack/Bay		$220.41				
H.6.3	Physical Collocation In The Remote Terminal - Security Access Key			$24.69			
H.6.4	Physical Collocation in the RT - Space Availability Report per premises requested			$218.49			
H.6.5	Physical Collocation in the RT- Remote Site CLLI Code Request, per CLLI Code Requested			$70.81			

Notes: (I) - Initial; (S) - Subsequent
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Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring First	Nonrecurring Additional	Disconnect First	Disconnect Additional
J.0	***OTHER***						
J.1	**DARK FIBER**						
J.1.2	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Local Channel/Loop		$58.83	$1,121	$153.19	$580.26	$357.17
J.1.3	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Interoffice		$28.74	$1,121	$153.19	$580.26	$357.17
J.3	**LOOP MAKE-UP**						
J.3.1	Mechanized Loop Make-up		$0.7644187				
J.3.3	Manual Loop Make-up w/o Facility Reservation Number			$74.46			
J.3.4	Manual Loop Make-up w/ Facility Reservation Number			$77.18			
J.4	**LINE SHARING SPLITTER IN THE CENTRAL OFFICE**						
J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office		$183.79	371.63		349.37	
J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office		$45.95	371.63		349.37	
J.4.3	Line Sharing Splitter - per Line Activation in the Central Office		$8.70	$39.39	$15.70	$35.06	$10.79
J.4.4	Line Sharing Splitter - per Subsequent Activity per Line Arrangement		$0.27	$34.56	$12.62	$16.43	$1.64
J.4.6	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)			$108.66		$82.12	
J.4.7	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7)			$54.40		$10.59	
J.4.8	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))			(S)	$15.63	(S)	$18.26
J.5	**ACCESS TO THE DCS**						
J.5.1	Customer Reconfiguration Establishment			$2.78		$3.32	
J.5.2	DS1 DCS Termination with DS0 Switching		$23.35	$41.14	$34.25	$29.94	$24.08
J.5.3	DS1 DCS Termination with DS1 Switching		$13.46	$27.79	$20.90	$21.99	$16.12
J.5.4	DS3 DCS Termination with DS1 Switching		$150.88	$41.14	$34.25	$29.94	$24.08
L.0	***ACCESS DAILY USAGE FILE (ADUF)***						
L.1	**ACCESS DAILY USAGE FILE (ADUF)**						
L.1.1	ADUF, Message Processing, per message		$0.0158054				
L.1.3	ADUF, Data Transmission (CONNECT:DIRECT), per message		$0.0001387				
M.0	***DAILY USAGE FILES***						
M.1	**ENHANCED OPTIONAL DAILY USAGE FILE**						
M.1.1	Enhanced Optional Daily usage File: Message Processing, Per Message		$0.2921174				

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.0	***UNBUNDLED LOOP COMBINATIONS***						
P.13	**EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT**						
P.13-1	First DS1 in DS3	1	$1,153.26				
		2	$1,170.93				
		3	$1,194.12				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT- NEW			$965.91	$400.64	$161.42	$67.08
P.13-2	D.6.1 Interoffice Transport - Dedicated - DS3 - Per Mile		$2.34				
P.13-3	Additional DS1 in same DS3	1	$75.45				
		2	$93.12				
		3	$116.31				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.16	**2-WIRE LOOP/ 2 WIRE VOICE GRADE IO TRANSPORT/ 2 WIRE PORT**						
P.16-1	Fixed - Switch as is	1	$40.00	$11.18	$3.52		
		2	$45.07	$11.18	$3.52		
		3	$51.72	$11.18	$3.52		
P.16.2	D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		$0.0174				
P.23	**EXTENDED 2-WIRE VOICE GRADE LOOP/ 2 WIRE VOICE GRADE INTEROFFICE TRANSPORT**						
P.23-1	Fixed	1	$38.35				
		2	$43.42				
		3	$50.07				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE VOICE GRADE LOOP/ 2 WIRE VOICE GRADE INTEROFFICE TRANSPORT - NEW			$251.11	$100.39	$142.26	$41.86
P.23-2	D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		$0.0174				

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.24	**EXTENDED 4-WIRE VOICE GRADE LOOP/ 4 WIRE VOICE GRADE INTEROFFICE TRANSPORT**						
P.24-1	Fixed	1	$52.00				
		2	$59.56				
		3	$69.48				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE VOICE GRADE LOOP/ 4 WIRE VOICE GRADE INTEROFFICE TRANSPORT - NEW			$251.11	$100.39	$142.26	$41.86
P.24-2	D.12.1 Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile		$0.0054				
P.25	**EXTENDED DS3 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT**						
P.25-1	Fixed		$1,228.44				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED DS3 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT - NEW			$784.76	$355.52	$171.21	$80.67
P.25-2	D.6.1 Interoffice Transport - Dedicated - DS3 - Per Mile		$2.34				
P.25-3	A.16.2 High Capacity Unbundled Local Loop - DS3 - Per Mile		$9.19				
P.26	**EXTENDED STS1 DIGITAL LOOP WITH DEDICATED STS1 INTEROFFICE TRANSPORT**						
P.26-1	Fixed		$1,243.86				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED STS1 DIGITAL LOOP WITH DEDICATED STS1 INTEROFFICE TRANSPORT - NEW			$784.76	$355.52	$171.21	$80.67
P-26-2	D.10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.34				
P.26-3	A.16.16 High Capacity Unbundled Local Loop - STS-1 - Per Mile		$9.19				

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.50	**4-WIRE DS1 LOOP WITH CHANNELIZATION WITH PORT**						
P.50.VG-1	First Voice Grade in DS1 - Switch as is	1	$196.36	$303.61	$15.74		
		2	$214.03	$303.61	$15.74		
		3	$237.22	$303.61	$15.74		
P.50.VG-2	Additional Voice Grade in same DS1		$6.51				
P.50.DID-1	First 2-Wire DID in DS1 - Switch as is	1	$201.23	$303.61	$15.74		
		2	$218.90	$303.61	$15.74		
		3	$242.09	$303.61	$15.74		
P.50.DID-2	Additional 2-Wire DID in same DS1		$11.13				
P.50.ISDN-1	First ISDN in DS1 - Switch as is	1	$212.36	$303.61	$15.74		
		2	$230.03	$303.61	$15.74		
		3	$253.22	$303.61	$15.74		
P.50.ISDN-2	Additional ISDN in same DS1		$22.51				
P.50.4	4-Wire DS1 Loop/Channelization Port Combination - Subsequent Activity - Add Lines - Per Line			$89.90			
P.50.5	4-Wire DS1 Loop/Channelization Port Combination - Subsequent Activity - Add Trunks - Per Trunk			$117.43			
P.51	**EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT**						
P.51-1	First 2-Wire ISDN in DS1	1	$188.66				
		2	$195.46				
		3	$204.39				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT - NEW			$485.24	$198.75	$146.05	$44.50
P.51-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.51-3	Additional 2-wire ISDN in same DS1	1	$25.46				
		2	$32.26				
		3	$41.19				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		

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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.52	**EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED STS-1 INTEROFFICE TRANSPORT**						
P.52-1	First in DS1 in STS1	1	$1,147.59				
		2	$1,165.26				
		3	$1,188.45				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED STS-1 INTEROFFICE TRANSPORT - NEW			$965.91	$400.64	$161.42	$67.08
P.52-2	D.10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.34				
P.52-3	Additional DS1 in same STS1	1	$75.31				
		2	$92.98				
		3	$116.17				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.53	**EXTENDED 2-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.53-1	First 2-Wire VG in First DS1 in DS3	1	$416.86				
		2	$421.93				
		3	$428.58				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.53-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.53-3	Additional 2-Wire VG in same DS1	1	$17.61				
		2	$22.68				
		3	$29.33				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.53-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.54	**EXTENDED 4-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.54-1	First 4-Wire VG in First DS1 in DS3	1	$429.71				
		2	$437.27				
		3	$447.19				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.54-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.54-3	Additional 4-Wire VG in same DS1	1	$25.75				
		2	$33.31				
		3	$43.23				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.54-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.55	**EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.55-1	First 4-Wire in First DS1 in DS3	1	$436.82				
		2	$446.33				
		3	$458.83				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.55-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.55-3	Additional 4-Wire in same DS1	1	$33.06				
		2	$42.57				
		3	$55.07				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.55-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.56	**EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.56-1	First 2-Wire in First DS1 in DS3	1	$429.22				
		2	$436.02				
		3	$444.95				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.56-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.56-3	Additional 2-Wire in same DS1	1	$25.46				
		2	$32.26				
		3	$41.19				

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring First	Nonrecurring Additional	Disconnect First	Disconnect Additional
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.56-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.57	**EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.57-1	First 4-Wire DS1 in DS3	1	$380.86				
		2	$398.53				
		3	$421.72				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.57-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.57-3	Additional 4-Wire DS1 in same DS3	1	$153.31				
		2	$170.98				
		3	$194.17				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.58	**EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DS0 INTEROFFICE TRANSPORT**						
P.58-1	Fixed	1	$52.29				
		2	$61.80				
		3	$74.30				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DS0 INTEROFFICE TRANSPORT - NEW						
P.58-2	D.3.1 Interoffice Transport - Dedicated - DS0 - Per Mile		$0.0174				

Notes: (I) - Initial; (S) - Subsequent
(231443)

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	***UNE Combination*** UNEs Included in Combination	**Source of Rate** (Cost Study Docket No.)
P.13	***4-Wire DS1 Digital Loop with Dedicated DS3 Interoffice Transport (EEL)***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
D.6.2	Interoffice Transport – Dedicated – DS3 - Facility Termination, per month	00-00544
D.6.1	Interoffice Transport – Dedicated – DS3 - Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
P.16	***2-Wire Voice Grade Loop with 2-Wire Voice Grade Interoffice Transport with 2-Wire Port***	
A.1.2	2-Wire Analog Voice Grade Loop – Service Level 2, per month	97-01262
D.2.2	Interoffice Transport - Dedicated - 2-Wire Voice Grade - Facility Termination, per month	97-01262
D.2.1	Interoffice Transport – Dedicated - 2-Wire Voice Grade - Per mile, per month	97-01262
B.1.1	2-Wire Analog Line Port, per month	97-01262
	Nonrecurring – Switch-as-is	00-00544
P.23	***2-Wire Voice Grade Loop with 2-Wire Voice Grade Interoffice Transport (EEL)***	
A.1.2	2-Wire Voice Grade Loop – Service Level 2, per month	97-01262
D.2.2	Interoffice Transport – Dedicated - 2-Wire Voice Grade - Facility Termination, per month	97-01262
D.2.1	Interoffice Transport – Dedicated – 2-Wire Voice Grade - Per mile, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.24	***4-Wire Voice Grade Loop with 4-Wire Voice Grade Interoffice Transport (EEL)***	
A.4.1	4-Wire Analog Voice Grade Loop, per month	97-01262
D.12.2	Interoffice Transport – Dedicated - 4-Wire Voice Grade - Facility Termination, per month	00-00544
D.12.1	Interoffice Transport – Dedicated - 4-Wire Voice Grade - Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
P.25	***DS3 Digital Loop with Dedicated DS3 Interoffice Transport (EEL)***	
A.16.1	High Capacity Unbundled Local Loop – DS3 – Facility Termination, per month	00-00544
D.6.2	Interoffice Transport – Dedicated – DS3 – Facility Termination, per month	00-00544
A.16.2	High Capacity Unbundled Local Loop – DS3 – Per mile, per month	00-00544
D.6.1	Interoffice Transport – Dedicated – DS3 – Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
P.26	***STS-1 Digital Loop with Dedicated STS-1 Interoffice Transport (EEL)***	
A.16.15	High Capacity Unbundled Local Loop – STS-1 – Facility Termination, per month	00-00544
D.10.2	Interoffice Transport – Dedicated – STS-1 – Facility Termination, per month	00-00544
A.16.16	High Capacity Unbundled Local Loop – STS-1 – Per mile, per month	00-00544
D.10.1	Interoffice Transport – Dedicated – STS-1 – Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	**Source of Rate** (Cost Study Docket No.)
P.50	***4-Wire DS1 Loop with Channelization with Port***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
B.1.1/B.1.3/B.1.5	2-Wire Voice Grade/DID/ISDN Line Port, per month	97-01262
Q.1.1	D4 Channel Bank Inside CO – System, per month	00-00544
Q.1.4/Q.1.3	Unbundled Loop Concentration – POTS Card/ISDN BRITE Card, per month	00-00544
	Nonrecurring – Switch-as-is	00-00544
	Nonrecurring – Subsequent Activity – Add Lines, per line	00-00544
	Nonrecurring – Subsequent Activity – Add Trunks, per trunk	00-00544
P.51	***2-Wire ISDN Digital Loop with DS1 Interoffice Transport (EEL)***	
A.5.1	2-Wire ISDN Digital Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.3	Interface Unit, Interface DS1 to DS0 – BRITE Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.52	***4-Wire DS1 Digital Loop with Dedicated STS-1 Interoffice Transport (EEL)***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
D.10.2	Interoffice Transport – Dedicated – STS-1 – Facility Termination, per month	00-00544
D.10.1	Interoffice Transport – Dedicated – STS-1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.53	***2-Wire Voice Grade Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.1.2	2-Wire Analog Voice Grade Loop – Service Level 2, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – Voice Grade Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.54	***4-Wire Voice Grade Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.4.1	4- Wire Analog Voice Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – Voice Grade Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.55	***4-Wire 56 or 64 Kbps Digital Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.10.1	4-Wire 19, 56 or 64 Kbps Digital Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – OCU-DP Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.56	***2-Wire ISDN Loop with DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.5.1	2-Wire ISDN Digital Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – BRITE Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	**Source of Rate** (Cost Study Docket No.)
P.57	***4-Wire DS1 Digital Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.58	***4-Wire 56 or 64 Kbps Digital Loop with DS0 Interoffice Transport (EEL)***	
A.10.1	4-Wire 19, 56 or 64 Kbps Digital Grade Loop, per month	97-01262
D.3.2	Interoffice Transport – Dedicated – DS0 – Facility Termination, per month	97-01262
D.3.1	Interoffice Transport – Dedicated – DS0 – Per mile, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF W. KEITH MILNER

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

NOVEMBER 13, 2000

Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. (BELLSOUTH).

A. My name is W. Keith Milner. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am Senior Director - Interconnection Services for BellSouth. I have served in my present role since February 1996, and have been involved with the management of certain issues related to local interconnection, resale, and unbundling.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. My business career spans over 30 years and includes responsibilities in the areas of network planning, engineering, training, administration, and operations. I have held positions of responsibility with a local exchange telephone company, a long distance company, and a research and development company. I have extensive experience in all phases of telecommunications network planning, deployment, and operations in both the domestic and international arenas.

I graduated from Fayetteville Technical Institute in Fayetteville, North Carolina, in 1970, with an Associate of Applied Science in Business Administration degree. I later graduated from Georgia State University in 1992 with a Master of Business Administration degree.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC SERVICE COMMISSION, AND IF SO, BRIEFLY DESCRIBE THE SUBJECT OF YOUR TESTIMONY?

A. I have previously testified before the state public service commissions in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, and South Carolina, the Tennessee Regulatory Authority, and the Utilities Commission in North Carolina on the issues of technical capabilities of the switching and facilities network regarding the introduction of new service offerings, expanded calling areas, unbundling, and network interconnection.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY BEING FILED TODAY?

A. In my testimony, I will address the technical aspects of specific network-related issues such as loop deployment, XDSL loop offerings, line sharing, access to unbundled sub-loop elements, and customized routing.

UNE Loop Deployment

Q. PLEASE PROVIDE THE NETWORK TECHNOLOGY ASSUMPTIONS USED IN DEVELOPING THE UNE LOOP COST STUDY.

A. The network infrastructure design in the loop cost methodology starts with two basic assumptions. First, loops up to 12,000 feet long (measured from the central office) are designed using only twisted pair copper facilities. Second, loops longer than 12,000 feet are provisioned using fiber optic cable loop feeder facilities and Next Generation Digital Loop Carrier (NGDLC).

Q. PLEASE EXPLAIN WHY FIBER LOOP FEEDER FACILITIES ARE USED IN CONJUNCTION WITH DIGITAL LOOP CARRIER RATHER THAN ONLY TWISTED PAIR COPPER FACILITIES FOR LOOPS LONGER THAN 12,000 FEET.

A. In BellSouth's costing methodology for voice grade (or “narrowband”) services, costs were developed for loops of increasing length using both copper cable facilities and fiber fed digital loop carrier. Depending on the type of construction (that is, aerial versus buried cable) and the volume of demand (cable size or NGDLC size), the economic crossover distance (that is, the point at which loops provisioned using DLC is more economically efficient than using copper cable loops) for voice grade services is approximately 12,000 feet from the central office.

It should be noted that, in actual network design, voice grade services are mixed with demand for other types of service such as DS-1 services and other higher bandwidth services. In selecting the infrastructure design for a network to meet all of these demands, new copper cable is rarely the facility of choice for the loop feeder network. Instead, fiber cable with fiber optic multiplexers and NGDLC are used to meet the combined demand on the cable route.

Q. WHERE FIBER FED NGDLC IS PROVISIONED, PLEASE EXPLAIN WHAT DESIGN CRITERIA ARE USED TO DETERMINE THE DESIGN OF THE CABLE PLANT EXTENDING FROM THE NGDLC TO THE CUSTOMER LOCATION.

A. Carrier Serving Area (CSA) design provides the rules for provisioning the cable plant extending from the NGDLC to the customer location. This part of the loop is referred to as loop distribution. CSA design rules limit the total loop distribution length from the NGDLC site to the customer to 12,000 feet. Included in this 12,000 feet may be a maximum of 2,500 feet of bridged tap. No single bridged tap may be longer than 2,000 feet. The concept of bridged tap itself is discussed later in this testimony.

Q. PLEASE EXPLAIN THE BENEFIT OF USING THE CARRIER SERVING AREA DESIGN.

A. The economics that limit copper cable deployment distances from the central office to the customer location are the same as those that limit copper cable deployment from the NGDLC to the customer location (that is, the part of the loop referred to as loop distribution). In addition to the economic benefits derived from the CSA design itself, the 12,000 foot maximum copper cable length makes copper loops compatible with many of the digital subscriber line (DSL) technologies used today in providing advanced services.

Q. WHAT IS THE DIFFERENCE BETWEEN NGDLC AND OTHER FORMS OF DIGITAL LOOP CARRIER (DLC)?

A. NGDLC describes a newer version of digital loop carrier equipment that provides many enhanced services and cost-reducing features that are not available on the older DLC systems. NGDLC systems are designed to support a larger capacity of lines, up to 2,016, from a single common equipment set compared to older vintages of DLC. For example, the larger capacity of NGDLC is a significant improvement over the 96-line capacity of the older vintage DLC referred to as "SLC-96", manufactured by Lucent Technologies.

Older vintage DLC cannot mix switched circuits and non-switched circuits within a 96-line group economically and can only use integrated central office alternatives economically when the 96-line group consists almost entirely of switched circuits. In contrast, NGDLC remote terminals can be configured on a circuit by circuit basis using integrated or non-integrated central office alternatives to provide switched and non-switched services.

In providing switched services, NGDLC can be integrated with the local digital switch directly without intervening interface equipment. In this mode of operation, traffic from the remote NGDLC site to the central office can be concentrated onto only the number of circuits required by the types of services provisioned from that site. Typically, residential services can be concentrated at a 4:1 ratio. This means that, on average, only one (1) line of capacity is required from the NGDLC site to the switch for each of four (4) residential lines served from the NGDLC. For business services the typical concentration ratio is 3:1. The actual concentration ratio chosen for a given application is a function of the traffic load to be carried by the NGDLC equipment. The higher the traffic load, the lower the concentration ratio. Stated another way, the higher the traffic load, the more transmission paths required between the NGDLC equipment to the central office switching equipment.

In the older DLC systems, when DLC is integrated with the switch, it can be configured with either no concentration or with 2:1 concentration. In either circumstance, older DLC systems use more feeder capacity per line than do NGDLC systems since the use of NGDLC allows higher concentration ratios (and thus less loop feeder capacity) than older vintages of DLC.

In providing non-switched services, NGDLC has the capability, on a line-by-line basis, to provision remote NGDLC lines through the non-integrated or "universal" capacity of the NGDLC central office terminal. This allows non-switched services to be routed around the central office switch to connect with the other customer locations of the non-switched services or to interconnect with another telecommunications carrier's facilities. Since these services are not switched, concentration is not feasible.

Q. WHY IS NGDLC ASSUMED IN THE LOOP COST METHODOLOGY?

A. There are three reasons. First, the larger line capacity on the NGDLC system achieves economies of scale, producing lower overall equipment costs. Second, the capability to mix switched and non-switched services on the same system eliminates wasted capacity, which improves the economic benefit of using NGDLC. Finally, the combination of larger line capacity and greater concentration capability reduces loop feeder capacity requirements resulting in lower overall costs.

Q. IN DISCUSSING OLDER VINTAGE DLC AND NGDLC, YOU MENTION INTEGRATION WITH THE CENTRAL OFFICE SWITCH. PLEASE DESCRIBE THE PROCEDURES THAT ARE FOLLOWED TO MAKE INTERFACING WITH THE SWITCH POSSIBLE.

A. Two technical documents provide descriptions of digital loop carrier systems and how they interface with local digital switches in the integrated configurations. The first document to be issued was Technical Reference-008 (TR-008). This document, authored by Bell Communications Research, Inc. or “Bellcore” (now Telecordia), described the SLC-96 DLC system manufactured by AT&T before divestiture, and the document itself was jointly owned by AT&T and the Regional Bell Operating Companies (RBOCs) at divestiture. A major portion of that technical reference is still in use today and describes the interface that allows remote NGDLC/DLC to connect directly to a local digital switch at the DS-1 level in what is referred to as an integrated configuration.

This configuration allows lines to be provisioned with channelization circuit packs at the remote NGDLC/DLC but without per line circuit packs at the central office switch. TR-008 describes two alternatives for this integrated capability.

TR-008 Mode I is a non-concentrated alternative that requires feeder capacity for every line on a full time basis. When this alternative is used, four DS-1s (each with 24 channels for a total of 96 channels) are required for each 96-line capacity TR-008 remote NGDLC/DLC system. This configuration is used when high usage lines are to be served from the remote NGDLC/DLC system. TR-008 Mode II is a concentrated alternative that provides 2:1 concentration. When this alternative is used, two DS-1s (each with 24 channels for a total of 48 channels) are required for each 96-line capacity TR-008 remote NGDLC/DLC system.

Generic Requirement 303 (GR-303) (authored by Bellcore) provides a set of generic requirements that describe more flexible NGDLC system types and a more flexible interface to a local digital switch. The GR-303 interfaces for integrating NGDLC with a local digital switch can vary in line capacity from 48 lines to 2,016 lines. The concentration allowed over these interfaces is variable and can be matched to the services being made available from the remote NGDLC site to allow the most economic concentration ratio consistent with the service being provided.

While there are many variables that impact the decision of which switch termination type to use for the interface between a remote NGDLC site and the local digital switch, generally the most economic configurations are provided by using GR-303 for sites with more than 150 lines in the three to five year planning period. TR-008 is used for smaller remote NGDLC sites.

Q. PLEASE SUMMARIZE YOUR DISCUSSION OF BELLSOUTH'S POSITION ON UNE LOOP DEPLOYMENT.

A. BellSouth has designed and deployed its UNE loop infrastructure in an economic and rational manner using sound engineering principles. Accordingly, the Authority should approve the resulting cost calculations and rates as presented in the testimonies of Ms. Caldwell and Mr. Ruscilli.

XDSL Loops

Q. PLEASE DESCRIBE BELLSOUTH'S UNBUNDLED XDSL LOOP OFFERING.

A. High Bit-Rate Digital Subscriber Line (HDSL) Compatible Loop: The requirements for this type of loop are that the end user must be served by a non-loaded copper pair, and the loop typically cannot be more than 12,000 feet long on 24 gauge copper wire. If 26 gauge copper wire is used, the limit is 9,000 feet or less. In either case, the loop may have up to 2,500 feet of bridged tap with no single bridged tap exceeding 2,000 feet. The technical characteristics of the loop are verified to ensure that the loop meets stringent industry standards for CSA transmission specifications to support HDSL services.

Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop: This type of loop is provided over copper facilities according to the Revised Resistance Design (RRD) industry standards, which means that the loop may be up to 18,000 feet long and may have up to 6,000 feet of bridged tap which is inclusive of the loop length. This means that for every foot of bridged tap, the loop length is reduced by an equal amount. Therefore, an RRD loop that has 4,000 feet of bridged tap could be no longer than 14,000 feet.

Originally the ADSL compatible loop was designed to the same CSA criteria as the HDSL capable loop. However, in response to requests from CLECs, the specification for the loop was changed to the RRD standards during the first quarter of 2000.

BellSouth developed both the HDSL capable loop and the ADSL capable loop in response to the FCC's 96-325 Order, and both loop types have been available to CLECs since the fourth quarter of 1996.

<u>Unbundled Copper Loop (UCL)</u> – This type of loop provides a “dry” copper pair (that is, without electronic devices) to an end user using the Resistance Design (RD) industry standard. This loop may be up to 18,000 feet long and may have up to 6,000 feet of bridged tap, which is <u>exclusive</u> of the loop length. This means the loop length is not reduced by the bridged tap amount. Therefore, in some cases, the loop length may be 18,000 feet long and have up to 6,000 feet of bridged tap. BellSouth cannot ensure that these loops will function properly for DSL service since their physical characteristics may exceed the maximum distance for some DSL services and equipment. However, BellSouth will ensure that these loops have electrical continuity and balance relative to the tip and ring conductors.

The UCL has been available to CLECs since the second quarter of 1999. As an additional offering, BellSouth has recently developed a new variant of UCL, the UCL Long (UCL-L) unbundled loop which is a copper loop that is longer than 18,000 feet. Typically applied telephony standards dictate that all copper loops longer than 18,000 feet be “loaded” to properly serve dial-tone or “plain old telephone service” (POTS) type customers. In order to transform such loops into "dry" or "clean" copper loops, the CLEC would need to use BellSouth's Unbundled Loop Modifications (ULM) service offering to have any load coils and/or bridged tap removed from these loops. BellSouth witness Mr. John Ruscilli addresses the issue of rates for ULM in his testimony.

Q. DOES BELLSOUTH OFFER ANY ADDITIONAL XDSL LOOPS?

A. BellSouth offers its Integrated Services Digital Network (ISDN)-capable loop, and Universal Digital Channel (UDC)-capable loop. These two loop types are not specifically categorized as xDSL-capable loops, but they may support the DSL service known as Integrated Services Digital Network Digital Subscriber Line (IDSL). BellSouth provisions its ISDN-capable loops according to applicable industry standards which means they may be provisioned over copper facilities or via a DLC system. These loops are also free of any load coils, but are not referred to as "clean copper loops" because they may be provisioned via DLC systems, which are completely compatible with ISDN service. The UDC loop is the same as the ISDN-capable loop but is provisioned differently in a manner that supports "data-only" ISDN that will better meet the needs of CLECs that want to deploy IDSL.

Q. WHAT IMPACT DOES LOOP LENGTH AND/OR THE PARTICULAR DSL

TECHNOLOGY HAVE ON THE LOOP COST?

A. The usefulness of BellSouth's unbundled loops for the provisioning of DSL services depends on a variety of factors, including the end user's distance from the serving wire center, as well as the length and gauge of the copper wire that serves the customer. Significantly, the same copper loops that are used to provide DSL services are also utilized to provide voice service to BellSouth's customers, as well as to other CLECs' customers.

BellSouth ensures that the unbundled loops it provides meet appropriate technical standards. As the FCC recognized: "[p]rovision of xDSL service is subject to a variety of important technical constraints. One is the length of the subscriber loop: ADSL, the most widely deployed xDSL-based service, generally requires loops of less than 18,000 feet using current technology. Another is the quality of the loop, which must be free of excessive bridged taps, loading coils, and other devices commonly used to aid in the provision of analog voice and data transmission, but which interfere with the provision of xDSL services. 'Conditioning' loops to remove those impediments, or constructing fiber-based digital loop carrier systems to overcome loop length difficulties, can be expensive." See Third Report and Order in CC Docket No. 98-147, rel. Dec. 9, 1999, ¶ 8, n. 9 ("Line Sharing" Order).

Q. PLEASE SUMMARIZE YOUR TESTIMONY ON THE PROVISIONING OF

XDSL SERVICES.

A. The cost of provisioning unbundled loops that CLECs use to provide xDSL services is a function of both the loop length and the particular DSL technology to be deployed. As a result, it is appropriate for the cost study for xDSL-compatible loops submitted with the testimony of Ms. Caldwell to recognize distinctions based on loop length for the particular DSL technology to be deployed.

Line Sharing

Q. WHAT IS LINE SHARING?

A. In its Third Report and Order in CC Docket No. 98-147 and Fourth Report and order in CC Docket No. 96-98, released December 9, 1999, the FCC states that "[t]he provision of XDSL-based service by a competitive LEC and voiceband service by an incumbent LEC on the same loop is frequently called 'line sharing'." (Order at ¶4)

Q. WHAT TECHNOLOGIES DOES BELLSOUTH UTILIZE IN ITS DEPLOYMENT OF LINE SHARING?

A. Line sharing requires that a non-loaded, 2-wire copper loop serve the end user. A non-loaded loop is a copper loop with no load coils, low-pass filters, range extenders, or similar devices. For central office based line sharing, the CLEC’s meet point is the collocation point of termination. BellSouth will use jumpers to connect the CLEC’s connector block to the splitter. The splitter will route the high frequency portion of the signal to the CLEC’s xDSL equipment in its collocation space. The splitter directs (1) the voiceband signals through a pair of copper wires to the voice switch, and (2) the digital data traffic though another pair of copper wires to the xDSL equipment in the CLEC's collocation space that is, in turn, attached to the CLEC's network. For remote terminal (RT) based line sharing, the CLEC’s meet point is the collocation point of termination at the remote terminal. BellSouth will use jumpers to connect the CLEC’s connector block to the splitter. The splitter will route the high frequency portion of the circuit to the CLEC’s xDSL equipment in its collocation space within the remote terminal.

Q. WHAT DEVICES USED ON UNBUNDLED LOOPS CAN CAUSE INTERFERENCE WITH DSL SERVICES?

A. There are three arrangements on many loops that permit or enhance voice service but effectively prevent or interfere with the satisfactory transmission of digital signals. Because these arrangements potentially cause interference with DSL services, they are sometimes referred to as "disturbers," which must be removed from local loops as needed to allow line sharing.

Q. WHAT ARE THESE THREE “DISTURBERS”, AND HOW DO THEY

INTERFERE WITH THE TRANSMISSION OF DIGITAL SIGNALS?

A. The three disturbers often referred to in the context of provisioning DSL services are load coils, bridged tap, and repeaters. These devices were developed to permit or enhance service in the voice band frequency range, typically 300 Hertz to 3,400 Hertz. However, their use often degrades successful transmission, particularly of digital signals, in the frequency range above 20,000 Hertz, the range in which xDSL services typically operate. Removing these devices typically restores the capability of a loop to accommodate services utilizing such high frequency ranges, a process referred to as "conditioning." However, this conditioning may render the loop incapable of providing satisfactory voice grade service.

Q. PLEASE DESCRIBE THE FUNCTION OF A LOAD COIL.

A. A load coil is an electrical inductance coil designed to improve transmission of signals in the voice band, and is typically used to extend the loop length over which acceptable voice grade transmission may be achieved, normally loop lengths greater than 18,000 feet. The load coil boosts or amplifies analog voice signals thus permitting their reception at greater distances.

Q. HOW DOES A LOAD COIL INTERFERE WITH AN XDSL SIGNAL?

A. The load coil's electrical inductance changes the rate at which data is transmitted through the loop such that the two xDSL modems at each end of the loop do not effectively receive each others' transmissions.

Q. PLEASE DESCRIBE THE FUNCTION OF A REPEATER.

A. As the name implies, a repeater inserted into a loop receives a signal from one end of a loop, amplifies the signal, and then retransmits the signal to the other end of the loop. This achieves the same general purpose as the load coil describe above, namely, to extend the viable range of a loop beyond normal limits of approximately 18,000 feet. There are two types of repeaters in common use throughout BellSouth's nine-state region. Voice frequency repeaters, the most common, are designed to amplify the analog signal carried in the voice frequency band of the loop. Digital repeaters extend the useful range of loops used for digital services.

Q. HOW DOES A REPEATER INTERFERE WITH AN XDSL SIGNAL?

A. Voice frequency repeaters can distort a digital signal to the point that high bit-rate error rates make the signal unusable. Digital repeaters may or may not interfere with xDSL type services, but success is very dependent upon the type of digital service being provisioned

Q. PLEASE DESCRIBE THE FUNCTION OF A BRIDGED TAP.

A. A bridged tap is a metallic extension to a loop such that the same loop appears at two separate service locations. Obviously, the loop can be used at only one of the two service locations at a given time; however, bridged tap is useful in increasing the efficiency of overall loop usage.

Q. HOW DOES A BRIDGED TAP INTERFERE WITH AN XDSL SIGNAL?

A. Bridged tap increases the inductance for the loop at both service locations; thus the length of the bridged tap must be considered along with the length of the loop to the service location.

Q. PLEASE SUMMARIZE YOUR TESTIMONY CONCERNING LINE SHARING.

A. My testimony describes the means by which BellSouth provisions line sharing, including the work that must be done to remove existing barriers to line sharing in BellSouth's loops to permit a successful installation. The Authority should approve the cost studies submitted by Ms. Caldwell with her testimony that reflect the provisioning process I have described.

<u>Access to Sub-Loop Elements</u>

Q. WHAT ARE SUB-LOOP ELEMENTS?

A. Sub-loop elements are the individual elements that make up the entire loop that extends from the BellSouth central office to the demarcation point between BellSouth's network and the inside wire at the end user customer's premises. BellSouth offers access to the following sub-loop elements:

- Unbundled Loop Feeder
- Unbundled Loop Distribution
- Unbundled Loop Concentration
- Unbundled Network Interface Device (NID)
- Unbundled Intrabuilding Network Cable (UINC)
- Unbundled Network Terminating Wire (UNTW)

Q. PLEASE DISCUSS THE SUB-LOOP ELEMENT REFERRED TO AS LOOP FEEDER.

A. In many cases BellSouth deploys a multiple circuit copper cable (for example, a 1,200 pair cable) from its central office to a remote terminal or cross-box located somewhere between the central office and the end user's location. Each pair within this cable can be used to carry a single voice conversation. This section of the loop is called the loop feeder. Sometimes, loop feeder has been referred to as "the first mile" of the loop in that it is the first section of cable leaving the BellSouth central office headed towards a customer's premises. This loop feeder section may also be provisioned using fiber optic cable.

The copper pairs of the loop feeder are then individually cross-connected to pairs in smaller cables called loop distribution. The loop distribution cables then serve all the houses or businesses in a sub-section of one of the central office's serving areas.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS LOOP CONCENTRATION.

A. Loop concentration is equipment such as digital loop carrier equipment used to concentrate the individual loop distribution pairs (which I discuss below) onto digital transmission facilities such as DS-1 circuits in the loop feeder facilities. Unbundled loop concentration allows a CLEC to digitize and multiplex its loop distribution pairs (either its own or those it acquired from BellSouth on an unbundled basis) onto digital facilities for transmission to the BellSouth central office.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS LOOP DISTRIBUTION.

A. Loop distribution facilities have been referred to as the "last mile" because these are the facilities that go the "last mile" to the customer's premises. The loop distribution cables are used to, in effect, "fan out" the availability of the cable pairs and/or transmission channels, if DLC equipment is used, from the loop feeder cables. In this regard, the cables one would see within a sub-division are generally loop distribution cables. Between the loop feeder cable and the loop distribution cable is a cabinet, above ground "hut", or below ground "controlled environment vault" within which cross-connections and/or electronics are located. These structures have been variously described as the “Feeder/Distribution Interface”, the “Serving Area Interface”, the “Remote Terminal” or, in its most simplistic configuration a “cross-connect box” or simply “cross-box”. Any of these terms can be used to refer to the function of connecting a copper cable pair or fiber optic facility in the loop feeder facilities to a copper cable pair in the loop distribution facilities. In the case of multi-story commercial buildings, the loop distribution facility eventually runs to the customer’s building and is then connected to Intrabuilding Network Cable (INC) and/or Network Terminating Wire (NTW). In single family dwellings, a “drop wire” connects the entire loop to the device called the Network Interface Device (NID).

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS INTRABUILDING NETWORK CABLE (INC).

A. In multi-story buildings, and in some campus-type properties, INC is that part of BellSouth’s loop facilities extending from a cross-connect terminal at, or close to, the entrance point of the distribution cable. INC is another sub-loop element that is located on the network side of the demarcation point between BellSouth’s network and the inside wire at an end user customer’s premises. INC in some cases is referred to as “riser cable.” Although INC may in some cases connect directly to the NID, typically it connects to NTW in a wiring closet prior to final termination at the end user’s NID.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS NETWORK TERMINATING WIRE (NTW).

A. NTW is another sub-loop element of the BellSouth loop. Depending on the type of building served, NTW provides a copper wire transmission path between distribution cable or INC, and “fans out” to individual customer suites or rooms within that building. In this sense, NTW is the “last” part of the loop on the network side of the demarcation point.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS THE NETWORK INTERFACE DEVICE (NID).

A. Simply stated, the NID provides a demarcation point between BellSouth’s facilities (that is, the loop) and the customer’s facilities (that is, the inside wire). Thus, the NID provides a way to connect the loop to the inside wire. In some cases, the NID provides additional functions such as lightning protection and loopback testing.

To summarize, loop feeder cables are connected to loop distribution cables. Then, depending on the type of structure being served (house, small building, multi-story building, etc.), the distribution cable connects to either a drop wire or to INC and/or NTW, any of which then extends the loop to its final termination at the customer’s NID. The NID establishes the demarcation point between BellSouth’s network and the inside wire at the end user customer's premises. NTW, INC, loop distribution, loop concentration, and loop feeder are located on BellSouth's side of the demarcation point and, thus, comprise sub-loop elements of BellSouth's network.

Q. WHAT IS YOUR UNDERSTANDING OF THE FCC'S STATEMENT IN ITS THIRD REPORT AND ORDER AND FOURTH FUTHER NOTICE OF PROPOSED RULEMAKING, FCC 99-238, RELEASED NOVEMBER 5, 1999 (UNE REMAND ORDER) THAT BELLSOUTH IS REQUIRED TO PROVIDE CLECS ACCESS TO ILEC-OWNED INSIDE WIRING, AND WHAT IS ITS IMPACT, IF ANY?

A. First, let me set out what the FCC stated. The FCC's UNE Remand Order at ¶210 states:

> We clarify that "technically feasible points" would include a point near the customer premises, such as the point of interconnection between the drop and the distribution cable, the NID, or the MPOE. Such access would give competitors unbundled access to the inside wire sub-loop element, in cases where the incumbent owns <u>and</u> controls wire inside the customer premises. It would also include any FDI, whether the FDI is located at a cabinet, CEV, remote terminal, utility room in a multi-dwelling unit, or any other accessible terminal. (Emphasis added).

The FCC's Remand Order at Paragraph 169 describes more specifically "control" of inside wire as follows:

> Section 68.3 of our rules defines the demarcation point as that point on the loop where the telephone company's control of the wire ceases, and the subscriber's control (or, in the case of some multiunit premises, the landlord's control) of the wire begins. Thus, the demarcation point is defined by control; it is not a fixed location on the network, but rather a point where an incumbent's and a property owner's responsibilities meet. The demarcation point is often, but not always, located at the minimum point of entry (MPOE), which is the closest practicable point to where the wire crosses a property line or enters a building. In multiunit premises, there may be either a single demarcation point for the entire building or separate demarcation points for each tenant, located at any of several locations, depending on the date the inside wire was installed, the local carrier's reasonable and nondiscriminatory practices, and the property owner's preferences. Thus, depending on the circumstances, the demarcation point may be located either at the NID, outside the NID, or inside the NID.

The above paragraphs from the UNE Remand Order demonstrate that the FCC intended to include in the unbundling of what it refers to as "inside wire" those facilities that exist today on the network side of the demarcation point, and which are included in BellSouth's Accounts and

Subsidiary Records Categories as Network Terminating Wire (NTW), and that which are defined in Part 32 of the Uniform System Of Accounting (USOA) as Intrabuilding Network Cable (INC). As defined in several previous FCC Orders, however, “inside wire” is located on the customer’s side of the demarcation point and is under control of the end user or, in some cases, the property owner or the landlord. A CLEC should obtain access to the sub-loop elements NTW and INC from BellSouth in the same manner as it obtains access to any other unbundled network element. As to access to the inside wire on the customer’s side of the demarcation point, such access should be obtained from the end user or from the building owner. BellSouth is not opposed to providing unbundled access to its sub-loop elements, however BellSouth has sought clarification from the FCC that its use of the term "inside wire" in this docket is not the same as that phrase has traditionally been used in describing facilities on the customer's side of the demarcation point.

Q. PLEASE EXPLAIN HOW BELLSOUTH PROVIDES CLECS WITH UNBUNDLED ACCESS TO SUB-LOOP ELEMENTS.

A. BellSouth offers access to all elements of its loop network through sub-loop unbundling offerings that comply with the FCC’s UNE Remand Order and FCC Rule 319(a). In keeping with the full intent of the FCC’s UNE Remand Order, BellSouth is, and has been, providing sub-loop unbundling at technically feasible points of access.

In order to provide CLECs with access to unbundled sub-loop elements, BellSouth will construct a separate access terminal in proximity to BellSouth's terminal. The CLEC installs its own terminal in proximity to the access terminal. BellSouth then extends tie cables between its terminal and the access terminal. These tie cables are connected to the unbundled sub-loop elements the CLEC desires to acquire from BellSouth. The CLEC extends a tie cable from its terminal to the access terminal and thus the unbundled sub-loop elements. BellSouth believes that such access affords CLECs a meaningful opportunity to compete, while also maintaining network security and reliability.

Q. HAVE YOU PREPARED AN EXHIBIT TO ILLUSTRATE BELLSOUTH'S PROPOSAL REGARDING CLEC ACCESS TO UNBUNDLED SUB-LOOP ELEMENTS?

A. Yes. Exhibit WKM-1, which is attached to this testimony, contains three (3) pages that I hope will aid in understanding this issue. Page 1 shows the typical access to unbundled NTW in a "garden" apartment. The point to be made here is that the access terminal is cross-connected by tie cable pairs with the terminals of both BellSouth and the CLEC thus allowing a CLEC access while preserving network reliability and security. The access terminal in this scenario could also function as a single point of interconnection (SPOI)[1] for access to unbundled NTW (UNTW). Page 2

[1] As used by the FCC in its UNE Remand Order, the term "SPOI" refers to a single point of interconnection at multi-unit premises that is suitable for use by multiple telecommunications carriers.

shows BellSouth's proposed form of access for a CLEC to the sub-loop element UINC. BellSouth proposes the use of an access terminal or connector block on the cross-connect panel that is cross-connected by tie cable with the terminals of both BellSouth and the CLEC. The cross-connect panel, which serves as the access terminal for UINC, could also serve as a SPOI for use by multiple carriers. Page 3 shows access to the sub-loop element Unbundled Loop Distribution.

Q. WILL BELLSOUTH PROVIDE A CLEC WITH DIRECT ACCESS TO BELLSOUTH'S SUB-LOOP ELEMENTS?

A. No. Such direct access would reduce network security and reliability, which the FCC found to be indicators that a given arrangement is not technically feasible. (First Report and Order in Docket 96-325, ¶ 203) The FCC requires that "each carrier must be able to retain responsibility for the management, control, and performance of its own network." (First Report and Order in Docket 96-325, ¶ 203) Direct access, if allowed, would render BellSouth incapable of managing and controlling its network in the provision of service to its and certain CLECs' end user customers. Therefore, due to concerns about network reliability and security, BellSouth believes that direct access to its network facilities by CLECs is not in the best interests of end user customers, whether they are end user customers of BellSouth or of the CLECs.

While I am in no way disparaging CLECs' technicians, with direct access it is possible for the CLECs' technicians to intentionally or unintentionally disrupt BellSouth's end user's service as well as the service of CLECs using unbundled loops or unbundled sub-loop elements acquired from BellSouth. That simply presents an unnecessary risk.

Further, with direct access, BellSouth would be at the CLECs' mercy to tell BellSouth how, where, and when the CLEC has used BellSouth's facilities. This would unnecessarily complicate the maintenance of inventory records. Indeed, how could BellSouth ever have an accurate record of its facilities if every CLEC in the state had direct access to these facilities? Of course, the lack of accurate inventory information would result in provisioning and repair of customer service becoming more error prone. I do want to be perfectly clear about this. What we are talking about here, is allowing technicians from any and every CLEC in Tennessee to walk into an equipment room in a high rise building and start appropriating pairs and facilities for its own use, without consulting with anyone and without any obligation to keep appropriate records so that the next person in the room knows what belongs to whom. It doesn't take much imagination to know what a disaster this would end up being for BellSouth and for the customers in the building in question.

Q. HAVE ANY STATE UTILITY COMMISSIONS ADDRESSED THE ISSUE OF CLEC ACCESS TO BELLSOUTH'S SUB-LOOP ELEMENTS?

A. Yes. The Florida Public Service Commission (FPSC) considered the issue of access to the sub-loop element UNTW in the arbitration proceedings between BellSouth and MediaOne in Docket No. 990149-TP. Also, the Georgia Public Service Commission (GPSC) considered this same issue of access to UNTW in the arbitration proceedings between BellSouth and MediaOne in Docket No. 10418-U.

The FPSC denied direct access to UNTW and required an access terminal to be placed between BellSouth's network and MediaOne's network. The access terminal gives CLECs the access to UNTW they desire without reducing network reliability and security. The FPSC determined that MediaOne and others could gain access to UNTW without reducing network security and reliability by adopting BellSouth's proposed form of access. A portion of that Order follows:

> The record does not contain evidence of any case which would support a proposal where one party is seeking to use its own personnel to, in effect, modify the configuration of another party's network without the owning party being present. We find that MediaOne's proposal to physically separate BellSouth's NTW cross-connect facility from BellSouth's outside distribution cross-connect facilities is an unrealistic approach for meeting its objectives. Therefore, BellSouth is perfectly within its rights to not allow MediaOne technicians to modify BellSouth's network.
>
> …Based on the evidence presented at the hearing, we believe that

it is in the best interests of the parties that the physical interconnection of MediaOne's network be achieved as proposed by BellSouth.

We find from the record that at least one other CLEC in Florida and an unknown number of CLECs in other states have been able to provide service based on BellSouth's NTW proposal. Thus, we believe that MediaOne should be able to provide service using BellSouth's NTW proposal… (FPSC in MediaOne Docket No. 990149-TP.)

The Georgia Commission likewise found that MediaOne should gain access through the use of an access terminal and BellSouth's facilities. In its Order, the Commission stated:

As stated in the prior section, to the extent there is not currently a single point of interconnection that can be feasibly accessed by MediaOne, consistent with the FCC's Third Report and Order, BellSouth must construct a single point of interconnection that will be fully accessible and suitable for use by multiple carriers. Such single points of interconnection shall be constructed consistent with MediaOne's proposal such that MediaOne shall provide its own cross connect (CSX) facility in the wiring closet to connect from the building back to its network. MediaOne would then be able to connect its customers within the MDU [that is, the Multiple Dwelling

Unit] by means of an ‘access CSX’. (GPSC in MediaOne Docket No. 10418-U.)

Q. WHAT DOES BELLSOUTH WANT THE AUTHORITY TO DO WITH REGARD TO THE ISSUE OF ACCESS TO THE SUB-LOOP ELEMENTS YOU HAVE DESCRIBED?

A. BellSouth believes the use of access terminals gives CLECs access to unbundled sub-loop elements while still maintaining network reliability and security. Such access should apply to all sub-loop elements. Accordingly, the Authority should approve the cost studies and resulting rates submitted with the testimonies of Ms. Caldwell and Mr. Ruscilli.

Customized Routing

Q. WHAT IS CUSTOMIZED ROUTING?

A. Customized routing (which has also been referred to as selective routing) allows calls from CLEC customers served by a BellSouth switch to reach the CLEC’s choice of operator service or directory assistance service platforms instead of BellSouth’s operator service and directory assistance service platforms. Customized routing can be provided when a CLEC acquires unbundled local switching from BellSouth or resells BellSouth’s local exchange services.

Q. BRIEFLY DESCRIBE THE METHODS AVAILABLE FOR CUSTOMIZED ROUTING.

A. The first method of providing customized routing that BellSouth has made available is the Line Class Code (LCC) method. Availability of customized routing capability using LCCs is offered on a first-come, first-served basis. To date, BellSouth has not denied any request for selective routing based on lack of LCC capacity.

Q. WHAT IS THE SECOND METHOD BY WHICH BELLSOUTH PROVIDES CUSTOMIZED ROUTING?

A. The second method for providing customized routing is through the use of BellSouth's Advanced Intelligent Network (AIN) platform. A technical trial of customized routing using BellSouth's AIN platform commenced in Louisiana, in August 1998, and was successfully completed in September 1998. A second trial commenced from May 1999 and successfully completed in August 1999.

BellSouth has completed work on enhancements to its AIN Service Management System (SMS) which will facilitate CLECs' ability to create and update routing information for the CLECs' end users. BellSouth recently completed end-to-end testing (ETET) of this enhancement.

By providing CLECs a choice of customized routing methods, BellSouth better enables CLECs to compete based upon their own business plans and priorities.

Q. PLEASE SUMMARIZE YOUR TESTIMONY WITH REGARD TO CUSTOMIZED ROUTING.

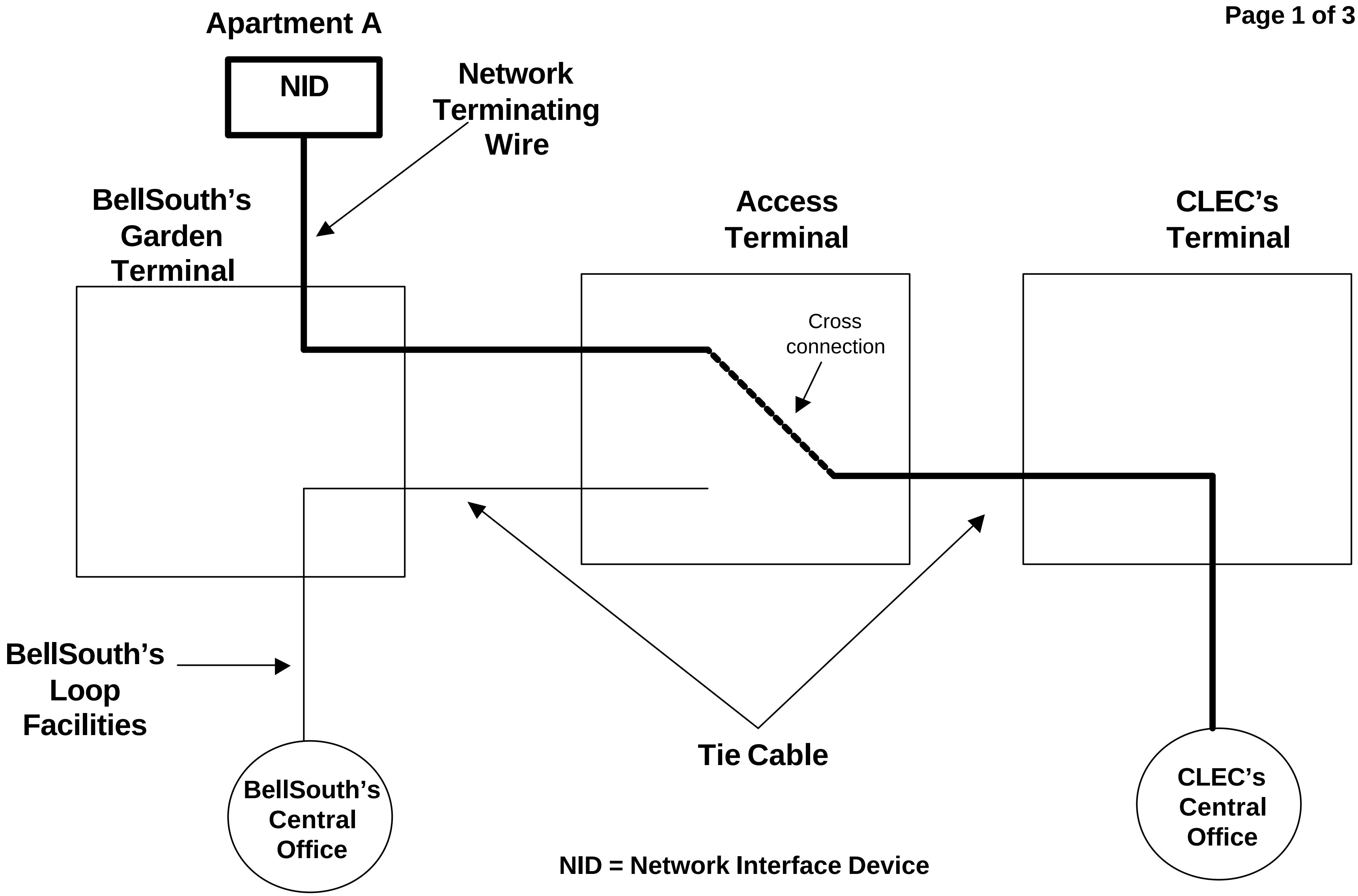
A. BellSouth offers two methods by which CLECs may obtain customized routing. Accordingly, the Authority should approve the cost studies and resulting rates for the AIN method as submitted in the testimonies of Ms. Caldwell and Mr. Ruscilli. The Authority has previously approved the rates for the Line Class Code method.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

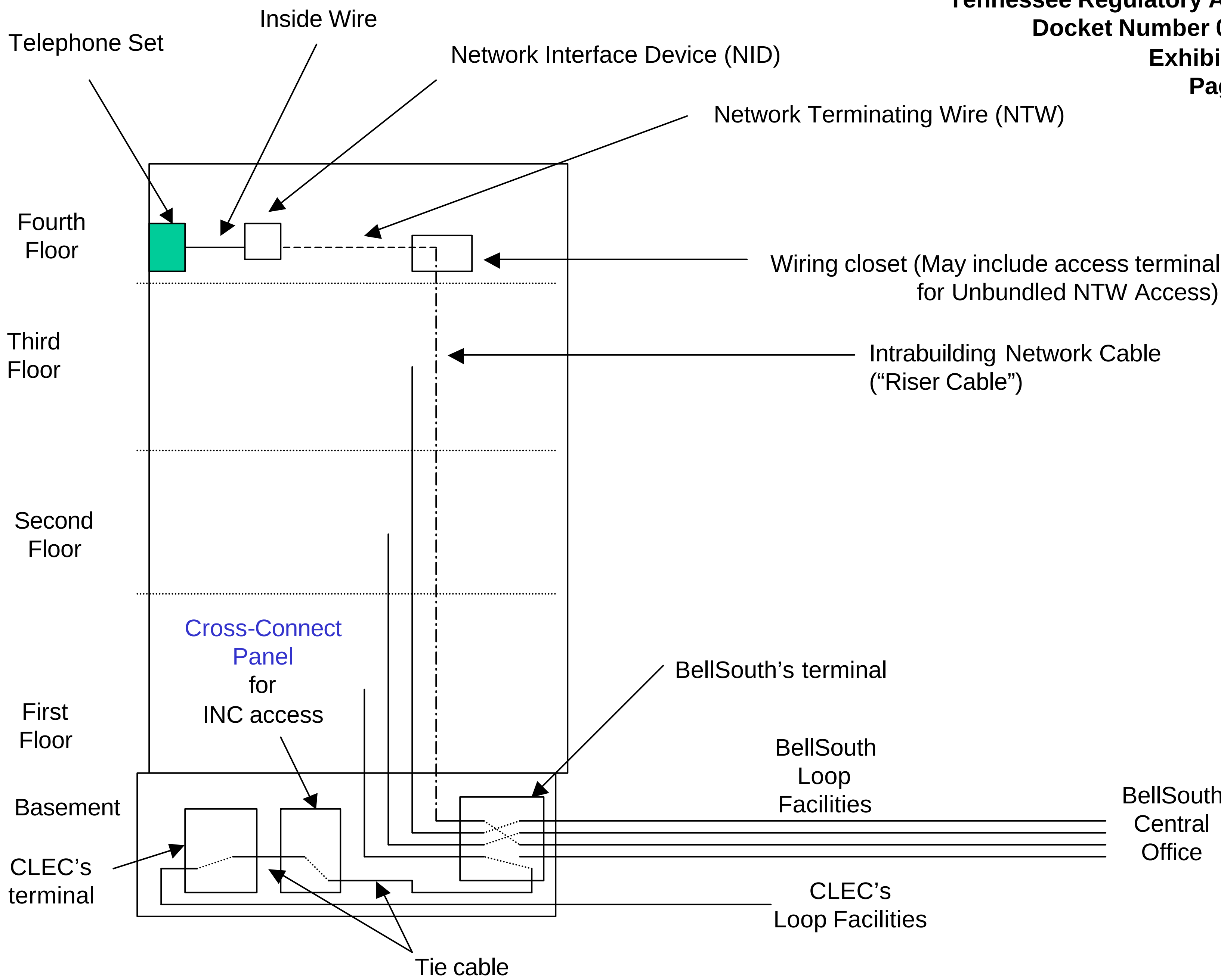
Typical access to unbundled network terminating wire in "garden" apartment

BellSouth Telecommunications, Inc.
Tennessee Regulatory Authority
Docket Number 00-00544
Exhibit WKM-1
Page 1 of 3

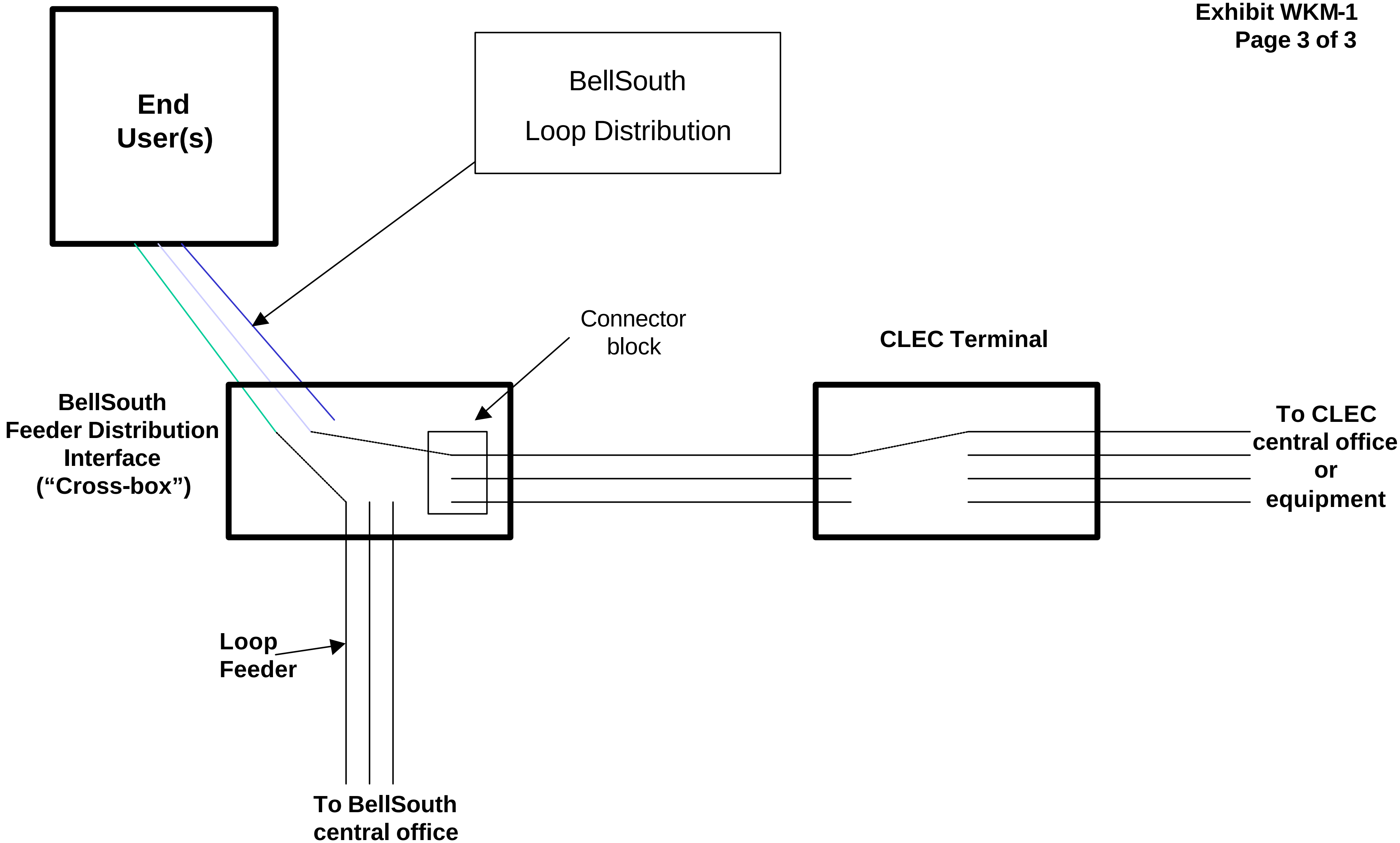


NID = Network Interface Device

BellSouth's proposed form of access



Access to the Sub-loop Element Loop Distribution



BELLSOUTH TELECOMMUNICATIONS, INC.

TESTIMONY OF RONALD M. PATE

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

November 13, 2000

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. AND YOUR BUSINESS ADDRESS.

A. My name is Ronald M. Pate. I am employed by BellSouth Telecommunications, Inc. ("BellSouth") as a Director, Interconnection Services. In this position, I handle certain issues related to local interconnection matters, primarily operations support systems ("OSS"). My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I graduated from Georgia Institute of Technology in Atlanta, Georgia, in 1973, with a Bachelor of Science Degree. In 1984, I received a Masters of Business Administration from Georgia State University. My professional career spans over twenty-five years of general management experience in operations, logistics management, human resources, sales and marketing.

I joined BellSouth in 1987, and have held various positions of increasing responsibility.

Q. HAVE YOU TESTIFIED PREVIOUSLY?

A. I have testified before the Public Service Commissions in Alabama, Florida, Georgia, Louisiana, South Carolina, the Tennessee Regulatory Authority and the North Carolina Utilities Commission.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A The purpose of my testimony is to address the FCC'S Third Report And Order And Fourth Further Notice Of Proposed Rulemaking In CC Docket 96-98 (FCC 99-238); Released November 5, 1999, (UNE Remand Order) as its relates to BellSouth's OSS including a new requirement that BellSouth must provide Competitive Local Exchange Carriers (CLECs) access to loop make-up data via BellSouth's OSS. Additionally, I will address BellSouth's OSS solution to satisfy the FCC's Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, released December 9, 1999 (Line Sharing Order) requiring that incumbent LECs unbundle the high frequency portion of the loop to permit the CLECs to provide xDSL-based service by sharing the lines with the incumbent's voiceband service.

Q. DOES BELLSOUTH PROVIDE CLECS NONDISCRIMINATORY ACCESS TO ITS OSS?

A. Yes. BellSouth provides CLECs nondiscriminatory access to its OSS functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing through robust and reliable manual and electronic interfaces. BellSouth's OSS interfaces for CLECs are operated and available on a nine-state regional basis in BellSouth's serving areas, including those in Tennessee. These interfaces allow CLECs the same pre-ordering and ordering functions that BellSouth provides to itself.

Q. DID THE FCC CHANGE ITS DEFINITION OF OSS IN THE UNE REMAND ORDER?

A. No. Specifically, the FCC defined OSS as consisting of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC's database and information.[1] Further, it stated " We find no reason to modify our definition of OSS." The FCC clarified that the pre-ordering function includes access to loop qualification information. Loop qualification information identifies the physical attributes of the loop plant (such as loop length, the presence of analog load coils and bridge taps, and the presence and type of Digital Loop Carrier) that

[1] FCC 99-238 paragraph 425

enable carriers to determine whether the loop is capable of supporting xDSL and other advanced technologies.[2] In summary, the FCC did not redefine OSS, rather it clarified the pre-ordering function to include access to loop qualification information.

Q. DID THE FCC'S UNE REMAND ORDER IMPACT BELLSOUTH'S OSS AS THESE OSS ARE USED BY CLECS?

A. The UNE Remand Order did not impact the existing CLEC OSS access offered by BellSouth other than to specify at paragraph 426 that "the pre-ordering function includes access to loop qualification [make-up] information."

Q. WHAT IS BELLSOUTH'S RESPONSE TO THE FCC'S REQUIREMENT THAT LOOP MAKE-UP INFORMATION BE AVAILABLE TO CLECS AS PART OF THE PRE-ORDERING FUNCTION?

A. BellSouth has developed and implemented procedures to provide CLECs with detailed loop make-up information via the manual Service Inquiry (SI) process. Additionally, BellSouth has under development a detailed mechanized Loop Make-up pre-order process that is accessible through all current electronic interfaces that support pre-order functions (LENS,

[2] FCC 99-238 paragraph 426

TAG, and RoboTAG®). This process will be available to any CLEC that is interested in incorporating these procedures into its interconnection agreement. BellSouth witnesses Ms. Caldwell and Mr. Ruscilli address the costs and BellSouth's proposed rates associated with the work required to incorporate this process into the pre-ordering function.

Q. PLEASE DESCRIBE THE MANUAL LOOP MAKE-UP SI PROCESS.

A. The loop make-up data is defined as the physical characteristics of the loop facilities beginning at the BellSouth central office. The data is listed in sequential order, and ends at the serving distribution terminal. Loop make-up data consists of such information as cable gauge and length, bridged taps, load coils, presence of Digital Loop Carrier ("DLC"), and other equipment that is part of local loop facilities.

The CLEC completes the "Customer Information" section of the Loop Make-up SI form indicating if it wants the loop make-up by telephone number, circuit identifier or address. The CLEC submits the Loop Make-up SI form to the Complex Resale Services Group ("CRSG") or their Account Team. The CRSG/Account Team forwards the SI form to BellSouth's Outside Plant Engineering Service Advocacy Center ("SAC"). The SAC verifies the availability of loop facilities. If the Loop Make-up SI indicates the CLEC wants the make-up by telephone number or circuit identifier, the SAC will return a specific make-up for the requested telephone number or circuit identifier. If the Loop Make-up SI indicates the CLEC wants the make-up by address, the SAC will return a specific make-up for the requested address.

The SAC will supply make-up for either a suitable copper pair(s) and DLC pairs as requested by the CLEC for the requested address, telephone number or circuit identifier. If either a copper pair, or DLC, but not both exists at that address/telephone number/circuit identifier, the SAC will indicate in the "Comments Section" which is not available at the requested address/telephone number/circuit identifier. The following is an example comment for an existing DLC make-up where a copper pair does not exist: "Provided DLC make-up at above address, no copper pairs exist at this location". Again, the loop make-up will be listed in sequential order starting at the central office and ending at the end user terminal. The SAC will return the completed Loop Make-up SI to the CRSG/Account Team. The CRSG/Account Team reviews the SI form for completeness and forwards the loop make-up data to the CLEC via electronic mail. They also forward the information to the Local Carrier Service Center (“LCSC”) for bill preparation. The LCSC provides a Firm Order Confirmation (“FOC”) to the CLEC and generates a service order that automatically completes for billing the service.

Q. IS THE MANUAL LOOP MAKE-UP SERVICE INQUIRY MERELY AN INTERIM PROCESS UNTIL ELECTRONIC ACCESS IS AVAILABLE?

A. No. The manual Loop Make-up ("LMU") SI process will continue to be a means for obtaining loop make-up information, even after the electronic Loop Make-up SI process is available. CLECs may obtain documentation for the current Unbundled Network Element ("UNE") pre-ordering and ordering information pertaining to BellSouth's manual loop make-up at BellSouth's Website: http://www.interconnection.bellsouth.com/guides/bpobr.html.

Q. CAN YOU ESTIMATE THE QUANTITY OF BELLSOUTH LOOPS THAT HAVE DETAILED LOOP INFORMATION POPULATED WITHIN LFACS THEREBY REDUCING THE NEED FOR A MANUAL SI?

A. While 100% of BellSouth's loops are populated in LFACS with certain basic information, not all will have the detailed loop make-up information. However, in the high-populated metropolitan areas where the marketing efforts of CLECs are most likely to be concentrated, it is approximated that as much as 80% of loops with detailed loop make-up information are populated in LFACS. So it is only for that remaining small percentage of loops that the manual SI process may have to be utilized. And whenever CLECs must use the manual SI process for these remaining loops, BellSouth will load the resulting loop make-up information in LFACS for future queries.

Q. PLEASE DISCUSS THE MEANS BELLSOUTH HAS DEVELOPED TO PROVIDE CLECS WITH ELECTRONIC ACCESS TO LOOP MAKE-UP INFORMATION AND ELECTRONIC ORDERING OF xDSL LOOPS?

A. BellSouth is developing a comprehensive electronic process for pre-ordering and ordering for CLECs via the Telecommunications Access Gateway ("TAG"), RoboTAG™ and Local Exchange Navigation System ("LENS"). It provides electronic access to loop make-up information from the Loop Facilities Assignment and Control System ("LFACS") and electronic ordering of xDSL loops.

BellSouth will also be enhancing the Electronic Data Interchange ("EDI") to provide electronic ordering of xDSL loops. These enhancements are currently in beta testing with selected CLECs. Interested CLECs will need to conduct System Readiness Testing ("SRT") with BellSouth prior to using these new functions when available for production. If they have not done so already, CLECs must also upgrade their TAG interface to the TCIF 9.0 version in order to test the new functions and then be able to use them in production. CLECs may obtain information on the manual and electronic ordering of BellSouth Loop Make-up at the BellSouth Website:

http://interconnection.bellsouth.com/products/UNE/bstlmu.pdf.

Q. PLEASE DESCRIBE BELLSOUTH'S LOOP QUALIFICATION SYSTEM ("LQS") AND ITS PURPOSE IN SUPPORTING BELLSOUTH'S DSL PRODUCT.

A. LQS stands for Loop Qualification System. LQS was designed as a tool for Network Service Providers, the purchasers of BellSouth's tariffed industrial class ADSL offering to determine whether a particular service location is qualified for BellSouth's industrial class ADSL offering based on BellSouth's defined technical parameters. In other words, by entering a telephone number or circuit identifier, LQS provides the user with a qualified "yes/no" response based on the technical parameters of BellSouth's industrial class ADSL offering only. LQS does not provide loop make-up information as contemplated by the FCC's UNE Remand Order.

Q. DOES BELLSOUTH PROVIDE CLECs ACCESS TO LQS?

A. Yes. Subsequent to the FCC's UNE Remand Order, LQS was made available for use by CLECs on an interim basis until the mechanized loop make-up interface is deployed. However, the purpose of LQS did not change with making this access to CLECs available - it remains a tool to provide a response to the inquirer if the location is qualified for BellSouth's ADSL service. Lastly, LQS does not provide the level of detailed information in order that a CLEC may make an independent judgment about whether the loop is capable of supporting advanced services equipment the CLEC intends to install.

Q. HOW DOES A CLEC OBTAIN ACCESS TO LQS?

A. A CLEC may contact its BellSouth account team to obtain information on gaining access to LQS. The account team will assist with the appropriate documentation necessary to obtain a password and resulting access to LQS. CLECs may obtain a Loop Qualification System ("LQS") DLEC/CLEC Job Aid via the BellSouth Website: http://www.interconnection.bellsouth.com/guides/bpobr.html

Q. DOES BELLSOUTH'S BUSINESS-CLASS ADSL UTILIZE LQS?

A. Yes. BellSouth's business class ADSL, sold from the FCC Tariff No.1 and intended primarily for business applications, utilizes LQS as a "screening function" to determine if a manual SI and subsequent manual loop make-up is required. In those instances that LQS provides a response that the loop under review will meet the required data speed, BellSouth will begin its order, design and provisioning phase, without involving the SI process.

In the remaining instances, where the response indicates that the loop under review will not perform at the required data speeds, BellSouth utilizes the manual SI and subsequent loop make-up to obtain exact loop make-up information.

Q. YOU HAVE REFERRED TO BOTH BELLSOUTH BUSINESS CLASS ADSL AND INDUSTRIAL CLASS ADSL. PLEASE DIFFERENTIATE.

A. My reference to BellSouth's business class ADSL is describing a high-speed service with data rates of:

- 384 Kbps x 384 Kbps
- 768 Kbps x 512 Kbps
- 1.5 – 1.8 Mbps x 512 - 768 Kbps
- 2 – 4 Mbps x 640 – 896 Kbps
- 4 – 6 Mbps x 640 – 896 Kbps
- 192 Kbps x 192 Kbps.

The business class offering will provide guaranteed performance levels to provide a desired class of service including symmetric and asymmetric data rates. The BellSouth business class ADSL is comparable to UCLs CLECs will be ordering.

My reference to BellSouth's industrial class ADSL is describing a comparatively lower speed service, downstream data rate up to 1.5 Mbps and upstream data rate up to 256 Kbps. The cost structure for this offering does not support special actions by BellSouth to either condition an existing loop or to provide a new loop in order to make ADSL work at a given location. The 1.5 Mbps x 256 Kbps offering, referred to as industrial service, is a "best effort", low cost, mass market offering.

Q. WHAT IS THE SOURCE OF THE LOOP INFORMATION CONTAINED WITHIN LQS?

A. The database of record for loop make-up information is LFACS. Thus, the source of loop information in LQS is LFACS. However, LQS also utilizes the additional software systems described below:

- Loop Engineering Information System ("LEIS") - An umbrella system with several modules, one of which is LEAD.

- Loop Engineering Assignment Data ("LEAD") - LEAD is a snapshot of the LFACS database. It receives current data once a month for all wire centers.

- Hands-Off Assignment Logic - (“HAL”) HAL is a BellSouth developed software system designed to pull information from LFACS and join transactions that can not be performed by LFACS, including assignment of most service orders, among which includes some assignments on ADSL facilities.

Q. IS DIRECT ACCESS TO LFACS OR LEIS/LEAD REQUIRED IN ORDER TO PROVIDE CLECS WITH DETAILED INFORMATION ABOUT THE LOOP?

A. No. BellSouth’s obligation is to provide requesting carriers the same underlying information that BellSouth has in any of its own databases or other internal records[1]. BellSouth’s mechanized OSS interface and manual interface provides a means to submit either a mechanized LMU pre-order query or a manual LMU Service Inquiry (“SI”) to LFACS and receive a response. In the case of LEIS/LEAD, access may be obtained by CLECs for LQS, which provides a “yes/no” qualified response.

Q. COULD I NOW ASK YOU TO ADDRESS LINE SHARING? HOW HAS THE FCC DEFINED LINE SHARING?

[1] CC Docket 96-68, Paragraph 427, Page 193, released November 5, 1999

A. In its Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, released December 9, 1999, page 10, paragraph 13, the FCC adopted the requirement that incumbent LECs "unbundle the high frequency portion of the loop to permit competitive LECs to provide xDSL-based services by sharing lines with the incumbent's voiceband services." Additionally, on page 12, paragraph 17 of the same order, the FCC described Line Sharing generally as "the ability of two different service providers to offer two services over the same line, with each provider employing different frequencies to transport voice or data over that line."

Q. PLEASE DESCRIBE BELLSOUTH'S APPROACH TO DEVELOPING OSS FUNCTIONALITY THAT WILL ELECTRONICALLY PROCESS CLEC XDSL AND LINE SHARING SERVICE REQUESTS.

A. BellSouth is implementing a vendor solution provided by Telcordia Technologies, Inc. to provide the OSS necessary for the pre-ordering, ordering and provisioning of CLEC xDSL compatible loops and Line Sharing. This extensive technical solution provides Pre-Existing Licensed Software and Marketable Licensed Software and Services to integrate Licensed Software for UNE Remand CLEC xDSL and Line Sharing into BellSouth's operations environment. As an example, the solution includes the establishment of a new corporate gateway along with a new system architecture for the processing of Local Service Requests ("LSRs") for the UNE Remand and Line Sharing Orders.

The Corporate gateway establishes a single entry point for processing of xDSL requests. It provides a flexible and expandable independent gateway that has security, logging and mapping capabilities,
The Corporate gateway is configured to provide Common Object Request Broker Architecture ("CORBA") interfaces for the TAG client APIs from the CLECs and an interface for BellSouth's OSS.
This allows pre-ordering and ordering functionality utilizing BellSouth's LENS, TAG, and Robo®Tag electronic interfaces. It also provides a navigator interface for the Local Service Requests Router ("LSRR"), which permits firm ordering functionality utilizing the BellSouth EDI electronic interface.

The new system architecture known as Delivery Order Manager will automate many of the service requests functions. Delivery Order Manager can be described as a work flow sequencing and control "engine" that works with partner applications to accept and process service requests. Delivery Order Manager will manage the access to all the databases needed to process a request. Some commonly known databases for pre-order and order functionality are CRIS, CABS, RSAG, ATLAS, and P/SIMS. In addition, Delivery Order Manager will access

LFACS for queries for loop make-up information. Delivery Order Manager also interfaces with a new Service Order Generator for mechanized service order creation allowing flow through of the requests to BellSouth's Service Order Communications System ("SOCS"). In addition to the software requirements and associated software Right-To-Use ("RTU") fees, the Telcordia provided solution also provides support services. Support services include such items as:

- Platform planning and support
- Installation and system administration support
- Services integration testing
- Training and documentation

Q. IS THE SCOPE OF WORK THAT IS TO BE PROVIDED BY TELCORDIA EXCLUSIVELY FOR CLEC OSS CAPABILITIES ASSOCIATED WITH THE UNE AND LINE SHARING ORDERS?

A. No. The majority of the work done in this effort is for OSS capabilities associated with UNE Remand and Line Sharing orders, however, Telcordia is performing additional work on Electronic Access Ordering ("EAO") functionality. EAO will provide ASR pre-order functionality for address validations and Connecting Facility Assignment ("CFA") inquiries. Approximately $3.2 million is committed for licensed software Right-to-Use fees for EAO.

Q. WHAT IS THE CURRENT VALUE OF THE SOFTWARE AND SERVICES SCOPE OF WORK THAT WILL BE PERFORMED BY TELCORDIA FOR BELLSOUTH IN THE UNE REMAND FOR XDSL AND LINE SHARING EFFORT?

A. The software and service fees total approximately $69,500,000 for the UNE Remand for xDSL and Line Sharing software and services provided by Telcordia Technologies, Inc. This includes approximately $28,500,000 for UNE Remand for CLEC xDSL (including 3 change notices) and approximately $41,000,000 for Line Sharing. This does not include the approximate $3,200,000 for software fees described previously for EAO functionality.

Q. PLEASE SUMMARIZE THE BENEFITS OF THE TELCORDIA SOLUTION FOR XDSL AND LINE SHARING TO BELLSOUTH AND ITS CLEC CUSTOMERS.

A. The Telcordia solution offers xDSL pre-ordering functionality utilizing BellSouth's LENS, TAG, and Robo®Tag electronic interfaces. It provides firm order functionality utilizing BellSouth's LENS, TAG, RoboTAG®, and EDI electronic interfaces. A navigator interface for the Local Service Requests Router ("LSRR") permits ordering functionality utilizing the

BellSouth EDI electronic interface. The mechanized LMU may be requested using multiple types of queries (i.e. by working telephone number, by working circuit identifier, query by spare facility at an address, query and reserve spare facility, and cancellation of a reservation). The Telcordia solution offers electronic processing of Line Sharing service requests allowing flow-through within BellSouth's OSS. Important benefits also include the ability to inventory and assign BellSouth facilities and splitters at the pre-specified CLEC meet points. These capabilities provided by the Telcordia solution translate into reliable, fast and accurate processing of CLEC xDSL and Line Sharing service requests. It provides state-of-the-art technology with the ability to process the anticipated volumes of requests in a cost-effective manner and to build future applications and functionalities.

Q. BASED ON CURRENT PLANS, WHEN WILL ELECTRONIC PRE-ORDER AND ORDERING CAPABILITIES BE AVAILABLE UNDER THE TELCORDIA SOLUTION?

A BellSouth currently has the pre-ordering functionality which includes loop make-up and the xDSL compatible loop firm order functionality in a Beta testing environment. The pre-ordering functionality for xDSL is targeted for deployment into the production environment in mid-to-late November 2000. Some defects for the ordering functionality discovered during Beta testing still remain. BellSouth is working with Telcordia to establish dates when the defects will be corrected. As a result, the ordering functionality for xDSL will be delayed beyond the targeted November implementation date.

Firm Order Line Sharing based on the vendor solution provided by Telcordia does not have a firm schedule established. In cooperation with the CLEC Line Sharing collaborative teams, BellSouth has implemented a an interim solution in the existing systems to allow mechanized firm ordering of CO-based BellSouth-owned splitter Line Sharing. This solution was implemented into the production environment on September 30, 2000. This interim solution is targeted to be supplemented and replaced utilizing the Telcordia solution in mid-to-late 2001. BellSouth plans to also offer mechanized firm order of CO-based CLEC owned splitter Line Sharing and Remote Line Sharing. These products are being developed jointly in the Line Sharing Collaborative teams and will be mechanized as they are developed.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF D. DAONNE CALDWELL

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

NOVEMBER 13, 2000

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St., N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth Telecommunications, Inc. (hereinafter referred to as "BellSouth"). My area of responsibility relates to the development of economic costs.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I attended the University of Mississippi, graduating with a Master of Science Degree in mathematics. Additionally, I have attended numerous Bell Communications Research, Inc. ("Bellcore") courses and outside seminars relating to service cost studies and economic principles.

My initial employment was with South Central Bell in 1976 in the Tupelo, Mississippi, Engineering Department where I was responsible for Outside Plant Planning. In 1983, I transferred to BellSouth Services, Inc. in

Birmingham, Alabama, and was responsible for the Centralized Results System Database. I moved to the Pricing and Economics Department in 1984 where I developed methodology for service cost studies until 1986 when I accepted a rotational assignment with Bellcore. While at Bellcore, I was responsible for development and instruction of the Service Cost Studies Curriculum including courses, such as, “Concepts of Service Cost Studies”, “Network Service Costs”, “Nonrecurring Costs”, and “Cost Studies for New Technologies”. In 1990, I returned to BellSouth and was appointed to a position in the cost organization, now part of the Finance Department, with the responsibility of managing the development of cost studies for transport facilities, both loop and interoffice. My current responsibilities encompass cost methodology development and the overall coordination of cost study and interrogatory response filings. Additionally, I participate in cost-related dockets as an expert witness on cost issues.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to present and support the cost study results for the unbundled network elements (“UNEs”) both those previously filed in this docket and for those attached to this testimony. Additionally, I describe the underlying cost methodology used in these studies. BellSouth witness, Mr. John Ruscilli, addresses the rates BellSouth is proposing that are based upon these costs.

Q. WHY DID BELLSOUTH FILE COST STUDIES IN THIS DOCKET?

A. In its May 9, 2000 Director's Conference, the Tennessee Regulatory Authority ("TRA") opened Docket No. 00-00544 and specified the elements for which BellSouth needed to provide cost support; Intra-building Cable, Network Terminating Wire and Line Sharing, such that permanent cost-based rates could be established. BellSouth fulfilled the TRA's directive with a June 30, 2000 filing. Subsequently, the TRA expanded the scope of this docket to include all elements that may be subject to arbitration as a result of the Federal Communications Commission's ("FCC's") Third Report and Order. BellSouth filed additional cost support on October 2, 2000 with respect to these UNEs. The TRA also ordered that BellSouth allow competitors to purchase and install splitters in a line sharing arrangement. BellSouth filed additional cost support in response to this order on October 20, 2000. BellSouth also included cost support for additional combinations in the October 20, 2000 filing. Additionally, attached to this docket as Exhibit DDC-1 are revised nonrecurring costs for xDSL loops, i.e., ADSL, HSDL, and unbundled copper loops ("UCLs"), Loop Conditioning, and Loop Make-up. Also, revisions to some line sharing nonrecurring costs have been made and additional elements have been identified that are required for line sharing. Exhibit DDC-1 supercedes the nonrecurring costs that were filed previously for these elements. A summary of the costs that changed from those previously filed is attached as Exhibit DDC-2.

Q. PLEASE EXPLAIN WHY BELLSOUTH REVISED THE NONRECURRING COSTS FOR XDSL LOOPS AND LINE SHARING.

A. The provisioning of xDSL and Line Sharing UNEs is an evolving process, such that BellSouth is constantly reviewing its projected time estimates and provisioning processes. Updates to work time estimates, work groups, and some underlying assumptions from the study filed previously in this docket are reflected in Exhibit DDC-1. As Exhibit DDC-2 reflects, the vast majority of the costs decreased. Exhibit DDC-3 outlines the changes that were made that impacted the cost results.

Q. WERE THE ELEMENTS FILED IN THIS DOCKET PREVIOUSLY SUBMITTED TO THE TENNESSEE REGULATORY AUTHORITY ("TRA") FOR REVIEW IN THE GENERIC DOCKET NO. 97-01262?

A. No. The elements submitted in this docket are the result of the Federal Communications Commission's ("FCC's") Third Report and Order, in which additional unbundled network elements ("UNEs") were defined. Thus, the TRA was never given the opportunity to review these costs in Docket No. 97-01262 (the generic cost docket). However, let me emphasize that BellSouth followed the methodology and inputs established by the TRA in Docket No. 97-01262. I will expand on this statement later in my testimony.

Q. WHAT TYPES OF COSTS ARE REFLECTED IN THE COST STUDY?

A. The cost study reflects both recurring and nonrecurring costs. Recurring costs include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cost of money, and income tax. Non-capital recurring costs are expenses associated with the use of an investment. These operating expenses consist of plant-specific expenses, such as, maintenance, ad valorem taxes and gross receipts taxes.

Nonrecurring costs are one-time expenses associated with provisioning, installing and disconnecting the network capability. These costs generally include five major categories of activity: service inquiry, service order, engineering, connect and test, and technician travel time.

Q. IS BELLSOUTH'S COST STUDY CONSISTENT WITH THE FCC's COSTING METHODOLOGY?

A. Yes. BellSouth's cost methodology is not only compliant with the Act, but also with the FCC's First Report and Order. BellSouth utilized the FCC's published Total Element Long Run Incremental Cost ("TELRIC") methodology as a guideline in producing cost support for unbundled network elements. Thus, the costs are forward-looking and reflect an efficient network design based on existing wire center locations.

Specifically, BellSouth's cost study is consistent with the FCC's costing methodology as set forth in FCC Rule 51.505 (Forward-looking economic cost) which defines the FCC's cost methodology for unbundled network elements. Pursuant to the FCC's rules, such costs must be developed using an efficient network configuration that uses the existing location of the Incumbent Local Exchange Carrier's ("ILEC's") wire centers. Further, the costs should be developed using a forward-looking cost of capital and economic depreciation rates, and a reasonable allocation of forward-looking common costs is appropriate. The forward-looking economic costs may not include embedded costs, retail costs, opportunity costs or revenues to subsidize other services.

Q. HAS THE IMPACT OF THE EIGHTH CIRCUIT COURT'S RECENT DECISION BEEN REFLECTED IN BELLSOUTH'S COST DEVELOPMENT?

A. No. On July 18, 2000, the United States Court of Appeals for the Eighth Circuit issued an opinion that struck down the FCC's TELRIC pricing rule. The Court held that unbundled network element costs should be determined using forward-looking costs of the incumbent local exchange company's ("ILEC's") existing network rather than on the costs of a hypothetical network of an imaginary carrier.

BellSouth has not fully evaluated the impacts of the Court's decision on the cost methodology for UNEs; further, the full impact of that decision will not be known until the appeal process is concluded. Therefore, BellSouth has not made any changes to the underlying TELRIC methodology to reflect the anticipated effect of the Eighth Circuit Court's decision. Thus, BellSouth's costs are forward-looking, but are conservative (low) based on the Eighth Circuit's opinion. Additionally, on September 25, 2000, the Eighth Circuit granted a stay of the TELRIC decision stating that its decision "is stayed pending the filing and ultimate disposition of a petition for certiorari with the Supreme Court." Thus, the timing of the final ruling on the Eighth Circuit's decision is pending and BellSouth reserves its right to revise its cost study once a final decision is reached with respect to this litigation.

Q. WHAT COST METHODOLOGY WAS USED IN THE COST STUDY SUBMITTED IN THIS DOCKET?

A. The cost study is based on the study methodology established by the TRA in its Order in Docket No. 97-01262. The TRA's response to Issue 1 in the Interim Order[1] established the cost methodology that should provide the foundation for both the cost models and the inputs. Page 8 of the Interim Order states: "The Authority finds that prices should be established using the forward-looking economic cost methodology as defined by the FCC's TELRIC methodology, including an appropriate markup for the recovery of shared and common costs. This methodology ensures that costs used to

[1] Issue 1: What cost methodology should the TRA use in setting interconnection and Unbundled Network Elements ("UNE") prices?

set prices for UNEs will reflect the inputs, quantities, and prices faced by an efficient firm using the least-cost technology." In establishing the pricing standard as TELRIC economic cost, the TRA has also determined that the TELRIC economic cost methodology should be followed for developing the costs.

Q. PLEASE PROVIDE SOME BACKGROUND TO DOCKET NO. 97-01262.

A. BellSouth filed cost studies to support permanent prices for various network elements that were contained in BellSouth's interconnection agreements or for which the TRA had previously established interim rates. The studies were filed electronically with complete documentation. With these studies, BellSouth introduced a new cost model, the TELRIC Calculator©. The TELRIC Calculator converts material prices and labor work times to cost.

Q. ARE THE ADJUSTMENTS TO BELLSOUTH'S INPUTS ORDERED BY THE TRA IN DOCKET NO. 97-01262 INCORPORATED IN THE COST STUDY RESULTS PRESENTED IN THIS DOCKET?

A. Yes. The TRA-ordered inputs that are relevant to the cost elements in this proceeding are included. For example, the cost study includes the TRA-ordered cost of money, depreciation lives, and shared and common

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Q. PLEASE ELABORATE ON THE TRA-ORDERED ADJUSTMENTS BELLSOUTH INCORPORATED IN THE COST STUDY TO FULFILL THE TRA'S INTERIM ORDER IN DOCKET NO. 97-01262.

A. I will address each of the adjustments included in this filing and reference the issue and the appropriate discussion from the TRA's Interim Order in Docket No. 97-01262. The cost studies submitted in this docket follow the intent of each TRA adjustment. Where appropriate, the inputs have been updated to reflect the study period, 2000-2002.

First, the TRA adopted ACSI's recommended markup of 15% to account for shared and common costs. (Page 11 of the Interim Order.) This adjustment was "hard coded" into BellSouth's TELRIC Calculator's Shared and Common cost module included in this filing.

Second, the TRA originally adjusted the loop fill factors in its Interim Order. (Page 12 of the Interim Order) However in its Reconsideration Ruling (11/3/99), the TRA modified this ruling and stated, "that the fill factors as proposed by BellSouth are more reasonable and should be adopted." (Page 10 Reconsideration Ruling)

Third, the TRA mandated that the models use Tennessee-specific depreciation lives, salvage values and other inputs used in calculating the depreciation rates as established by the former Tennessee Public Service Commission in Docket No. 92-13527. (Page 13 of the Interim Order) The ordered depreciation rates were incorporated into the study included in this docket.

Fourth, BellSouth's cost study reflects the following adjustments ordered by the TRA: (1) overall cost of capital of 10.46%; (2) debt ratio of 40%; (3) 7.30% cost of debt; (4) equity ratio of 60%; (5) 12.46% cost of equity. (Page 15 of the Interim Order) Refer to the seventh point, below, for further discussion of cost of capital input.

Fifth, the TRA directed that BellSouth's normalized 1996 plant specific expense should be reduced by 22.5% for calculating network maintenance expense. (Page 17 of the Interim Order) However, in the April 20, 1999 Director's Conference, the TRA reconsidered this aspect of the Interim Order and limited the 22.5% reduction to network operations expenses only. (Page 10 of the Transcript) The April 20, 1999 adjustment is reflected in this filing.

Sixth, the TRA originally adjusted the ad valorem tax to reflect the actual 1998 tax rate of .0116. (Page 17 of the Interim Order) This input was used in this filing.

Seventh, the TRA concluded that unbundled network elements should be priced in a manner that considers the time value of money by employing monthly compounding in calculating the monthly rate from an annual cost. (Page 18 of the Interim Order) In other words, BellSouth was ordered to reflect monthly compounding using the approved overall cost of money of 10.46%. This methodology was reflected in BellSouth's cost study and in effect changed the cost of money to 9.93%.

Eighth, the TRA ordered that the drop length be adjusted to 100'. (Page 19 of the Interim Order) This input was used in the calculation of UCL costs in this docket. Additionally since BellSouth no longer uses contract labor to place drops, the adjustment to the labor component is not necessary.

Ninth, The TRA adjusted the distribution of residential and business loops to 69.22% residential and 30.78% business. (Page 22 of the Interim Order) This distribution was reconsidered by the TRA and changed to 62.89% (residential) and 37.11% (business). This mix of residential and business loops was utilized in the study submitted in this docket.

Tenth, the TRA found that "BST's TELRIC Calculator model should be adjusted to reflect three (3) other entities equally sharing aerial support structures (poles) with BST for a total of four (4)." (Page 27 of the Interim Order) This adjustment was incorporated in this filing.

Eleventh, the TRA concluded that only direct costs should be recovered through nonrecurring charges. (Page 31 of the Interim Order) Thus, BellSouth has removed shared and common costs from the calculation of nonrecurring costs. Because of this aspect of the Interim Order, BellSouth had to make two computer runs. A run was made using a common cost factor of 15% (which the TRA established in response to Issue 3) to calculate recurring costs. Then another run was made using a common cost factor of zero to calculate nonrecurring costs. Both runs are contained on the CD-ROM, one labeled Recurring (15% common cost factor) and the other Nonrecurring (0% common cost factor).

Twelfth, the TRA ordered a fallout rate of 7% for unbundled network element orders and three minutes of work activity by the Local Customer Service Center ("LCSC"). (Page 33 of the Interim Order) However, in response to BellSouth request for reconsideration at the April 20, 1999 Director's Conference, the TRA decided that "BellSouth's model should be adjusted to reflect 15 minutes of work time to resolve a fallout situation that will occur 7 percent of the time." (Page 18 of the Transcript) The April 20, 1999 clarification was included in this filing.

Thirteenth, the TRA determined that "BST should adjust its TELRIC Calculator model to recover all costs associated with testing in recurring rates." (Page 34 of the Interim Order) Thus, BellSouth removed the testing times from the nonrecurring cost development and recovered these costs as part of the recurring rates.

Finally, the TRA determined that disconnect costs should be separated from installation costs and assessed at the time of disconnect. (Page 35 of the Interim Order). BellSouth presents disconnect costs separately from installation costs.[2]

Q. THE FCC'S THIRD REPORT AND ORDER INCREASED THE LIST OF UNES BELLSOUTH IS OBLIGATED TO PROVIDE. PLEASE BRIEFLY DESCRIBE THE "NEW" ELEMENTS THAT ARE INCLUDED IN BELLSOUTH'S COST STUDY.

A. The FCC listed eight basic types of network elements that must be unbundled: (1) Loops, (2) Subloops, (3) Network Interface Device ("NID"), (4) Circuit Switching, (5) Packet Switching (only in limited circumstances), (6) Interoffice Transmission Facilities, (7) Signaling and Call-Related Databases, and (8) Operational Support Systems ("OSS"). I will describe each of these categories individually and detail the new elements BellSouth is presenting with this filing.

Q. PLEASE DESCRIBE THE DIFFERENT TYPES OF LOOPS BELLSOUTH INCLUDED IN THIS STUDY.

A. First let me state that the FCC's Third Report and Order did not alter the definition of a loop with respect to the manner in which BellSouth

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[2] BellSouth's inclusion of the TRA's adjustments should not be construed as an endorsement of the modifications. In fact, BellSouth disagrees with many aspects of the TRA's adjustments and reserves the right to challenge these modifications.

conducted its cost studies. The FCC's definition reads as follows:

> The local loop network element is defined as a transmission facility between a distribution frame (or equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer premises, including inside wire owned by the incumbent LEC. (Appendix C, Page 3 of the FCC Third Report and Order)

The cost studies BellSouth submitted both in Docket No. 97-01262 and in this proceeding comply with this definition.

The FCC's Third Report and Order did, however, emphasize BellSouth's obligation to offer xDSL compatible loops. BellSouth previously submitted costs for various types of xDSL loops in Docket No. 97-01262, including ADSL and HDSL compatible loops. (These loops meet the transmission requirements set for ADSL and HDSL service.) The TRA is in the process of establishing both recurring and nonrecurring rates based upon BellSouth's compliance filings in Docket No. 97-01262 for these elements. However, BellSouth has re-studied the nonrecurring costs associated with these types of loops in this proceeding because the provisioning process has changed radically since the studies were initially conducted. Specifically, the nonrecurring cost structure now reflects that fact that the CLEC can qualify the loop, instead of BellSouth.

Additionally, for this proceeding, BellSouth has developed recurring and nonrecurring costs for 2-wire and 4-wire UCLs; e.g., the CLEC can offer a variety of xDSL services. The costs are segmented between loops less than 18,000 feet ("UCL-Short") and loops greater than 18,000 feet ("UCL-Long"). The UCLs are commonly referred to as "dry copper" loops because they have no intervening equipment such as load coils, bridged tap, or repeaters between the end user premises and the serving wire center. Another type of xDSL loop that BellSouth is offering is a Universal Digital Channel ("UDC"). The UDC is similar to an ISDN loop except that it follows stricter provisioning guidelines, such that the CLEC can concatenate the 3 "ISDN" channels into a single 144 KBPS circuit.

Even though it is not classified as a distinct UNE, the FCC discussed Loop Conditioning as it relates to the provisioning of xDSL compatible loops in its Third Report and Order. BellSouth offers three types of Loop Conditioning (Loop Modification ("ULM")), Load Coil/ Equipment Removal – Short, Load Coil/Equipment Removal – Long, and Bridged Tap Removal. This structure appropriately reflects the way in which the costs to provide this service will occur. Costs were developed for removing load coils from loops less than 18,000 feet and for loops greater than 18,000 feet. In its study, BellSouth assumed for loops less than 18,000 feet, 10 pairs will be conditioned (load coils removed) at the same time. This is based on projected demand for the conditioned loops. Additionally, for loops less than 18,000 feet the impact of this procedure on voice grade service will be minimal since load coils neither enhance nor impair the quality of voice transmission for loops of that length. For loops greater than 18,000 feet, however, the removal of intermediary electronics (e.g., load coils) would likely degrade the voice grade transmission quality, rendering it unusable for voice grade transmission. To minimize the quantity of voice grade circuits that will be unavailable for transmission of voice grade level service, BellSouth practices assume only two circuits will be conditioned initially. Bridged tap removal assumed three bridge taps are removed, one in the underground and the other two buried or aerial.

Certain CLECs have argued that intermediary devices are not required for loops less than 18,000 feet, and thus, that BellSouth is not entitled to recover costs to remove those devices. The FCC addressed such arguments and stated: "We agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops." (¶193, FCC CC Docket 96-98 Third Report and Order)

The FCC also mandated that BellSouth offer loops at higher transmission rates, i.e., greater than a DS1. Thus, in this filing BellSouth determined the cost of DS3, OC3, OC12, OC48, and STS-1 loops and local channels.

Q. DESCRIBE THE ELEMENTS BELLSOUTH INCLUDED UNDER THE SUBLOOP/ NID CATEGORIES.

A. BellSouth has developed costs for Unbundled Sub-Loops that are 2-wire or 4-wire components of a loop that can be technically unbundled. Sub-Loops consist of Sub-Loop Feeder ("USL-F"), Sub-Loop Distribution ("USL-D"), Unbundled Intra-building Network Cable ("UINC"), and Unbundled Network Terminating Wire ("UNTW"). USL-F is also provided for the DS1 digital loop.

Sub-loop feeder is the physical transmission facility (or channel or group of channels on such facility) which extends from the main distributing frame connection in the end office to the cross-connect box. If the loop is served by digital loop carrier, a central office digital loop carrier terminal is required to convert the digital signal to voice grade analog. A test point is provisioned with the sub-loop feeder for remote test access.

Sub-loop distribution is the physical transmission facility from a BellSouth cross-connect device to the customer's premises (i.e., the Network Interface Device ("NID")). This facility will allow an end user to send and receive telecommunications traffic when it is properly connected to other required network elements, such as loop feeder facility. This facility includes a NID (where applicable) at the customer's location in the loop.

BellSouth will also provide sub-loop interconnection to the Unbundled Intrabuilding Network Cable ("UINC"). UINC is the distribution facility inside a subscriber's building or between buildings on one customer's premises (continuous property not separated by a public street or road). UINC includes the facility from the cross-connect device in the building equipment room up to and including the end-user's point of demarcation.

Unbundled Network Terminating Wire ("UNTW") is unshielded twisted copper wiring that is used to extend circuits from an INC terminal or from a building entrance terminal to an individual customer's point of demarcation. It is the last segment of the field-side loop distribution facilities. In multi-subscriber configurations, UNTW represents the point at which the network branches out to serve individual subscribers.

UNTW will be provided in Multi-Dwelling Units ("MDUs") and/or Multi-Tenants Units ("MTUs") where BellSouth provides wiring all the way to the end-users premises. BellSouth will not provide this element in those locations where the property owner provides the wiring to the end user's premises or where the property owner will not allow BellSouth to place its facilities to the end user.

Another group of elements that can be classified as "sub-loop" is unbundled sub-loop concentration ("USLC"). These elements allow a CLEC to concentrate loop distribution elements, provided by the CLEC, on to multiple DS1s. This arrangement allows the CLEC to connect the loop distribution elements (at a concentrated level) to BellSouth's feeder facilities. BellSouth will then transport the DS1s carrying the distribution circuits back to the serving wire center for termination on a BellSouth DSX1 block and ultimately to the CLEC's collocation space.

I have discussed loop modification (conditioning) previously. To reflect the possibility that the CLEC may only purchase distribution from BellSouth and that conditioning may be required, BellSouth offers the following elements:

Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Load Coil/Equipment Removal and Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Bridged Tap Removal. Mr. Ruscilli addresses the rates BellSouth is proposing for these sub-loop elements in his testimony, while Mr. Milner discusses sub-loop access.

Q. DOES THE FCC'S THIRD REPORT AND ORDER AFFECT THE COST SUPPORT REQUIRED FOR THE NID?

A. The FCC's UNE Third Report and Order does not affect the costs previously provided to the TRA and upon which the TRA will ultimately establish rates for NIDs. However, the FCC modified the definition of the NID to include "any means of interconnection of customer premises wiring to the incumbent LEC's distribution plant, such as a cross-connect device used for that purpose." (¶233 of the FCC Third Report and Order) Therefore, in this filing, BellSouth has determined the nonrecurring cost associated with establishing a cross-connect in conjunction with a NID.

NID access is designed to allow a CLEC the opportunity to connect its loop to the inside wire accessed through BellSouth's NID. It is expected that the CLEC will provision a loop and a NID to the customer's location. In these circumstances, the CLEC may perform a physical cross-connect of the inside wire to its loop to provide a communication pathway from the CLEC through BellSouth's NID to the end user's inside wire.

If BellSouth does not have a NID, i.e., it terminates its loops directly to the inside wire of the end user, or where the existing NID is not suitable for connection, BellSouth will install a NID. Also, at the CLEC's request, BellSouth will install a second NID and will provide the cross-connect from the BellSouth NID to the CLEC NID.

Q. HAS BELLSOUTH DEVELOPED COSTS FOR CIRCUIT SWITCHING?

A. Not in this docket. Since the TRA will ultimately set rates for Unbundled Switching and Local Interconnection based on costs submitted in Docket No. 97-01262, it is unnecessary to re-file cost support. Additionally, the FCC's Third Report and Order did not alter the existing definition of Local Switching. However, the FCC's order did find that incumbent LECs will be relieved of its obligation to provide local circuit switching under certain circumstances that will be discussed by Mr. Ruscilli.

Q. DID BELLSOUTH DEVELOP COSTS FOR UNBUNDLED PACKET SWITCHING?

A. No. Rather, BellSouth has developed the cost associated with allowing a CLEC to collocate in the remote terminal and has filed those costs in this proceeding. Mr. Ruscilli addresses the issue of unbundling packet switching in greater detail in his testimony.

Q. ARE THERE ANY NEW ELEMENTS FOR INTEROFFICE TRANSMISSION FACILITIES?

A. Yes. As with loops, the FCC ordered that BellSouth provide interoffice facilities at higher transmission rates. Thus, costs were developed for both dedicated and shared interoffice facilities at DS3, OC3, OC12, OC48, and STS-1 transmission rates.

Q. WHAT IS BELLSOUTH OFFERING TO COMPLY WITH THE REQUIREMENT TO UNBUNDLE CALL-RELATED DATABASES AND SIGNALING?

A. BellSouth previously submitted costs for 800 Access, Line Information Database ("LIDB") Access, and CCS7 Signaling Transport in Docket No. 97-01262. The TRA will establish rates based upon BellSouth's costs for these items. In this docket, BellSouth is augmenting its list of database access items to include Calling Name ("CNAM"), Local Number Portability ("LNP"), and E911.

Q. HAS BELLSOUTH DEVELOPED ADDITIONAL COST SUPPORT FOR OSS ACCESS?

A. No. BellSouth submitted cost support associated with the development, implementation, and on-going support of electronic interfaces to BellSouth's ordering systems in Docket No. 97-01262. BellSouth developed electronic interfaces that allow CLECs access to BellSouth's existing legacy systems, as directed in Paragraph 523 of the FCC's First Report and Order which states:

> We thus conclude that an incumbent LEC must provide nondiscriminatory access to their operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing available to the LEC itself.

The FCC's Third Report and Order did not change this requirement. However, the order did mandate that BellSouth enable CLEC access to loop make-up information as part of the ordering process.

Q. DID BELLSOUTH DEVELOP COSTS FOR ACCESS TO LOOP MAKE-UP AS STIPULATED IN THE FCC'S THIRD REPORT AND ORDER?

A. Yes. BellSouth developed costs that reflect accessing loop make-up information via two methods, either through an electronic interface or manually. If the CLEC chooses the mechanized process, the Loop Facilities Assignment and Control System ("LFACS") database is accessed and interactive loop data extracts based on search criteria can be made. In the cost study, element J.3.1 (Mechanized Loop Make-up) reflects the costs BellSouth incurs in providing the CLEC access to LFACS via this mechanized process.

BellSouth also offers the CLEC a manual process. The manual process begins with the CLEC initiating a service inquiry requesting loop make-up information. BellSouth personnel manually develop the loop make-up and provide the CLEC a copy. In the cost study, element J.3.3 (Manual Loop Make-up) reflects the costs BellSouth incurs in performing these activities.

Q. ARE THERE ARE OTHER ELEMENTS BELLSOUTH IS OFFERING THAT WERE NOT INCLUDED IN DOCKET NO. 97-01262?

A. Yes. The FCC's Third Report and Order also stated that the incumbent must test and report troubles on conditioned loops for the line's features, functions, and capabilities. (¶195) Thus, BellSouth determined the costs associated with testing beyond voice and incorporated such costs in its filing.

Additionally, the FCC's Advanced Service Order revised some of the elements BellSouth had to offer under physical collocation. BellSouth expanded collocation to include assembly point and physical collocation at the remote terminal. The Advanced Services Order also addressed Line Sharing. BellSouth is obligated to “share” the existing physical loop by segmenting the bandwidth. This study reflects the costs of providing such an arrangement in BellSouth’s central office.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The TRA has ruled on the appropriate methodology for developing costs for unbundled network elements - TELRIC economic costs. BellSouth utilized the principles inherent in this methodology for its cost study filed with this testimony. Thus, the incremental recurring and nonrecurring costs are long-run and reflect an efficient, forward-looking, yet attainable, network. It is also BellSouth’s opinion that if the Eighth Circuit’s TELRIC ruling is affirmed, the costs determined by this methodology are understated.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF JOHN A. RUSCILLI

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

NOVEMBER 13, 2000

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS ADDRESS.

A. My name is John A. Ruscilli. I am employed by BellSouth as Senior Director for State Regulatory for the nine-state BellSouth region. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR BACKGROUND AND EXPERIENCE.

A. I attended the University of Alabama in Birmingham where I earned a Bachelor of Science Degree in 1979 and a Master of Business Administration in 1982. After graduation I began employment with South Central Bell as an Account Executive in Marketing, transferring to AT&T in 1983. I joined BellSouth in late 1984 as an analyst in Market Research, and in late 1985 moved into the Pricing and Economics organization with various responsibilities for business case analysis, tariffing, demand analysis and price regulation. I served as a subject matter expert on ISDN tariffing in various commission and public service commission ("PSC") staff meetings in Tennessee, Florida, North Carolina and Georgia. I later moved into the State

Regulatory and External Affairs organization with responsibility for implementing both state price regulation requirements and the provisions of the Telecommunications Act of 1996 ("the Act"), through arbitration and 271 hearing support. In July 1997, I became Director of Regulatory and Legislative Affairs for BellSouth Long Distance, Inc., with responsibilities that included obtaining the necessary certificates of public convenience and necessity, testifying, Federal Communications Commission ("FCC") and PSC support, federal and state compliance reporting and tariffing for all 50 states and the FCC. I assumed my current position in July 2000.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The Tennessee Regulatory Authority ("Authority") opened this docket to establish rates for certain unbundled network elements ("UNEs"). My testimony addresses the policy issues related to the cost studies and price development for the UNEs that BellSouth offers to Competitive Local Exchange Carriers ("CLECs") outlined by the FCC in its Third Report and Order in CC Docket No. 96-98, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, issued November 5, 1999 ("UNE Remand Order") and its Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98 ("Line Sharing Order"). The following areas are discussed in my testimony: 1) the policy foundations underlying the proposed rates; 2) the effect of the proposed rates on implementation of those policies; and 3) the development of the proposed rates.

Q. GENERALLY, WHAT IS THE PURPOSE OF THIS PROCEEDING?

A. The FCC's UNE Remand Order identified additional UNEs that must be offered to

CLECs and the Line Sharing Order identified the high frequency portion of the loop, also referred to as line sharing, as a new UNE. Also, pursuant to the requirements of FCC Rule 51.507(f), state commissions must establish different rates (prices) for certain UNEs in at least three cost-related rate zones within the state to reflect geographic cost differences. Therefore, the primary goal of this proceeding is to establish rates (including geographically deaveraged rates where appropriate) for the additional UNEs that the FCC identified in its UNE Remand Order and its Line Sharing Order. The rates the Authority establishes is this proceeding will replace, subject to true-up, the interim rates that the Authority has previously established.

Q. BRIEFLY DESCRIBE THE COST STUDIES BELLSOUTH IS SUPPORTING IN THIS PROCEEDING.

A. In Docket No 97-01262, the Authority instructed that various adjustments be made to the Total Element Long Run Incremental Cost ("TELRIC") initially filed by BellSouth. BellSouth's witness Ms. Daonne Caldwell sponsors the cost studies that BellSouth filed on October 2, 2000 in this proceeding. As she explains in detail, these studies are based on forward-looking economic costs, and the same adjustments previously ordered by the Authority have been incorporated into these studies.

Q. WHAT RATES (RECURRING AND NON-RECURRING) DOES BELLSOUTH PROPOSE IN THIS PROCEEDING?

A. BellSouth proposes rates that are equal to the forward-looking economic cost as defined in the FCC's current pricing rules. These rates equal the sum of: (1)

TELRIC (based on the efficient network requirement) plus, (2) a reasonable allocation of forward-looking common costs. BellSouth, however, continues to maintain that the FCC's pricing rules do not permit full cost recovery. The rates BellSouth proposes are contained in Exhibit JAR-1 attached to my testimony. Exhibit JAR-1 contains BellSouth's proposed rates for the additional UNEs that resulted from the FCC's UNE Remand and Line Sharing Orders. The cost study reference number is provided with the description of the corresponding rate element.

Q. HOW WILL THE PRICES ESTABLISHED IN THIS PROCEEDING AFFECT THE DEVELOPMENT OF LOCAL COMPETITION IN TENNESSEE?

A. The prices established in this proceeding will have profound effects on the continued development of competition in Tennessee. The outcome of this docket will affect:

- the nature and extent of competition;
- how local competition will continue to develop;
- which companies will choose to participate;
- which customers will benefit from local competition;
- economic development and the availability of advanced technologies.

All of these issues will be significantly impacted by the Authority's decision in this proceeding.

Q. PLEASE BRIEFLY COMMENT ON HOW PRICES FOR UNES AND INTERCONNECTION SERVICES AFFECT THE ISSUES IDENTIFIED ABOVE.

A. In order to maintain an environment in which efficient competition will occur and provide the maximum benefit to consumers, local competition must be implemented in a fair and balanced manner. If prices for UNEs and interconnection services are set either too high or too low then:

- new investment will not materialize and economic development will be thwarted;
- market entry and investment decisions of competitors, including BellSouth, will be distorted;
- the development of efficient competition in the local market, as intended by Congress, will not prosper, and
- such incorrect pricing will not, in the long run, benefit the consumer.

Q. HOW WILL INCENTIVES TO INVEST IN NEW TECHNOLOGY BE AFFECTED BY PRICES THAT ARE NOT JUST AND REASONABLE?

A. Generally, incentives to invest in new technology are reduced if prices for UNEs and interconnection services are not just and reasonable. As explained further below, such incentives to both CLECs and Incumbent Local Exchange Companies ("ILECs") are reduced.

One consequence of establishing prices that are not just and reasonable is that such pricing causes inefficient decisions. Prices that are understated deter the ILEC from undertaking investments because it guarantees that the costs of those investments will not be recovered. An ILEC only has an obligation to unbundle its existing network.

If UNE prices are too low, investment decisions associated with expanding or upgrading that network become more speculative. Accordingly, incentives to expand that network into new areas and upgrade it with new technology are reduced. Where UNEs are available, CLECs will over-consume the ILEC's facilities and under-invest in their own facilities, even when investing in their own facilities is the efficient choice.

Another consequence of inadequate UNE prices is that it results in inefficient entry of CLECs into the local market by placing all of the risks of building and maintaining a network on the ILEC. In effect, the CLECs get a "free ride" on BellSouth's network without having to make any substantial investment or commitment. While CLECs have the <u>option</u> to use the ILEC's facilities for the economic life of those facilities, CLECs don't have to. The CLEC can utilize BellSouth's facilities for a limited period, e.g., until the CLEC builds its own facilities to serve a customer. Since BellSouth established the facilities, however, BellSouth must recover its costs whether a CLEC uses the facilities or not. Any costs not recovered from the CLEC who caused the costs become a burden upon BellSouth's end users. If prices are not set to cover costs, then CLECs don't bring to the marketplace anything more than an arbitrage mechanism. This arbitrage allows them to avoid paying the costs they would otherwise have to pay in a competitive marketplace. End user customers are ultimately the losers in this arrangement.

Q. ARE THERE ANY OTHER ASPECTS TO THIS RATE-SETTING PROCEEDING OF WHICH THE AUTHORITY SHOULD BE AWARE?

A. Yes. Another troublesome outcome of setting prices too low would be the marginalization of the ILEC. As discussed later in my testimony, marginalization occurs as a result of price differences between rural residential and urban businesses. The prices of the latter have historically subsidized the high cost of providing service to the former, serving public policy purposes to ensure affordable local service for all consumers. Setting UNE and interconnection services prices at unreasonably low levels will hinder BellSouth's ability to compete because the CLECs will have an artificial pricing advantage over BellSouth. The CLEC will, therefore, be in a better position to "cherry pick" the more profitable, mainly business customers, and the ILEC will lose the low cost, high margin, urban customers to competition. The ILEC will be left to serve the high cost, low (or negative) margin, rural customers. Ultimately, since only the low margin customers will be left to cover the full cost of the network, prices for these predominantly rural customers would have to increase.

Q. PLEASE EXPLAIN FURTHER HOW INADEQUATE UNE PRICES AFFECT RETAIL PRICES.

A. If the prices of the services provided to competitors do not cover the costs of providing the services, BellSouth's retail customers and shareholders will end up subsidizing its competitors. In that event, BellSouth must attempt to recover certain wholesale costs through its retail prices. Unfortunately, however, attempts to recover the shortfall in this manner will ultimately be unsuccessful and BellSouth will have no choice but to recover the shortfall from its retail customers. The competitor who is using the subsidized facilities will not have to recover this shortfall through its retail prices. Hence, the competitor's prices will remain lower than the incumbent's retail prices. By partially utilizing a subsidy provided by BellSouth's retail customers and shareholders, the competitor can undercut BellSouth's retail prices. To respond to this competitive pressure, BellSouth must lower certain retail prices, and attempt to recover wholesale costs from a smaller group of retail customers. The result is that this subsidy to competitors would ultimately be borne by those end users that have the fewest competitive options, e.g., rural residential customers.

Q. WHAT ARE SOME OF THE CONSEQUENCES IF PRICES ARE SET TOO HIGH?

A. As I mentioned earlier, the FCC's current pricing rules result in prices being understated. Therefore, setting prices too high is not currently a condition the Authority will encounter. Nonetheless, setting prices too high would result in uneconomic decisions such as a CLEC constructing its own facilities (rather than purchasing UNEs from the ILEC) when the CLEC is not the most efficient provider. Of course, the result would be that infrastructure competition would develop sooner, even though the CLEC may not be the most efficient provider.

The ultimate goal is to establish prices that are neither too low nor too high; to do otherwise will result in inefficient decisions, and, ultimately, consumers will suffer the consequences. Again, however, given the current pricing rules, the Authority can only minimize the extent to which prices are set too low.

Q. ARE THERE ANY UNIQUE CONCERNS SURROUNDING NONRECURRING PRICES?

A. Yes. While all of the issues previously discussed apply both to recurring and nonrecurring prices, the impact of inappropriate nonrecurring prices is felt immediately. Nonrecurring prices principally recover labor cost and direct expenses incurred when a specific element or service is provisioned as the result of a service order. These expenses are paid immediately by the ILEC. Thus, setting nonrecurring prices too low will immediately begin to create the negative consequences that I previously discussed. Consequently, the Authority should be very careful to ensure that nonrecurring prices fully recover the cost that an ILEC is expected to incur on a going-forward basis.

In particular, the Authority should ensure that the obligations of the ILEC are accurately reflected in the cost study. For example, BellSouth's nonrecurring costs reflect the work times typically required to perform the various functions required to provision a particular element. Therefore, if the Authority were to establish performance requirements that require additional work activities, BellSouth's cost studies would not accurately reflect its costs.

Finally, nonrecurring costs should reflect the activities actually undertaken to provide the element. For example, a new technology that <u>could</u> reduce nonrecurring costs should only be used as a basis for prices to the extent that it will be actually used by BellSouth to provide the element on a going-forward basis.

<u>Geographic Deaveraging</u>

Q. WHAT OBLIGATION DOES THE AUTHORITY HAVE TO ESTABLISH GEOGRAPHICALLY DEAVERAGED RATES FOR UNBUNDLED NETWORK ELEMENTS?

A. The FCC's Rule 51.507(f) requires state commissions to establish different rates (prices) for elements in at least three cost-related rate zones within the state to reflect geographic cost differences. With the November 2, 1999 release of the FCC's Order in CC Docket No. 96-46, the stay of Rule 51.507(f) was lifted effective May 1, 2000.

Q. PLEASE DISCUSS THE GENERAL POLICY CONSIDERATIONS ASSOCIATED WITH GEOGRAPHIC DEAVERAGING OF UNEs.

A. UNEs are generally used by CLECs to compete with services offered at retail rates by incumbent local exchange carriers ("ILECs"). Consequently, the relationship between UNE rates and retail rates affects competitive development. Historically, it has been the intent and practice of regulators to deaverage rates for basic service in an inverse relationship to costs. For example, for basic residence local exchange service in Tennessee, Rate Group 1 has the lowest rate, and Rate Group 5 has the highest rate. The wire centers in Rate Group 1, however, are generally rural and have much higher costs than the urban wire centers in Rate Group 5. Such pricing practices served both regulatory and public policy purposes and incorporated implicit subsidies to ensure affordable local service for all customers. Conversely, UNE prices are based on costs and will be geographically deaveraged in a direct relationship to cost.

Geographically deaveraging UNE rates will result in a rate structure that is inconsistent with the existing pricing practices for retail rates for basic local exchange service as established by this Authority. The present rate structure in Tennessee incorporates long-standing policies of purposefully pricing some services markedly above costs in order to price other services, such as residential basic local exchange service, at or below cost. Further, basic local exchange service rates have been established with a direct relationship to the number of lines in an exchange's local calling area – the greater the number of lines in a particular exchange's local call area, the higher the price for the basic service. Geographic deaveraging will create loop prices that vary inversely from the prices for retail services.

Q. WHAT SHOULD THE AUTHORITY DO TO ADDRESS THE PROBLEMS DISCUSSED ABOVE?

A. The Authority should encourage rate rebalancing and establish a universal service fund as quickly as possible. This is important because unbundled loops will be used by CLECs to compete for these retail customers. Geographically deaveraging loop prices would result in lower UNE loop prices in the urban area where retail prices are currently the highest. In rural areas, the reverse would be true. However, in rural areas, geographically deaveraged unbundled loop prices set high enough to cover costs would be irrelevant because the CLEC could simply resell the low priced retail service to rural customers. As a result, deaveraging, without concomitant rate rebalancing or creation of a state universal service fund, simply creates another opportunity for CLECs to engage in inappropriate arbitrage of the pricing schedule. This arbitrage will ultimately lead to higher prices for rural customers as CLECs usurp the contribution contained in the prices charged in urban areas that currently make lower rural prices possible.

It is very important to recognize that CLECs use unbundled loops to compete with residence and business retail local exchange services. As such, the pricing implications of geographically deaveraging the loop cannot be divorced from the price of local exchange services.

Q. PLEASE EXPLAIN HOW BELLSOUTH DERIVED ITS PROPOSED DEAVERAGED RATES.

A. The geographically deaveraged rates BellSouth proposes were derived using the methodology adopted by the Authority in their decision of April 25, 2000, in Docket No. 97-1262. In using the methodology adopted by the Authority, customers who are located in the same geographic area and who have similar calling areas will be in the same geographically deaveraged zone for UNE pricing. Utilizing local exchange rate groups to define geographically deaveraged zones for UNEs meets the requirements set forth by the FCC and provides consistency between the structure of BellSouth's retail, resale and UNE rates. Further, "rate group-to-zone" mapping best represents the competitive market environment in Tennessee, thereby promoting competition in all areas of Tennessee.

Q. WHAT DOES BELLSOUTH PROPOSE AS ITS GEOGRAPHICALLY DEAVERAGED RATES IN THIS PROCEEDING?

A. The geographically deaveraged rates being proposed by BellSouth are contained in Exhibit JAR-1. Also, when deaveraging the loop/port combination, only the loop component is deaveraged since switching (port) costs do not vary by geographic location.

UNE Remand Order Requirements

Q. PLEASE BRIEFLY DESCRIBE THE FCC'S UNE REMAND ORDER.

A. As the result of a Court Remand, the FCC was required to review its previously established national list of UNEs. The FCC was instructed to apply the "Necessary and Impair Standards" of Section 251(d)(2) of the Act to determine which network elements an ILEC must unbundle. The FCC's UNE Remand Order resulted from this further review, and it provided a national list of network elements that ILECs must unbundle and make available at cost-based rates for CLECs. The resulting list is similar, but not identical, to the original UNE list. Generally, loops, subloops, network interface devices (NIDs), circuit switching, interoffice transmission facilities, signaling and call-related databases and operations support systems (OSS) must be unbundled. However, certain network elements contained in the original UNE list no longer must be unbundled. These items are operator services and directory assistance (OS/DA), packet switching (per specified exemption) and circuit switching (per specified exemption).

Q. WHAT IS THE RELEVANCE OF THE FCC'S UNE REMAND ORDER TO THIS PROCEEDING?

A. As previously noted, this Authority is establishing permanent cost-based rates for numerous UNEs in Docket No. 97-01262. Since the FCC has added some UNEs, this Authority must establish permanent cost-based rates for these new UNEs. The permanent cost-based rates that will be established in Docket No. 97-01262 are unaffected by the UNE Remand Order.

Q. WERE ANY ADDITIONAL UNBUNDLED LOOP TYPES REQUIRED BY THE FCC'S UNE REMAND ORDER?

A. Yes. While the Authority is preparing to establish rates for numerous types of unbundled loops, the FCC's UNE Remand Order requires BellSouth to provide unbundled copper loops, dark fiber loops and unbundled loops at high capacity speeds such as DS3 and OC3. Because the Authority has not yet addressed prices for these types of loops, BellSouth proposes the rates contained on Exhibit JAR-1.

Q. WHAT IS THE BASIS FOR THE PRICES BELLSOUTH PROPOSES FOR PROVIDING UNE COMBINATIONS?

A. Prices for the elements that comprise the UNE combinations that BellSouth makes available to CLECs when such combinations are currently combined will be established by the Authority. Some of the prices will be established by the Authority in Docket No. 97-01262 and some of the prices will be established in this proceeding. Exhibit JAR-2 attached to my testimony contains a chart that identifies the UNEs that are included in various UNE combinations along with the identification of the TRA docket number in which the rate will be established. As I will discuss in greater detail later in my testimony, BellSouth has elected to provide access to new enhanced extended loop ("EEL") combinations when specific circumstances exist so that BellSouth is not required to provide unbundled local switching. As such, BellSouth is proposing in this proceeding nonrecurring cost studies and prices for providing new EEL combinations. BellSouth's nonrecurring cost study for providing new EEL combinations was filed on October 20, 2000. The proposed recurring and nonrecurring prices for the UNE combinations being addressed in this proceeding are contained in Exhibit JAR-1.

Q. PLEASE EXPLAIN WHY BELLSOUTH IS PROPOSING NONRECURRING RATES FOR ADSL AND HDSL LOOPS IN THIS DOCKET WHEN RATES FOR THESE LOOPS WERE ALREADY BEING CONSIDERED IN DOCKET NO. 97-01262?

A. The nonrecurring rates BellSouth proposed in Docket No. 97-01262 for ADSL and HDSL loops were based on a cost structure that only allowed for a manual service inquiry process and assumed that loop makeup information would always be required for xDSL loops. Since BellSouth's filing in Docket No. 97-01262, BellSouth has implemented a mechanized provisioning process associated with its xDSL loop offerings. As such, BellSouth will offer both a manual and a mechanized provisioning process for service inquiry and access to loop makeup information.

Q. PLEASE EXPLAIN HOW RESTRUCTURING THE NONRECURRING COSTS IMPACTS THE RECURRING RATES FOR XDSL LOOPS.

A. Because of the Authority's requirement that nonrecurring costs associated with testing be recovered on a monthly recurring basis, the restructuring of the nonrecurring ADSL and HDSL costs impacts the amount of nonrecurring testing costs. Since the nonrecurring testing costs have decreased, the testing cost to be included in the recurring rates for the ADSL and HDSL loops has also decreased. As such, the proposed recurring rates for ADSL and HDSL loops being considered in Docket No. 97-01262 should be modified to reflect the impact of the restructured nonrecurring cost study.

Q. PLEASE DESCRIBE THE SITUATIONS WHEN CHARGES FOR LINE CONDITIONING, ALSO REFERRED TO AS LOOP MODIFICATION, WOULD APPLY.

A. Unbundled loop modification charges are applicable when a CLEC requests that BellSouth remove equipment that has been placed on copper loops (i.e., load coils, low-pass filters, range extenders, etc.) and/or by removing bridged tap attached to the copper loop. The FCC permits BellSouth to charge CLECs for loop conditioning. The FCC's UNE Remand Order states, "[w]e agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops." [See Paragraph 193, Footnote deleted]

Obviously, since the FCC allows the recovery of costs for conditioning loops under 18,000 feet, rates for conditioning loops greater than 18, 000 feet are also appropriate. A CLEC may use BellSouth's unbundled loop modification offering to remove bridge tap and/or equipment from any copper loop within BellSouth's network for the purposes of providing advanced data services.

Q. WHAT ARE THE APPROPRIATE RATES FOR LOOP MODIFICATION?

A. BellSouth's proposed rates for unbundled loop modification are contained in Exhibit JAR-1. These proposed rates are supported by cost studies sponsored by Ms. Caldwell.

Q. PLEASE EXPLAIN WHICH SUBLOOP ELEMENTS BELLSOUTH IS OBLIGATED TO UNBUNDLE.

A. The FCC's UNE Remand Order defines the subloop network element as any portion of the loop that is technically feasible to access at terminals in the ILEC's outside plant, including inside wire. Consistent with this order, BellSouth makes the following subloop elements available to CLECs on an unbundled basis:

The *Network Interface Device* ("NID") provides a single line termination device or that portion of a multiple line termination device required to terminate a single line or circuit. The NID, located on the customer's premises, establishes the official network demarcation point between a telecommunications company and its end user customer. BellSouth provides access to the NID on an unbundled basis; therefore, a CLEC may order a stand alone NID from BellSouth. However, when a CLEC orders an unbundled loop, BellSouth provides the NID also. In all cases where BellSouth provisions a loop, it must be properly grounded.

Loop feeder provides a transmission path between the feeder distribution interface and the telephone company central office.

Loop distribution or distribution media provides a transmission path between a feeder distribution interface and the NID at the customer's premises. If the CLEC were to take loop distribution as an unbundled element, then the CLEC would presumably provide its own feeder facilities to its own switch.

Loop concentration enables CLECs to concentrate up to 96 sub-loops on 2 DS1s for the purpose of connecting the sub-loops (at a concentrated level) to BellSouth's feeder system.

Inside Wire, as described by the FCC in its UNE Remand Order, includes wire owned and controlled by the ILEC on or near an end user customer premises. Such inside wire would include access to BellSouth's Network Terminating Wire ("NTW") and Intrabuilding Network Cable ("INC"). Inside wire on the customer's side of the demarcation point (typically the NID) is owned and controlled by the customer.

Q. HOW SHOULD THE PRICES FOR UNBUNDLED SUBLOOP ELEMENTS BE SET?

A. The prices for unbundled subloop elements should be established using the same cost methodology used for other unbundled network elements. Ms. Caldwell sponsors BellSouth's cost studies for subloop elements. Prices for the subloop elements that BellSouth makes available to CLECs on an unbundled basis are contained in Exhibit JAR-1 attached to my testimony.

Q. IN ITS UNE REMAND ORDER, DID THE FCC MODIFY ITS DEFINITION OF THE NID?

A. Yes. Initially, in its First Report and Order in CC Docket No. 96-98 issued August 8, 1996 ("Local Competition Order"), the FCC defined the NID network element as a cross-connect device used to connect loop facilities to inside wiring. In its UNE Remand Order at ¶ 233, the FCC modified its original definition of the NID to "include all features, functions, and capabilities of the facilities used to connect the loop distribution plant to the customer premises wiring, regardless of the particular design of the NID mechanism." The FCC's stated goal was to have the NID definition "be flexible and technology neutral." (Id. ¶ 234) The FCC noted that its "rules permit considerable variation in the interconnection facilities between carrier and customer-controlled facilities," and that "evolution in network design and technology will likely cause additional design variations among the hardware interfaces between carrier and customer premises facilities." (Id.)

Therefore, in its NID definition, the FCC's use of the terms "features, functions and capabilities" means that, regardless of the type of device used to connect the loop distribution plant to the customer premises wiring, competitors will be able to obtain access to any such facilities as an unbundled network element. Indeed, the FCC stated that its "intention is to ensure that the NID definition will apply to new technologies, as well as current technologies, and to ensure that competitors will continue to be able to access customer premises facilities as an unbundled network element, as long as that access is required pursuant to section 251(d)(2) standards." (Id.)

The FCC also specified that its definition of the NID includes any means of interconnection of customer premises wiring to the incumbent LEC's distribution plant, such as a cross-connect device used for that purpose. However, the FCC specifically declined to include inside wiring in the definition of the NID, or to include the NID as part of any other subloop element.

Q. DOES THE FCC'S CURRENT DEFINITION OF THE NID HAVE ANY AFFECT ON THE PRICES THE AUTHORITY IS CURRENTLY CONSIDERING FOR THE NID?

A. No, it does not. The costs the Authority is considering for the NID are equal to the forward looking economic cost as developed using the Authority's cost study adjustments. The only additional element required by the FCC in its UNE Remand Order is a NID cross-connect, and BellSouth's proposed rate for this element is found on Exhibit JAR-1.

Q. HOW IS THE FCC'S DEFINITION OF INSIDE WIRE IN ITS UNE REMAND ORDER DIFFERENT FROM THE GENERALLY ACCEPTED MEANING OF INSIDE WIRE?

A. Since it was deregulated, inside wire has been defined as wire on the customer's side of the demarcation point. Consequently, inside wire is considered to be owned and controlled by the customer. In its UNE Remand Order, however, the FCC used the term "inside wire" when discussing access to BellSouth's Unbundled Network Terminating Wire ("UNTW") and Unbundled Intrabuilding Network Cable ("UINC"). Inside Wire, as described by the FCC in its UNE Remand Order, includes wire owned and controlled by the ILEC on or near an end user customer premises. Although BellSouth does not agree that the term "inside wire" appropriately encompasses UNTW and UINC, BellSouth does agree that UNTW and UINC are subloop elements, which CLECs are entitled to purchase on an unbundled basis, and for which BellSouth should be compensated.

Q. DOES BELLSOUTH'S PETITION FOR RECONSIDERATION ON THE DEFINITION OF INSIDE WIRE AFFECT THE RATES PROPOSED IN THIS PROCEEDING?

A. No. On February 17, 2000 BellSouth petitioned the FCC to reconsider its definition of inside wire adopted in the UNE Remand Order. Specifically, BellSouth has requested the FCC to continue to use its historic definition of inside wire and not expand its definition to include UNTW and UINC. Regardless of the outcome of BellSouth's Petition, UNTW and UINC would remain subloop elements, and the rates BellSouth proposes in this proceeding for UNTW and UINC comply with the FCC's rules.

Q. PLEASE EXPLAIN HOW THE PROVISION OF UNBUNDLED LOCAL SWITCHING IS AFFECTED BY THE FCC'S UNE REMAND ORDER.

A. BellSouth, like other incumbents, is required to unbundle local loops and local switching in certain instances so that CLECs can purchase these elements for use in their networks. However, in its UNE Remand Order the FCC determined that, in certain geographic areas, and under specific circumstances, the incumbent LEC can elect not to provide unbundled switching. The geographic area that is involved is what is referred to as Density Zone 1 in a top 50 Metropolitan Statistical Area ("MSA"). The specific circumstances involve two considerations. First, the incumbent LEC has to agree to provide, at TELRIC-based rates, enhanced extended links ("EELs") in this geographic area to CLECs that serve end users with four or more lines. The EEL is a specific combination of loop and transport UNEs. What this means is that the ILEC will combine a UNE loop and UNE transport to assist the CLEC in getting to the switch that the CLEC will use to provide local switching. Second, the incumbent is only relieved of the obligation to provide local switching for customers of the CLEC who have four or more lines.

The FCC's logic here is that the biggest part of the consumer market involves customers who have three or fewer lines. By the time a customer has four or more lines, the customer is either a mid-sized or a large customer, and CLECs are not impaired without access to BellSouth's unbundled switching to address the telecommunications needs of these classes of customers.

Q. WHY DOES THE INCUMBENT LEC HAVE TO PROVIDE ACCESS TO EELS IN ORDER TO TAKE ADVANTAGE OF THIS EXEMPTION?

A. Basically, the thought is that, if the incumbent LEC is willing to provide an EEL, the CLEC can haul the call anywhere in the area to a switch. The FCC obviously concluded that, at least in the top 50 MSAs, switching is available from any number of sources. As long as the incumbent LEC allows the CLEC to have an EEL so that the end user could be connected to a switch, it is not necessary for the incumbent LEC to unbundle local switching.

The FCC's Rule 51.319(c)(2) is quite clear. It simply states that if the incumbent LEC provides nondiscriminatory access to the EEL in Density Zone 1 in a top 50 MSA, then the incumbent LEC is not required to unbundle local circuit switching in that area for end users having four or more lines. In adopting this position in its UNE Remand Order at ¶ 293, the FCC found that a rule that provides access to unbundled local circuit switching to requesting carriers when they serve customers with three lines or fewer captures a significant portion of the mass market. The FCC rejected the CLECs' contrary arguments.

Q. DOES THE FCC'S UNE REMAND ORDER IMPACT THE RATES THIS AUTHORITY INTENDS TO ESTABLISH FOR LOCAL SWITCHING?

A. No, it does not. The rates the Authority intends to establish in Docket No. 97-01262 do not impact those situations where BellSouth is required to provide CLECs with access to unbundled local switching. When BellSouth elects to take advantage of the switching exemption I just discussed, BellSouth will offer CLECs access to new EELs for qualifying customers at the sum of the recurring rates for the elements that comprise an EEL as established in Docket No. 97-01262. The nonrecurring prices for BellSouth to provide these new EEL combinations are contained on Exhibit JAR-1 and are supported by the cost studies BellSouth filed on October 20, 2000.

Q. DOES THE FCC'S UNE REMAND ORDER HAVE ANY EFFECT ON THE UNBUNDLING OF VERTICAL FEATURES?

A. No. Nothing in the UNE Remand Order modified any previous FCC decisions or other rulings concerning the unbundling of vertical features. The Authority intends to establish rates for unbundled vertical features in Docket No. 97-01262.

Q. DID THE FCC'S UNE REMAND ORDER IDENTIFY ADDITIONAL UNBUNDLING REQUIREMENTS FOR INTEROFFICE TRANSMISSION FACILITIES?

A. The FCC's UNE Remand Order determined that high capacity interoffice transmission facilities should be provided on an unbundled basis. Further, the Order required that ILECs provide unbundled access to dark fiber. In order to comply with those requirements, BellSouth is proposing rates for unbundled interoffice transport at levels such as DS3, OC3 and OC48, and is also proposing rates for unbundled dark fiber. Please see Exhibit JAR-1 for BellSouth's proposed rates that are supported by cost studies sponsored by Ms. Caldwell.

Q. PLEASE DESCRIBE BELLSOUTH'S OBLIGATIONS RELATIVE TO PROVIDING CLECS WITH ACCESS TO BELLSOUTH'S SIGNALING NETWORKS AND CALL-RELATED DATABASES.

A. The FCC's Rule 51.319 requires BellSouth to provide nondiscriminatory access to signaling networks and call-related databases. When a CLEC purchases unbundled switching, BellSouth provides access to its signaling network from that switch in the same manner in which BellSouth obtains such access itself. When a CLEC provides its own switching facilities, BellSouth also provides access to its signaling network for each of the CLEC's switches in the same manner as BellSouth connects one of its own switches. For query and call-related database response, BellSouth provides access to its call-related databases.

Q. WHAT ARE THE RATES BELLSOUTH PROPOSES FOR ACCESS TO ITS SIGNALING NETWORK AND CALL-RELATED DATABASES?

A. BellSouth proposes the rates contained in Exhibit JAR-1, attached to my testimony, for access to BellSouth's signaling network and the following call-related databases:

- BellSouth Calling Name Database Service (CNAM)
- BellSouth Access to E911 Service
- Local Number Portability (LNP) Query Service

Q. WHAT DOES THE FCC'S UNE REMAND ORDER SAY ABOUT OPERATIONS SUPPORT SYSTEMS ("OSS")?

A. Basically, in its UNE Remand Order, the FCC reaffirmed that incumbent LECs must provide access to OSS functions on an unbundled basis to requesting carriers. As Mr. Pate discusses in his testimony, BellSouth provides such access. The UNE Remand Order does not impact the existing CLEC OSS interfaces or require any modifications to these interfaces. The UNE Remand Order does not impact the rates that CLECs will pay for access to the OSS functions that the Authority intends to establish in Docket No. 97-01262. The FCC clarified in its UNE Remand Order that its definition of OSS includes access to loop qualification information. As a result, the Authority must establish rates for CLECs to access this information in this proceeding

Q. WHAT IS LOOP MAKE-UP INFORMATION?

A. As defined in the FCC's UNE Remand Order, loop make-up information (also referred to as loop qualification information) identifies the physical attributes of the loop plant (such as loop length, the presence of analog load coils and bridge taps, and the presence and type of Digital Loop Carrier), which then enables carriers to determine whether the loop is capable of supporting xDSL and other advanced technologies. BellSouth witness Mr. Ron Pate describes the processes BellSouth makes available to CLECs for access to such loop make-up information.

Q. WHAT RATES DOES BELLSOUTH PROPOSE TO COVER THE COST OF PROVIDING ACCESS TO LOOP MAKE-UP INFORMATION?

A. On Exhibit JAR-1, BellSouth proposes rates for two elements – access to the loop make-up database (Cost Ref. No. J.3.1 - Mechanized Loop Make-up) and a service inquiry with loop make-up (Cost Ref. Nos. J.3.3 and J.3.4 - Manual Loop Make-up with or without Facility Reservation Number). The proposed rates are based on BellSouth's cost studies as sponsored by Ms. Caldwell.

Q. IS BELLSOUTH REQUIRED TO PROVIDE ACCESS TO PACKET SWITCHING UNEs?

A. No. With regard to the obligation to unbundle packet switching, the FCC stated in its Third Report and Order:

> We decline at this time to unbundle the packet switching functionality, except in limited circumstances. Among other potential factors, we recognize that the presence of multiple requesting carriers providing service with their own packet switches is probative of whether they are impaired without access to

unbundled packet switching. The record demonstrates that competitors are actively deploying facilities used to provide advanced services to serve certain segments of the market – namely, medium and large business – and hence they cannot be said to be impaired in their ability to offer service, at least to these segments without access to the incumbent's facilities. (Order at ¶ 306)

Q. WHAT ARE THE "LIMITED CIRCUMSTANCES" REFERRED TO BY THE FCC?

A. The FCC's Rule 51.319(c)(3)(B) regarding packet switching requires that an ILEC provide unbundled packet switching only where each of the following conditions are satisfied:

(i) The incumbent LEC has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems; or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section (e.g., end office to remote terminal, pedestal or environmentally controlled vault);

(ii) There are no spare copper loops capable of supporting the xDSL services the requesting carrier seeks to offer;

(iii) The incumbent LEC has not permitted a requesting carrier to deploy a Digital Subscriber Line Access Multiplexer at the remote terminal, pedestal or environmentally controlled vault or other interconnection point, nor has the requesting carrier obtained a virtual collocation arrangement at these subloop interconnection points as defined under § 51.319(b); and

(iv) The incumbent LEC has deployed packet switching capability for its own use.

Q. DOES BELLSOUTH OFFER THE DSLAM AS A UNE? ?

A. No. At paragraph 304 of its Third Report and Order, the FCC defines a DSLAM as a component of packet switching. BellSouth knows of no instance in which all of the conditions required by the FCC, stated above, will be satisfied. Therefore, BellSouth is not required to offer packet switching components; e.g., DSLAMs, on an unbundled basis.

Q. IS BELLSOUTH OBLIGATED TO PROVIDE CLECS WITH ACCESS TO OPERATOR SERVICES AND DIRECTORY ASSISTANCE ("OS/DA") AS UNES?

A. No. The FCC's UNE Remand Order found that CLECs are not impaired without access to BellSouth's OS/DA as UNEs so long as BellSouth provides customized routing (also referred to as selective routing). BellSouth offers selective routing; therefore, certain elements on the BellSouth Tennessee Rate Sheet that BellSouth submitted to the Authority on June 9, 2000 in Docket No. 97-01262 should be removed (specifically, all elements shown under Cost Reference Nos. G.1 through G.8).

Q. WHAT RATES DOES BELLSOUTH PROPOSE FOR SELECTIVE ROUTING?

A. BellSouth offers CLECs two methods for selective routing: selective routing using line class codes, or selective routing utilizing BellSouth's Advanced Intelligent Network ("AIN") solution. Mr. Milner's testimony describes BellSouth's selective routing offerings. BellSouth's proposed rates for selective routing using line class codes are being considered in Docket No. 97-01262. BellSouth's proposed rates for selective routing using BellSouth's AIN solution are contained in Exhibit JAR-1. The proposed rates for BellSouth's AIN solution for selective routing are based on BellSouth's cost studies as sponsored by Ms. Caldwell.

Q. PLEASE EXPLAIN "LINE SHARING" AND "SPECTRUM MANAGEMENT."

A. The local loop from the central office to the customer's premises can be used to provide both voice and packet data service. There are a number of carriers who want to use that loop to provide packet data service while the ILEC would continue to provide voice service. Inserting specific equipment on the line enables the spectrum to be "shared" by the voice provider and the data provider, a functionality also known as "line sharing." In its Line Sharing Order, the FCC specifically states "[t]he provision of xDSL-based service by a competitive LEC and voiceband service by an incumbent LEC on the same loop is frequently called 'line sharing.'" (Line Sharing Order at ¶ 4)

Q. UNDER WHAT CONDITIONS IS AN ILEC SUCH AS BELLSOUTH OBLIGATED TO PROVIDE LINE SHARING?

A. ILECs are only obligated to provide line sharing to a single requesting carrier at the same customer address as the traditional POTS analog voice service provided by the incumbent. Line sharing as ordered by the FCC is available under the following conditions:

- Two carriers – one voice provider (ILEC) and one data provider (CLEC) – serve one customer per loop (Id. ¶ 74);
- The ILEC provides traditional POTS analog voiceband service to the customer on the line to be shared (Id. ¶ 19);
- The CLEC provides xDSL-based service to the customer (Id. ¶ 13);
- The CLEC's xDSL technologies do not use the frequencies immediately above the voiceband, thereby preserving them as a "buffer" zone to ensure the integrity of the voiceband traffic (Id. fn 136);
- The CLEC's xDSL technology does not interfere with analog voiceband transmission (Id. ¶ 70-71); and
- If the ILEC's retail customer disconnects his/her POTs service, the data provider must purchase the entire stand-alone loop if it wishes to continue providing xDSL service to the customer. Similarly, ILECs are not required to provide line sharing to a requesting carrier when the CLEC purchases a combination of network elements known as the UNE platform. (Id. ¶¶ 72-73)

The "platform" referred to in the preceding reference is the loop/port combination. When a CLEC purchases the loop/port combination, the CLEC becomes the voice service provider. In order for BellSouth to provide access to the high frequency portion of the loop when the CLEC has purchased the loop/port combination, BellSouth would have to physically separate the loop/port combination, add in a splitter, and then recombine. BellSouth is not required to perform these functions for CLECs.

Further, the FCC's Line Sharing Order specifically concluded in paragraph 72 "that incumbent LECs must make available to competitive carriers only the high frequency portion of the loop network element on loops <u>on which the incumbent LEC is also providing analog voice service.</u>" (emphasis added) In that same paragraph, the FCC stated that "incumbent carriers are not required to provide line sharing to requesting carriers that are purchasing a combination of network elements known as the platform. In that circumstance, the incumbent no longer is the voice provider to the customer." The platform referred to is the loop/port combination. Also, the FCC's Line Sharing Order thoroughly examined whether CLECs would be impaired without access to line sharing when the ILEC is not providing the voice service. The FCC determined that no such impairment exists.

Finally, the FCC reiterated its position in its Order dated June 30, 2000 in CC Docket No. 00-65 (SBC – Texas Section 271 Application). At paragraph 324 the Order states, "the obligation of an incumbent LEC to make the high frequency portion of the loop separately available is limited to those instances in which the incumbent LEC is providing, and continues to provide, voice service on the particular loop to which the requesting carrier seeks access."

Q. WHAT ARE THE RATES BELLSOUTH PROPOSES FOR LINE SHARING?

A. BellSouth's proposed rates for line sharing, including rates for CLEC owned splitters, are contained in Exhibit JAR-1. The proposed rates are supported by cost studies sponsored by Ms. Caldwell.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes. #231084

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.0	***UNBUNDLED LOCAL LOOP***						
A.2	**SUB-LOOP**						
A.2.11	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop	1	$7.30	$147.93	$75.11	$99.96	$16.98
		2	$9.54	$147.93	$75.11	$99.96	$16.98
		3	$12.47	$147.93	$75.11	$99.96	$16.98
A.2.13	Network Interface Device Cross Connect			$11.11	$11.11		
A.2.14	2-Wire Intrabuilding Network Cable (INC)		$1.47	$107.63	$34.81	$94.41	$13.09
A.2.15	4-Wire Intrabuilding Network Cable (INC)		$2.55	$119.40	$46.58	$99.96	$16.98
A.2.17	Sub-Loop - Per Cross Box Location - CLEC Feeder Facility Set-Up			$517.25			
A.2.18	Sub-Loop - Per Cross Box Location - Per 25 Pair Panel Set-Up			$42.68			
A.2.19	Sub-Loop - Per Building Equipment Room - CLEC Feeder Facility Set-Up			$358.04			
A.2.20	Sub-Loop - Per Building Equipment Room - Per 25 Pair Panel Set-Up			$105.13			
A.2.21	Sub-Loop - Per Cross Box Location - CLEC Distribution Facility Set-Up			$517.25			
A.2.24	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only	1	$21.52	$137.31	$61.93	$118.04	$30.13
		2	$28.11	$137.31	$61.93	$118.04	$30.13
		3	$36.76	$137.31	$61.93	$118.04	$30.13
A.2.25	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only	1	$16.11	$142.83	$67.45	$104.67	$18.53
		2	$21.04	$142.83	$67.45	$104.67	$18.53
		3	$27.51	$142.83	$67.45	$104.67	$18.53
A.2.29	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only	1	$26.06	$116.00	$40.62	$106.82	$18.91
		2	$34.03	$116.00	$40.62	$106.82	$18.91
		3	$44.50	$116.00	$40.62	$106.82	$18.91
A.2.30	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only	1	$9.52	$114.27	$38.89	$104.67	$18.53
		2	$12.43	$114.27	$38.89	$104.67	$18.53
		3	$16.26	$114.27	$38.89	$104.67	$18.53
A.2.32	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only	1	$14.37	$123.41	$48.03	$110.44	$22.53
		2	$18.76	$123.41	$48.03	$110.44	$22.53
		3	$24.53	$123.41	$48.03	$110.44	$22.53
A.2.40	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only	1	$5.16	$110.71	$37.89	$94.41	$13.09
		2	$6.74	$110.71	$37.89	$94.41	$13.09
		3	$8.81	$110.71	$37.89	$94.41	$13.09

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.2.42	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only	1	$6.52	$117.12	$44.30	$99.96	$16.98
		2	$8.52	$117.12	$44.30	$99.96	$16.98
		3	$11.14	$117.12	$44.30	$99.96	$16.98
A.2.44	Network Interface Device (NID) - 2 line			$89.69	$54.56	$0.6391	$0.6391
A.2.45	Network Interface Device (NID) - 6 line			$129.65	$94.51	$0.6522	$0.6522
A.3	**LOOP CHANNELIZATION AND CO INTERFACE (INSIDE CO)**						
A.3.12	Unbundled Loop Concentration - System A (TR008)		$500.18	$613.60			
A.3.13	Unbundled Loop Concentration - System B (TR008)		$54.82	$255.67			
A.3.14	Unbundled Loop Concentration - System A (TR303)		$539.00	$613.60			
A.3.15	Unbundled Loop Concentration - System B (TR303)		$92.37	$255.67			
A.3.16	Unbundled Loop Concentration - DS1 Line Interface Card		$6.23	$74.39	$53.07	$30.23	$8.46
A.3.17	Unbundled Loop Concentration - POTS Card		$2.32	$8.69	$8.65	$9.71	$9.65
A.3.18	Unbundled Loop Concentration - ISDN (Brite Card)		$8.46	$8.69	$8.65	$9.71	$9.65
A.3.19	Unbundled Loop Concentration - SPOTS Card		$12.45	$8.69	$8.65	$9.71	$9.65
A.3.20	Unbundled Loop Concentration - Specials Card		$7.53	$8.69	$8.65	$9.71	$9.65
A.3.21	Unbundled Loop Concentration - TEST CIRCUIT Card		$35.77	$8.69	$8.65	$9.71	$9.65
A.3.22	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data		$11.03	$8.69	$8.65	$9.71	$9.65
A.5	**2-WIRE ISDN DIGITAL GRADE LOOP**						
A.5.6	Universal Digital Channel	1	$21.15	$228.92	$152.42	$110.01	$21.63
		2	$27.62	$228.92	$152.42	$110.01	$21.63
		3	$36.12	$228.92	$152.42	$110.01	$21.63
A.6	**2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP**						
A.6.5	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop **(Nonrecurring with Loop Makeup)**			$198.59	$88.13	$111.76	$20.81
A.6.6	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop **(Nonrecurring without Loop Makeup)**			$123.38	$54.30	$94.14	$15.36
A.7	**2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP**						
A.7.5	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring with Loop Makeup)**			$201.24	$88.80	$111.76	$20.81
A.7.6	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring without Loop Makeup)**			$123.38	$54.30	$94.14	$15.36

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.8	**4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP**						
A.8.5	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring with Loop Makeup)**			$214.20	$101.76	$117.67	$24.85
A.8.6	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop **(Nonrecurring without Loop Makeup)**			$136.35	$67.27	$99.69	$19.29
A.9	**4-WIRE DS1 DIGITAL LOOP**						
A.9.21	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop	1	39.74	$116.00	$40.62	$106.82	$18.91
		2	51.90	$116.00	$40.62	$106.82	$18.91
		3	67.86	$116.00	$40.62	$106.82	$18.91
A.12	**CONCENTRATION PER SYSTEM PER FEATURE ACTIVATED (OUTSIDE CENTRAL OFFICE)**						
A.12.1	Unbundled Loop Concentration - System A (TR008)		$554.30	$384.75	$209.58	$229.31	$72.71
A.12.2	Unbundled Loop Concentration - System B (TR008)		$79.61	$384.75	$209.58	$229.31	$72.71
A.12.3	Unbundled Loop Concentration - System A (TR303)		$590.18	$384.75	$209.58	$229.31	$72.71
A.12.4	Unbundled Loop Concentration - System B (TR303)		$115.49	$384.75	$209.58	$229.31	$72.71
A.12.5	Unbundled Sub-loop Concentration - USLC Feeder Interface		$60.89	$116.00	$40.62	$106.82	$18.91
A.12.6	Unbundled Loop Concentration - POTS Card		$2.43	$8.69	$8.65	$9.71	$9.65
A.12.7	Unbundled Loop Concentration - ISDN (Brite Card)		$8.93	$8.69	$8.65	$9.71	$9.65
A.12.8	Unbundled Loop Concentration - SPOTS Card		$13.14	$8.69	$8.65	$9.71	$9.65
A.12.9	Unbundled Loop Concentration - Specials Card		$7.94	$8.69	$8.65	$9.71	$9.65
A.12.10	Unbundled Loop Concentration - TEST CIRCUIT Card		$37.78	$8.69	$8.65	$9.71	$9.65
A.12.11	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data		$11.64	$8.69	$8.65	$9.71	$9.65
A.13	**2-WIRE COPPER LOOP**						
A.13.1	2-Wire Copper Loop - short **(Nonrecurring with Loop Makeup)**	1	$13.21	$199.70	$87.26	$111.76	$20.81
		2	$17.25	$199.70	$87.26	$111.76	$20.81
		3	$22.56	$199.70	$87.26	$111.76	$20.81
A.13.1	2-Wire Copper Loop - short **(Nonrecurring without Loop Makeup)**	1	$13.21	$121.84	$52.77	$94.14	$15.36
		2	$17.25	$121.84	$52.77	$94.14	$15.36
		3	$22.56	$121.84	$52.77	$94.14	$15.36
A.13.7	2-Wire Copper Loop - long **(Nonrecurring with Loop Makeup)**	1	$42.00	$187.34	$74.90	$111.76	$20.81
		2	$54.85	$187.34	$74.90	$111.76	$20.81
		3	$71.72	$187.34	$74.90	$111.76	$20.81
A.13.7	2-Wire Copper Loop - long **(Nonrecurring without Loop Makeup)**	1	$42.00	$109.48	$40.41	$94.14	$15.36
		2	$54.85	$109.48	$40.41	$94.14	$15.36
		3	$71.72	$109.48	$40.41	$94.14	$15.36

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.14	**4-WIRE COPPER LOOP**						
A.14.1	4-Wire Copper Loop - short **(Nonrecurring with Loop Makeup)**	1	$18.18	$212.67	$100.22	$117.67	$24.85
		2	$23.74	$212.67	$100.22	$117.67	$24.85
		3	$31.05	$212.67	$100.22	$117.67	$24.85
A.14.1	4-Wire Copper Loop - short **(Nonrecurring without Loop Makeup)**	1	$18.18	$134.81	$65.73	$99.69	$19.29
		2	$23.74	$134.81	$65.73	$99.69	$19.29
		3	$31.05	$134.81	$65.73	$99.69	$19.29
A.14.7	4-Wire Copper Loop - long **(Nonrecurring with Loop Makeup)**	1	$56.62	$200.31	$87.86	$117.67	$24.85
		2	$73.94	$200.31	$87.86	$117.67	$24.85
		3	$96.69	$200.31	$87.86	$117.67	$24.85
A.14.7	4-Wire Copper Loop - long **(Nonrecurring without Loop Makeup)**	1	$56.62	$122.45	$53.37	$99.69	$19.29
		2	$73.94	$122.45	$53.37	$99.69	$19.29
		3	$96.69	$122.45	$53.37	$99.69	$19.29
A.15	**UNBUNDLED NETWORK TERMINATING WIRE (NTW)**						
A.15.1	Unbundled Network Terminating Wire (NTW) per Pair		$0.3878	$59.77		$0.5814	
A.16	**HIGH CAPACITY UNBUNDLED LOCAL LOOP**						
A.16.1	High Capacity Unbundled Local Loop - DS3 - Facility Termination		$374.24	$595.37	$304.50	$234.83	$170.16
A.16.2	High Capacity Unbundled Local Loop - DS3 - Per Mile		$9.19				
A.16.3	High Capacity Unbundled Local Loop -DS3 -Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
A.16.4	High Capacity Unbundled Local Loop - OC3 - Facility Termination		$618.88	$787.84	$262.31	$109.04	$105.91
A.16.5	High Capacity Unbundled Local Loop - OC3 - Per Mile		$6.97				
A.16.6	High Capacity Unbundled Local Loopl - OC3 - Incremental Cost Manual Svc Order vs Electronic			$36.84	$36.84	$19.01	$19.01
A.16.7	High Capacity Unbundled Local Loop - OC12 - Facility Termination		$2,246.28	$992.37	$262.31	$109.04	$105.91
A.16.8	High Capacity Unbundled Local Loop - OC12 - Per Mile		$8.58				
A.16.9	High Capacity Unbundled Local Loop -OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
A.16.10	High Capacity Unbundled Local Loop - OC48 - Facility Termination		$1,490.11	$1,190	$255.01	$128.05	$124.92
A.16.11	High Capacity Unbundled Local Loop - OC48 - Per Mile		$28.14				
A.16.12	High Capacity Unbundled Local Loop - OC48 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
A.16.13	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48		$678.67	$177.59	$163.78	$109.04	$105.91
A.16.14	High Capacity Unbundled Local Loop - OC48 - Interface-Incremental Cost-Manual Svc Order vs Electronic			$36.84	$36.84	$19.01	$19.01
A.16.15	High Capacity Unbundled Local Loop - STS-1 - Facility Termination		$389.35	$595.37	$304.50	$215.82	$151.15
A.16.16	High Capacity Unbundled Local Loop - STS-1 - Per Mile		$9.19				
A.16.17	High Capacity Unbundled Local Loop - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84	$19.01	$19.01

Notes: (I) - Initial; (S) - Subsequent

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
A.17	**LOOP CONDITIONING**						
A.17.1	Unbundled Loop Modification - Load Coil / Equipment Removal - short		$61.45				
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Removal - long - First and Additional			$321.99			
A.17.3	Unbundled Loop Modification - Bridged Tap Removal		$61.49				
A.17.4	Unbundled Loop Modification - Additive			$12.36	$12.36		
A.17.5	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Load Coil/Equipment Removal First/Add'l			$335.36	$7.82		
A.17.6	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Bridged Tap Removal First/Add'l			$528.48	$9.74		
A.19	**LOOP TESTING BEYOND VOICE GRADE**						
A.19.1	Loop Testing Beyond VG - Basic per 1/2 hour			$115.94	$55.45		
A.19.2	Loop Testing Beyond VG - Overtime per 1/2 hour			$151.69	$72.75		
A.19.3	Loop Testing Beyond VG - Premium per 1/2 hour			$187.43	$90.06		
A.19.198	Loop Testing Beyond VG - Basic per 1/2 hour - Testing			$53.31	$53.31		
A.19.298	Loop Testing Beyond VG - Overtime per 1/2 hour - Testing			$69.93	$69.93		
A.19.398	Loop Testing Beyond VG - Premium per 1/2 hour - Testing			$86.56	$86.56		
D.0	***UNBUNDLED TRANSPORT AND LOCAL INTERCONNECTION***						
D.5	**LOCAL CHANNEL - DEDICATED**						
D.5.7	Local Channel - Dedicated - DS3 - Per Mile		$7.15				
D.5.8	Local Channel - Dedicated - DS3 - Facility Termination		$611.30	$595.37	$304.50	$215.82	$151.15
D.5.9	Local Channel - Dedicated - DS3 -Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.10	Local Channel - Dedicated - OC3 - Per Mile		$6.00				
D.5.11	Local Channel - Dedicated - OC3 - Facility Termination		$1,320.28	$787.84	$262.31	$109.04	$105.91
D.5.12	Local Channel - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.13	Local Channel - Dedicated - OC12 - Per Mile		$8.58				
D.5.14	Local Channel - Dedicated - OC12 - Facility Termination		$7,849.28	$992.37	$262.31	$109.04	$105.91
D.5.15	Local Channel - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.16	Local Channel - Dedicated - OC48 - Per Mile		$28.14				
D.5.17	Local Channel - Dedicated - OC48 - Facility Termination		$1,908.11	$985.07	$255.01	$109.04	$105.91
D.5.18	Local Channel - Dedicated - OC48 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01

Notes: (I) - Initial; (S) - Subsequent

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
D.5.19	Local Channel - Dedicated - OC48 - Interface OC12 on OC48		$644.82	$382.12	$163.78	$109.04	$105.91
D.5.20	Local Channel - Dedicated - OC48 - Interface - Inc. Cost - Man. Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.21	Local Channel - Dedicated - STS-1 - Facility Termination		$599.59	$588.07	$297.20	$215.82	$151.15
D.5.22	Local Channel - Dedicated - STS-1 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.5.23	Local Channel - Dedicated - STS-1 -Per Mile		$7.15				
D.6	**INTEROFFICE TRANSPORT - DEDICATED - DS3**						
D.6.1	Interoffice Transport - Dedicated - DS3 - Per Mile		$2.34				
D.6.2	Interoffice Transport - Dedicated - DS3 - Facility Termination		$848.99	$395.29	$176.56	$109.04	$105.91
D.6.3	Interoffice Transport - DS3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.7	**INTEROFFICE TRANSPORT - DEDICATED - OC3**						
D.7.1	Interoffice Transport - Dedicated - OC3 - Per Mile		$4.43				
D.7.2	Interoffice Transport - Dedicated - OC3 - Facility Termination		$2,361.11	$689.30	$163.78	$130.87	$130.87
D.7.3	Interoffice Transport - Dedicated - OC3 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$109.04	$105.91
D.8	**INTEROFFICE TRANSPORT - DEDICATED - OC12**						
D.8.1	Interoffice Transport - Dedicated - OC12 - Per Mile		$14.41				
D.8.2	Interoffice Transport - Dedicated - OC12 - Facility Termination		$9,124.11	$893.84	$163.78	$130.87	$130.87
D.8.3	Interoffice Transport - Dedicated - OC12 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$109.04	$105.91
D.9	**INTEROFFICE TRANSPORT - DEDICATED - OC48**						
D.9.1	Interoffice Transport - Dedicated - OC48 - Per Mile		$26.52				
D.9.2	Interoffice Transport - Dedicated - OC48 - Facility Termination		$13,229.11	$893.84	$163.78	$109.04	$105.91
D.9.3	Interoffice Transport - Dedicated - OC48 - Incremental Cost - Manual Svc. Order vs. Electronic			$36.84	$36.84	$19.01	$19.01
D.9.4	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48			$382.12	$163.78	$109.04	$105.91
D.9.5	Interoffice Transport - OC48 Interface - Incremental Cost-Manual Svc Order vs Elec			$36.84	$36.84	$19.01	$19.01
D.10	**INTEROFFICE TRANSPORT - DEDICATED - STS-1**						
D.10.1	Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.34				
D.10.2	Interoffice Transport - Dedicated - STS-1 - Facility Termination		$849.30	$395.29	$176.56	$109.04	$105.91
D.10.3	Interoffice Transport - STS-1 - Incremental Cost - Manual Svc Order vs. Electronic			$36.84	$36.84	$19.01	$19.01

Notes: (I) - Initial; (S) - Subsequent
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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
D.12	**INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE**						
D.12.1	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile		$0.0054				
D.12.2	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination		$24.09	$37.87	$26.02	$30.78	$13.07
D.12.3	Interoffice Transpor t- Dedicated - 4-Wire VG-Incremental Cost-Manual Svc Order vs Elec			$15.08	$15.08	$8.66	$8.66
E.0	***SIGNALING NETWORK, DATA BASES, & SERVICE MANAGEMENT SYS.***						
E.3	**CCS7 SIGNALING TRANSPORT**						
E.3.7	CCS7 Signaling Connection, Per link (A link) (Same as E.3.1)		$17.84	$130.84			
E.3.8	CCS7 Signaling Connection, Per link (B link) (also known as D link)(Same as E.3.1)		$17.84	$130.84			
E.3.9	CCS7 Signaling Usage, Per ISUP Message(Same as E.3.3)		$0.0000373				
E.3.10	CCS7 Signaling Usage Surrogate, per link per LATA per mo (9)(Same as E.3.5)		$352.30				
E.3.11	CCS7 Signaling Point Code, Establishment or Change, per STP affected			$121.77			
E.4	**BELLSOUTH CALLING NAME (CNAM) DATABASE (DB) SERVICE**						
E.4.1	CNAM for DB Owners - Service Establishment, Manual			$43.27		$39.79	
E.4.2	CNAM for Non DB Owners - Service Establishment, Manual			$43.27		$39.79	
E.4.3	CNAM for DB Owners Service Provisioning with Point Code Establishment			(I) $1,868	(S) $1,382	(I) $507.09	(S) $372.86
E.4.4	CNAM for Non DB Owners Service Provisioning with Point Code Establishment			(I) $645.50	(S) $462.23	(I) $519.01	(S) $372.86
E.4.5	CNAM for DB and Non DB Owners, Per Query		$0.0010541				
E.5	**BELLSOUTH ACCESS TO 911 SERVICE**						
E.5.1	BellSouth E911 Access - Local Channel - Dedicated - 2-wire Voice Grade (Same as D.5.1)	1	$17.18	$199.33	$24.16	$54.81	$4.80
		2	$22.44	$199.33	$24.16	$54.81	$4.80
		3	$29.34	$199.33	$24.16	$54.81	$4.80
E.5.2	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire Voice Grade Per Mile (Same as D.2.1)		$0.02				
E.5.3	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-wire VG Facility Term (Same as D.2.2)		$18.58	$55.39	$17.37	$27.96	$3.51
E.5.4	BellSouth E911 Access - Local Channel - Dedicated - DS1 (Same as D.5.3)	1	$36.24	$277.35	$233.26	$33.18	$22.30
		2	$47.33	$277.35	$233.26	$33.18	$22.30
		3	$61.89	$277.35	$233.26	$33.18	$22.30
E.5.5	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Mile (Same as D.4.1)		$0.36				
E.5.6	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Facility Termination (Same as D.4.2)		$77.86	$112.40	$76.27	$19.55	$14.99

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Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring First	Nonrecurring Additional	Disconnect First	Disconnect Additional
E.6	**LNP QUERY SERVICE**						
E.6.1	LNP Cost Per query		$0.0009277				
E.6.2	LNP Service Establishment Manual			$23.60		$21.71	
E.6.3	LNP Service Provisioning with Point Code Establishment			(I) $1,119	(S) $571.71	(I) $507.09	(S) $372.86
G.0	***SELECTIVE ROUTING***						
G.11	SELECTIVE CARRIER ROUTING (AIN SOLUTION)						
G.11.1	Service Establishment per CLEC			$190,638		$16,200	
G.11.2	Service Establishment per End Office			$317.55		$3.19	
G.11.4	Query Cost		$0.0206047				
H.0	***COLLOCATION***						
H.3	**ASSEMBLY POINT**						
H.3.1	Assembly Point: 2-Wire Cross Connects		$1.29	$11.03	$10.09	$11.29	$10.19
H.3.2	Assembly Point: 4-Wire Cross Connects		$2.22	$11.21	$10.22	$11.58	$10.40
H.3.3	Assembly Point: DS-1 Cross Connects		$12.77	$28.30	$16.79	$11.61	$10.50
H.3.4	Assembly Point 2-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87	$1.13	$1.13
H.3.5	Assembly Point 4-Wire Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87	$1.16	$1.16
H.3.6	Assembly Point DS1 Cross Connect Incremental Cost Manual vs. Electronic Service Order			$1.87	$1.87	$1.16	$1.16
H.6	**PHYSICAL COLLOCATION IN THE REMOTE TERMINAL (RT)**						
H.6.1	Physical Collocation In The Remote Terminal - Application Fee			$580.20		$312.76	
H.6.2	Physical Collocation In The Remote Terminal - Per Rack/Bay		$220.41				
H.6.3	Physical Collocation In The Remote Terminal - Security Access Key			$24.69			
H.6.4	Physical Collocation in the RT - Space Availability Report per premises requested			$218.49			
H.6.5	Physical Collocation in the RT- Remote Site CLLI Code Request, per CLLI Code Requested			$70.81			

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

BellSouth Telecommunications, Inc.
TRA Docket No. 00-00544
Exhibit JAR-1
November 13, 2000

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
J.0	***OTHER***						
J.1	**DARK FIBER**						
J.1.2	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Local Channel/Loop		$58.83	$1,121	$153.19	$580.26	$357.17
J.1.3	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Interoffice		$28.74	$1,121	$153.19	$580.26	$357.17
J.3	**LOOP MAKE-UP**						
J.3.1	Mechanized Loop Make-up		$0.7644187				
J.3.3	Manual Loop Make-up w/o Facility Reservation Number			$74.46			
J.3.4	Manual Loop Make-up w/ Facility Reservation Number			$77.18			
J.4	**LINE SHARING SPLITTER IN THE CENTRAL OFFICE**						
J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office		$183.79	371.63		349.37	
J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office		$45.95	371.63		349.37	
J.4.3	Line Sharing Splitter - per Line Activation in the Central Office		$8.70	$39.39	$15.70	$35.06	$10.79
J.4.4	Line Sharing Splitter - per Subsequent Activity per Line Arrangement		$0.27	$34.56	$12.62	$16.43	$1.64
J.4.6	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)			$108.66		$82.12	
J.4.7	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7)			$54.40		$10.59	
J.4.8	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))			(S)	$15.63	(S)	$18.26
J.5	**ACCESS TO THE DCS**						
J.5.1	Customer Reconfiguration Establishment			$2.78		$3.32	
J.5.2	DS1 DCS Termination with DS0 Switching		$23.35	$41.14	$34.25	$29.94	$24.08
J.5.3	DS1 DCS Termination with DS1 Switching		$13.46	$27.79	$20.90	$21.99	$16.12
J.5.4	DS3 DCS Termination with DS1 Switching		$150.88	$41.14	$34.25	$29.94	$24.08
L.0	***ACCESS DAILY USAGE FILE (ADUF)***						
L.1	**ACCESS DAILY USAGE FILE (ADUF)**						
L.1.1	ADUF, Message Processing, per message		$0.0158054				
L.1.3	ADUF, Data Transmission (CONNECT:DIRECT), per message		$0.0001387				
M.0	***DAILY USAGE FILES***						
M.1	**ENHANCED OPTIONAL DAILY USAGE FILE**						
M.1.1	Enhanced Optional Daily usage File: Message Processing, Per Message		$0.2921174				

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.0	***UNBUNDLED LOOP COMBINATIONS***						
P.13	**EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT**						
P.13-1	First DS1 in DS3	1	$1,153.26				
		2	$1,170.93				
		3	$1,194.12				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT- NEW			$965.91	$400.64	$161.42	$67.08
P.13-2	D.6.1 Interoffice Transport - Dedicated - DS3 - Per Mile		$2.34				
P.13-3	Additional DS1 in same DS3	1	$75.45				
		2	$93.12				
		3	$116.31				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.16	**2-WIRE LOOP/ 2 WIRE VOICE GRADE IO TRANSPORT/ 2 WIRE PORT**						
P.16-1	Fixed - Switch as is	1	$40.00	$11.18	$3.52		
		2	$45.07	$11.18	$3.52		
		3	$51.72	$11.18	$3.52		
P.16.2	D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		$0.0174				
P.23	**EXTENDED 2-WIRE VOICE GRADE LOOP/ 2 WIRE VOICE GRADE INTEROFFICE TRANSPORT**						
P.23-1	Fixed	1	$38.35				
		2	$43.42				
		3	$50.07				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE VOICE GRADE LOOP/ 2 WIRE VOICE GRADE INTEROFFICE TRANSPORT - NEW			$251.11	$100.39	$142.26	$41.86
P.23-2	D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		$0.0174				

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.24	**EXTENDED 4-WIRE VOICE GRADE LOOP/ 4 WIRE VOICE GRADE INTEROFFICE TRANSPORT**						
P.24-1	Fixed	1	$52.00				
		2	$59.56				
		3	$69.48				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE VOICE GRADE LOOP/ 4 WIRE VOICE GRADE INTEROFFICE TRANSPORT - NEW			$251.11	$100.39	$142.26	$41.86
P.24-2	D.12.1 Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile		$0.0054				
P.25	**EXTENDED DS3 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT**						
P.25-1	Fixed		$1,228.44				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED DS3 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT - NEW			$784.76	$355.52	$171.21	$80.67
P.25-2	D.6.1 Interoffice Transport - Dedicated - DS3 - Per Mile		$2.34				
P.25-3	A.16.2 High Capacity Unbundled Local Loop - DS3 - Per Mile		$9.19				
P.26	**EXTENDED STS1 DIGITAL LOOP WITH DEDICATED STS1 INTEROFFICE TRANSPORT**						
P.26-1	Fixed		$1,243.86				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED STS1 DIGITAL LOOP WITH DEDICATED STS1 INTEROFFICE TRANSPORT - NEW			$784.76	$355.52	$171.21	$80.67
P-26-2	D.10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.34				
P.26-3	A.16.16 High Capacity Unbundled Local Loop - STS-1 - Per Mile		$9.19				

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.50	**4-WIRE DS1 LOOP WITH CHANNELIZATION WITH PORT**						
P.50.VG-1	First Voice Grade in DS1 - Switch as is	1	$196.36	$303.61	$15.74		
		2	$214.03	$303.61	$15.74		
		3	$237.22	$303.61	$15.74		
P.50.VG-2	Additional Voice Grade in same DS1		$6.51				
P.50.DID-1	First 2-Wire DID in DS1 - Switch as is	1	$201.23	$303.61	$15.74		
		2	$218.90	$303.61	$15.74		
		3	$242.09	$303.61	$15.74		
P.50.DID-2	Additional 2-Wire DID in same DS1		$11.13				
P.50.ISDN-1	First ISDN in DS1 - Switch as is	1	$212.36	$303.61	$15.74		
		2	$230.03	$303.61	$15.74		
		3	$253.22	$303.61	$15.74		
P.50.ISDN-2	Additional ISDN in same DS1		$22.51				
P.50.4	4-Wire DS1 Loop/Channelization Port Combination - Subsequent Activity - Add Lines - Per Line			$89.90			
P.50.5	4-Wire DS1 Loop/Channelization Port Combination - Subsequent Activity - Add Trunks - Per Trunk			$117.43			
P.51	**EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT**						
P.51-1	First 2-Wire ISDN in DS1	1	$188.66				
		2	$195.46				
		3	$204.39				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT - NEW			$485.24	$198.75	$146.05	$44.50
P.51-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.51-3	Additional 2-wire ISDN in same DS1	1	$25.46				
		2	$32.26				
		3	$41.19				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.52	**EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED STS-1 INTEROFFICE TRANSPORT**						
P.52-1	First in DS1 in STS1	1	$1,147.59				
		2	$1,165.26				
		3	$1,188.45				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED STS-1 INTEROFFICE TRANSPORT - NEW			$965.91	$400.64	$161.42	$67.08
P.52-2	D.10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.34				
P.52-3	Additional DS1 in same STS1	1	$75.31				
		2	$92.98				
		3	$116.17				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.53	**EXTENDED 2-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.53-1	First 2-Wire VG in First DS1 in DS3	1	$416.86				
		2	$421.93				
		3	$428.58				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.53-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.53-3	Additional 2-Wire VG in same DS1	1	$17.61				
		2	$22.68				
		3	$29.33				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.53-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.54	**EXTENDED 4-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.54-1	First 4-Wire VG in First DS1 in DS3	1	$429.71				
		2	$437.27				
		3	$447.19				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.54-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.54-3	Additional 4-Wire VG in same DS1	1	$25.75				
		2	$33.31				
		3	$43.23				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.54-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		

Notes: (I) - Initial; (S) - Subsequent
(231443)

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring		Disconnect	
				First	Additional	First	Additional
P.55	**EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.55-1	First 4-Wire in First DS1 in DS3	1	$436.82				
		2	$446.33				
		3	$458.83				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.55-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.55-3	Additional 4-Wire in same DS1	1	$33.06				
		2	$42.57				
		3	$55.07				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.55-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.56	**EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.56-1	First 2-Wire in First DS1 in DS3	1	$429.22				
		2	$436.02				
		3	$444.95				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.56-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.56-3	Additional 2-Wire in same DS1	1	$25.46				
		2	$32.26				
		3	$41.19				

Notes: (I) - Initial; (S) - Subsequent
(231443)

Tennessee Rate Sheet

Cost Ref. No.	Unbundled Network Element	Zone	Recurring	Nonrecurring First	Nonrecurring Additional	Disconnect First	Disconnect Additional
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.56-4	Additional DS1 in same DS3		$176.35				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.57	**EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX**						
P.57-1	First 4-Wire DS1 in DS3	1	$380.86				
		2	$398.53				
		3	$421.72				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX - NEW			$485.24	$198.75	$146.05	$44.50
P.57-2	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$0.3562				
P.57-3	Additional 4-Wire DS1 in same DS3	1	$153.31				
		2	$170.98				
		3	$194.17				
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only			$36.96	$14.84		
P.58	**EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DS0 INTEROFFICE TRANSPORT**						
P.58-1	Fixed	1	$52.29				
		2	$61.80				
		3	$74.30				
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is			$52.73	$24.62	$9.12	$9.12
	Nonrecurring - EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DS0 INTEROFFICE TRANSPORT - NEW						
P.58-2	D.3.1 Interoffice Transport - Dedicated - DS0 - Per Mile		$0.0174				

Notes: (I) - Initial; (S) - Subsequent
(231443)

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.13	***4-Wire DS1 Digital Loop with Dedicated DS3 Interoffice Transport (EEL)***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
D.6.2	Interoffice Transport – Dedicated – DS3 - Facility Termination, per month	00-00544
D.6.1	Interoffice Transport – Dedicated – DS3 - Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
P.16	***2-Wire Voice Grade Loop with 2-Wire Voice Grade Interoffice Transport with 2-Wire Port***	
A.1.2	2-Wire Analog Voice Grade Loop – Service Level 2, per month	97-01262
D.2.2	Interoffice Transport - Dedicated - 2-Wire Voice Grade - Facility Termination, per month	97-01262
D.2.1	Interoffice Transport – Dedicated - 2-Wire Voice Grade - Per mile, per month	97-01262
B.1.1	2-Wire Analog Line Port, per month	97-01262
	Nonrecurring – Switch-as-is	00-00544
P.23	***2-Wire Voice Grade Loop with 2-Wire Voice Grade Interoffice Transport (EEL)***	
A.1.2	2-Wire Voice Grade Loop – Service Level 2, per month	97-01262
D.2.2	Interoffice Transport – Dedicated - 2-Wire Voice Grade - Facility Termination, per month	97-01262
D.2.1	Interoffice Transport – Dedicated – 2-Wire Voice Grade - Per mile, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.24	***4-Wire Voice Grade Loop with 4-Wire Voice Grade Interoffice Transport (EEL)***	
A.4.1	4-Wire Analog Voice Grade Loop, per month	97-01262
D.12.2	Interoffice Transport – Dedicated - 4-Wire Voice Grade - Facility Termination, per month	00-00544
D.12.1	Interoffice Transport – Dedicated - 4-Wire Voice Grade - Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
P.25	***DS3 Digital Loop with Dedicated DS3 Interoffice Transport (EEL)***	
A.16.1	High Capacity Unbundled Local Loop – DS3 – Facility Termination, per month	00-00544
D.6.2	Interoffice Transport – Dedicated – DS3 – Facility Termination, per month	00-00544
A.16.2	High Capacity Unbundled Local Loop – DS3 – Per mile, per month	00-00544
D.6.1	Interoffice Transport – Dedicated – DS3 – Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
P.26	***STS-1 Digital Loop with Dedicated STS-1 Interoffice Transport (EEL)***	
A.16.15	High Capacity Unbundled Local Loop – STS-1 – Facility Termination, per month	00-00544
D.10.2	Interoffice Transport – Dedicated – STS-1 – Facility Termination, per month	00-00544
A.16.16	High Capacity Unbundled Local Loop – STS-1 – Per mile, per month	00-00544
D.10.1	Interoffice Transport – Dedicated – STS-1 – Per mile, per month	00-00544
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.50	***4-Wire DS1 Loop with Channelization with Port***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
B.1.1/B.1.3/B.1.5	2-Wire Voice Grade/DID/ISDN Line Port, per month	97-01262
Q.1.1	D4 Channel Bank Inside CO – System, per month	00-00544
Q.1.4/Q.1.3	Unbundled Loop Concentration – POTS Card/ISDN BRITE Card, per month	00-00544
	Nonrecurring – Switch-as-is	00-00544
	Nonrecurring – Subsequent Activity – Add Lines, per line	00-00544
	Nonrecurring – Subsequent Activity – Add Trunks, per trunk	00-00544
P.51	***2-Wire ISDN Digital Loop with DS1 Interoffice Transport (EEL)***	
A.5.1	2-Wire ISDN Digital Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.3	Interface Unit, Interface DS1 to DS0 – BRITE Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.52	***4-Wire DS1 Digital Loop with Dedicated STS-1 Interoffice Transport (EEL)***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
D.10.2	Interoffice Transport – Dedicated – STS-1 – Facility Termination, per month	00-00544
D.10.1	Interoffice Transport – Dedicated – STS-1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.53	***2-Wire Voice Grade Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.1.2	2-Wire Analog Voice Grade Loop – Service Level 2, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – Voice Grade Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.54	***4-Wire Voice Grade Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.4.1	4- Wire Analog Voice Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – Voice Grade Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	*UNE Combination* UNEs Included in Combination	Source of Rate (Cost Study Docket No.)
P.55	***4-Wire 56 or 64 Kbps Digital Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.10.1	4-Wire 19, 56 or 64 Kbps Digital Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – OCU-DP Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.56	***2-Wire ISDN Loop with DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.5.1	2-Wire ISDN Digital Grade Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
A.18.1	Channelization – Channel System DS1 to DS0, per month	97-01262
A.18.4	Interface Unit – Interface DS1 to DS0 – BRITE Card, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544

Composition of Proposed Prices for UNE Combinations

Cost Ref. No.	***UNE Combination*** UNEs Included in Combination	**Source of Rate** (Cost Study Docket No.)
P.57	***4-Wire DS1 Digital Loop with Dedicated DS1 Interoffice Transport with 3/1 MUX (EEL)***	
A.9.1	4-Wire DS1 Digital Loop, per month	97-01262
D.4.2	Interoffice Transport – Dedicated – DS1 – Facility Termination, per month	97-01262
D.4.1	Interoffice Transport – Dedicated – DS1 – Per mile, per month	97-01262
A.18.5	Channelization – Channel System DS3 to DS1, per month	97-01262
A.18.6	Interface Unit – Interface DS3 to DS1, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544
	Nonrecurring – New Feature Activation for Combination Use Only	00-00544
P.58	***4-Wire 56 or 64 Kbps Digital Loop with DS0 Interoffice Transport (EEL)***	
A.10.1	4-Wire 19, 56 or 64 Kbps Digital Grade Loop, per month	97-01262
D.3.2	Interoffice Transport – Dedicated – DS0 – Facility Termination, per month	97-01262
D.3.1	Interoffice Transport – Dedicated – DS0 – Per mile, per month	97-01262
P.17.1	Nonrecurring – Switch-as-is	97-01262
	Nonrecurring – New	00-00544

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared John A. Ruscilli –Senior Director – State Regulatory, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 00-00544 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 34 pages and 2 exhibit(s).

John A. Ruscilli

Sworn to and subscribed
before me on 11/10/00

Suzy A. Sherwood
NOTARY PUBLIC

SUZY A. SHERWOOD
MY COMMISSION EXPIRES
APR
28
2003
FAYETTE COUNTY, GEORGIA
NOTARY PUBLIC

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF W. KEITH MILNER

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

NOVEMBER 13, 2000

Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. (BELLSOUTH).

A. My name is W. Keith Milner. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am Senior Director - Interconnection Services for BellSouth. I have served in my present role since February 1996, and have been involved with the management of certain issues related to local interconnection, resale, and unbundling.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. My business career spans over 30 years and includes responsibilities in the areas of network planning, engineering, training, administration, and operations. I have held positions of responsibility with a local exchange telephone company, a long distance company, and a research and development company. I have extensive experience in all phases of telecommunications network planning, deployment, and operations in both the domestic and international arenas.

I graduated from Fayetteville Technical Institute in Fayetteville, North Carolina, in 1970, with an Associate of Applied Science in Business Administration degree. I later graduated from Georgia State University in 1992 with a Master of Business Administration degree.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC SERVICE COMMISSION, AND IF SO, BRIEFLY DESCRIBE THE SUBJECT OF YOUR TESTIMONY?

A. I have previously testified before the state public service commissions in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, and South Carolina, the Tennessee Regulatory Authority, and the Utilities Commission in North Carolina on the issues of technical capabilities of the switching and facilities network regarding the introduction of new service offerings, expanded calling areas, unbundling, and network interconnection.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY BEING FILED TODAY?

A. In my testimony, I will address the technical aspects of specific network-related issues such as loop deployment, XDSL loop offerings, line sharing, access to unbundled sub-loop elements, and customized routing.

UNE Loop Deployment

Q. PLEASE PROVIDE THE NETWORK TECHNOLOGY ASSUMPTIONS USED IN DEVELOPING THE UNE LOOP COST STUDY.

A. The network infrastructure design in the loop cost methodology starts with two basic assumptions. First, loops up to 12,000 feet long (measured from the central office) are designed using only twisted pair copper facilities. Second, loops longer than 12,000 feet are provisioned using fiber optic cable loop feeder facilities and Next Generation Digital Loop Carrier (NGDLC).

Q. PLEASE EXPLAIN WHY FIBER LOOP FEEDER FACILITIES ARE USED IN CONJUNCTION WITH DIGITAL LOOP CARRIER RATHER THAN ONLY TWISTED PAIR COPPER FACILITIES FOR LOOPS LONGER THAN 12,000 FEET.

A. In BellSouth's costing methodology for voice grade (or “narrowband”) services, costs were developed for loops of increasing length using both copper cable facilities and fiber fed digital loop carrier. Depending on the type of construction (that is, aerial versus buried cable) and the volume of demand (cable size or NGDLC size), the economic crossover distance (that is, the point at which loops provisioned using DLC is more economically efficient than using copper cable loops) for voice grade services is approximately 12,000 feet from the central office.

It should be noted that, in actual network design, voice grade services are mixed with demand for other types of service such as DS-1 services and other higher bandwidth services. In selecting the infrastructure design for a network to meet all of these demands, new copper cable is rarely the facility of choice for the loop feeder network. Instead, fiber cable with fiber optic multiplexers and NGDLC are used to meet the combined demand on the cable route.

Q. WHERE FIBER FED NGDLC IS PROVISIONED, PLEASE EXPLAIN WHAT DESIGN CRITERIA ARE USED TO DETERMINE THE DESIGN OF THE CABLE PLANT EXTENDING FROM THE NGDLC TO THE CUSTOMER LOCATION.

A. Carrier Serving Area (CSA) design provides the rules for provisioning the cable plant extending from the NGDLC to the customer location. This part of the loop is referred to as loop distribution. CSA design rules limit the total loop distribution length from the NGDLC site to the customer to 12,000 feet. Included in this 12,000 feet may be a maximum of 2,500 feet of bridged tap. No single bridged tap may be longer than 2,000 feet. The concept of bridged tap itself is discussed later in this testimony.

Q. PLEASE EXPLAIN THE BENEFIT OF USING THE CARRIER SERVING AREA DESIGN.

A. The economics that limit copper cable deployment distances from the central office to the customer location are the same as those that limit copper cable deployment from the NGDLC to the customer location (that is, the part of the loop referred to as loop distribution). In addition to the economic benefits derived from the CSA design itself, the 12,000 foot maximum copper cable length makes copper loops compatible with many of the digital subscriber line (DSL) technologies used today in providing advanced services.

Q. WHAT IS THE DIFFERENCE BETWEEN NGDLC AND OTHER FORMS OF DIGITAL LOOP CARRIER (DLC)?

A. NGDLC describes a newer version of digital loop carrier equipment that provides many enhanced services and cost-reducing features that are not available on the older DLC systems. NGDLC systems are designed to support a larger capacity of lines, up to 2,016, from a single common equipment set compared to older vintages of DLC. For example, the larger capacity of NGDLC is a significant improvement over the 96-line capacity of the older vintage DLC referred to as "SLC-96", manufactured by Lucent Technologies.

Older vintage DLC cannot mix switched circuits and non-switched circuits within a 96-line group economically and can only use integrated central office alternatives economically when the 96-line group consists almost entirely of switched circuits. In contrast, NGDLC remote terminals can be configured on a circuit by circuit basis using integrated or non-integrated central office alternatives to provide switched and non-switched services.

In providing switched services, NGDLC can be integrated with the local digital switch directly without intervening interface equipment. In this mode of operation, traffic from the remote NGDLC site to the central office can be concentrated onto only the number of circuits required by the types of services provisioned from that site. Typically, residential services can be concentrated at a 4:1 ratio. This means that, on average, only one (1) line of capacity is required from the NGDLC site to the switch for each of four (4) residential lines served from the NGDLC. For business services the typical concentration ratio is 3:1. The actual concentration ratio chosen for a given application is a function of the traffic load to be carried by the NGDLC equipment. The higher the traffic load, the lower the concentration ratio. Stated another way, the higher the traffic load, the more transmission paths required between the NGDLC equipment to the central office switching equipment.

In the older DLC systems, when DLC is integrated with the switch, it can be configured with either no concentration or with 2:1 concentration. In either circumstance, older DLC systems use more feeder capacity per line than do NGDLC systems since the use of NGDLC allows higher concentration ratios (and thus less loop feeder capacity) than older vintages of DLC.

In providing non-switched services, NGDLC has the capability, on a line-by-line basis, to provision remote NGDLC lines through the non-integrated or "universal" capacity of the NGDLC central office terminal. This allows non-switched services to be routed around the central office switch to connect with the other customer locations of the non-switched services or to interconnect with another telecommunications carrier's facilities. Since these services are not switched, concentration is not feasible.

Q. WHY IS NGDLC ASSUMED IN THE LOOP COST METHODOLOGY?

A. There are three reasons. First, the larger line capacity on the NGDLC system achieves economies of scale, producing lower overall equipment costs. Second, the capability to mix switched and non-switched services on the same system eliminates wasted capacity, which improves the economic benefit of using NGDLC. Finally, the combination of larger line capacity and greater concentration capability reduces loop feeder capacity requirements resulting in lower overall costs.

Q. IN DISCUSSING OLDER VINTAGE DLC AND NGDLC, YOU MENTION INTEGRATION WITH THE CENTRAL OFFICE SWITCH. PLEASE DESCRIBE THE PROCEDURES THAT ARE FOLLOWED TO MAKE INTERFACING WITH THE SWITCH POSSIBLE.

A. Two technical documents provide descriptions of digital loop carrier systems and how they interface with local digital switches in the integrated configurations. The first document to be issued was Technical Reference-008 (TR-008). This document, authored by Bell Communications Research, Inc. or “Bellcore” (now Telecordia), described the SLC-96 DLC system manufactured by AT&T before divestiture, and the document itself was jointly owned by AT&T and the Regional Bell Operating Companies (RBOCs) at divestiture. A major portion of that technical reference is still in use today and describes the interface that allows remote NGDLC/DLC to connect directly to a local digital switch at the DS-1 level in what is referred to as an integrated configuration.

This configuration allows lines to be provisioned with channelization circuit packs at the remote NGDLC/DLC but without per line circuit packs at the central office switch. TR-008 describes two alternatives for this integrated capability.

TR-008 Mode I is a non-concentrated alternative that requires feeder capacity for every line on a full time basis. When this alternative is used, four DS-1s (each with 24 channels for a total of 96 channels) are required for each 96-line capacity TR-008 remote NGDLC/DLC system. This configuration is used when high usage lines are to be served from the remote NGDLC/DLC system. TR-008 Mode II is a concentrated alternative that provides 2:1 concentration. When this alternative is used, two DS-1s (each with 24 channels for a total of 48 channels) are required for each 96-line capacity TR-008 remote NGDLC/DLC system.

Generic Requirement 303 (GR-303) (authored by Bellcore) provides a set of generic requirements that describe more flexible NGDLC system types and a more flexible interface to a local digital switch. The GR-303 interfaces for integrating NGDLC with a local digital switch can vary in line capacity from 48 lines to 2,016 lines. The concentration allowed over these interfaces is variable and can be matched to the services being made available from the remote NGDLC site to allow the most economic concentration ratio consistent with the service being provided.

While there are many variables that impact the decision of which switch termination type to use for the interface between a remote NGDLC site and the local digital switch, generally the most economic configurations are provided by using GR-303 for sites with more than 150 lines in the three to five year planning period. TR-008 is used for smaller remote NGDLC sites.

Q. PLEASE SUMMARIZE YOUR DISCUSSION OF BELLSOUTH'S POSITION ON UNE LOOP DEPLOYMENT.

A. BellSouth has designed and deployed its UNE loop infrastructure in an economic and rational manner using sound engineering principles. Accordingly, the Authority should approve the resulting cost calculations and rates as presented in the testimonies of Ms. Caldwell and Mr. Ruscilli.

XDSL Loops

Q. PLEASE DESCRIBE BELLSOUTH'S UNBUNDLED XDSL LOOP OFFERING.

A. High Bit-Rate Digital Subscriber Line (HDSL) Compatible Loop: The requirements for this type of loop are that the end user must be served by a non-loaded copper pair, and the loop typically cannot be more than 12,000 feet long on 24 gauge copper wire. If 26 gauge copper wire is used, the limit is 9,000 feet or less. In either case, the loop may have up to 2,500 feet of bridged tap with no single bridged tap exceeding 2,000 feet. The technical characteristics of the loop are verified to ensure that the loop meets stringent industry standards for CSA transmission specifications to support HDSL services.

Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop: This type of loop is provided over copper facilities according to the Revised Resistance Design (RRD) industry standards, which means that the loop may be up to 18,000 feet long and may have up to 6,000 feet of bridged tap which is inclusive of the loop length. This means that for every foot of bridged tap, the loop length is reduced by an equal amount. Therefore, an RRD loop that has 4,000 feet of bridged tap could be no longer than 14,000 feet.

Originally the ADSL compatible loop was designed to the same CSA criteria as the HDSL capable loop. However, in response to requests from CLECs, the specification for the loop was changed to the RRD standards during the first quarter of 2000.

BellSouth developed both the HDSL capable loop and the ADSL capable loop in response to the FCC's 96-325 Order, and both loop types have been available to CLECs since the fourth quarter of 1996.

Unbundled Copper Loop (UCL) – This type of loop provides a "dry" copper pair (that is, without electronic devices) to an end user using the Resistance Design (RD) industry standard. This loop may be up to 18,000 feet long and may have up to 6,000 feet of bridged tap, which is exclusive of the loop length. This means the loop length is not reduced by the bridged tap amount. Therefore, in some cases, the loop length may be 18,000 feet long and have up to 6,000 feet of bridged tap. BellSouth cannot ensure that these loops will function properly for DSL service since their physical characteristics may exceed the maximum distance for some DSL services and equipment. However, BellSouth will ensure that these loops have electrical continuity and balance relative to the tip and ring conductors.

The UCL has been available to CLECs since the second quarter of 1999. As an additional offering, BellSouth has recently developed a new variant of UCL, the UCL Long (UCL-L) unbundled loop which is a copper loop that is longer than 18,000 feet. Typically applied telephony standards dictate that all copper loops longer than 18,000 feet be “loaded” to properly serve dial-tone or “plain old telephone service” (POTS) type customers. In order to transform such loops into "dry" or "clean" copper loops, the CLEC would need to use BellSouth's Unbundled Loop Modifications (ULM) service offering to have any load coils and/or bridged tap removed from these loops. BellSouth witness Mr. John Ruscilli addresses the issue of rates for ULM in his testimony.

Q. DOES BELLSOUTH OFFER ANY ADDITIONAL XDSL LOOPS?

A. BellSouth offers its Integrated Services Digital Network (ISDN)-capable loop, and Universal Digital Channel (UDC)-capable loop. These two loop types are not specifically categorized as xDSL-capable loops, but they may support the DSL service known as Integrated Services Digital Network Digital Subscriber Line (IDSL). BellSouth provisions its ISDN-capable loops according to applicable industry standards which means they may be provisioned over copper facilities or via a DLC system. These loops are also free of any load coils, but are not referred to as "clean copper loops" because they may be provisioned via DLC systems, which are completely compatible with ISDN service. The UDC loop is the same as the ISDN-capable loop but is provisioned differently in a manner that supports "data-only" ISDN that will better meet the needs of CLECs that want to deploy IDSL.

Q. WHAT IMPACT DOES LOOP LENGTH AND/OR THE PARTICULAR DSL

TECHNOLOGY HAVE ON THE LOOP COST?

A. The usefulness of BellSouth's unbundled loops for the provisioning of DSL services depends on a variety of factors, including the end user's distance from the serving wire center, as well as the length and gauge of the copper wire that serves the customer. Significantly, the same copper loops that are used to provide DSL services are also utilized to provide voice service to BellSouth's customers, as well as to other CLECs' customers.

BellSouth ensures that the unbundled loops it provides meet appropriate technical standards. As the FCC recognized: "[p]rovision of xDSL service is subject to a variety of important technical constraints. One is the length of the subscriber loop: ADSL, the most widely deployed xDSL-based service, generally requires loops of less than 18,000 feet using current technology. Another is the quality of the loop, which must be free of excessive bridged taps, loading coils, and other devices commonly used to aid in the provision of analog voice and data transmission, but which interfere with the provision of xDSL services. 'Conditioning' loops to remove those impediments, or constructing fiber-based digital loop carrier systems to overcome loop length difficulties, can be expensive." See Third Report and Order in CC Docket No. 98-147, rel. Dec. 9, 1999, ¶ 8, n. 9 ("Line Sharing" Order).

Q. PLEASE SUMMARIZE YOUR TESTIMONY ON THE PROVISIONING OF

XDSL SERVICES.

A. The cost of provisioning unbundled loops that CLECs use to provide xDSL services is a function of both the loop length and the particular DSL technology to be deployed. As a result, it is appropriate for the cost study for xDSL-compatible loops submitted with the testimony of Ms. Caldwell to recognize distinctions based on loop length for the particular DSL technology to be deployed.

Line Sharing

Q. WHAT IS LINE SHARING?

A. In its Third Report and Order in CC Docket No. 98-147 and Fourth Report and order in CC Docket No. 96-98, released December 9, 1999, the FCC states that "[t]he provision of XDSL-based service by a competitive LEC and voiceband service by an incumbent LEC on the same loop is frequently called 'line sharing'." (Order at ¶4)

Q. WHAT TECHNOLOGIES DOES BELLSOUTH UTILIZE IN ITS DEPLOYMENT OF LINE SHARING?

A. Line sharing requires that a non-loaded, 2-wire copper loop serve the end user. A non-loaded loop is a copper loop with no load coils, low-pass filters, range extenders, or similar devices. For central office based line sharing, the CLEC’s meet point is the collocation point of termination. BellSouth will use jumpers to connect the CLEC’s connector block to the splitter. The splitter will route the high frequency portion of the signal to the CLEC’s xDSL equipment in its collocation space. The splitter directs (1) the voiceband signals through a pair of copper wires to the voice switch, and (2) the digital data traffic though another pair of copper wires to the xDSL equipment in the CLEC's collocation space that is, in turn, attached to the CLEC's network. For remote terminal (RT) based line sharing, the CLEC’s meet point is the collocation point of termination at the remote terminal. BellSouth will use jumpers to connect the CLEC’s connector block to the splitter. The splitter will route the high frequency portion of the circuit to the CLEC’s xDSL equipment in its collocation space within the remote terminal.

Q. WHAT DEVICES USED ON UNBUNDLED LOOPS CAN CAUSE INTERFERENCE WITH DSL SERVICES?

A. There are three arrangements on many loops that permit or enhance voice service but effectively prevent or interfere with the satisfactory transmission of digital signals. Because these arrangements potentially cause interference with DSL services, they are sometimes referred to as "disturbers," which must be removed from local loops as needed to allow line sharing.

Q. WHAT ARE THESE THREE “DISTURBERS”, AND HOW DO THEY

INTERFERE WITH THE TRANSMISSION OF DIGITAL SIGNALS?

A. The three disturbers often referred to in the context of provisioning DSL services are load coils, bridged tap, and repeaters. These devices were developed to permit or enhance service in the voice band frequency range, typically 300 Hertz to 3,400 Hertz. However, their use often degrades successful transmission, particularly of digital signals, in the frequency range above 20,000 Hertz, the range in which xDSL services typically operate. Removing these devices typically restores the capability of a loop to accommodate services utilizing such high frequency ranges, a process referred to as "conditioning." However, this conditioning may render the loop incapable of providing satisfactory voice grade service.

Q. PLEASE DESCRIBE THE FUNCTION OF A LOAD COIL.

A. A load coil is an electrical inductance coil designed to improve transmission of signals in the voice band, and is typically used to extend the loop length over which acceptable voice grade transmission may be achieved, normally loop lengths greater than 18,000 feet. The load coil boosts or amplifies analog voice signals thus permitting their reception at greater distances.

Q. HOW DOES A LOAD COIL INTERFERE WITH AN XDSL SIGNAL?

A. The load coil's electrical inductance changes the rate at which data is transmitted through the loop such that the two xDSL modems at each end of the loop do not effectively receive each others' transmissions.

Q. PLEASE DESCRIBE THE FUNCTION OF A REPEATER.

A. As the name implies, a repeater inserted into a loop receives a signal from one end of a loop, amplifies the signal, and then retransmits the signal to the other end of the loop. This achieves the same general purpose as the load coil describe above, namely, to extend the viable range of a loop beyond normal limits of approximately 18,000 feet. There are two types of repeaters in common use throughout BellSouth's nine-state region. Voice frequency repeaters, the most common, are designed to amplify the analog signal carried in the voice frequency band of the loop. Digital repeaters extend the useful range of loops used for digital services.

Q. HOW DOES A REPEATER INTERFERE WITH AN XDSL SIGNAL?

A. Voice frequency repeaters can distort a digital signal to the point that high bit-rate error rates make the signal unusable. Digital repeaters may or may not interfere with xDSL type services, but success is very dependent upon the type of digital service being provisioned

Q. PLEASE DESCRIBE THE FUNCTION OF A BRIDGED TAP.

A. A bridged tap is a metallic extension to a loop such that the same loop appears at two separate service locations. Obviously, the loop can be used at only one of the two service locations at a given time; however, bridged tap is useful in increasing the efficiency of overall loop usage.

Q. HOW DOES A BRIDGED TAP INTERFERE WITH AN XDSL SIGNAL?

A. Bridged tap increases the inductance for the loop at both service locations; thus the length of the bridged tap must be considered along with the length of the loop to the service location.

Q. PLEASE SUMMARIZE YOUR TESTIMONY CONCERNING LINE SHARING.

A. My testimony describes the means by which BellSouth provisions line sharing, including the work that must be done to remove existing barriers to line sharing in BellSouth's loops to permit a successful installation. The Authority should approve the cost studies submitted by Ms. Caldwell with her testimony that reflect the provisioning process I have described.

Access to Sub-Loop Elements

Q. WHAT ARE SUB-LOOP ELEMENTS?

A. Sub-loop elements are the individual elements that make up the entire loop that extends from the BellSouth central office to the demarcation point between BellSouth's network and the inside wire at the end user customer's premises. BellSouth offers access to the following sub-loop elements:

- Unbundled Loop Feeder
- Unbundled Loop Distribution
- Unbundled Loop Concentration
- Unbundled Network Interface Device (NID)
- Unbundled Intrabuilding Network Cable (UINC)
- Unbundled Network Terminating Wire (UNTW)

Q. PLEASE DISCUSS THE SUB-LOOP ELEMENT REFERRED TO AS LOOP FEEDER.

A. In many cases BellSouth deploys a multiple circuit copper cable (for example, a 1,200 pair cable) from its central office to a remote terminal or cross-box located somewhere between the central office and the end user's location. Each pair within this cable can be used to carry a single voice conversation. This section of the loop is called the loop feeder. Sometimes, loop feeder has been referred to as "the first mile" of the loop in that it is the first section of cable leaving the BellSouth central office headed towards a customer's premises. This loop feeder section may also be provisioned using fiber optic cable.

The copper pairs of the loop feeder are then individually cross-connected to pairs in smaller cables called loop distribution. The loop distribution cables then serve all the houses or businesses in a sub-section of one of the central office's serving areas.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS LOOP CONCENTRATION.

A. Loop concentration is equipment such as digital loop carrier equipment used to concentrate the individual loop distribution pairs (which I discuss below) onto digital transmission facilities such as DS-1 circuits in the loop feeder facilities. Unbundled loop concentration allows a CLEC to digitize and multiplex its loop distribution pairs (either its own or those it acquired from BellSouth on an unbundled basis) onto digital facilities for transmission to the BellSouth central office.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS LOOP DISTRIBUTION.

A. Loop distribution facilities have been referred to as the "last mile" because these are the facilities that go the "last mile" to the customer's premises. The loop distribution cables are used to, in effect, "fan out" the availability of the cable pairs and/or transmission channels, if DLC equipment is used, from the loop feeder cables. In this regard, the cables one would see within a sub-division are generally loop distribution cables. Between the loop feeder cable and the loop distribution cable is a cabinet, above ground "hut", or below ground "controlled environment vault" within which cross-connections and/or electronics are located. These structures have been variously described as the “Feeder/Distribution Interface”, the “Serving Area Interface”, the “Remote Terminal” or, in its most simplistic configuration a “cross-connect box” or simply “cross-box”. Any of these terms can be used to refer to the function of connecting a copper cable pair or fiber optic facility in the loop feeder facilities to a copper cable pair in the loop distribution facilities. In the case of multi-story commercial buildings, the loop distribution facility eventually runs to the customer’s building and is then connected to Intrabuilding Network Cable (INC) and/or Network Terminating Wire (NTW). In single family dwellings, a “drop wire” connects the entire loop to the device called the Network Interface Device (NID).

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS INTRABUILDING NETWORK CABLE (INC).

A. In multi-story buildings, and in some campus-type properties, INC is that part of BellSouth’s loop facilities extending from a cross-connect terminal at, or close to, the entrance point of the distribution cable. INC is another sub-loop element that is located on the network side of the demarcation point between BellSouth’s network and the inside wire at an end user customer’s premises. INC in some cases is referred to as “riser cable.” Although INC may in some cases connect directly to the NID, typically it connects to NTW in a wiring closet prior to final termination at the end user’s NID.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS NETWORK TERMINATING WIRE (NTW).

A. NTW is another sub-loop element of the BellSouth loop. Depending on the type of building served, NTW provides a copper wire transmission path between distribution cable or INC, and “fans out” to individual customer suites or rooms within that building. In this sense, NTW is the “last” part of the loop on the network side of the demarcation point.

Q. PLEASE DESCRIBE THE SUB-LOOP ELEMENT REFERRED TO AS THE NETWORK INTERFACE DEVICE (NID).

A. Simply stated, the NID provides a demarcation point between BellSouth’s facilities (that is, the loop) and the customer’s facilities (that is, the inside wire). Thus, the NID provides a way to connect the loop to the inside wire. In some cases, the NID provides additional functions such as lightning protection and loopback testing.

To summarize, loop feeder cables are connected to loop distribution cables. Then, depending on the type of structure being served (house, small building, multi-story building, etc.), the distribution cable connects to either a drop wire or to INC and/or NTW, any of which then extends the loop to its final termination at the customer’s NID. The NID establishes the demarcation point between BellSouth’s network and the inside wire at the end user customer's premises. NTW, INC, loop distribution, loop concentration, and loop feeder are located on BellSouth's side of the demarcation point and, thus, comprise sub-loop elements of BellSouth's network.

Q. WHAT IS YOUR UNDERSTANDING OF THE FCC'S STATEMENT IN ITS THIRD REPORT AND ORDER AND FOURTH FUTHER NOTICE OF PROPOSED RULEMAKING, FCC 99-238, RELEASED NOVEMBER 5, 1999 (UNE REMAND ORDER) THAT BELLSOUTH IS REQUIRED TO PROVIDE CLECS ACCESS TO ILEC-OWNED INSIDE WIRING, AND WHAT IS ITS IMPACT, IF ANY?

A. First, let me set out what the FCC stated. The FCC's UNE Remand Order at ¶210 states:

> We clarify that "technically feasible points" would include a point near the customer premises, such as the point of interconnection between the drop and the distribution cable, the NID, or the MPOE. Such access would give competitors unbundled access to the inside wire sub-loop element, in cases where the incumbent owns <u>and</u> controls wire inside the customer premises. It would also include any FDI, whether the FDI is located at a cabinet, CEV, remote terminal, utility room in a multi-dwelling unit, or any other accessible terminal. (Emphasis added).

The FCC's Remand Order at Paragraph 169 describes more specifically "control" of inside wire as follows:

> Section 68.3 of our rules defines the demarcation point as that point on the loop where the telephone company's control of the wire ceases, and the subscriber's control (or, in the case of some multiunit premises, the landlord's control) of the wire begins. Thus, the demarcation point is defined by control; it is not a fixed location on the network, but rather a point where an incumbent's and a property owner's responsibilities meet. The demarcation point is often, but not always, located at the minimum point of entry (MPOE), which is the closest practicable point to where the wire crosses a property line or enters a building. In multiunit premises, there may be either a single demarcation point for the entire building or separate demarcation points for each tenant, located at any of several locations, depending on the date the inside wire was installed, the local carrier's reasonable and nondiscriminatory practices, and the property owner's preferences. Thus, depending on the circumstances, the demarcation point may be located either at the NID, outside the NID, or inside the NID.

The above paragraphs from the UNE Remand Order demonstrate that the FCC intended to include in the unbundling of what it refers to as "inside wire" those facilities that exist today on the network side of the demarcation point, and which are included in BellSouth's Accounts and

Subsidiary Records Categories as Network Terminating Wire (NTW), and that which are defined in Part 32 of the Uniform System Of Accounting (USOA) as Intrabuilding Network Cable (INC). As defined in several previous FCC Orders, however, “inside wire” is located on the customer’s side of the demarcation point and is under control of the end user or, in some cases, the property owner or the landlord. A CLEC should obtain access to the sub-loop elements NTW and INC from BellSouth in the same manner as it obtains access to any other unbundled network element. As to access to the inside wire on the customer’s side of the demarcation point, such access should be obtained from the end user or from the building owner. BellSouth is not opposed to providing unbundled access to its sub-loop elements, however BellSouth has sought clarification from the FCC that its use of the term "inside wire" in this docket is not the same as that phrase has traditionally been used in describing facilities on the customer's side of the demarcation point.

Q. PLEASE EXPLAIN HOW BELLSOUTH PROVIDES CLECS WITH UNBUNDLED ACCESS TO SUB-LOOP ELEMENTS.

A. BellSouth offers access to all elements of its loop network through sub-loop unbundling offerings that comply with the FCC’s UNE Remand Order and FCC Rule 319(a). In keeping with the full intent of the FCC’s UNE Remand Order, BellSouth is, and has been, providing sub-loop unbundling at technically feasible points of access.

In order to provide CLECs with access to unbundled sub-loop elements, BellSouth will construct a separate access terminal in proximity to BellSouth's terminal. The CLEC installs its own terminal in proximity to the access terminal. BellSouth then extends tie cables between its terminal and the access terminal. These tie cables are connected to the unbundled sub-loop elements the CLEC desires to acquire from BellSouth. The CLEC extends a tie cable from its terminal to the access terminal and thus the unbundled sub-loop elements. BellSouth believes that such access affords CLECs a meaningful opportunity to compete, while also maintaining network security and reliability.

Q. HAVE YOU PREPARED AN EXHIBIT TO ILLUSTRATE BELLSOUTH'S PROPOSAL REGARDING CLEC ACCESS TO UNBUNDLED SUB-LOOP ELEMENTS?

A. Yes. Exhibit WKM-1, which is attached to this testimony, contains three (3) pages that I hope will aid in understanding this issue. Page 1 shows the typical access to unbundled NTW in a "garden" apartment. The point to be made here is that the access terminal is cross-connected by tie cable pairs with the terminals of both BellSouth and the CLEC thus allowing a CLEC access while preserving network reliability and security. The access terminal in this scenario could also function as a single point of interconnection (SPOI)[1] for access to unbundled NTW (UNTW). Page 2

[1] As used by the FCC in its UNE Remand Order, the term "SPOI" refers to a single point of interconnection at multi-unit premises that is suitable for use by multiple telecommunications carriers.

shows BellSouth's proposed form of access for a CLEC to the sub-loop element UINC. BellSouth proposes the use of an access terminal or connector block on the cross-connect panel that is cross-connected by tie cable with the terminals of both BellSouth and the CLEC. The cross-connect panel, which serves as the access terminal for UINC, could also serve as a SPOI for use by multiple carriers. Page 3 shows access to the sub-loop element Unbundled Loop Distribution.

Q. WILL BELLSOUTH PROVIDE A CLEC WITH DIRECT ACCESS TO BELLSOUTH'S SUB-LOOP ELEMENTS?

A. No. Such direct access would reduce network security and reliability, which the FCC found to be indicators that a given arrangement is not technically feasible. (First Report and Order in Docket 96-325, ¶ 203) The FCC requires that "each carrier must be able to retain responsibility for the management, control, and performance of its own network." (First Report and Order in Docket 96-325, ¶ 203) Direct access, if allowed, would render BellSouth incapable of managing and controlling its network in the provision of service to its and certain CLECs' end user customers. Therefore, due to concerns about network reliability and security, BellSouth believes that direct access to its network facilities by CLECs is not in the best interests of end user customers, whether they are end user customers of BellSouth or of the CLECs.

While I am in no way disparaging CLECs' technicians, with direct access it is possible for the CLECs' technicians to intentionally or unintentionally disrupt BellSouth's end user's service as well as the service of CLECs using unbundled loops or unbundled sub-loop elements acquired from BellSouth. That simply presents an unnecessary risk.

Further, with direct access, BellSouth would be at the CLECs' mercy to tell BellSouth how, where, and when the CLEC has used BellSouth's facilities. This would unnecessarily complicate the maintenance of inventory records. Indeed, how could BellSouth ever have an accurate record of its facilities if every CLEC in the state had direct access to these facilities? Of course, the lack of accurate inventory information would result in provisioning and repair of customer service becoming more error prone. I do want to be perfectly clear about this. What we are talking about here, is allowing technicians from any and every CLEC in Tennessee to walk into an equipment room in a high rise building and start appropriating pairs and facilities for its own use, without consulting with anyone and without any obligation to keep appropriate records so that the next person in the room knows what belongs to whom. It doesn't take much imagination to know what a disaster this would end up being for BellSouth and for the customers in the building in question.

Q. HAVE ANY STATE UTILITY COMMISSIONS ADDRESSED THE ISSUE OF CLEC ACCESS TO BELLSOUTH'S SUB-LOOP ELEMENTS?

A. Yes. The Florida Public Service Commission (FPSC) considered the issue of access to the sub-loop element UNTW in the arbitration proceedings between BellSouth and MediaOne in Docket No. 990149-TP. Also, the Georgia Public Service Commission (GPSC) considered this same issue of access to UNTW in the arbitration proceedings between BellSouth and MediaOne in Docket No. 10418-U.

The FPSC denied direct access to UNTW and required an access terminal to be placed between BellSouth's network and MediaOne's network. The access terminal gives CLECs the access to UNTW they desire without reducing network reliability and security. The FPSC determined that MediaOne and others could gain access to UNTW without reducing network security and reliability by adopting BellSouth's proposed form of access. A portion of that Order follows:

> The record does not contain evidence of any case which would support a proposal where one party is seeking to use its own personnel to, in effect, modify the configuration of another party's network without the owning party being present. We find that MediaOne's proposal to physically separate BellSouth's NTW cross-connect facility from BellSouth's outside distribution cross-connect facilities is an unrealistic approach for meeting its objectives. Therefore, BellSouth is perfectly within its rights to not allow MediaOne technicians to modify BellSouth's network.
>
> …Based on the evidence presented at the hearing, we believe that

> it is in the best interests of the parties that the physical interconnection of MediaOne's network be achieved as proposed by BellSouth.
>
> We find from the record that at least one other CLEC in Florida and an unknown number of CLECs in other states have been able to provide service based on BellSouth's NTW proposal. Thus, we believe that MediaOne should be able to provide service using BellSouth's NTW proposal… (FPSC in MediaOne Docket No. 990149-TP.)

The Georgia Commission likewise found that MediaOne should gain access through the use of an access terminal and BellSouth's facilities. In its Order, the Commission stated:

> As stated in the prior section, to the extent there is not currently a single point of interconnection that can be feasibly accessed by MediaOne, consistent with the FCC's Third Report and Order, BellSouth must construct a single point of interconnection that will be fully accessible and suitable for use by multiple carriers. Such single points of interconnection shall be constructed consistent with MediaOne's proposal such that MediaOne shall provide its own cross connect (CSX) facility in the wiring closet to connect from the building back to its network. MediaOne would then be able to connect its customers within the MDU [that is, the Multiple Dwelling

Unit] by means of an ‘access CSX’. (GPSC in MediaOne Docket No. 10418-U.)

Q. WHAT DOES BELLSOUTH WANT THE AUTHORITY TO DO WITH REGARD TO THE ISSUE OF ACCESS TO THE SUB-LOOP ELEMENTS YOU HAVE DESCRIBED?

A. BellSouth believes the use of access terminals gives CLECs access to unbundled sub-loop elements while still maintaining network reliability and security. Such access should apply to all sub-loop elements. Accordingly, the Authority should approve the cost studies and resulting rates submitted with the testimonies of Ms. Caldwell and Mr. Ruscilli.

Customized Routing

Q. WHAT IS CUSTOMIZED ROUTING?

A. Customized routing (which has also been referred to as selective routing) allows calls from CLEC customers served by a BellSouth switch to reach the CLEC’s choice of operator service or directory assistance service platforms instead of BellSouth’s operator service and directory assistance service platforms. Customized routing can be provided when a CLEC acquires unbundled local switching from BellSouth or resells BellSouth’s local exchange services.

Q. BRIEFLY DESCRIBE THE METHODS AVAILABLE FOR CUSTOMIZED ROUTING.

A. The first method of providing customized routing that BellSouth has made available is the Line Class Code (LCC) method. Availability of customized routing capability using LCCs is offered on a first-come, first-served basis. To date, BellSouth has not denied any request for selective routing based on lack of LCC capacity.

Q. WHAT IS THE SECOND METHOD BY WHICH BELLSOUTH PROVIDES CUSTOMIZED ROUTING?

A. The second method for providing customized routing is through the use of BellSouth's Advanced Intelligent Network (AIN) platform. A technical trial of customized routing using BellSouth's AIN platform commenced in Louisiana, in August 1998, and was successfully completed in September 1998. A second trial commenced from May 1999 and successfully completed in August 1999.

BellSouth has completed work on enhancements to its AIN Service Management System (SMS) which will facilitate CLECs' ability to create and update routing information for the CLECs' end users. BellSouth recently completed end-to-end testing (ETET) of this enhancement.

By providing CLECs a choice of customized routing methods, BellSouth better enables CLECs to compete based upon their own business plans and priorities.

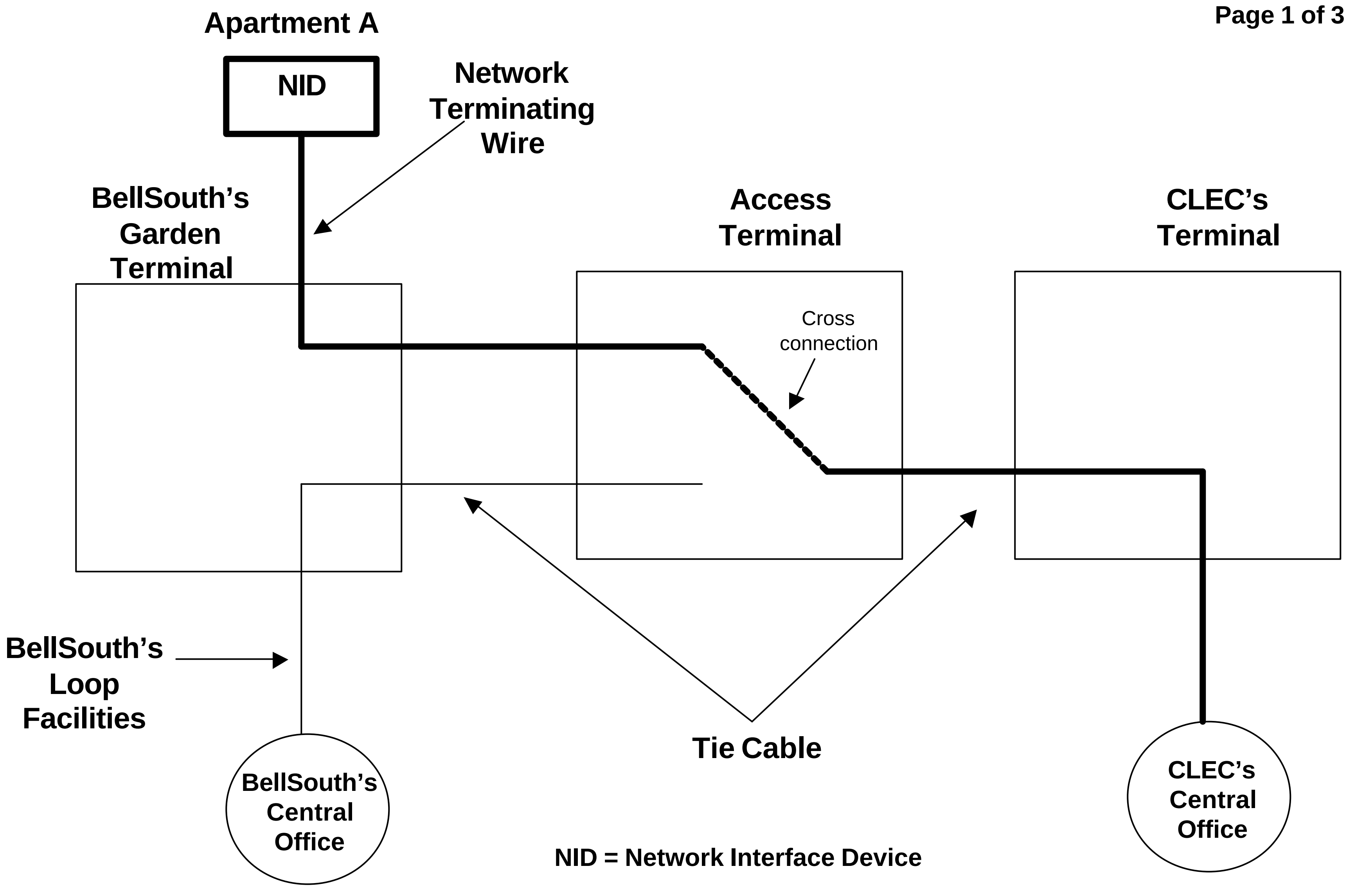
Q. PLEASE SUMMARIZE YOUR TESTIMONY WITH REGARD TO CUSTOMIZED ROUTING.

A. BellSouth offers two methods by which CLECs may obtain customized routing. Accordingly, the Authority should approve the cost studies and resulting rates for the AIN method as submitted in the testimonies of Ms. Caldwell and Mr. Ruscilli. The Authority has previously approved the rates for the Line Class Code method.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

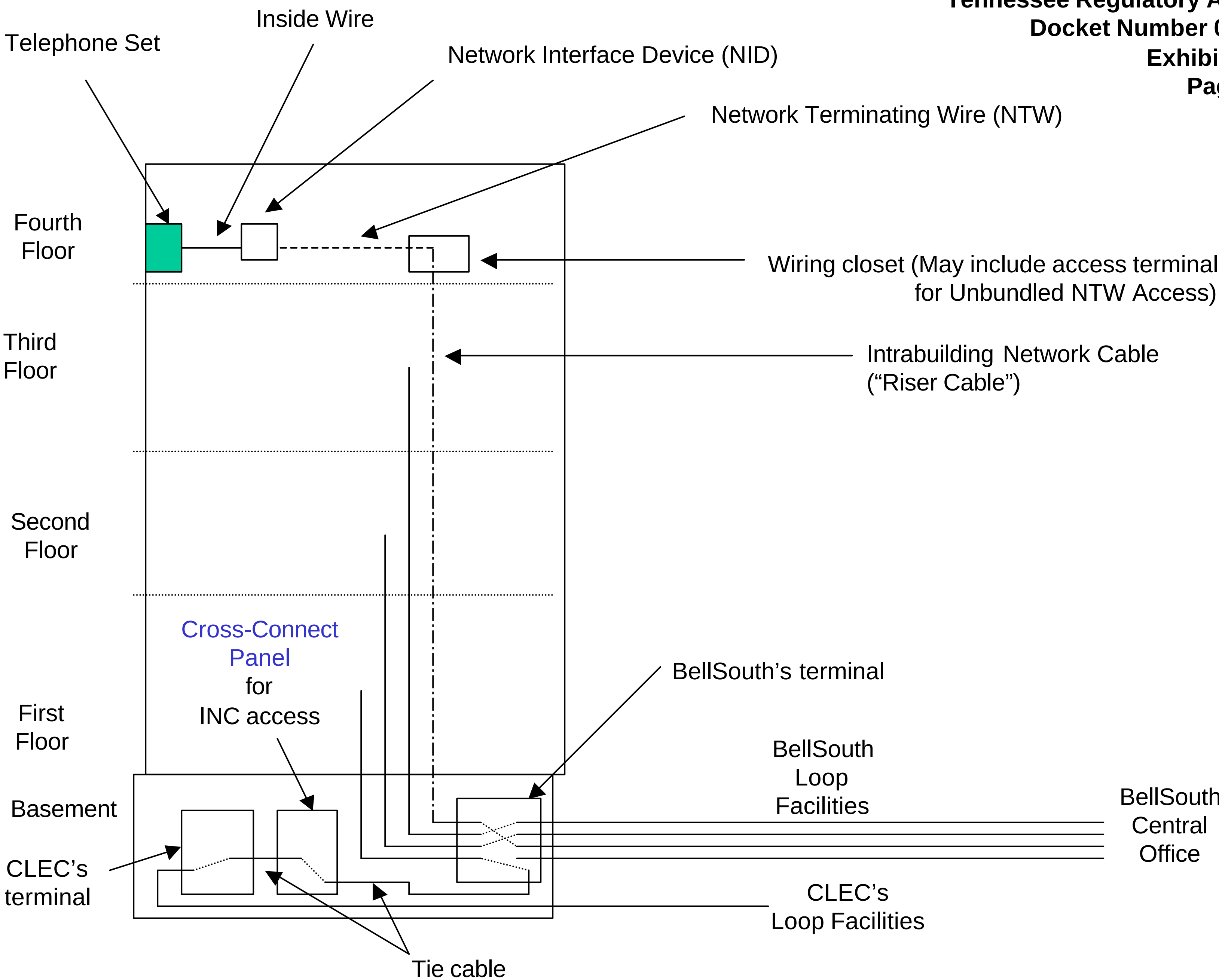
Typical access to unbundled network terminating wire in "garden" apartment



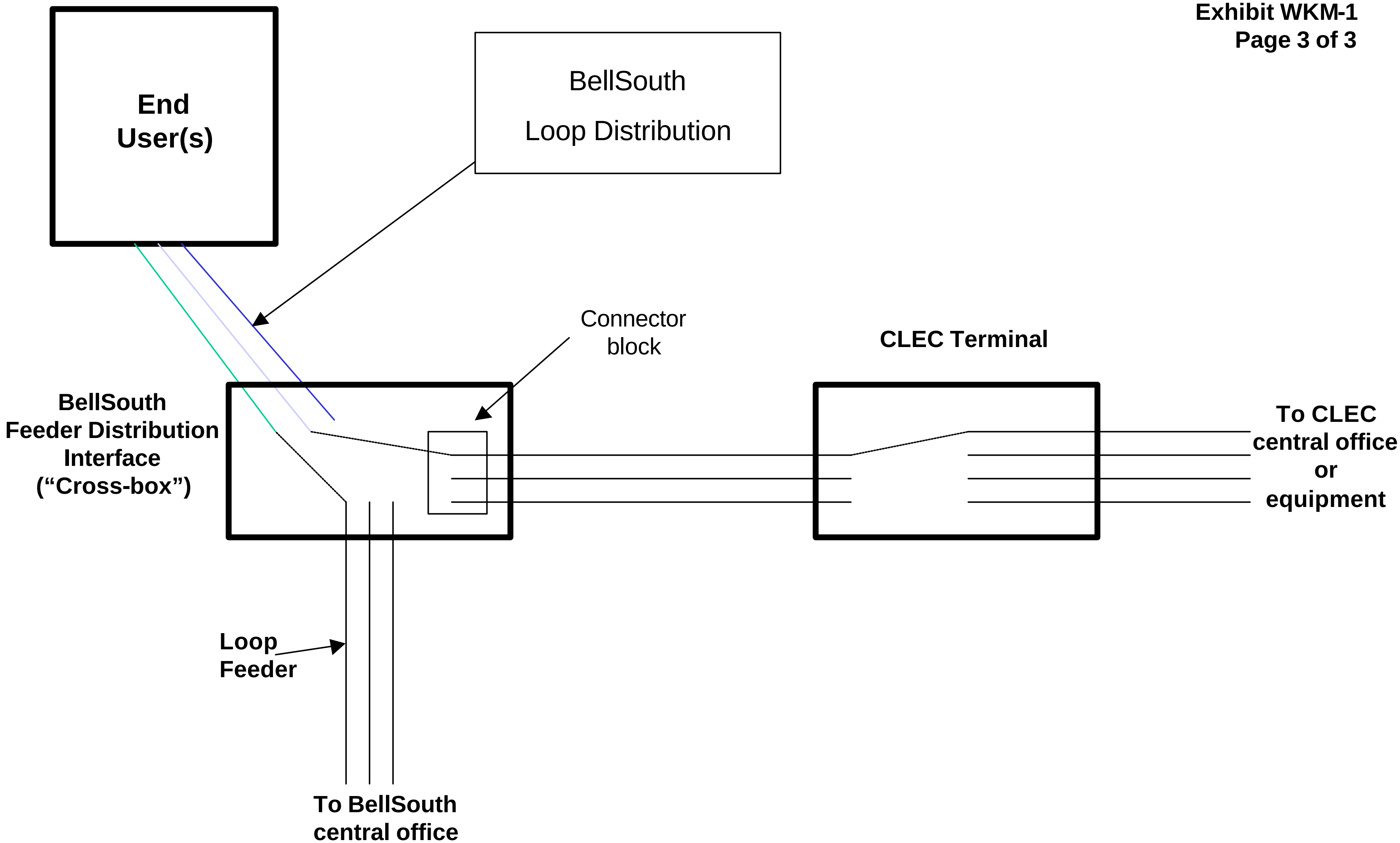
NID = Network Interface Device

BellSouth's proposed form of access

BellSouth Telecommunications, Inc.
Tennessee Regulatory Authority
Docket Number 00-00544
Exhibit WKM-1
Page 2 of 3



Access to the Sub-loop Element Loop Distribution



AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared W. Keith Milner –Senior Director – Interconnection Services, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 00-00544 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 33 pages and 1 exhibit(s).

W. Keith Milner

Sworn to and subscribed
before me on 11/10/00

Suzy A. Sherwood
NOTARY PUBLIC

SUZY A. SHERWOOD
MY COMMISSION EXPIRES
APR 28 2003
FAYETTE COUNTY, GEORGIA
NOTARY PUBLIC

BELLSOUTH TELECOMMUNICATIONS, INC.

TESTIMONY OF RONALD M. PATE

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

November 13, 2000

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. AND YOUR BUSINESS ADDRESS.

A. My name is Ronald M. Pate. I am employed by BellSouth Telecommunications, Inc. ("BellSouth") as a Director, Interconnection Services. In this position, I handle certain issues related to local interconnection matters, primarily operations support systems ("OSS"). My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I graduated from Georgia Institute of Technology in Atlanta, Georgia, in 1973, with a Bachelor of Science Degree. In 1984, I received a Masters of Business Administration from Georgia State University. My professional career spans over twenty-five years of general management experience in operations, logistics management, human resources, sales and marketing.

I joined BellSouth in 1987, and have held various positions of increasing responsibility.

Q. HAVE YOU TESTIFIED PREVIOUSLY?

A. I have testified before the Public Service Commissions in Alabama, Florida, Georgia, Louisiana, South Carolina, the Tennessee Regulatory Authority and the North Carolina Utilities Commission.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A The purpose of my testimony is to address the FCC'S Third Report And Order And Fourth Further Notice Of Proposed Rulemaking In CC Docket 96-98 (FCC 99-238); Released November 5, 1999, (UNE Remand Order) as its relates to BellSouth's OSS including a new requirement that BellSouth must provide Competitive Local Exchange Carriers (CLECs) access to loop make-up data via BellSouth's OSS. Additionally, I will address BellSouth's OSS solution to satisfy the FCC's Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, released December 9, 1999 (Line Sharing Order) requiring that incumbent LECs unbundle the high frequency portion of the loop to permit the CLECs to provide xDSL-based service by sharing the lines with the incumbent's voiceband service.

Q. DOES BELLSOUTH PROVIDE CLECS NONDISCRIMINATORY ACCESS TO ITS OSS?

A. Yes. BellSouth provides CLECs nondiscriminatory access to its OSS functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing through robust and reliable manual and electronic interfaces. BellSouth's OSS interfaces for CLECs are operated and available on a nine-state regional basis in BellSouth's serving areas, including those in Tennessee. These interfaces allow CLECs the same pre-ordering and ordering functions that BellSouth provides to itself.

Q. DID THE FCC CHANGE ITS DEFINITION OF OSS IN THE UNE REMAND ORDER?

A. No. Specifically, the FCC defined OSS as consisting of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC's database and information.[1] Further, it stated " We find no reason to modify our definition of OSS." The FCC clarified that the pre-ordering function includes access to loop qualification information. Loop qualification information identifies the physical attributes of the loop plant (such as loop length, the presence of analog load coils and bridge taps, and the presence and type of Digital Loop Carrier) that

[1] FCC 99-238 paragraph 425

enable carriers to determine whether the loop is capable of supporting xDSL and other advanced technologies.[2] In summary, the FCC did not redefine OSS, rather it clarified the pre-ordering function to include access to loop qualification information.

Q. DID THE FCC'S UNE REMAND ORDER IMPACT BELLSOUTH'S OSS AS THESE OSS ARE USED BY CLECS?

A. The UNE Remand Order did not impact the existing CLEC OSS access offered by BellSouth other than to specify at paragraph 426 that "the pre-ordering function includes access to loop qualification [make-up] information."

Q. WHAT IS BELLSOUTH'S RESPONSE TO THE FCC'S REQUIREMENT THAT LOOP MAKE-UP INFORMATION BE AVAILABLE TO CLECS AS PART OF THE PRE-ORDERING FUNCTION?

A. BellSouth has developed and implemented procedures to provide CLECs with detailed loop make-up information via the manual Service Inquiry (SI) process. Additionally, BellSouth has under development a detailed mechanized Loop Make-up pre-order process that is accessible through all current electronic interfaces that support pre-order functions (LENS,

[2] FCC 99-238 paragraph 426

TAG, and RoboTAG®). This process will be available to any CLEC that is interested in incorporating these procedures into its interconnection agreement. BellSouth witnesses Ms. Caldwell and Mr. Ruscilli address the costs and BellSouth's proposed rates associated with the work required to incorporate this process into the pre-ordering function.

Q. PLEASE DESCRIBE THE MANUAL LOOP MAKE-UP SI PROCESS.

A. The loop make-up data is defined as the physical characteristics of the loop facilities beginning at the BellSouth central office. The data is listed in sequential order, and ends at the serving distribution terminal. Loop make-up data consists of such information as cable gauge and length, bridged taps, load coils, presence of Digital Loop Carrier ("DLC"), and other equipment that is part of local loop facilities.

The CLEC completes the "Customer Information" section of the Loop Make-up SI form indicating if it wants the loop make-up by telephone number, circuit identifier or address. The CLEC submits the Loop Make-up SI form to the Complex Resale Services Group ("CRSG") or their Account Team. The CRSG/Account Team forwards the SI form to BellSouth's Outside Plant Engineering Service Advocacy Center ("SAC"). The SAC verifies the availability of loop facilities. If the Loop Make-up SI indicates the CLEC wants the make-up by telephone number or circuit identifier, the SAC will return a specific make-up for the requested telephone number or circuit identifier. If the Loop Make-up SI indicates the CLEC wants the make-up by address, the SAC will return a specific make-up for the requested address.

The SAC will supply make-up for either a suitable copper pair(s) and DLC pairs as requested by the CLEC for the requested address, telephone number or circuit identifier. If either a copper pair, or DLC, but not both exists at that address/telephone number/circuit identifier, the SAC will indicate in the "Comments Section" which is not available at the requested address/telephone number/circuit identifier. The following is an example comment for an existing DLC make-up where a copper pair does not exist: "Provided DLC make-up at above address, no copper pairs exist at this location". Again, the loop make-up will be listed in sequential order starting at the central office and ending at the end user terminal. The SAC will return the completed Loop Make-up SI to the CRSG/Account Team. The CRSG/Account Team reviews the SI form for completeness and forwards the loop make-up data to the CLEC via electronic mail. They also forward the information to the Local Carrier Service Center ("LCSC") for bill preparation. The LCSC provides a Firm Order Confirmation ("FOC") to the CLEC and generates a service order that automatically completes for billing the service.

Q. IS THE MANUAL LOOP MAKE-UP SERVICE INQUIRY MERELY AN INTERIM PROCESS UNTIL ELECTRONIC ACCESS IS AVAILABLE?

A. No. The manual Loop Make-up ("LMU") SI process will continue to be a means for obtaining loop make-up information, even after the electronic Loop Make-up SI process is available. CLECs may obtain documentation for the current Unbundled Network Element ("UNE") pre-ordering and ordering information pertaining to BellSouth's manual loop make-up at BellSouth's Website: http://www.interconnection.bellsouth.com/guides/bpobr.html.

Q. CAN YOU ESTIMATE THE QUANTITY OF BELLSOUTH LOOPS THAT HAVE DETAILED LOOP INFORMATION POPULATED WITHIN LFACS THEREBY REDUCING THE NEED FOR A MANUAL SI?

A. While 100% of BellSouth's loops are populated in LFACS with certain basic information, not all will have the detailed loop make-up information. However, in the high-populated metropolitan areas where the marketing efforts of CLECs are most likely to be concentrated, it is approximated that as much as 80% of loops with detailed loop make-up information are populated in LFACS. So it is only for that remaining small percentage of loops that the manual SI process may have to be utilized. And whenever CLECs must use the manual SI process for these remaining loops, BellSouth will load the resulting loop make-up information in LFACS for future queries.

Q. PLEASE DISCUSS THE MEANS BELLSOUTH HAS DEVELOPED TO PROVIDE CLECS WITH ELECTRONIC ACCESS TO LOOP MAKE-UP INFORMATION AND ELECTRONIC ORDERING OF xDSL LOOPS?

A. BellSouth is developing a comprehensive electronic process for pre-ordering and ordering for CLECs via the Telecommunications Access Gateway ("TAG"), RoboTAG™ and Local Exchange Navigation System ("LENS"). It provides electronic access to loop make-up information from the Loop Facilities Assignment and Control System ("LFACS") and electronic ordering of xDSL loops.

BellSouth will also be enhancing the Electronic Data Interchange ("EDI") to provide electronic ordering of xDSL loops. These enhancements are currently in beta testing with selected CLECs. Interested CLECs will need to conduct System Readiness Testing ("SRT") with BellSouth prior to using these new functions when available for production. If they have not done so already, CLECs must also upgrade their TAG interface to the TCIF 9.0 version in order to test the new functions and then be able to use them in production. CLECs may obtain information on the manual and electronic ordering of BellSouth Loop Make-up at the BellSouth Website:

http://interconnection.bellsouth.com/products/UNE/bstlmu.pdf.

Q. PLEASE DESCRIBE BELLSOUTH'S LOOP QUALIFICATION SYSTEM ("LQS") AND ITS PURPOSE IN SUPPORTING BELLSOUTH'S DSL PRODUCT.

A. LQS stands for Loop Qualification System. LQS was designed as a tool for Network Service Providers, the purchasers of BellSouth's tariffed industrial class ADSL offering to determine whether a particular service location is qualified for BellSouth's industrial class ADSL offering based on BellSouth's defined technical parameters. In other words, by entering a telephone number or circuit identifier, LQS provides the user with a qualified "yes/no" response based on the technical parameters of BellSouth's industrial class ADSL offering only. LQS does not provide loop make-up information as contemplated by the FCC's UNE Remand Order.

Q. DOES BELLSOUTH PROVIDE CLECs ACCESS TO LQS?

A. Yes. Subsequent to the FCC's UNE Remand Order, LQS was made available for use by CLECs on an interim basis until the mechanized loop make-up interface is deployed. However, the purpose of LQS did not change with making this access to CLECs available - it remains a tool to provide a response to the inquirer if the location is qualified for BellSouth's ADSL service. Lastly, LQS does not provide the level of detailed information in order that a CLEC may make an independent judgment about whether the loop is capable of supporting advanced services equipment the CLEC intends to install.

Q. HOW DOES A CLEC OBTAIN ACCESS TO LQS?

A. A CLEC may contact its BellSouth account team to obtain information on gaining access to LQS. The account team will assist with the appropriate documentation necessary to obtain a password and resulting access to LQS. CLECs may obtain a Loop Qualification System ("LQS") DLEC/CLEC Job Aid via the BellSouth Website: http://www.interconnection.bellsouth.com/guides/bpobr.html

Q. DOES BELLSOUTH'S BUSINESS-CLASS ADSL UTILIZE LQS?

A. Yes. BellSouth's business class ADSL, sold from the FCC Tariff No.1 and intended primarily for business applications, utilizes LQS as a "screening function" to determine if a manual SI and subsequent manual loop make-up is required. In those instances that LQS provides a response that the loop under review will meet the required data speed, BellSouth will begin its order, design and provisioning phase, without involving the SI process.

In the remaining instances, where the response indicates that the loop under review will not perform at the required data speeds, BellSouth utilizes the manual SI and subsequent loop make-up to obtain exact loop make-up information.

Q. YOU HAVE REFERRED TO BOTH BELLSOUTH BUSINESS CLASS ADSL AND INDUSTRIAL CLASS ADSL. PLEASE DIFFERENTIATE.

A. My reference to BellSouth's business class ADSL is describing a high-speed service with data rates of:

- 384 Kbps x 384 Kbps
- 768 Kbps x 512 Kbps
- 1.5 – 1.8 Mbps x 512 - 768 Kbps
- 2 – 4 Mbps x 640 – 896 Kbps
- 4 – 6 Mbps x 640 – 896 Kbps
- 192 Kbps x 192 Kbps.

The business class offering will provide guaranteed performance levels to provide a desired class of service including symmetric and asymmetric data rates. The BellSouth business class ADSL is comparable to UCLs CLECs will be ordering.

My reference to BellSouth's industrial class ADSL is describing a comparatively lower speed service, downstream data rate up to 1.5 Mbps and upstream data rate up to 256 Kbps. The cost structure for this offering does not support special actions by BellSouth to either condition an existing loop or to provide a new loop in order to make ADSL work at a given location. The 1.5 Mbps x 256 Kbps offering, referred to as industrial service, is a "best effort", low cost, mass market offering.

Q. WHAT IS THE SOURCE OF THE LOOP INFORMATION CONTAINED WITHIN LQS?

A. The database of record for loop make-up information is LFACS. Thus, the source of loop information in LQS is LFACS. However, LQS also utilizes the additional software systems described below:

- Loop Engineering Information System ("LEIS") - An umbrella system with several modules, one of which is LEAD.

- Loop Engineering Assignment Data ("LEAD") - LEAD is a snapshot of the LFACS database. It receives current data once a month for all wire centers.

- Hands-Off Assignment Logic - (“HAL”) HAL is a BellSouth developed software system designed to pull information from LFACS and join transactions that can not be performed by LFACS, including assignment of most service orders, among which includes some assignments on ADSL facilities.

Q. IS DIRECT ACCESS TO LFACS OR LEIS/LEAD REQUIRED IN ORDER TO PROVIDE CLECS WITH DETAILED INFORMATION ABOUT THE LOOP?

A. No. BellSouth’s obligation is to provide requesting carriers the same underlying information that BellSouth has in any of its own databases or other internal records[1]. BellSouth’s mechanized OSS interface and manual interface provides a means to submit either a mechanized LMU pre-order query or a manual LMU Service Inquiry (“SI”) to LFACS and receive a response. In the case of LEIS/LEAD, access may be obtained by CLECs for LQS, which provides a “yes/no” qualified response.

Q. COULD I NOW ASK YOU TO ADDRESS LINE SHARING? HOW HAS THE FCC DEFINED LINE SHARING?

[1] CC Docket 96-68, Paragraph 427, Page 193, released November 5, 1999

A. In its Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, released December 9, 1999, page 10, paragraph 13, the FCC adopted the requirement that incumbent LECs "unbundle the high frequency portion of the loop to permit competitive LECs to provide xDSL-based services by sharing lines with the incumbent's voiceband services." Additionally, on page 12, paragraph 17 of the same order, the FCC described Line Sharing generally as "the ability of two different service providers to offer two services over the same line, with each provider employing different frequencies to transport voice or data over that line."

Q. PLEASE DESCRIBE BELLSOUTH'S APPROACH TO DEVELOPING OSS FUNCTIONALITY THAT WILL ELECTRONICALLY PROCESS CLEC XDSL AND LINE SHARING SERVICE REQUESTS.

A. BellSouth is implementing a vendor solution provided by Telcordia Technologies, Inc. to provide the OSS necessary for the pre-ordering, ordering and provisioning of CLEC xDSL compatible loops and Line Sharing. This extensive technical solution provides Pre-Existing Licensed Software and Marketable Licensed Software and Services to integrate Licensed Software for UNE Remand CLEC xDSL and Line Sharing into BellSouth's operations environment. As an example, the solution includes the establishment of a new corporate gateway along with a new system architecture for the processing of Local Service Requests ("LSRs") for the UNE Remand and Line Sharing Orders.

The Corporate gateway establishes a single entry point for processing of xDSL requests. It provides a flexible and expandable independent gateway that has security, logging and mapping capabilities,
The Corporate gateway is configured to provide Common Object Request Broker Architecture ("CORBA") interfaces for the TAG client APIs from the CLECs and an interface for BellSouth's OSS.
This allows pre-ordering and ordering functionality utilizing BellSouth's LENS, TAG, and Robo®Tag electronic interfaces. It also provides a navigator interface for the Local Service Requests Router ("LSRR"), which permits firm ordering functionality utilizing the BellSouth EDI electronic interface.

The new system architecture known as Delivery Order Manager will automate many of the service requests functions. Delivery Order Manager can be described as a work flow sequencing and control "engine" that works with partner applications to accept and process service requests. Delivery Order Manager will manage the access to all the databases needed to process a request. Some commonly known databases for pre-order and order functionality are CRIS, CABS, RSAG, ATLAS, and P/SIMS. In addition, Delivery Order Manager will access

LFACS for queries for loop make-up information. Delivery Order Manager also interfaces with a new Service Order Generator for mechanized service order creation allowing flow through of the requests to BellSouth's Service Order Communications System ("SOCS"). In addition to the software requirements and associated software Right-To-Use ("RTU") fees, the Telcordia provided solution also provides support services. Support services include such items as:

- Platform planning and support
- Installation and system administration support
- Services integration testing
- Training and documentation

Q. IS THE SCOPE OF WORK THAT IS TO BE PROVIDED BY TELCORDIA EXCLUSIVELY FOR CLEC OSS CAPABILITIES ASSOCIATED WITH THE UNE AND LINE SHARING ORDERS?

A. No. The majority of the work done in this effort is for OSS capabilities associated with UNE Remand and Line Sharing orders, however, Telcordia is performing additional work on Electronic Access Ordering ("EAO") functionality. EAO will provide ASR pre-order functionality for address validations and Connecting Facility Assignment ("CFA") inquiries. Approximately $3.2 million is committed for licensed software Right-to-Use fees for EAO.

Q. WHAT IS THE CURRENT VALUE OF THE SOFTWARE AND SERVICES SCOPE OF WORK THAT WILL BE PERFORMED BY TELCORDIA FOR BELLSOUTH IN THE UNE REMAND FOR XDSL AND LINE SHARING EFFORT?

A. The software and service fees total approximately $69,500,000 for the UNE Remand for xDSL and Line Sharing software and services provided by Telcordia Technologies, Inc. This includes approximately $28,500,000 for UNE Remand for CLEC xDSL (including 3 change notices) and approximately $41,000,000 for Line Sharing. This does not include the approximate $3,200,000 for software fees described previously for EAO functionality.

Q. PLEASE SUMMARIZE THE BENEFITS OF THE TELCORDIA SOLUTION FOR XDSL AND LINE SHARING TO BELLSOUTH AND ITS CLEC CUSTOMERS.

A. The Telcordia solution offers xDSL pre-ordering functionality utilizing BellSouth's LENS, TAG, and Robo®Tag electronic interfaces. It provides firm order functionality utilizing BellSouth's LENS, TAG, RoboTAG®, and EDI electronic interfaces. A navigator interface for the Local Service Requests Router ("LSRR") permits ordering functionality utilizing the

BellSouth EDI electronic interface. The mechanized LMU may be requested using multiple types of queries (i.e. by working telephone number, by working circuit identifier, query by spare facility at an address, query and reserve spare facility, and cancellation of a reservation). The Telcordia solution offers electronic processing of Line Sharing service requests allowing flow-through within BellSouth's OSS. Important benefits also include the ability to inventory and assign BellSouth facilities and splitters at the pre-specified CLEC meet points. These capabilities provided by the Telcordia solution translate into reliable, fast and accurate processing of CLEC xDSL and Line Sharing service requests. It provides state-of-the-art technology with the ability to process the anticipated volumes of requests in a cost-effective manner and to build future applications and functionalities.

Q. BASED ON CURRENT PLANS, WHEN WILL ELECTRONIC PRE-ORDER AND ORDERING CAPABILITIES BE AVAILABLE UNDER THE TELCORDIA SOLUTION?

A BellSouth currently has the pre-ordering functionality which includes loop make-up and the xDSL compatible loop firm order functionality in a Beta testing environment. The pre-ordering functionality for xDSL is targeted for deployment into the production environment in mid-to-late November 2000. Some defects for the ordering functionality discovered during Beta testing still remain. BellSouth is working with Telcordia to establish dates when the defects will be corrected. As a result, the ordering functionality for xDSL will be delayed beyond the targeted November implementation date.

Firm Order Line Sharing based on the vendor solution provided by Telcordia does not have a firm schedule established. In cooperation with the CLEC Line Sharing collaborative teams, BellSouth has implemented a an interim solution in the existing systems to allow mechanized firm ordering of CO-based BellSouth-owned splitter Line Sharing. This solution was implemented into the production environment on September 30, 2000. This interim solution is targeted to be supplemented and replaced utilizing the Telcordia solution in mid-to-late 2001. BellSouth plans to also offer mechanized firm order of CO-based CLEC owned splitter Line Sharing and Remote Line Sharing. These products are being developed jointly in the Line Sharing Collaborative teams and will be mechanized as they are developed.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Ronald M. Pate–Director – Interconnection Operations, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 00-00544 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 19 pages and 0 exhibit(s).

Ronald M. Pate

Ronald M. Pate

Sworn to and subscribed
before me on 11/10/00

Suzy A. Sherwood

NOTARY PUBLIC

SUZY A. SHERWOOD
MY COMMISSION EXPIRES
APR
28
2003
FAYETTE COUNTY, GEORGIA
NOTARY PUBLIC

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF D. DAONNE CALDWELL

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 00-00544

NOVEMBER 13, 2000

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St., N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth Telecommunications, Inc. (hereinafter referred to as “BellSouth”). My area of responsibility relates to the development of economic costs.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I attended the University of Mississippi, graduating with a Master of Science Degree in mathematics. Additionally, I have attended numerous Bell Communications Research, Inc. (“Bellcore”) courses and outside seminars relating to service cost studies and economic principles.

My initial employment was with South Central Bell in 1976 in the Tupelo, Mississippi, Engineering Department where I was responsible for Outside Plant Planning. In 1983, I transferred to BellSouth Services, Inc. in

Birmingham, Alabama, and was responsible for the Centralized Results System Database. I moved to the Pricing and Economics Department in 1984 where I developed methodology for service cost studies until 1986 when I accepted a rotational assignment with Bellcore. While at Bellcore, I was responsible for development and instruction of the Service Cost Studies Curriculum including courses, such as, “Concepts of Service Cost Studies”, “Network Service Costs”, “Nonrecurring Costs”, and “Cost Studies for New Technologies”. In 1990, I returned to BellSouth and was appointed to a position in the cost organization, now part of the Finance Department, with the responsibility of managing the development of cost studies for transport facilities, both loop and interoffice. My current responsibilities encompass cost methodology development and the overall coordination of cost study and interrogatory response filings. Additionally, I participate in cost-related dockets as an expert witness on cost issues.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to present and support the cost study results for the unbundled network elements (“UNEs”) both those previously filed in this docket and for those attached to this testimony. Additionally, I describe the underlying cost methodology used in these studies. BellSouth witness, Mr. John Ruscilli, addresses the rates BellSouth is proposing that are based upon these costs.

Q. WHY DID BELLSOUTH FILE COST STUDIES IN THIS DOCKET?

A. In its May 9, 2000 Director's Conference, the Tennessee Regulatory Authority ("TRA") opened Docket No. 00-00544 and specified the elements for which BellSouth needed to provide cost support; Intra-building Cable, Network Terminating Wire and Line Sharing, such that permanent cost-based rates could be established. BellSouth fulfilled the TRA's directive with a June 30, 2000 filing. Subsequently, the TRA expanded the scope of this docket to include all elements that may be subject to arbitration as a result of the Federal Communications Commission's ("FCC's") Third Report and Order. BellSouth filed additional cost support on October 2, 2000 with respect to these UNEs. The TRA also ordered that BellSouth allow competitors to purchase and install splitters in a line sharing arrangement. BellSouth filed additional cost support in response to this order on October 20, 2000. BellSouth also included cost support for additional combinations in the October 20, 2000 filing. Additionally, attached to this docket as Exhibit DDC-1 are revised nonrecurring costs for xDSL loops, i.e., ADSL, HSDL, and unbundled copper loops ("UCLs"), Loop Conditioning, and Loop Make-up. Also, revisions to some line sharing nonrecurring costs have been made and additional elements have been identified that are required for line sharing. Exhibit DDC-1 supercedes the nonrecurring costs that were filed previously for these elements. A summary of the costs that changed from those previously filed is attached as Exhibit DDC-2.

Q. PLEASE EXPLAIN WHY BELLSOUTH REVISED THE NONRECURRING COSTS FOR XDSL LOOPS AND LINE SHARING.

A. The provisioning of xDSL and Line Sharing UNEs is an evolving process, such that BellSouth is constantly reviewing its projected time estimates and provisioning processes. Updates to work time estimates, work groups, and some underlying assumptions from the study filed previously in this docket are reflected in Exhibit DDC-1. As Exhibit DDC-2 reflects, the vast majority of the costs decreased. Exhibit DDC-3 outlines the changes that were made that impacted the cost results.

Q. WERE THE ELEMENTS FILED IN THIS DOCKET PREVIOUSLY SUBMITTED TO THE TENNESSEE REGULATORY AUTHORITY ("TRA") FOR REVIEW IN THE GENERIC DOCKET NO. 97-01262?

A. No. The elements submitted in this docket are the result of the Federal Communications Commission's ("FCC's") Third Report and Order, in which additional unbundled network elements ("UNEs") were defined. Thus, the TRA was never given the opportunity to review these costs in Docket No. 97-01262 (the generic cost docket). However, let me emphasize that BellSouth followed the methodology and inputs established by the TRA in Docket No. 97-01262. I will expand on this statement later in my testimony.

Q. WHAT TYPES OF COSTS ARE REFLECTED IN THE COST STUDY?

A. The cost study reflects both recurring and nonrecurring costs. Recurring costs include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cost of money, and income tax. Non-capital recurring costs are expenses associated with the use of an investment. These operating expenses consist of plant-specific expenses, such as, maintenance, ad valorem taxes and gross receipts taxes.

Nonrecurring costs are one-time expenses associated with provisioning, installing and disconnecting the network capability. These costs generally include five major categories of activity: service inquiry, service order, engineering, connect and test, and technician travel time.

Q. IS BELLSOUTH'S COST STUDY CONSISTENT WITH THE FCC's COSTING METHODOLOGY?

A. Yes. BellSouth's cost methodology is not only compliant with the Act, but also with the FCC's First Report and Order. BellSouth utilized the FCC's published Total Element Long Run Incremental Cost ("TELRIC") methodology as a guideline in producing cost support for unbundled network elements. Thus, the costs are forward-looking and reflect an efficient network design based on existing wire center locations.

Specifically, BellSouth's cost study is consistent with the FCC's costing methodology as set forth in FCC Rule 51.505 (Forward-looking economic cost) which defines the FCC's cost methodology for unbundled network elements. Pursuant to the FCC's rules, such costs must be developed using an efficient network configuration that uses the existing location of the Incumbent Local Exchange Carrier's ("ILEC's") wire centers. Further, the costs should be developed using a forward-looking cost of capital and economic depreciation rates, and a reasonable allocation of forward-looking common costs is appropriate. The forward-looking economic costs may not include embedded costs, retail costs, opportunity costs or revenues to subsidize other services.

Q. HAS THE IMPACT OF THE EIGHTH CIRCUIT COURT'S RECENT DECISION BEEN REFLECTED IN BELLSOUTH'S COST DEVELOPMENT?

A. No. On July 18, 2000, the United States Court of Appeals for the Eighth Circuit issued an opinion that struck down the FCC's TELRIC pricing rule. The Court held that unbundled network element costs should be determined using forward-looking costs of the incumbent local exchange company's ("ILEC's") existing network rather than on the costs of a hypothetical network of an imaginary carrier.

BellSouth has not fully evaluated the impacts of the Court's decision on the cost methodology for UNEs; further, the full impact of that decision will not be known until the appeal process is concluded. Therefore, BellSouth has not made any changes to the underlying TELRIC methodology to reflect the anticipated effect of the Eighth Circuit Court's decision. Thus, BellSouth's costs are forward-looking, but are conservative (low) based on the Eighth Circuit's opinion. Additionally, on September 25, 2000, the Eighth Circuit granted a stay of the TELRIC decision stating that its decision "is stayed pending the filing and ultimate disposition of a petition for certiorari with the Supreme Court." Thus, the timing of the final ruling on the Eighth Circuit's decision is pending and BellSouth reserves its right to revise its cost study once a final decision is reached with respect to this litigation.

Q. WHAT COST METHODOLOGY WAS USED IN THE COST STUDY SUBMITTED IN THIS DOCKET?

A. The cost study is based on the study methodology established by the TRA in its Order in Docket No. 97-01262. The TRA's response to Issue 1 in the Interim Order[1] established the cost methodology that should provide the foundation for both the cost models and the inputs. Page 8 of the Interim Order states: "The Authority finds that prices should be established using the forward-looking economic cost methodology as defined by the FCC's TELRIC methodology, including an appropriate markup for the recovery of shared and common costs. This methodology ensures that costs used to

[1] Issue 1: What cost methodology should the TRA use in setting interconnection and Unbundled Network Elements ("UNE") prices?

set prices for UNEs will reflect the inputs, quantities, and prices faced by an efficient firm using the least-cost technology." In establishing the pricing standard as TELRIC economic cost, the TRA has also determined that the TELRIC economic cost methodology should be followed for developing the costs.

Q. PLEASE PROVIDE SOME BACKGROUND TO DOCKET NO. 97-01262.

A. BellSouth filed cost studies to support permanent prices for various network elements that were contained in BellSouth's interconnection agreements or for which the TRA had previously established interim rates. The studies were filed electronically with complete documentation. With these studies, BellSouth introduced a new cost model, the TELRIC Calculator©. The TELRIC Calculator converts material prices and labor work times to cost.

Q. ARE THE ADJUSTMENTS TO BELLSOUTH'S INPUTS ORDERED BY THE TRA IN DOCKET NO. 97-01262 INCORPORATED IN THE COST STUDY RESULTS PRESENTED IN THIS DOCKET?

A. Yes. The TRA-ordered inputs that are relevant to the cost elements in this proceeding are included. For example, the cost study includes the TRA-ordered cost of money, depreciation lives, and shared and common

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factors.

Q. PLEASE ELABORATE ON THE TRA-ORDERED ADJUSTMENTS BELLSOUTH INCORPORATED IN THE COST STUDY TO FULFILL THE TRA'S INTERIM ORDER IN DOCKET NO. 97-01262.

A. I will address each of the adjustments included in this filing and reference the issue and the appropriate discussion from the TRA's Interim Order in Docket No. 97-01262. The cost studies submitted in this docket follow the intent of each TRA adjustment. Where appropriate, the inputs have been updated to reflect the study period, 2000-2002.

First, the TRA adopted ACSI's recommended markup of 15% to account for shared and common costs. (Page 11 of the Interim Order.) This adjustment was "hard coded" into BellSouth's TELRIC Calculator's Shared and Common cost module included in this filing.

Second, the TRA originally adjusted the loop fill factors in its Interim Order. (Page 12 of the Interim Order) However in its Reconsideration Ruling (11/3/99), the TRA modified this ruling and stated, "that the fill factors as proposed by BellSouth are more reasonable and should be adopted." (Page 10 Reconsideration Ruling)

Third, the TRA mandated that the models use Tennessee-specific depreciation lives, salvage values and other inputs used in calculating the depreciation rates as established by the former Tennessee Public Service Commission in Docket No. 92-13527. (Page 13 of the Interim Order) The ordered depreciation rates were incorporated into the study included in this docket.

Fourth, BellSouth's cost study reflects the following adjustments ordered by the TRA: (1) overall cost of capital of 10.46%; (2) debt ratio of 40%; (3) 7.30% cost of debt; (4) equity ratio of 60%; (5) 12.46% cost of equity. (Page 15 of the Interim Order) Refer to the seventh point, below, for further discussion of cost of capital input.

Fifth, the TRA directed that BellSouth's normalized 1996 plant specific expense should be reduced by 22.5% for calculating network maintenance expense. (Page 17 of the Interim Order) However, in the April 20, 1999 Director's Conference, the TRA reconsidered this aspect of the Interim Order and limited the 22.5% reduction to network operations expenses only. (Page 10 of the Transcript) The April 20, 1999 adjustment is reflected in this filing.

Sixth, the TRA originally adjusted the ad valorem tax to reflect the actual 1998 tax rate of .0116. (Page 17 of the Interim Order) This input was used in this filing.

Seventh, the TRA concluded that unbundled network elements should be priced in a manner that considers the time value of money by employing monthly compounding in calculating the monthly rate from an annual cost. (Page 18 of the Interim Order) In other words, BellSouth was ordered to reflect monthly compounding using the approved overall cost of money of 10.46%. This methodology was reflected in BellSouth's cost study and in effect changed the cost of money to 9.93%.

Eighth, the TRA ordered that the drop length be adjusted to 100'. (Page 19 of the Interim Order) This input was used in the calculation of UCL costs in this docket. Additionally since BellSouth no longer uses contract labor to place drops, the adjustment to the labor component is not necessary.

Ninth, The TRA adjusted the distribution of residential and business loops to 69.22% residential and 30.78% business. (Page 22 of the Interim Order) This distribution was reconsidered by the TRA and changed to 62.89% (residential) and 37.11% (business). This mix of residential and business loops was utilized in the study submitted in this docket.

Tenth, the TRA found that "BST's TELRIC Calculator model should be adjusted to reflect three (3) other entities equally sharing aerial support structures (poles) with BST for a total of four (4)." (Page 27 of the Interim Order) This adjustment was incorporated in this filing.

Eleventh, the TRA concluded that only direct costs should be recovered through nonrecurring charges. (Page 31 of the Interim Order) Thus, BellSouth has removed shared and common costs from the calculation of nonrecurring costs. Because of this aspect of the Interim Order, BellSouth had to make two computer runs. A run was made using a common cost factor of 15% (which the TRA established in response to Issue 3) to calculate recurring costs. Then another run was made using a common cost factor of zero to calculate nonrecurring costs. Both runs are contained on the CD-ROM, one labeled Recurring (15% common cost factor) and the other Nonrecurring (0% common cost factor).

Twelfth, the TRA ordered a fallout rate of 7% for unbundled network element orders and three minutes of work activity by the Local Customer Service Center ("LCSC"). (Page 33 of the Interim Order) However, in response to BellSouth request for reconsideration at the April 20, 1999 Director's Conference, the TRA decided that "BellSouth's model should be adjusted to reflect 15 minutes of work time to resolve a fallout situation that will occur 7 percent of the time." (Page 18 of the Transcript) The April 20, 1999 clarification was included in this filing.

Thirteenth, the TRA determined that "BST should adjust its TELRIC Calculator model to recover all costs associated with testing in recurring rates." (Page 34 of the Interim Order) Thus, BellSouth removed the testing times from the nonrecurring cost development and recovered these costs as part of the recurring rates.

Finally, the TRA determined that disconnect costs should be separated from installation costs and assessed at the time of disconnect. (Page 35 of the Interim Order). BellSouth presents disconnect costs separately from installation costs.[2]

Q. THE FCC'S THIRD REPORT AND ORDER INCREASED THE LIST OF UNES BELLSOUTH IS OBLIGATED TO PROVIDE. PLEASE BRIEFLY DESCRIBE THE "NEW" ELEMENTS THAT ARE INCLUDED IN BELLSOUTH'S COST STUDY.

A. The FCC listed eight basic types of network elements that must be unbundled: (1) Loops, (2) Subloops, (3) Network Interface Device ("NID"), (4) Circuit Switching, (5) Packet Switching (only in limited circumstances), (6) Interoffice Transmission Facilities, (7) Signaling and Call-Related Databases, and (8) Operational Support Systems ("OSS"). I will describe each of these categories individually and detail the new elements BellSouth is presenting with this filing.

Q. PLEASE DESCRIBE THE DIFFERENT TYPES OF LOOPS BELLSOUTH INCLUDED IN THIS STUDY.

A. First let me state that the FCC's Third Report and Order did not alter the definition of a loop with respect to the manner in which BellSouth

[2] BellSouth's inclusion of the TRA's adjustments should not be construed as an endorsement of the modifications. In fact, BellSouth disagrees with many aspects of the TRA's adjustments and reserves the right to challenge these modifications.

conducted its cost studies. The FCC's definition reads as follows:

> The local loop network element is defined as a transmission facility between a distribution frame (or equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer premises, including inside wire owned by the incumbent LEC. (Appendix C, Page 3 of the FCC Third Report and Order)

The cost studies BellSouth submitted both in Docket No. 97-01262 and in this proceeding comply with this definition.

The FCC's Third Report and Order did, however, emphasize BellSouth's obligation to offer xDSL compatible loops. BellSouth previously submitted costs for various types of xDSL loops in Docket No. 97-01262, including ADSL and HDSL compatible loops. (These loops meet the transmission requirements set for ADSL and HDSL service.) The TRA is in the process of establishing both recurring and nonrecurring rates based upon BellSouth's compliance filings in Docket No. 97-01262 for these elements. However, BellSouth has re-studied the nonrecurring costs associated with these types of loops in this proceeding because the provisioning process has changed radically since the studies were initially conducted. Specifically, the nonrecurring cost structure now reflects that fact that the CLEC can qualify the loop, instead of BellSouth.

Additionally, for this proceeding, BellSouth has developed recurring and nonrecurring costs for 2-wire and 4-wire UCLs; e.g., the CLEC can offer a variety of xDSL services. The costs are segmented between loops less than 18,000 feet ("UCL-Short") and loops greater than 18,000 feet ("UCL-Long"). The UCLs are commonly referred to as "dry copper" loops because they have no intervening equipment such as load coils, bridged tap, or repeaters between the end user premises and the serving wire center. Another type of xDSL loop that BellSouth is offering is a Universal Digital Channel ("UDC"). The UDC is similar to an ISDN loop except that it follows stricter provisioning guidelines, such that the CLEC can concatenate the 3 "ISDN" channels into a single 144 KBPS circuit.

Even though it is not classified as a distinct UNE, the FCC discussed Loop Conditioning as it relates to the provisioning of xDSL compatible loops in its Third Report and Order. BellSouth offers three types of Loop Conditioning (Loop Modification ("ULM")), Load Coil/ Equipment Removal – Short, Load Coil/Equipment Removal – Long, and Bridged Tap Removal. This structure appropriately reflects the way in which the costs to provide this service will occur. Costs were developed for removing load coils from loops less than 18,000 feet and for loops greater than 18,000 feet. In its study, BellSouth assumed for loops less than 18,000 feet, 10 pairs will be conditioned (load coils removed) at the same time. This is based on projected demand for the conditioned loops. Additionally, for loops less than 18,000 feet the impact of this procedure on voice grade service will be minimal since load coils neither enhance nor impair the quality of voice transmission for loops of that length. For loops greater than 18,000 feet, however, the removal of intermediary electronics (e.g., load coils) would likely degrade the voice grade transmission quality, rendering it unusable for voice grade transmission. To minimize the quantity of voice grade circuits that will be unavailable for transmission of voice grade level service, BellSouth practices assume only two circuits will be conditioned initially. Bridged tap removal assumed three bridge taps are removed, one in the underground and the other two buried or aerial.

Certain CLECs have argued that intermediary devices are not required for loops less than 18,000 feet, and thus, that BellSouth is not entitled to recover costs to remove those devices. The FCC addressed such arguments and stated: "We agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops." (¶193, FCC CC Docket 96-98 Third Report and Order)

The FCC also mandated that BellSouth offer loops at higher transmission rates, i.e., greater than a DS1. Thus, in this filing BellSouth determined the cost of DS3, OC3, OC12, OC48, and STS-1 loops and local channels.

Q. DESCRIBE THE ELEMENTS BELLSOUTH INCLUDED UNDER THE SUBLOOP/ NID CATEGORIES.

A. BellSouth has developed costs for Unbundled Sub-Loops that are 2-wire or 4-wire components of a loop that can be technically unbundled. Sub-Loops consist of Sub-Loop Feeder ("USL-F"), Sub-Loop Distribution ("USL-D"), Unbundled Intra-building Network Cable ("UINC"), and Unbundled Network Terminating Wire ("UNTW"). USL-F is also provided for the DS1 digital loop.

Sub-loop feeder is the physical transmission facility (or channel or group of channels on such facility) which extends from the main distributing frame connection in the end office to the cross-connect box. If the loop is served by digital loop carrier, a central office digital loop carrier terminal is required to convert the digital signal to voice grade analog. A test point is provisioned with the sub-loop feeder for remote test access.

Sub-loop distribution is the physical transmission facility from a BellSouth cross-connect device to the customer's premises (i.e., the Network Interface Device ("NID")). This facility will allow an end user to send and receive telecommunications traffic when it is properly connected to other required network elements, such as loop feeder facility. This facility includes a NID (where applicable) at the customer's location in the loop.

BellSouth will also provide sub-loop interconnection to the Unbundled Intrabuilding Network Cable ("UINC"). UINC is the distribution facility inside a subscriber's building or between buildings on one customer's premises (continuous property not separated by a public street or road). UINC includes the facility from the cross-connect device in the building equipment room up to and including the end-user's point of demarcation.

Unbundled Network Terminating Wire ("UNTW") is unshielded twisted copper wiring that is used to extend circuits from an INC terminal or from a building entrance terminal to an individual customer's point of demarcation. It is the last segment of the field-side loop distribution facilities. In multi-subscriber configurations, UNTW represents the point at which the network branches out to serve individual subscribers.

UNTW will be provided in Multi-Dwelling Units ("MDUs") and/or Multi-Tenants Units ("MTUs") where BellSouth provides wiring all the way to the end-users premises. BellSouth will not provide this element in those locations where the property owner provides the wiring to the end user's premises or where the property owner will not allow BellSouth to place its facilities to the end user.

Another group of elements that can be classified as "sub-loop" is unbundled sub-loop concentration ("USLC"). These elements allow a CLEC to concentrate loop distribution elements, provided by the CLEC, on to multiple DS1s. This arrangement allows the CLEC to connect the loop distribution elements (at a concentrated level) to BellSouth's feeder facilities. BellSouth will then transport the DS1s carrying the distribution circuits back to the serving wire center for termination on a BellSouth DSX1 block and ultimately to the CLEC's collocation space.

I have discussed loop modification (conditioning) previously. To reflect the possibility that the CLEC may only purchase distribution from BellSouth and that conditioning may be required, BellSouth offers the following elements:
Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Load Coil/Equipment Removal and Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Bridged Tap Removal. Mr. Ruscilli addresses the rates BellSouth is proposing for these sub-loop elements in his testimony, while Mr. Milner discusses sub-loop access.

Q. DOES THE FCC'S THIRD REPORT AND ORDER AFFECT THE COST SUPPORT REQUIRED FOR THE NID?

A. The FCC's UNE Third Report and Order does not affect the costs previously provided to the TRA and upon which the TRA will ultimately establish rates for NIDs. However, the FCC modified the definition of the NID to include "any means of interconnection of customer premises wiring to the incumbent LEC's distribution plant, such as a cross-connect device used for that purpose." (¶233 of the FCC Third Report and Order) Therefore, in this filing, BellSouth has determined the nonrecurring cost associated with establishing a cross-connect in conjunction with a NID.

NID access is designed to allow a CLEC the opportunity to connect its loop to the inside wire accessed through BellSouth's NID. It is expected that the CLEC will provision a loop and a NID to the customer's location. In these circumstances, the CLEC may perform a physical cross-connect of the inside wire to its loop to provide a communication pathway from the CLEC through BellSouth's NID to the end user's inside wire.

If BellSouth does not have a NID, i.e., it terminates its loops directly to the inside wire of the end user, or where the existing NID is not suitable for connection, BellSouth will install a NID. Also, at the CLEC's request, BellSouth will install a second NID and will provide the cross-connect from the BellSouth NID to the CLEC NID.

Q. HAS BELLSOUTH DEVELOPED COSTS FOR CIRCUIT SWITCHING?

A. Not in this docket. Since the TRA will ultimately set rates for Unbundled Switching and Local Interconnection based on costs submitted in Docket No. 97-01262, it is unnecessary to re-file cost support. Additionally, the FCC's Third Report and Order did not alter the existing definition of Local Switching. However, the FCC's order did find that incumbent LECs will be relieved of its obligation to provide local circuit switching under certain circumstances that will be discussed by Mr. Ruscilli.

Q. DID BELLSOUTH DEVELOP COSTS FOR UNBUNDLED PACKET SWITCHING?

A. No. Rather, BellSouth has developed the cost associated with allowing a CLEC to collocate in the remote terminal and has filed those costs in this proceeding. Mr. Ruscilli addresses the issue of unbundling packet switching in greater detail in his testimony.

Q. ARE THERE ANY NEW ELEMENTS FOR INTEROFFICE TRANSMISSION FACILITIES?

A. Yes. As with loops, the FCC ordered that BellSouth provide interoffice facilities at higher transmission rates. Thus, costs were developed for both dedicated and shared interoffice facilities at DS3, OC3, OC12, OC48, and STS-1 transmission rates.

Q. WHAT IS BELLSOUTH OFFERING TO COMPLY WITH THE REQUIREMENT TO UNBUNDLE CALL-RELATED DATABASES AND SIGNALING?

A. BellSouth previously submitted costs for 800 Access, Line Information Database ("LIDB") Access, and CCS7 Signaling Transport in Docket No. 97-01262. The TRA will establish rates based upon BellSouth's costs for these items. In this docket, BellSouth is augmenting its list of database access items to include Calling Name ("CNAM"), Local Number Portability ("LNP"), and E911.

Q. HAS BELLSOUTH DEVELOPED ADDITIONAL COST SUPPORT FOR OSS ACCESS?

A. No. BellSouth submitted cost support associated with the development, implementation, and on-going support of electronic interfaces to BellSouth's ordering systems in Docket No. 97-01262. BellSouth developed electronic interfaces that allow CLECs access to BellSouth's existing legacy systems, as directed in Paragraph 523 of the FCC's First Report and Order which states:

> We thus conclude that an incumbent LEC must provide nondiscriminatory access to their operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing available to the LEC itself.

The FCC's Third Report and Order did not change this requirement. However, the order did mandate that BellSouth enable CLEC access to loop make-up information as part of the ordering process.

Q. DID BELLSOUTH DEVELOP COSTS FOR ACCESS TO LOOP MAKE-UP AS STIPULATED IN THE FCC'S THIRD REPORT AND ORDER?

A. Yes. BellSouth developed costs that reflect accessing loop make-up information via two methods, either through an electronic interface or manually. If the CLEC chooses the mechanized process, the Loop Facilities Assignment and Control System ("LFACS") database is accessed and interactive loop data extracts based on search criteria can be made. In the cost study, element J.3.1 (Mechanized Loop Make-up) reflects the costs BellSouth incurs in providing the CLEC access to LFACS via this mechanized process.

BellSouth also offers the CLEC a manual process. The manual process begins with the CLEC initiating a service inquiry requesting loop make-up information. BellSouth personnel manually develop the loop make-up and provide the CLEC a copy. In the cost study, element J.3.3 (Manual Loop Make-up) reflects the costs BellSouth incurs in performing these activities.

Q. ARE THERE ARE OTHER ELEMENTS BELLSOUTH IS OFFERING THAT WERE NOT INCLUDED IN DOCKET NO. 97-01262?

A. Yes. The FCC's Third Report and Order also stated that the incumbent must test and report troubles on conditioned loops for the line's features, functions, and capabilities. (¶195) Thus, BellSouth determined the costs associated with testing beyond voice and incorporated such costs in its filing.

Additionally, the FCC's Advanced Service Order revised some of the elements BellSouth had to offer under physical collocation. BellSouth expanded collocation to include assembly point and physical collocation at the remote terminal. The Advanced Services Order also addressed Line Sharing. BellSouth is obligated to "share" the existing physical loop by segmenting the bandwidth. This study reflects the costs of providing such an arrangement in BellSouth's central office.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The TRA has ruled on the appropriate methodology for developing costs for unbundled network elements - TELRIC economic costs. BellSouth utilized the principles inherent in this methodology for its cost study filed with this testimony. Thus, the incremental recurring and nonrecurring costs are long-run and reflect an efficient, forward-looking, yet attainable, network. It is also BellSouth's opinion that if the Eighth Circuit's TELRIC ruling is affirmed, the costs determined by this methodology are understated.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

TENNESSEE DOCKET NO. 00-00544

BELLSOUTH TELECOMMUNICATIONS

CALDWELL DIRECT, EXHIBIT DDC-1

NOVEMBER 13, 2000

TENNESSEE DOCKET NO. 00-00544
CALDWELL DIRECT, EXHIBIT DDC-1
TABLE OF CONTENTS

EXECUTIVE SUMMARY

STATEMENT OF PURPOSE

In its August 3, 2000 pre-hearing conference, the Tennessee Regulatory Authority (TRA) expanded the scope of this docket. Specifically, BellSouth Telecommunications, Inc. (hereinafter referred to as BellSouth or the Company) was required to develop costs for all unbundled network elements (UNEs) outlined by the Federal Communication Commission's (FCC's) Third Report and Order that are subject to arbitration in Tennessee.

On October 2, 2000, BellSouth filed Total Element Long Run Incremental Cost (TELRIC) studies, including shared and common costs, in compliance with the Order. This filing is to provide revised nonrecurring costs for xDSL loops, unbundled copper loops, loop conditioning, manual loop makeup and line sharing. These nonrecurring costs replace those previously filed in this Docket. The shared and common factors used in these studies are those adopted by the TRA in Docket No. 97-01262. Other factors and labor rates, not specifically addressed by the TRA in Docket No. 97-01262, have been updated from the values presented in Docket No. 97-01262 to reflect a 2000-2002 study period.

BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Tennessee
Base Case - Nonrecurrung Only

11/09/2000

	Cost Element	Recurring	Non Recurring	Non-Recurring				Testing spread over service life		
				First	Additional	Initial	Subsequent	Service Life	Cost	Monthly Cost
A.0	UNBUNDLED LOCAL LOOP									
A.6	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP									
A.6.5	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)									
A.6.6	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)			$186.23	$75.77					
A.6.598	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU) - Testing			$111.02	$41.94					
A.6.599	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect			$70.36	$67.97			46	$70.36	$1.85
A.6.698	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU) - Testing			$111.76	$20.81					
A.6.699	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU)- Disconnect			$70.36	$67.97			46	$70.36	$1.85
				$94.14	$15.36					
A.7	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP									
A.7.5	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)									
A.7.6	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)			$188.88	$76.44					
A.7.598	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing			$111.02	$41.94					
A.7.599	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect			$86.69	$84.30			46	$86.69	$2.27
A.7.698	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing			$111.76	$20.81					
A.7.699	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect			$86.69	$84.30			46	$86.69	$2.27
				$94.14	$15.36					
A.8	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP									
A.8.5	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)									
A.8.6	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)			$201.84	$89.40					
A.8.598	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing			$123.99	$54.91					
A.8.599	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Disconnect			$127.64	$125.25			52	$127.64	$3.03
A.8.698	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing			$117.67	$24.85					
A.8.699	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect			$127.64	$125.25			52	$127.64	$3.03
				$99.69	$19.29					
A.13	2-WIRE COPPER LOOP									
A.13.8	2-Wire Copper Loop - short (Nonrecurring w/ LMU)									
A.13.9	2-Wire Copper Loop - short (Nonrecurring w/o LMU)			$187.34	$74.90					
A.13.10	2-Wire Copper Loop - long (Nonrecurring w/ LMU)			$109.48	$40.41					
A.13.11	2-Wire Copper Loop - long (Nonrecurring w/o LMU)			$187.34	$74.90					
A.13.898	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing			$109.48	$40.41					
A.13.899	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect			$70.14	$67.75			46	$70.14	$1.84
A.13.998	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing			$111.76	$20.81					
A.13.999	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect			$70.14	$67.75			46	$70.14	$1.84
A.13.1098	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing			$94.14	$15.36					
A.13.1099	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect			$70.14	$67.75			46	$70.14	$1.84
A.13.1198	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing			$111.76	$20.81					
A.13.1199	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect			$70.14	$67.75			46	$70.14	$1.84
				$94.14	$15.36					
A.14	4-WIRE COPPER LOOP									
A.14.8	4-Wire Copper Loop - short (Nonrecurring w/ LMU)									
A.14.9	4-Wire Copper Loop - short (Nonrecurring w/o LMU)			$200.31	$87.86					
A.14.10	4-Wire Copper Loop - long (Nonrecurring w/ LMU)			$122.45	$53.37					
A.14.11	4-Wire Copper Loop - long (Nonrecurring w/o LMU)			$200.31	$87.86					
A.14.898	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing			$122.45	$53.37					
A.14.899	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect			$102.82	$100.43			52	$102.82	$2.44
A.14.998	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing			$117.67	$24.85					
A.14.999	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect			$102.82	$100.43			52	$102.82	$2.44
A.14.1098	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing			$99.69	$19.29					
A.14.1099	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect			$102.82	$100.43			52	$102.82	$2.44
A.14.1198	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing			$117.67	$24.85					
A.14.1199	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect			$102.82	$100.43			52	$102.82	$2.44
				$99.69	$19.29					
A.17	LOOP CONDITIONING									

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BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Tennessee
Base Case - Nonrecurrung Only

11/09/2000

	Cost Element	Recurring	Non Recurring	First	Non-Recurring Additional	Initial	Subsequent	Testing Service Life	spread over service life Cost	Monthly Cost
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Removal - long		$321.99							
A.17.4	Unbundled Loop Modification - Additive			$12.36	$12.36					
J.0	OTHER									
J.3	LOOP MAKE-UP									
J.3.3	Manual Loop Make-up w/o Facility Reservation Number		$74.46							
J.3.4	Manual Loop Make-up w/ Facility Reservation Number		$77.18							
J.4	LINE SHARING SPLITTER IN THE CENTRAL OFFICE									
J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office		$371.63							
J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office		$371.63							
J.4.6	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)		$108.66							
J.4.7	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))		$54.40							
J.4.8	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7)						$15.63			
J.4.199	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office - Disconnect		$349.37							
J.4.299	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office - Disconnect		$349.37							
J.4.699	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD) - Disconnect		$82.12							
J.4.799	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs)) - Disconnect		$10.59							
J.4.899	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7) - Disconnect						$18.26			

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SECTION 2

METHODOLOGY

For a full description of the methodology used in these studies, see BellSouth's October 2, 2000 filing in this docket.

TENNESSEE DOCKET NO. 00-00544
CALDWELL DIRECT, EXHIBIT DDC-1
SECTION 3
DESCRIPTION OF MODELS AND PRICE CALCULATORS

For a full description of the models used in these studies, see BellSouth's October 2, 2000 filing in this docket.

TENNESSEE DOCKET NO. 00-00544
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SECTION 4
INPUTS - LOADINGS AND FACTORS

For a full description of the inputs and factors used in these studies, see BellSouth's October 2, 2000 filing in this docket.

TENNESSEE DOCKET NO. 00-00544
CALDWELL DIRECT, EXHIBIT DDC-1
SECTION 5
UNBUNDLED NETWORK ELEMENT STUDIES

INTRODUCTION

This section contains a complete listing of the UNEs included in this filing. For a description of the cost elements and an overview of the study process for each category of elements studied by BellSouth, see BellSouth's October 2, 2000 filing in this docket. Additionally, output and input spreadsheets for each individual UNE are provided. In some instances, the spreadsheet may contain inputs and workpapers for several cost elements. In such situations, the file is provided in order of the first cost element number contained in that file.

The studies included in this filing are all based on a three (3) year study period (2000 - 2002). All long run costs associated with providing the service cost elements are identified and included in the TELRIC studies.

Testing costs are identified as separate costs and included in recurring rates as indicated on the summary report.

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SECTION 5
UNBUNDLED NETWORK ELEMENT STUDIES

		Filename
A.0	**UNBUNDLED LOCAL LOOP**	
A.6	**2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP**	
A.6.5	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)	TN-xdsl.xls
A.6.6	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)	TN-xdsl.xls
A.6.598	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.6.599	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect	TN-xdsl.xls
A.6.698	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.6.699	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU)- Disconnect	TN-xdsl.xls
A.7	**2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP**	
A.7.5	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)	TN-xdsl.xls
A.7.6	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)	TN-xdsl.xls
A.7.598	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.7.599	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect	TN-xdsl.xls
A.7.698	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.7.699	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.8	**4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP**	
A.8.5	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)	TN-xdsl.xls
A.8.6	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)	TN-xdsl.xls
A.8.598	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.8.599	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.8.698	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.8.699	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.13	**2-WIRE COPPER LOOP**	
A.13.8	2-Wire Copper Loop - short (Nonrecurring w/ LMU)	TN-xdsl.xls
A.13.9	2-Wire Copper Loop - short (Nonrecurring w/o LMU)	TN-xdsl.xls
A.13.10	2-Wire Copper Loop - long (Nonrecurring w/ LMU)	TN-xdsl.xls
A.13.11	2-Wire Copper Loop - long (Nonrecurring w/o LMU)	TN-xdsl.xls
A.13.898	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.13.899	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.13.998	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.13.999	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.13.1098	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.13.1099	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls

A.13.1198	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.13.1199	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.14	**4-WIRE COPPER LOOP**	
A.14.8	4-Wire Copper Loop - short (Nonrecurring w/ LMU)	TN-xdsl.xls
A.14.9	4-Wire Copper Loop - short (Nonrecurring w/o LMU)	TN-xdsl.xls
A.14.10	4-Wire Copper Loop - long (Nonrecurring w/ LMU)	TN-xdsl.xls
A.14.11	4-Wire Copper Loop - long (Nonrecurring w/o LMU)	TN-xdsl.xls
A.14.898	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.14.899	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.14.998	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.14.999	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.14.1098	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing	TN-xdsl.xls
A.14.1099	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect	TN-xdsl.xls
A.14.1198	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing	TN-xdsl.xls
A.14.1199	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect	TN-xdsl.xls
A.17	**LOOP CONDITIONING**	
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Removal - long	TN_MOD.xls
A.17.4	Unbundled Loop Modification - Additive	TN_MOD.xls
J.0	**OTHER**	
J.3	**LOOP MAKE-UP**	
J.3.3	Manual Loop Make-up w/o Facility Reservation Number	Tn-lmu.xls
J.3.4	Manual Loop Make-up w/ Facility Reservation Number	Tn-lmu.xls
J.4	**LINE SHARING SPLITTER IN THE CENTRAL OFFICE**	
J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office	TnLineSh.xls
J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office	TnLineSh.xls
J.4.6	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)	TnLineSh.xls
J.4.7	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))	TnLineSh.xls
J.4.8	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7)	TnLineSh.xls
J.4.199	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office - Disconnect	TnLineSh.xls
J.4.299	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office - Disconnect	TnLineSh.xls
J.4.699	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD) - Disconnect	TnLineSh.xls
J.4.799	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs)) - Disconnect	TnLineSh.xls
J.4.899	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7) - Disconnect	TnLineSh.xls

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SECTION 5
UNBUNDLED NETWORK ELEMENT STUDIES

NONRECURRING COSTS OUTPUTS

Nonrecurring Cost Summary

Tennessee
A.6.5 - 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)

11/7/2000

	Nonrecurring Cost					
	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$185.6740	$0.0000	$185.6740	$75.5459	$0.0000	$75.5459
Total Cost	$185.6740	$0.0000	$185.6740	$75.5459	$0.0000	$75.5459
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$186.2334			$75.7735
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$186.2334**			**$75.7735**

000008

Nonrecurring Cost Development

Tennessee
A.6.5 - 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.3333	0.0833	0.0000	0.0000	$32.62	$10.8733	$2.7183	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$10.8733	$2.7183
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	185.6740	75.5459

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.34	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.3333	0.0833	0.0000	0.0000	$32.62	$10.8733	$2.7183	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$10.8733	$2.7183
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	185.6740	75.5459

000009

Nonrecurring Cost Summary

Tennessee
A.6.6 - 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$110.6877	$0.0000	$110.6877	$41.8164	$0.0000	$41.8164
Total Cost	$110.6877	$0.0000	$110.6877	$41.8164	$0.0000	$41.8164
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$111.0212			$41.9424
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$111.0212**			**$41.9424**

000010

Nonrecurring Cost Development

Tennessee
A.6.6 - 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	110.6877	41.8164

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	110.6877	41.8164

000011

Nonrecurring Cost Summary

Tennessee
A.6.598 - 2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$70.1454	$0.0000	$70.1454	$67.7632	$0.0000	$67.7632
Total Cost	$70.1454	$0.0000	$70.1454	$67.7632	$0.0000	$67.7632
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$70.3568			$67.9673
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$70.3568**			**$67.9673**

000012

Nonrecurring Cost Development

Tennessee
A.6.598 - 2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8156	0.8156	0.0000	0.0000	$38.31	$31.2447	$31.2447	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.2447	$31.2447
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	70.1454	67.7632

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8156	0.8156	0.0000	0.0000	$38.31	$31.2447	$31.2447	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.2447	$31.2447
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	70.1454	67.7632

000013

Nonrecurring Cost Summary

Tennessee
A.6.599 - 2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Total Cost	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$111.7614			$20.8063
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$111.7614**			**$20.8063**

000014

Nonrecurring Cost Development

Tennessee
A.6.599 - 2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect

11/7/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	A Installation Worktimes Additional	B Disconnect Worktimes First	B Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	D=AxC Install Cost Additional	E=BxC Disconnect Cost First	E=BxC Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	G=ExF Discounted Disconnect Cost Additional	H=D+G Direct Cost First	H=D+G Direct Cost Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

000015

Nonrecurring Cost Summary

Tennessee
A.6.698 - 2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$70.1454	$0.0000	$70.1454	$67.7632	$0.0000	$67.7632
Total Cost	$70.1454	$0.0000	$70.1454	$67.7632	$0.0000	$67.7632
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$70.3568			$67.9673
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$70.3568**			**$67.9673**

000016

Nonrecurring Cost Development

Tennessee
A.6.898 - 2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8156	0.8156	0.0000	0.0000	$38.31	$31.2447	$31.2447	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.2447	$31.2447
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	70.1454	67.7632

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8156	0.8156	0.0000	0.0000	$38.31	$31.2447	$31.2447	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.2447	$31.2447
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	70.1454	67.7632

000017

Nonrecurring Cost Summary

Tennessee
A.6.699 - 2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU)- Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$93.8580	$0.0000	$93.8580	$15.3127	$0.0000	$15.3127
Total Cost	$93.8580	$0.0000	$93.8580	$15.3127	$0.0000	$15.3127
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$94.1408			$15.3588
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$94.1408**			**$15.3588**

000018

Nonrecurring Cost Development

Tennessee
A.6.699 - 2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU)- Disconnect

11/7/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	A Installation Worktimes Additional	B Disconnect Worktimes First	B Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	D=AxC Install Cost Additional	E=BxC Disconnect Cost First	E=BxC Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	G=ExF Discounted Disconnect Cost Additional	H=D+G Direct Cost First	H=D+G Direct Cost Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

000019

Nonrecurring Cost Summary

Tennessee
A.7.5 - 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$188.3133	$0.0000	$188.3133	$76.2057	$0.0000	$76.2057
Total Cost	$188.3133	$0.0000	$188.3133	$76.2057	$0.0000	$76.2057
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$188.8807			$76.4353
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$188.8807**			**$76.4353**

000020

Nonrecurring Cost Development

Tennessee

A.7.5 - 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	188.3133	76.2057

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	188.3133	76.2057

000021

Nonrecurring Cost Summary

Tennessee
A.7.6 - 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$110.6877	$0.0000	$110.6877	$41.8164	$0.0000	$41.8164
Total Cost	$110.6877	$0.0000	$110.6877	$41.8164	$0.0000	$41.8164
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$111.0212			$41.9424
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$111.0212**			**$41.9424**

000022

Nonrecurring Cost Development

Tennessee

A.7.6 - 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0625	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	110.6877	41.8164

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0625	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	110.6877	41.8164

000023

Nonrecurring Cost Summary

Tennessee
A.7.598 - 2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$86.4272	$0.0000	$86.4272	$84.0449	$0.0000	$84.0449
Total Cost	$86.4272	$0.0000	$86.4272	$84.0449	$0.0000	$84.0449
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$86.6876			$84.2981
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$86.6876**			**$84.2981**

000024

Nonrecurring Cost Development

Tennessee
A.7.598 - 2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2406	1.2406	0.0000	0.0000	$38.31	$47.5264	$47.5264	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$47.5264	$47.5264
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	86.4272	84.0449

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2406	1.2406	0.0000	0.0000	$38.31	$47.5264	$47.5264	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$47.5264	$47.5264
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	86.4272	84.0449

000025

Nonrecurring Cost Summary

Tennessee
A.7.599 - 2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Total Cost	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$111.7614			$20.8063
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$111.7614**			**$20.8063**

000026

Nonrecurring Cost Development

Tennessee
A.7.599 - 2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect

11/7/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	A Installation Worktimes Additional	B Disconnect Worktimes First	B Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	D=AxC Install Cost Additional	E=BxC Disconnect Cost First	E=BxC Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	G=ExF Discounted Disconnect Cost Additional	H=D+G Direct Cost First	H=D+G Direct Cost Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

000027

Nonrecurring Cost Summary

Tennessee
A.7.698 - 2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$86.4272	$0.0000	$86.4272	$84.0449	$0.0000	$84.0449
Total Cost	$86.4272	$0.0000	$86.4272	$84.0449	$0.0000	$84.0449
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$86.6876			$84.2981
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$86.6876**			**$84.2981**

000028

Nonrecurring Cost Development

Tennessee
A.7.698 - 2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2406	1.2406	0.0000	0.0000	$38.31	$47.5264	$47.5264	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$47.5264	$47.5264
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	86.4272	84.0449

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2406	1.2406	0.0000	0.0000	$38.31	$47.5264	$47.5264	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$47.5264	$47.5264
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	86.4272	84.0449

000029

Nonrecurring Cost Summary

Tennessee
A.7.699 - 2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$93.8580	$0.0000	$93.8580	$15.3127	$0.0000	$15.3127
Total Cost	$93.8580	$0.0000	$93.8580	$15.3127	$0.0000	$15.3127
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$94.1408			$15.3588
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$94.1408**			**$15.3588**

000030

Nonrecurring Cost Development

Tennessee
A.7.699 - 2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	A Installation Worktimes Additional	B Disconnect Worktimes First	B Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	D=AxC Install Cost Additional	E=BxC Disconnect Cost First	E=BxC Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	G=ExF Discounted Disconnect Cost Additional	H=D+G Direct Cost First	H=D+G Direct Cost Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

000301

Nonrecurring Cost Summary

Tennessee
A.8.5 - 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$201.2385	$0.0000	$201.2385	$89.1309	$0.0000	$89.1309
Total Cost	$201.2385	$0.0000	$201.2385	$89.1309	$0.0000	$89.1309
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$201.8448			$89.3995
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$201.8448**			**$89.3995**

000031

Nonrecurring Cost Development

11/7/2000

Tennessee

A.8.5 - 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	201.2385	89.1309

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	201.2385	89.1309

000032

Nonrecurring Cost Summary

Tennessee
A.8.6 - 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$123.6129	$0.0000	$123.6129	$54.7416	$0.0000	$54.7416
Total Cost	$123.6129	$0.0000	$123.6129	$54.7416	$0.0000	$54.7416
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$123.9854			$54.9065
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$123.9854**			**$54.9065**

000033

11/7/2000

Nonrecurring Cost Development

Tennessee

A.8.6 - 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	123.8129	54.7416

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.6390	0.1828	0.0000	0.0000	$38.31	$24.4801	$7.0043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$24.4801	$7.0043
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	123.8129	54.7416

000034

Nonrecurring Cost Summary

Tennessee
A.8.598 - 4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing

11/9/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$127.2585	$0.0000	$127.2585	$124.8762	$0.0000	$124.8762
Total Cost	$127.2585	$0.0000	$127.2585	$124.8762	$0.0000	$124.8762
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$127.6419			$125.2525
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$127.6419**			**$125.2525**

000035

Tennessee
A.8.598 - 4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing

11/9/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.8609	1.8609	0.0000	0.0000	$38.31	$71.2896	$71.2896	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$71.2896	$71.2896
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	127.2585	124.8762

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.8609	1.8609	0.0000	0.0000	$38.31	$71.2896	$71.2896	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$71.2896	$71.2896
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	127.2585	124.8762

000036

Nonrecurring Cost Summary

Tennessee
A.8.599 - 4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Disconnect

11/9/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$117.3156	$0.0000	$117.3156	$24.7771	$0.0000	$24.7771
Total Cost	$117.3156	$0.0000	$117.3156	$24.7771	$0.0000	$24.7771
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$117.6691			$24.8518
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$117.6691**			**$24.8518**

000037

Nonrecurring Cost Development

Tennessee
A.8.599 - 4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Disconnect

11/9/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
	JFC/	JFC/Payband	Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	Payband	Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1920	$18.5776	$6.1925	$18.5776	$6.1925
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8258	$46.0101	$10.8258
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	117.3156	24.7771

	JFC/	JFC/Payband	Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	Payband	Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1920	$18.5776	$6.1925	$18.5776	$6.1925
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8258	$46.0101	$10.8258
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	117.3156	24.7771

000038

Nonrecurring Cost Summary

Tennessee
A.8.698 - 4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$127.2585	$0.0000	$127.2585	$124.8762	$0.0000	$124.8762
Total Cost	$127.2585	$0.0000	$127.2585	$124.8762	$0.0000	$124.8762
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$127.6419			$125.2525
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$127.6419**			**$125.2525**

000039

Nonrecurring Cost Development

Tennessee

A.8.698 - 4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.8609	1.8609	0.0000	0.0000	$38.31	$71.2896	$71.2896	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$71.2896	$71.2896
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	127.2585	124.8762

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.8609	1.8609	0.0000	0.0000	$38.31	$71.2896	$71.2896	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$71.2896	$71.2896
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	127.2585	124.8762

000040

Nonrecurring Cost Summary

Tennessee
A.8.699 - 4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$99.3883	$0.0000	$99.3883	$19.2348	$0.0000	$19.2348
Total Cost	$99.3883	$0.0000	$99.3883	$19.2348	$0.0000	$19.2348
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$99.6877			$19.2928
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$99.6877**			**$19.2928**

000041

11/7/2000

Nonrecurring Cost Development

Tennessee

A.8.699 - 4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1920	$0.6502	$0.6502	$0.6502	$0.6502
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	99.3883	19.2348

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1920	$0.6502	$0.6502	$0.6502	$0.6502
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	99.3883	19.2348

000042

Nonrecurring Cost Summary

Tennessee
A.13.8 - 2-Wire Copper Loop - short (Nonrecurring w/ LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$186.7809	$0.0000	$186.7809	$74.6733	$0.0000	$74.6733
Total Cost	$186.7809	$0.0000	$186.7809	$74.6733	$0.0000	$74.6733
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$187.3437			$74.8983
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$187.3437**			**$74.8983**

000043

Nonrecurring Cost Development

Tennessee
A.13.8 - 2-Wire Copper Loop - short (Nonrecurring w/ LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	186.7809	74.6733

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	186.7809	74.6733

000044

Nonrecurring Cost Summary

Tennessee
A.13.9 - 2-Wire Copper Loop - short (Nonrecurring w/o LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$109.1553	$0.0000	$109.1553	$40.2840	$0.0000	$40.2840
Total Cost	$109.1553	$0.0000	$109.1553	$40.2840	$0.0000	$40.2840
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$109.4842			$40.4054
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$109.4842**			**$40.4054**

000045

11/7/2000

Nonrecurring Cost Development

Tennessee
A.13.9 - 2-Wire Copper Loop - short (Nonrecurring w/o LMU)

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	109.1553	40.2840

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	109.1553	40.2840

000046

Nonrecurring Cost Summary

Tennessee
A.13.10 - 2-Wire Copper Loop - long (Nonrecurring w/ LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$186.7809	$0.0000	$186.7809	$74.6733	$0.0000	$74.6733
Total Cost	$186.7809	$0.0000	$186.7809	$74.6733	$0.0000	$74.6733
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$187.3437			$74.8983
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$187.3437**			**$74.8983**

000047

Nonrecurring Cost Development

Tennessee

A.13.10 - 2-Wire Copper Loop - long (Nonrecurring w/ LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	186.7809	74.6733

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	186.7809	74.6733

000048

Nonrecurring Cost Summary

Tennessee
A.13.11 - 2-Wire Copper Loop - long (Nonrecurring w/o LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$109.1553	$0.0000	$109.1553	$40.2840	$0.0000	$40.2840
Total Cost	$109.1553	$0.0000	$109.1553	$40.2840	$0.0000	$40.2840
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$109.4842			$40.4054
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$109.4842**			**$40.4054**

000049

Nonrecurring Cost Development

Tennessee
A.13.11 - 2-Wire Copper Loop - long (Nonrecurring w/o LMU)

11/7/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	Installation Worktimes Additional	B Disconnect Worktimes First	Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	Install Cost Additional	E=BxC Disconnect Cost First	Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	H=D+G Direct Cost First	Direct Cost Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	109.1553	40.2840

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.2193	0.5693	0.0000	0.0000	$45.41	$55.3669	$25.8504	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$55.3669	$25.8504
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$15.1367	$0.0000
														Total	109.1553	40.2840

000050

Nonrecurring Cost Summary

Tennessee
A.13.898 - 2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$69.9283	$0.0000	$69.9283	$67.5461	$0.0000	$67.5461
Total Cost	$69.9283	$0.0000	$69.9283	$67.5461	$0.0000	$67.5461
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$70.1390			$67.7496
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$70.1390**			**$67.7496**

000051

Nonrecurring Cost Development

Tennessee
A.13.898 - 2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
	JFC/	JFC/Payband	Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	Payband	Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

	JFC/	JFC/Payband	Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	Payband	Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

000052

Nonrecurring Cost Summary

Tennessee
A.13.899 - 2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Total Cost	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Gross Receipts Tax Factor		X	1.0030		X	1.0030
Cost (including Gross Receipts Tax)			$111.7614			$20.8063
Common Cost Factor		X	1.0000		X	1.0000
Nonrecurring Economic Cost			**$111.7614**			**$20.8063**

000053

11/7/2000

Nonrecurring Cost Development

Tennessee

A.13.899 - 2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

000054

Nonrecurring Cost Summary

Tennessee
A.13.998 - 2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing

11/7/2000

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$69.9283	$0.0000		$69.9283	$67.5461	$0.0000		$67.5461
Total Cost	$69.9283	$0.0000		$69.9283	$67.5461	$0.0000		$67.5461
Gross Receipts Tax Factor			X	1.0030			X	1.0030
Cost (including Gross Receipts Tax)				$70.1390				$67.7496
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$70.1390**				**$67.7496**

000055

Tennessee
A.13.998 - 2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

000056

Nonrecurring Cost Summary

Tennessee
A.13.999 - 2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$93.8580	$0.0000		$93.8580	$15.3127	$0.0000		$15.3127
Total Cost	$93.8580	$0.0000		$93.8580	$15.3127	$0.0000		$15.3127
Gross Receipts Tax Factor			X	1.0030			X	1.0030
Cost (including Gross Receipts Tax)				$94.1408				$15.3588
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$94.1408**				**$15.3588**

000057

Nonrecurring Cost Development

Tennessee
A.13.999 - 2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	A Installation Worktimes Additional	B Disconnect Worktimes First	B Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	D=AxC Install Cost Additional	E=BxC Disconnect Cost First	E=BxC Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	G=ExF Discounted Disconnect Cost Additional	H=D+G Direct Cost First	H=D+G Direct Cost Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

000058

Nonrecurring Cost Summary

Tennessee
A.13.1098 - 2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing

11/7/2000

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$69.9283	$0.0000		$69.9283	$67.5461	$0.0000		$67.5461
Total Cost	$69.9283	$0.0000		$69.9283	$67.5461	$0.0000		$67.5461
Gross Receipts Tax Factor			X	1.0030			X	1.0030
Cost (including Gross Receipts Tax)				$70.1390				$67.7496
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$70.1390**				**$67.7496**

000059

Nonrecurring Cost Development

Tennessee
A.13.1098 - 2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

000060

Nonrecurring Cost Summary

Tennessee
A.13.1099 - 2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Total Cost	$111.4256	$0.0000	$111.4256	$20.7438	$0.0000	$20.7438
Gross Receipts Tax Factor		X	1.0030		X	1.0030
Cost (including Gross Receipts Tax)			$111.7614			$20.8063
Common Cost Factor		X	1.0000		X	1.0000
Nonrecurring Economic Cost			**$111.7614**			**$20.8063**

000061

Nonrecurring Cost Development

Tennessee
A.13.1099 - 2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1681	$18.2049	$6.0683	$18.2049	$6.0683
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	111.4256	20.7438

000062

Nonrecurring Cost Summary

Tennessee
A.13.1198 - 2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$69.9283	$0.0000	$69.9283	$67.5461	$0.0000	$67.5461
Total Cost	$69.9283	$0.0000	$69.9283	$67.5461	$0.0000	$67.5461
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$70.1390			$67.7496
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$70.1390**			**$67.7496**

000063

Nonrecurring Cost Development

Tennessee

A.13.1198 - 2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.8099	0.8099	0.0000	0.0000	$38.31	$31.0276	$31.0276	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$31.0276	$31.0276
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.7517	0.7517	0.0000	0.0000	$45.41	$34.1362	$34.1362	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$34.1362	$34.1362
														Total	69.9283	67.5461

000064

Nonrecurring Cost Summary

Tennessee
A.13.1199 - 2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$93.8580	$0.0000	$93.8580	$15.3127	$0.0000	$15.3127
Total Cost	$93.8580	$0.0000	$93.8580	$15.3127	$0.0000	$15.3127
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$94.1408			$15.3588
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$94.1408**			**$15.3588**

000065

Nonrecurring Cost Development

Tennessee
A.13.1199 - 2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1681	$0.6372	$0.6372	$0.6372	$0.6372
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1681	$1.7355	$0.2620	$1.7355	$0.2620
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1681	$0.2338	$0.2338	$0.2338	$0.2338
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1681	$21.5844	$2.2375	$21.5844	$2.2375
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1681	$10.4352	$4.8698	$10.4352	$4.8698
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.7833	0.1333	$45.41	$0.0000	$0.0000	$35.5712	$6.0547	1.1681	$41.5507	$7.0725	$41.5507	$7.0725
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1681	$17.6812	$0.0000	$17.6812	$0.0000
														Total	93.8580	15.3127

000066

Nonrecurring Cost Summary

Tennessee
A.14.8 - 4-Wire Copper Loop - short (Nonrecurring w/ LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$199.7061	$0.0000	$199.7061	$87.5985	$0.0000	$87.5985
Total Cost	$199.7061	$0.0000	$199.7061	$87.5985	$0.0000	$87.5985
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$200.3078			$87.8624
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$200.3078**			**$87.8624**

000067

Nonrecurring Cost Development

Tennessee
A.14.8 - 4-Wire Copper Loop - short (Nonrecurring w/ LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	199.7061	87.5985

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	199.7061	87.5985

000068

Nonrecurring Cost Summary

Tennessee
A.14.9 - 4-Wire Copper Loop - short (Nonrecurring w/o LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$122.0805	$0.0000	$122.0805	$53.2092	$0.0000	$53.2092
Total Cost	$122.0805	$0.0000	$122.0805	$53.2092	$0.0000	$53.2092
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$122.4484			$53.3695
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$122.4484**			**$53.3695**

000069

Nonrecurring Cost Development

Tennessee

A.14.9 - 4-Wire Copper Loop - short (Nonrecurring w/o LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	122.0805	53.2092

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	122.0805	53.2092

000070

Nonrecurring Cost Summary

Tennessee
A.14.10 - 4-Wire Copper Loop - long (Nonrecurring w/ LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$199.7061	$0.0000	$199.7061	$87.5985	$0.0000	$87.5985
Total Cost	$199.7061	$0.0000	$199.7061	$87.5985	$0.0000	$87.5985
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$200.3078			$87.8624
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$200.3078**			**$87.8624**

000071

Nonrecurring Cost Development

Tennessee
A.14.10 - 4-Wire Copper Loop - long (Nonrecurring w/ LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
	JFC/	JFC/Payband	Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	Payband	Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	199.7061	87.5985

	JFC/	JFC/Payband	Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	Payband	Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.2242	0.0000	0.0000	$51.17	$27.2054	$11.4706	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$27.2054	$11.4706
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.1667	0.0000	0.0000	$31.17	$23.3775	$5.1950	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$23.3775	$5.1950
ENGINEERING	JG57	Job Grade 57	0.4156	0.4156	0.0000	0.0000	$40.54	$16.8476	$16.8476	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$16.8476	$16.8476
ENGINEERING	JG57	Job Grade 57	0.3333	0.0833	0.0000	0.0000	$40.54	$13.5127	$3.3782	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$13.5127	$3.3782
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	199.7061	87.5985

000072

Nonrecurring Cost Summary

Tennessee
A.14.11 - 4-Wire Copper Loop - long (Nonrecurring w/o LMU)

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$122.0805	$0.0000	$122.0805	$53.2092	$0.0000	$53.2092
Total Cost	$122.0805	$0.0000	$122.0805	$53.2092	$0.0000	$53.2092
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$122.4484			$53.3695
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$122.4484**			**$53.3695**

000073

Nonrecurring Cost Development

Tennessee
A.14.11 - 4-Wire Copper Loop - long (Nonrecurring w/o LMU)

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	122.0805	53.2092

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0175	0.0175	0.0000	0.0000	$31.17	$0.5455	$0.5455	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$0.5455	$0.5455
ENGINEERING	JG57	Job Grade 57	0.0416	0.0416	0.0000	0.0000	$40.54	$1.6848	$1.6848	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.6848	$1.6848
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0333	0.0083	0.0000	0.0000	$32.62	$1.0873	$0.2718	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0873	$0.2718
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0825	0.0450	0.0000	0.0000	$33.64	$2.7753	$1.5138	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$2.7753	$1.5138
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0400	0.0400	0.0000	0.0000	$34.31	$1.3724	$1.3724	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.3724	$1.3724
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.5990	0.1428	0.0000	0.0000	$38.31	$22.9477	$5.4719	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$22.9477	$5.4719
CONNECT & TEST	4WXX	Work Management Center (WMC)	0.0333	0.0000	0.0000	0.0000	$32.76	$1.0920	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$1.0920	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1700	0.0850	0.0000	0.0000	$42.04	$7.1468	$3.5734	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$7.1468	$3.5734
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.5039	0.8539	0.0000	0.0000	$45.41	$68.2921	$38.7756	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$68.2921	$38.7756
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.3333	0.0000	0.0000	0.0000	$45.41	$15.1367	$0.0000	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$15.1367	$0.0000
														Total	122.0805	53.2092

000074

Nonrecurring Cost Summary

Tennessee
A.14.898 - 4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Total Cost	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Gross Receipts Tax Factor		X	1.0030		X	1.0030
Cost (including Gross Receipts Tax)			$102.8191			$100.4297
Common Cost Factor		X	1.0000		X	1.0000
Nonrecurring Economic Cost			**$102.8191**			**$100.4297**

000075

Nonrecurring Cost Development

11/7/2000

Tennessee
A.14.898 - 4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	A Installation Worktimes Additional	B Disconnect Worktimes First	B Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	D=AxC Install Cost Additional	E=BxC Disconnect Cost First	E=BxC Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	G=ExF Discounted Disconnect Cost Additional	H=D+G Direct Cost First	H=D+G Direct Cost Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

000076

Nonrecurring Cost Summary

Tennessee
A.14.899 - 4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$117.3156	$0.0000	$117.3156	$24.7771	$0.0000	$24.7771
Total Cost	$117.3156	$0.0000	$117.3156	$24.7771	$0.0000	$24.7771
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$117.6691			$24.8518
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$117.6691**			**$24.8518**

000077

Nonrecurring Cost Development

11/7/2000

Tennessee

A.14.899 - 4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1920	$18.5776	$6.1925	$18.5776	$6.1925
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	117.3156	24.7771

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1920	$18.5776	$6.1925	$18.5776	$6.1925
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	117.3156	24.7771

000078

Nonrecurring Cost Summary

Tennessee
A.14.998 - 4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Total Cost	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$102.8191			$100.4297
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$102.8191**			**$100.4297**

000079

Nonrecurring Cost Development

Tennessee

A.14.998 - 4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

000080

Nonrecurring Cost Summary

Tennessee
A.14.999 - 4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$99.3883	$0.0000	$99.3883	$19.2348	$0.0000	$19.2348
Total Cost	$99.3883	$0.0000	$99.3883	$19.2348	$0.0000	$19.2348
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$99.6877			$19.2928
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$99.6877**			**$19.2928**

000081

Nonrecurring Cost Development

11/7/2000

Tennessee
A.14.999 - 4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktimes First	A Installation Worktimes Additional	B Disconnect Worktimes First	B Disconnect Worktimes Additional	C Direct Labor Rate	D=AxC Install Cost First	D=AxC Install Cost Additional	E=BxC Disconnect Cost First	E=BxC Disconnect Cost Additional	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost First	G=ExF Discounted Disconnect Cost Additional	H=D+G Direct Cost First	H=D+G Direct Cost Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1920	$0.6502	$0.6502	$0.6502	$0.6502
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	99.3883	19.2348

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1920	$0.6502	$0.6502	$0.6502	$0.6502
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	99.3883	19.2348

000082

Nonrecurring Cost Summary

Tennessee
A.14.1098 - 4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Total Cost	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$102.8191			$100.4297
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$102.8191**			**$100.4297**

000083

Nonrecurring Cost Development

11/7/2000

Tennessee

A.14.1098 - 4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

000084

Nonrecurring Cost Summary

Tennessee
A.14.1099 - 4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect

11/7/2000

	Nonrecurring Cost					
	First			**Additional**		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$117.3156	$0.0000	$117.3156	$24.7771	$0.0000	$24.7771
Total Cost	$117.3156	$0.0000	$117.3156	$24.7771	$0.0000	$24.7771
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$117.6691			$24.8518
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$117.6691**			**$24.8518**

000085

Nonrecurring Cost Development

11/7/2000

Tennessee
A.14.1099 - 4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1920	$18.5776	$6.1925	$18.5776	$6.1925
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	117.3156	24.7771

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.5000	0.1667	$31.17	$0.0000	$0.0000	$15.5850	$5.1950	1.1920	$18.5776	$6.1925	$18.5776	$6.1925
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	117.3156	24.7771

000086

Nonrecurring Cost Summary

Tennessee
A.14.1198 - 4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Total Cost	$102.5102	$0.0000	$102.5102	$100.1280	$0.0000	$100.1280
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$102.8191			$100.4297
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$102.8191**			**$100.4297**

000087

Nonrecurring Cost Development

Tennessee
A.14.1198 - 4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing

11/7/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	Direct Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	1.2149	1.2149	0.0000	0.0000	$38.31	$46.5414	$46.5414	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$46.5414	$46.5414
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.1133	0.0567	0.0000	0.0000	$42.04	$4.7645	$2.3823	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$4.7645	$2.3823
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	1.1276	1.1276	0.0000	0.0000	$45.41	$51.2043	$51.2043	$0.0000	$0.0000	1.1920	$0.0000	$0.0000	$51.2043	$51.2043
														Total	102.5102	100.1280

000088

Nonrecurring Cost Summary

Tennessee
A.14.1199 - 4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect

11/7/2000

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$99.3883	$0.0000	$99.3883	$19.2348	$0.0000	$19.2348
Total Cost	$99.3883	$0.0000	$99.3883	$19.2348	$0.0000	$19.2348
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$99.6877			$19.2928
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$99.6877**			**$19.2928**

000089

Nonrecurring Cost Development

Tennessee
A.14.1199 - 4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1920	$0.6502	$0.6502	$0.6502	$0.6502
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	99.3883	19.2348

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
SERVICE ORDER	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0175	0.0175	$31.17	$0.0000	$0.0000	$0.5455	$0.5455	1.1920	$0.6502	$0.6502	$0.6502	$0.6502
ENGINEERING	4N4X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0442	0.0067	$33.64	$0.0000	$0.0000	$1.4858	$0.2243	1.1920	$1.7711	$0.2673	$1.7711	$0.2673
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0000	0.0000	0.0058	0.0058	$34.31	$0.0000	$0.0000	$0.2001	$0.2001	1.1920	$0.2386	$0.2386	$0.2386	$0.2386
CONNECT & TEST	4AXX	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.4823	0.0500	$38.31	$0.0000	$0.0000	$18.4782	$1.9155	1.1920	$22.0263	$2.2833	$22.0263	$2.2833
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2125	0.0992	$42.04	$0.0000	$0.0000	$8.9335	$4.1690	1.1920	$10.6489	$4.9695	$10.6489	$4.9695
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.8500	0.2000	$45.41	$0.0000	$0.0000	$38.5985	$9.0820	1.1920	$46.0101	$10.8259	$46.0101	$10.8259
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0000	0.0000	0.3333	0.0000	$45.41	$0.0000	$0.0000	$15.1367	$0.0000	1.1920	$18.0432	$0.0000	$18.0432	$0.0000
														Total	99.3883	19.2348

000090

Nonrecurring Cost Summary

Tennessee
A.17.2 - Unbundled Loop Modification - Load Coil / Equipment Removal - long

11/7/2000

Nonrecurring Cost

	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$321.0182	$0.0000	$321.0182
Total Cost	$321.0182	$0.0000	$321.0182
Gross Receipts Tax Factor			X 1.0030
Cost (including Gross Receipts Tax)			$321.9854
Common Cost Factor			X 1.0000
Nonrecurring Economic Cost			**$321.9854**

000091

Nonrecurring Cost Development

Tennessee
A.17.2 - Unbundled Loop Modification - Load Coil / Equipment Removal - long

11/7/2000

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.0111	0.0000	$51.17	$0.5679	$0.0000	1.0000	$0.0000	$0.5679
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0157	0.0000	$31.17	$0.4880	$0.0000	1.0000	$0.0000	$0.4880
ENGINEERING	JG57	Job Grade 57	1.8750	0.0000	$40.54	$76.0088	$0.0000	1.0000	$0.0000	$76.0088
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.1392	0.0000	$32.62	$4.5396	$0.0000	1.0000	$0.0000	$4.5396
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.4175	0.0000	$34.31	$14.3244	$0.0000	1.0000	$0.0000	$14.3244
CONNECT & TEST	420X	Outside Plant Constr (OSPC)	5.0400	0.0000	$42.55	$214.4520	$0.0000	1.0000	$0.0000	$214.4520
TRAVEL	420X	Outside Plant Constr (OSPC)	0.2500	0.0000	$42.55	$10.6375	$0.0000	1.0000	$0.0000	$10.6375
									Total	**321.0182094**

Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**TELRIC Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**TELRIC**
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.0111	0.0000	$51.17	$0.5679	$0.0000	1.0000	$0.0000	$0.5679
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0157	0.0000	$31.17	$0.4880	$0.0000	1.0000	$0.0000	$0.4880
ENGINEERING	JG57	Job Grade 57	1.8750	0.0000	$40.54	$76.0088	$0.0000	1.0000	$0.0000	$76.0088
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.1392	0.0000	$32.62	$4.5396	$0.0000	1.0000	$0.0000	$4.5396
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.4175	0.0000	$34.31	$14.3244	$0.0000	1.0000	$0.0000	$14.3244
CONNECT & TEST	420X	Outside Plant Constr (OSPC)	5.0400	0.0000	$42.55	$214.4520	$0.0000	1.0000	$0.0000	$214.4520
TRAVEL	420X	Outside Plant Constr (OSPC)	0.2500	0.0000	$42.55	$10.6375	$0.0000	1.0000	$0.0000	$10.6375
									Total	**321.0182**

000092

11/7/2000

Nonrecurring Cost Summary

Tennessee
A.17.4 - Unbundled Loop Modification - Additive

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$12.3214	$0.0000	$12.3214	$12.3214	$0.0000	$12.3214
Total Cost	$12.3214	$0.0000	$12.3214	$12.3214	$0.0000	$12.3214
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$12.3586			$12.3586
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$12.3586**			**$12.3586**

000093

Nonrecurring Cost Development

11/7/2000

Tennessee
A.17.4 - Unbundled Loop Modification - Additive

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.0018	0.0018	0.0000	0.0000	$51.17	$0.0914	$0.0914	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.0914	$0.0914
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0025	0.0025	0.0000	0.0000	$31.17	$0.0785	$0.0785	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.0785	$0.0785
ENGINEERING	JG57	Job Grade 57	0.0754	0.0754	0.0000	0.0000	$40.54	$3.0574	$3.0574	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$3.0574	$3.0574
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0056	0.0056	0.0000	0.0000	$32.62	$0.1826	$0.1826	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.1826	$0.1826
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0168	0.0168	0.0000	0.0000	$34.31	$0.5762	$0.5762	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.5762	$0.5762
CONNECT & TEST	420X	Outside Plant Constr (OSPC)	0.1858	0.1858	0.0000	0.0000	$42.55	$7.9074	$7.9074	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$7.9074	$7.9074
TRAVEL	420X	Outside Plant Constr (OSPC)	0.0101	0.0101	0.0000	0.0000	$42.55	$0.4279	$0.4279	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4279	$0.4279
														Total	12.3214	12.3214

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.0018	0.0018	0.0000	0.0000	$51.17	$0.0914	$0.0914	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.0914	$0.0914
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.0025	0.0025	0.0000	0.0000	$31.17	$0.0785	$0.0785	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.0785	$0.0785
ENGINEERING	JG57	Job Grade 57	0.0754	0.0754	0.0000	0.0000	$40.54	$3.0574	$3.0574	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$3.0574	$3.0574
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.0056	0.0056	0.0000	0.0000	$32.62	$0.1826	$0.1826	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.1826	$0.1826
ENGINEERING	4M1X	Address & Facility Inventory (AFIG)	0.0168	0.0168	0.0000	0.0000	$34.31	$0.5762	$0.5762	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.5762	$0.5762
CONNECT & TEST	420X	Outside Plant Constr (OSPC)	0.1858	0.1858	0.0000	0.0000	$42.55	$7.9074	$7.9074	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$7.9074	$7.9074
TRAVEL	420X	Outside Plant Constr (OSPC)	0.0101	0.0101	0.0000	0.0000	$42.55	$0.4279	$0.4279	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4279	$0.4279
														Total	12.3214	12.3214

000094

Nonrecurring Cost Summary

Tennessee
J.3.3 - Manual Loop Make-up w/o Facility Reservation Number

11/7/2000

	Direct Cost	Shared Cost		TELRIC
	Nonrecurring Cost			
Nonrecurring Cost Development Sheet Col H	$74.2342	$0.0000		$74.2342
Total Cost	$74.2342	$0.0000		$74.2342
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$74.4579
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$74.4579**

000095

Nonrecurring Cost Development

Tennessee
J.3.3 - Manual Loop Make-up w/o Facility Reservation Number

11/7/2000

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.0000	$51.17	$27.2054	$0.0000	1.0000	$0.0000	$27.2054
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.0000	$31.17	$23.3775	$0.0000	1.0000	$0.0000	$23.3775
ENGINEERING	JG57	Job Grade 57	0.3823	0.0000	$40.54	$15.4963	$0.0000	1.0000	$0.0000	$15.4963
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.2500	0.0000	$32.62	$8.1550	$0.0000	1.0000	$0.0000	$8.1550
									Total	**74.23420947**

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.0000	$51.17	$27.2054	$0.0000	1.0000	$0.0000	$27.2054
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.0000	$31.17	$23.3775	$0.0000	1.0000	$0.0000	$23.3775
ENGINEERING	JG57	Job Grade 57	0.3823	0.0000	$40.54	$15.4963	$0.0000	1.0000	$0.0000	$15.4963
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.2500	0.0000	$32.62	$8.1550	$0.0000	1.0000	$0.0000	$8.1550
									Total	**74.2342**

000096

Nonrecurring Cost Summary

Tennessee
J.3.4 - Manual Loop Make-up w/ Facility Reservation Number

11/7/2000

Nonrecurring Cost

	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$76.9525	$0.0000	$76.9525
Total Cost	$76.9525	$0.0000	$76.9525
Gross Receipts Tax Factor			X 1.0030
Cost (including Gross Receipts Tax)			$77.1844
Common Cost Factor			X 1.0000
Nonrecurring Economic Cost			**$77.1844**

000097

Nonrecurring Cost Development

Tennessee
J.3.4 - Manual Loop Make-up w/ Facility Reservation Number

11/7/2000

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	Direct Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	Direct Cost
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.0000	$51.17	$27.2054	$0.0000	1.0000	$0.0000	$27.2054
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.0000	$31.17	$23.3775	$0.0000	1.0000	$0.0000	$23.3775
ENGINEERING	JG57	Job Grade 57	0.3823	0.0000	$40.54	$15.4963	$0.0000	1.0000	$0.0000	$15.4963
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.3333	0.0000	$32.62	$10.8733	$0.0000	1.0000	$0.0000	$10.8733
									Total	76.9525428

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
SERVICE INQUIRY	SDWC	Systems Designer w/Sales Com	0.5317	0.0000	$51.17	$27.2054	$0.0000	1.0000	$0.0000	$27.2054
SERVICE INQUIRY	230X	Customer Point Of Contact - ICSC/LCSC	0.7500	0.0000	$31.17	$23.3775	$0.0000	1.0000	$0.0000	$23.3775
ENGINEERING	JG57	Job Grade 57	0.3823	0.0000	$40.54	$15.4963	$0.0000	1.0000	$0.0000	$15.4963
ENGINEERING	4FXX	Service Advocacy Center (SAC)	0.3333	0.0000	$32.62	$10.8733	$0.0000	1.0000	$0.0000	$10.8733
									Total	76.9525

000098

Nonrecurring Cost Summary

Tennessee
J.4.1 - Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office

11/9/2000

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$370.5127	$0.0000		$370.5127
Total Cost	$370.5127	$0.0000		$370.5127
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$371.6291
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$371.6291**

000099

Nonrecurring Cost Development

11/9/2000

Tennessee
J.4.1 - Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
COSMOS / SWITCH	JG56	Job Grade 56	4.0000	0.0000	$36.16	$144.6380	$0.0000	1.1681	$0.0000	$144.6380
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	3.0000	0.0000	$50.98	$152.9400	$0.0000	1.1681	$0.0000	$152.9400
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.7400	0.0000	$31.17	$23.0658	$0.0000	1.1681	$0.0000	$23.0658
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.6700	0.0000	$51.17	$34.2839	$0.0000	1.1681	$0.0000	$34.2839
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.5000	0.0000	$31.17	$15.5850	$0.0000	1.1681	$0.0000	$15.5850
									Total	**370.5127**

Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**TELRIC Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**TELRIC**
COSMOS / SWITCH	JG56	Job Grade 56	4.0000	0.0000	$36.16	$144.6380	$0.0000	1.1681	$0.0000	$144.6380
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	3.0000	0.0000	$50.98	$152.9400	$0.0000	1.1681	$0.0000	$152.9400
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.7400	0.0000	$31.17	$23.0658	$0.0000	1.1681	$0.0000	$23.0658
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.6700	0.0000	$51.17	$34.2839	$0.0000	1.1681	$0.0000	$34.2839
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.5000	0.0000	$31.17	$15.5850	$0.0000	1.1681	$0.0000	$15.5850
									Total	**370.5127**

000100

Nonrecurring Cost Summary

Tennessee
J.4.2 - Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office

11/9/2000

Nonrecurring Cost

	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$370.5127	$0.0000	$370.5127
Total Cost	$370.5127	$0.0000	$370.5127
Gross Receipts Tax Factor			X 1.0030
Cost (including Gross Receipts Tax)			$371.6291
Common Cost Factor			X 1.0000
Nonrecurring Economic Cost			**$371.6291**

000101

Nonrecurring Cost Development

Tennessee
J.4.2 - Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office

11/9/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktime	B Disconnect Worktime	C Direct Labor Rate	D=AxC Install Cost	E=BxC Disconnect Cost	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost	H=D+G Direct Cost
COSMOS / SWITCH	JG56	Job Grade 56	4.0000	0.0000	$36.16	$144.6380	$0.0000	1.1681	$0.0000	$144.6380
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	3.0000	0.0000	$50.98	$152.9400	$0.0000	1.1681	$0.0000	$152.9400
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.7400	0.0000	$31.17	$23.0658	$0.0000	1.1681	$0.0000	$23.0658
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.6700	0.0000	$51.17	$34.2839	$0.0000	1.1681	$0.0000	$34.2839
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.5000	0.0000	$31.17	$15.5850	$0.0000	1.1681	$0.0000	$15.5850
									Total	**370.5127**

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
COSMOS / SWITCH	JG56	Job Grade 56	4.0000	0.0000	$36.16	$144.6380	$0.0000	1.1681	$0.0000	$144.6380
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	3.0000	0.0000	$50.98	$152.9400	$0.0000	1.1681	$0.0000	$152.9400
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.7400	0.0000	$31.17	$23.0658	$0.0000	1.1681	$0.0000	$23.0658
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.6700	0.0000	$51.17	$34.2839	$0.0000	1.1681	$0.0000	$34.2839
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.5000	0.0000	$31.17	$15.5850	$0.0000	1.1681	$0.0000	$15.5850
									Total	**370.5127**

000102

Nonrecurring Cost Summary

Tennessee
J.4.6 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)

11/9/2000

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$108.3297	$0.0000		$108.3297
Total Cost	$108.3297	$0.0000		$108.3297
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$108.6561
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$108.6561**

000103

Nonrecurring Cost Development

11/9/2000

Tennessee
J.4.6 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	1.0000	0.0000	$50.98	$50.9800	$0.0000	1.1681	$0.0000	$50.9800
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.7400	0.0000	$31.17	$23.0658	$0.0000	1.1681	$0.0000	$23.0658
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.6700	0.0000	$51.17	$34.2839	$0.0000	1.1681	$0.0000	$34.2839
									Total	**108.3297**

Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**TELRIC Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**TELRIC**
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	1.0000	0.0000	$50.98	$50.9800	$0.0000	1.1681	$0.0000	$50.9800
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.7400	0.0000	$31.17	$23.0658	$0.0000	1.1681	$0.0000	$23.0658
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.6700	0.0000	$51.17	$34.2839	$0.0000	1.1681	$0.0000	$34.2839
									Total	**108.3297**

000104

Nonrecurring Cost Summary

Tennessee
J.4.7 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))

11/09/2000

	Nonrecurring Cost			
	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$54.2393	$0.0000		$54.2393
Total Cost	$54.2393	$0.0000		$54.2393
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$54.4027
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$54.4027**

Nonrecurring Cost Development

Tennessee

J.4.7 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))

11/09/2000

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
COSMOS / SWITCH	JG56	Job Grade 56	1.5000	0.0000	$36.16	$54.2393	$0.0000	1.1681	$0.0000	$54.2393
									Total	**54.23925**

Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**TELRIC Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**TELRIC**
COSMOS / SWITCH	JG56	Job Grade 56	1.5000	0.0000	$36.16	$54.2393	$0.0000	1.1681	$0.0000	$54.2393
									Total	**54.2393**

000106

Nonrecurring Cost Summary

Tennessee
J.4.8 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7)

11/9/2000

Nonrecurring Cost

	Initial				Subsequent			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H				$0.0000	$15.5850	$0.0000		$15.5850
Total Cost	$0.0000	$0.0000		$0.0000	$15.5850	$0.0000		$15.5850
Gross Receipts Tax Factor			X	1.0030			X	1.0030
Cost (including Gross Receipts Tax)				$0.0000				$15.6320
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$0.0000**				**$15.6320**

000107

Tennessee
J.4.8 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7)

11/9/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	Initial	Subsequent	Initial	Subsequent	Rate	Initial	Subsequent	Initial	Subsequent	Factor	Initial	Subsequent	Initial	Subsequent
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.5000	0.0000	0.0000	$31.17	$0.0000	$15.5850	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.0000	$15.5850
														Total	0.0000	15.5850

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	Initial	Subsequent	Initial	Subsequent	Rate	Initial	Subsequent	Initial	Subsequent	Factor	Initial	Subsequent	Initial	Subsequent
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.5000	0.0000	0.0000	$31.17	$0.0000	$15.5850	$0.0000	$0.0000	1.1681	$0.0000	$0.0000	$0.0000	$15.5850
														Total	0.0000	15.5850

000108

Nonrecurring Cost Summary

Tennessee

J.4.199 - Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office - Disconnect

11/9/2000

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$348.3203	$0.0000		$348.3203
Total Cost	$348.3203	$0.0000		$348.3203
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$349.3698
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$349.3698**

000109

Nonrecurring Cost Development

Tennessee
J.4.199 - Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office - Disconnect

11/9/2000

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
COSMOS / SWITCH	JG56	Job Grade 56	0.0000	2.0000	$36.16	$0.0000	$72.3190	1.1681	$84.4759	$84.4759
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	0.0000	3.0000	$50.98	$0.0000	$152.9400	1.1681	$178.6494	$178.6494
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.0000	0.7400	$31.17	$0.0000	$23.0658	1.1681	$26.9432	$26.9432
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.0000	0.6700	$51.17	$0.0000	$34.2839	1.1681	$40.0471	$40.0471
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.5000	$31.17	$0.0000	$15.5850	1.1681	$18.2049	$18.2049
									Total	**348.3203263**

Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**TELRIC Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**TELRIC**
COSMOS / SWITCH	JG56	Job Grade 56	0.0000	2.0000	$36.16	$0.0000	$72.3190	1.1681	$84.4759	$84.4759
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	0.0000	3.0000	$50.98	$0.0000	$152.9400	1.1681	$178.6494	$178.6494
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.0000	0.7400	$31.17	$0.0000	$23.0658	1.1681	$26.9432	$26.9432
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.0000	0.6700	$51.17	$0.0000	$34.2839	1.1681	$40.0471	$40.0471
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.5000	$31.17	$0.0000	$15.5850	1.1681	$18.2049	$18.2049
									Total	**348.3203**

000110

Nonrecurring Cost Summary

Tennessee

J.4.299 - Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office - Disconnect

11/9/2000

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$348.3203	$0.0000		$348.3203
Total Cost	$348.3203	$0.0000		$348.3203
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$349.3698
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$349.3698**

Nonrecurring Cost Development

Tennessee
J.4.299 - Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office - Disconnect

11/9/2000

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktime	B Disconnect Worktime	C Direct Labor Rate	D=AxC Install Cost	E=BxC Disconnect Cost	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost	H=D+G Direct Cost
COSMOS / SWITCH	JG56	Job Grade 56	0.0000	2.0000	$36.16	$0.0000	$72.3190	1.1681	$84.4759	$84.4759
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	0.0000	3.0000	$50.98	$0.0000	$152.9400	1.1681	$178.6494	$178.6494
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.0000	0.7400	$31.17	$0.0000	$23.0658	1.1681	$26.9432	$26.9432
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.0000	0.6700	$51.17	$0.0000	$34.2839	1.1681	$40.0471	$40.0471
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.5000	$31.17	$0.0000	$15.5850	1.1681	$18.2049	$18.2049
									Total	**348.3203263**

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
COSMOS / SWITCH	JG56	Job Grade 56	0.0000	2.0000	$36.16	$0.0000	$72.3190	1.1681	$84.4759	$84.4759
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	0.0000	3.0000	$50.98	$0.0000	$152.9400	1.1681	$178.6494	$178.6494
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.0000	0.7400	$31.17	$0.0000	$23.0658	1.1681	$26.9432	$26.9432
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.0000	0.6700	$51.17	$0.0000	$34.2839	1.1681	$40.0471	$40.0471
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.5000	$31.17	$0.0000	$15.5850	1.1681	$18.2049	$18.2049
									Total	**348.3203**

000112

Nonrecurring Cost Summary

Tennessee

J.4.699 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD) - Disconnect

11/9/2000

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$81.8777	$0.0000		$81.8777
Total Cost	$81.8777	$0.0000		$81.8777
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$82.1244
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$82.1244**

000113

Nonrecurring Cost Development

Tennessee
J.4.699 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD) - Disconnect

11/9/2000

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	Direct Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	Direct Cost
			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	0.0000	0.2500	$50.98	$0.0000	$12.7450	1.1681	$14.8874	$14.8874
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.0000	0.7400	$31.17	$0.0000	$23.0658	1.1681	$26.9432	$26.9432
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.0000	0.6700	$51.17	$0.0000	$34.2839	1.1681	$40.0471	$40.0471
									Total	**81.87768146**

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Circuit Capacity Management	34XX	Ntwk & Eng Planning (FG20)	0.0000	0.2500	$50.98	$0.0000	$12.7450	1.1681	$14.8874	$14.8874
Complex Resale Support Group	221X	Complex Resale Support Group (CRSG)	0.0000	0.7400	$31.17	$0.0000	$23.0658	1.1681	$26.9432	$26.9432
Complex Resale Support Group	SDWC	Systems Designer w/Sales Com	0.0000	0.6700	$51.17	$0.0000	$34.2839	1.1681	$40.0471	$40.0471
									Total	**81.8777**

000114

Nonrecurring Cost Summary

Tennessee
J.4.799 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs)) - Disconnect

11/09/2000

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$10.5595	$0.0000		$10.5595
Total Cost	$10.5595	$0.0000		$10.5595
Gross Receipts Tax Factor			X	1.0030
Cost (including Gross Receipts Tax)				$10.5913
Common Cost Factor			X	1.0000
Nonrecurring Economic Cost				**$10.5913**

000115

Nonrecurring Cost Development

Tennessee

J.4.799 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs)) - Disconnect

11/9/2000

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
COSMOS / SWITCH	JG56	Job Grade 56	0.0000	0.2500	$36.16	$0.0000	$9.0399	1.1681	$10.5595	$10.5595
									Total	**10.55948603**

Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**TELRIC Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**TELRIC**
COSMOS / SWITCH	JG56	Job Grade 56	0.0000	0.2500	$36.16	$0.0000	$9.0399	1.1681	$10.5595	$10.5595
									Total	**10.5595**

000116

Nonrecurring Cost Summary

Tennessee

J.4.899 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7) - Disconnect

11/9/2000

Nonrecurring Cost

	Initial Direct Cost	Initial Shared Cost	Initial TELRIC	Subsequent Direct Cost	Subsequent Shared Cost	Subsequent TELRIC
Nonrecurring Cost Development Sheet Col H			$0.0000	$18.2049	$0.0000	$18.2049
Total Cost	$0.0000	$0.0000	$0.0000	$18.2049	$0.0000	$18.2049
Gross Receipts Tax Factor			X 1.0030			X 1.0030
Cost (including Gross Receipts Tax)			$0.0000			$18.2597
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$0.0000**			**$18.2597**

000117

Nonrecurring Cost Development

Tennessee
J.4.899 - Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order for J.4.7) - Disconnect

11/9/2000

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes Initial	Installation Worktimes Subsequent	Disconnect Worktimes Initial	Disconnect Worktimes Subsequent	Direct Labor Rate	Install Cost Initial	Install Cost Subsequent	Disconnect Cost Initial	Disconnect Cost Subsequent	Disconnect Discount Factor	Discounted Disconnect Cost Initial	Discounted Disconnect Cost Subsequent	Direct Cost Initial	Direct Cost Subsequent
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0000	0.5000	$31.17	$0.0000	$0.0000	$0.0000	$15.5850	1.1681	$0.0000	$18.2049	$0.0000	$18.2049
														Total	0.0000	18.2049

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes Initial	Installation Worktimes Subsequent	Disconnect Worktimes Initial	Disconnect Worktimes Subsequent	TELRIC Labor Rate	Install Cost Initial	Install Cost Subsequent	Disconnect Cost Initial	Disconnect Cost Subsequent	Disconnect Discount Factor	Discounted Disconnect Cost Initial	Discounted Disconnect Cost Subsequent	TELRIC Initial	TELRIC Subsequent
LCSC	230X	Customer Point Of Contact - ICSC/LCSC	0.0000	0.0000	0.0000	0.5000	$31.17	$0.0000	$0.0000	$0.0000	$15.5850	1.1681	$0.0000	$18.2049	$0.0000	$18.2049
														Total	0.0000	18.2049

000118

	A	B	C	D	E	F	G	H	I	J	K
1	Tennessee										
2	Index Sheet										
3	Study Period: 2000-2002										
4											
5											
6											
7											
8											
9			**Sheet Name:**		**Description:**						
10			Index		xDSL-Capable and Copper Loops						
11			Investments		CALCULATOR INPUT FORM - MATERIAL/INVESTMENT DATA						
12			Additives_Recurring		CALCULATOR INPUT FORM - RECURRING EXPENSES DATA						
13			Additives_Nonrecurring		CALCULATOR INPUT FORM - NONRECURRING EXPENSES DATA						
14			Recurring Labor		CALCULATOR INPUT FORM - RECURRING LABOR EXPENSES DATA						
15			Nonrecurring Labor		CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES						
16			WP100		Nonrecurring Worktimes						
17			INPUTS_SERVICE ORDER		Detailed Labor Worktimes						
18			INPUTS_SERVICE INQUIRY		Detailed Labor Worktimes						
19			INPUTS_ENGINEERING		Detailed Labor Worktimes						
20			INPUTS_CONNECT&TEST		Detailed Labor Worktimes						
21			INPUTS_TRAVEL		Detailed Labor Worktimes						
22			INPUTS_MISC		Miscellaneous Inputs						
23											
24											
25											
26											
27											
28											

000119

	A	B	C	D	E	F	G	H	I	J
1		CALCULATOR INPUT FORM - MATERIAL/INVESTMENT DATA								
2										
3		Instructions:								
4		1. Use this worksheet to record material and/or investments to be input into the								
5		Calculator calculations.								
6		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).								
7		3. Input data, by Cost Element, leaving no blank lines. On next row								
8		after last line of data, type END in Cost Element Column.								
9		4. All data on this form should be cell-referenced to study workpapers.								
10		5. Do NOT change columns, headings, sheet name.								
11										
12					Volume	Volume				
13		Cost		Sub	Sensitive	Insensitive				
14	State	Element #	FRC	FRC	$ Amount	$ Amount				
15	TN									
16		END								
17										
18										
19										
20										
21										
22										
23										
24										
25										

000120

CALCULATOR INPUT FORM - RECURRING EXPENSES DATA

Instructions:
1. **Use this worksheet to record recurring non-labor expenses to be input into the Calculator calculations.**
2. **All amounts shown are per unit (e.g., per call, per loop, per MOU).**
3. **Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.**
4. **All data on this form should be cell-referenced to study workpapers.**
5. **Do NOT change columns, headings, sheet name.**

State	Cost Element #	Recurring Expense Description (Limited to 25 characters)	Recurring Volume Sensitive $ Amount	Recurring Volume Insensitive $ Amount
TN	A.13.1	Subscriber Line Testing	$0.2061	
TN	A.13.7	Subscriber Line Testing	$0.2061	
TN	A.14.1	Subscriber Line Testing	$0.2061	
TN	A.14.7	Subscriber Line Testing	$0.2061	
TN	A.13.1	Network Terminating Wire	$0.1301	
TN	A.13.7	Network Terminating Wire	$0.1301	
TN	A.14.1	Network Terminating Wire	$0.1301	
TN	A.14.7	Network Terminating Wire	$0.1301	
TN	A.13.7	Additive for Loops Greater Than 18,000 Feet	$39.2500	
TN	A.14.7	Additive for Loops Greater Than 18,000 Feet	$53.0600	
	END			

Maximum 10 entries per Cost Element #

000121

CALCULATOR INPUT FORM - NONRECURRING EXPENSES DATA

Instructions:

1. Use this worksheet to record nonrecurring non-labor expenses to be input into the Calculator calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.
6. Use column D when cost element has a single nonrecurring cost; use columns E & F for elements with a first and additional nonrecurring cost; use columns G & H for elements with an initial and subsequent nonrecurring cost.

State	Cost Element #	Nonrecurring Expense Description (Limited to 25 characters)	Nonrecurring $ Amount	Nonrecurring First $ Amount	Nonrecurring Additional $ Amount	Nonrecurring Initial $ Amount	Nonrecurring Subsequent $ Amount
TN							
	END						

Maximum 10 entries per Cost Element #

000122

	A	B	C	D	E	F	G	H
1		**CALCULATOR INPUT FORM - RECURRING LABOR EXPENSES DATA**						
2								
3		**Instructions:**						
4		**1. Use this worksheet to record recurring expensed labor times to be input into the**						
5		**Calculator calculations.**						
6		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**						
7		**3. Input data, by Cost Element, leaving no blank lines. On next row**						
8		**after last line of data, type END in Cost Element Column.**						
9		**4. All data on this form should be cell-referenced to study workpapers.**						
10		**5. Do NOT change columns, headings, sheet name.**						
11								
12								
13					**Work Time (Hours)**			
14		**Cost**	**Labor Expense Description**	**JFC/**	**Volume**	**Volume**		
15	**State**	**Element #**	**(Limited to 25 characters)**	**Payband**	**Sensitive**	**Insensitive**		
16	TN							
17		END						
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37			Maximum 20 entries per Cost Element #					
38								

000123

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES													
2															
3		Instructions:													
4		1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.													
5		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).													
6		3. Input data, by Cost Element, leaving no blank lines. On next row													
7		after last line of data, type END in Cost Element Column.													
8		4. All data on this form should be cell-referenced to study workpapers.													
9		5. Do NOT change columns, headings, sheet name.													
10		6. Use columns F & G when cost element has a single nonrecurring cost; use columns H, I, J, & K for elements with a first													
11		and additional nonrecurring cost; use columns L, M, N & O for elements with an initial and subsequent nonrecurring cost.													
12		7. Input Cost Element Life (in months) on first row of data for each cost element. It is not necessary to repeat on each line.													
13															
14															
15	Study Mid-Point Date (Mos.)			6/1/2001											
16															
17															
18–20	State	Cost Element #	Cost Element Life (Mo)	Labor Expense Description (Limited to 25 characters)	JFC/ Payband	(For use w/ one NR) Installation Time (Hours)	Disconnect Time Hours	First Installation Time (Hours)	First Disconnect Time Hours	Additional Installation Time (Hours)	Additional Disconnect Time Hours	Initial Installation Time (Hours)	Initial Disconnect Time Hours	Subsequent Installation Time (Hours)	Subsequent Disconnect Time Hours
21	TN	A 6 5	46	SERVICE INQUIRY	SDWC			0.5317		0.2242					
22	TN	A 6 5	46	SERVICE INQUIRY	230X			0.7500		0.1667					
23	TN	A 6 5	46	ENGINEERING	JG57			0.4156		0.4156					
24	TN	A 6 5	46	ENGINEERING	4FXX			0.3333		0.0833					
25	TN	A 6 5	46	ENGINEERING	4N4X			0.0825		0.0450					
26	TN	A 6 5	46	ENGINEERING	4M1X			0.0400		0.0400					
27	TN	A 6 5	46	CONNECT & TEST	4AXX			0.6390		0.1828					
28	TN	A 6 5	46	CONNECT & TEST	4WXX			0.0333		-					
29	TN	A 6 5	46	CONNECT & TEST	431X			0.1700		0.0850					
30	TN	A 6 5	46	CONNECT & TEST	411X			1.2193		0.5693					
31	TN	A 6 5	46	TRAVEL	411X			0.3333		-					
32	TN	A 6 599	46	SERVICE INQUIRY	SDWC				-		-				
33	TN	A 6 599	46	SERVICE INQUIRY	230X				0.5000		0.1667				
34	TN	A 6 599	46	ENGINEERING	JG57				-		-				
35	TN	A 6 599	46	ENGINEERING	4FXX				-		-				
36	TN	A 6 599	46	ENGINEERING	4N4X				0.0442		0.0067				
37	TN	A 6 599	46	ENGINEERING	4M1X				0.0058		0.0058				
38	TN	A 6 599	46	CONNECT & TEST	4AXX				0.4823		0.0500				
39	TN	A 6 599	46	CONNECT & TEST	4WXX				-		-				
40	TN	A 6 599	46	CONNECT & TEST	431X				0.2125		0.0992				
41	TN	A 6 599	46	CONNECT & TEST	411X				0.7833		0.1333				
42	TN	A 6 599	46	TRAVEL	411X				0.3333		-				
43	TN	A 6 598	46	CONNECT & TEST	4AXX			0.8156	-	0.8156	-				
44	TN	A 6 598	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
45	TN	A 6 598	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				
46	TN	A 6 6	46	SERVICE ORDER	230X			0.0175		0.0175					
47	TN	A 6 6	46	ENGINEERING	JG57			0.0416		0.0416					
48	TN	A 6 6	46	ENGINEERING	4FXX			0.0333		0.0083					
49	TN	A 6 6	46	ENGINEERING	4N4X			0.0825		0.0450					
50	TN	A 6 6	46	ENGINEERING	4M1X			0.0400		0.0400					
51	TN	A 6 6	46	CONNECT & TEST	4AXX			0.6390		0.1828					
52	TN	A 6 6	46	CONNECT & TEST	4WXX			0.0333		-					
53	TN	A 6 6	46	CONNECT & TEST	431X			0.1700		0.0850					
54	TN	A 6 6	46	CONNECT & TEST	411X			1.2193		0.5693					
55	TN	A 6 6	46	TRAVEL	411X			0.3333		-					
56	TN	A 6 699	46	SERVICE ORDER	230X				0.0175		0.0175				
57	TN	A 6 699	46	ENGINEERING	JG57				-		-				
58	TN	A 6 699	46	ENGINEERING	4FXX				-		-				

000124

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
59	TN	A 6 699	46	ENGINEERING	4N4X				0.0442		0.0067				
60	TN	A 6 699	46	ENGINEERING	4M1X				0.0058		0.0058				
61	TN	A 6 699	46	CONNECT & TEST	4AXX				0.4823		0.0500				
62	TN	A 6 699	46	CONNECT & TEST	4WXX				-		-				
63	TN	A 6 699	46	CONNECT & TEST	431X				0.2125		0.0992				
64	TN	A 6 699	46	CONNECT & TEST	411X				0.7833		0.1333				
65	TN	A 6 699	46	TRAVEL	411X				0.3333		-				
66	TN	A 6 698	46	CONNECT & TEST	4AXX			0.8156	-	0.8156	-				
67	TN	A 6 698	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
68	TN	A 6 698	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				
69	TN	A 7 5	46	SERVICE INQUIRY	SDWC			0.5317		0.2242					
70	TN	A 7 5	46	SERVICE INQUIRY	230X			0.7500		0.1667					
71	TN	A 7 5	46	ENGINEERING	JG57			0.4156		0.4156					
72	TN	A 7 5	46	ENGINEERING	JG57			0.3333		0.0833					
73	TN	A 7 5	46	ENGINEERING	4N4X			0.0825		0.0450					
74	TN	A 7 5	46	ENGINEERING	4M1X			0.0400		0.0400					
75	TN	A 7 5	46	CONNECT & TEST	4AXX			0.6390		0.1828					
76	TN	A 7 5	46	CONNECT & TEST	4WXX			0.0333		-					
77	TN	A 7 5	46	CONNECT & TEST	431X			0.1700		0.0850					
78	TN	A 7 5	46	CONNECT & TEST	411X			1.2193		0.5693					
79	TN	A 7 5	46	TRAVEL	411X			0.3333		-					
80	TN	A 7 599	46	SERVICE INQUIRY	SDWC				-		-				
81	TN	A 7 599	46	SERVICE INQUIRY	230X				0.5000		0.1667				
82	TN	A 7 599	46	ENGINEERING	JG57				-		-				
83	TN	A 7 599	46	ENGINEERING	JG57				-		-				
84	TN	A 7 599	46	ENGINEERING	4N4X				0.0442		0.0067				
85	TN	A 7 599	46	ENGINEERING	4M1X				0.0058		0.0058				
86	TN	A 7 599	46	CONNECT & TEST	4AXX				0.4823		0.0500				
87	TN	A 7 599	46	CONNECT & TEST	4WXX				-		-				
88	TN	A 7 599	46	CONNECT & TEST	431X				0.2125		0.0992				
89	TN	A 7 599	46	CONNECT & TEST	411X				0.7833		0.1333				
90	TN	A 7 599	46	TRAVEL	411X				0.3333		-				
91	TN	A 7 598	46	CONNECT & TEST	4AXX			1.2406	-	1.2406	-				
92	TN	A 7 598	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
93	TN	A 7 598	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				
94	TN	A 7 6	46	SERVICE ORDER	230X			0.0175		0.0175					
95	TN	A 7 6	46	ENGINEERING	JG57			0.0416		0.0416					
96	TN	A 7 6	46	ENGINEERING	4FXX			0.0333		0.0083					
97	TN	A 7 6	46	ENGINEERING	4N4X			0.0825		0.0450					
98	TN	A 7 6	46	ENGINEERING	4M1X			0.0400		0.0400					
99	TN	A 7 6	46	CONNECT & TEST	4AXX			0.6390		0.1828					
100	TN	A 7 6	46	CONNECT & TEST	4WXX			0.0333		-					
101	TN	A 7 6	46	CONNECT & TEST	431X			0.1700		0.0850					
102	TN	A 7 6	46	CONNECT & TEST	411X			1.2193		0.5693					
103	TN	A 7 6	46	TRAVEL	411X			0.3333		-					
104	TN	A 7 699	46	SERVICE ORDER	230X				0.0175		0.0175				
105	TN	A 7 699	46	ENGINEERING	JG57				-		-				
106	TN	A 7 699	46	ENGINEERING	4FXX				-		-				
107	TN	A 7 699	46	ENGINEERING	4N4X				0.0442		0.0067				
108	TN	A 7 699	46	ENGINEERING	4M1X				0.0058		0.0058				
109	TN	A 7 699	46	CONNECT & TEST	4AXX				0.4823		0.0500				
110	TN	A 7 699	46	CONNECT & TEST	4WXX				-		-				
111	TN	A 7 699	46	CONNECT & TEST	431X				0.2125		0.0992				
112	TN	A 7 699	46	CONNECT & TEST	411X				0.7833		0.1333				
113	TN	A 7 699	46	TRAVEL	411X				0.3333		-				
114	TN	A 7 698	46	CONNECT & TEST	4AXX			1.2406	-	1.2406	-				
115	TN	A 7 698	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
116	TN	A 7 698	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				

000125

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
117	TN	A.8.5	52	SERVICE INQUIRY	SDWC			0.5317		0.2242					
118	TN	A.8.5	52	SERVICE INQUIRY	230X			0.7500		0.1667					
119	TN	A.8.5	52	ENGINEERING	JG57			0.4156		0.4156					
120	TN	A.8.5	52	ENGINEERING	JG57			0.3333		0.0833					
121	TN	A.8.5	52	ENGINEERING	4N4X			0.0825		0.0450					
122	TN	A.8.5	52	ENGINEERING	4M1X			0.0400		0.0400					
123	TN	A.8.5	52	CONNECT & TEST	4AXX			0.6390		0.1828					
124	TN	A.8.5	52	CONNECT & TEST	4WXX			0.0333		-					
125	TN	A.8.5	52	CONNECT & TEST	431X			0.1700		0.0850					
126	TN	A.8.5	52	CONNECT & TEST	411X			1.5039		0.8539					
127	TN	A.8.5	52	TRAVEL	411X			0.3333		-					
128	TN	A.8.599	52	SERVICE INQUIRY	SDWC				-		-				
129	TN	A.8.599	52	SERVICE INQUIRY	230X				0.5000		0.1667				
130	TN	A.8.599	52	ENGINEERING	JG57				-		-				
131	TN	A.8.599	52	ENGINEERING	JG57				-		-				
132	TN	A.8.599	52	ENGINEERING	4N4X				0.0442		0.0067				
133	TN	A.8.599	52	ENGINEERING	4M1X				0.0058		0.0058				
134	TN	A.8.599	52	CONNECT & TEST	4AXX				0.4823		0.0500				
135	TN	A.8.599	52	CONNECT & TEST	4WXX				-		-				
136	TN	A.8.599	52	CONNECT & TEST	431X				0.2125		0.0992				
137	TN	A.8.599	52	CONNECT & TEST	411X				0.8500		0.2000				
138	TN	A.8.599	52	TRAVEL	411X				0.3333		-				
139	TN	A.8.598	52	CONNECT & TEST	4AXX			1.8609	-	1.8609	-				
140	TN	A.8.598	52	CONNECT & TEST	431X			0.1133	-	0.0567	-				
141	TN	A.8.598	52	CONNECT & TEST	411X			1.1276	-	1.1276	-				
142	TN	A.8.6	52	SERVICE ORDER	230X			0.0175		0.0175					
143	TN	A.8.6	52	ENGINEERING	JG57			0.0416		0.0416					
144	TN	A.8.6	52	ENGINEERING	4FXX			0.0333		0.0083					
145	TN	A.8.6	52	ENGINEERING	4N4X			0.0825		0.0450					
146	TN	A.8.6	52	ENGINEERING	4M1X			0.0400		0.0400					
147	TN	A.8.6	52	CONNECT & TEST	4AXX			0.6390		0.1828					
148	TN	A.8.6	52	CONNECT & TEST	4WXX			0.0333		-					
149	TN	A.8.6	52	CONNECT & TEST	431X			0.1700		0.0850					
150	TN	A.8.6	52	CONNECT & TEST	411X			1.5039		0.8539					
151	TN	A.8.6	52	TRAVEL	411X			0.3333		-					
152	TN	A.8.699	52	SERVICE ORDER	230X				0.0175		0.0175				
153	TN	A.8.699	52	ENGINEERING	JG57				-		-				
154	TN	A.8.699	52	ENGINEERING	4FXX				-		-				
155	TN	A.8.699	52	ENGINEERING	4N4X				0.0442		0.0067				
156	TN	A.8.699	52	ENGINEERING	4M1X				0.0058		0.0058				
157	TN	A.8.699	52	CONNECT & TEST	4AXX				0.4823		0.0500				
158	TN	A.8.699	52	CONNECT & TEST	4WXX				-		-				
159	TN	A.8.699	52	CONNECT & TEST	431X				0.2125		0.0992				
160	TN	A.8.699	52	CONNECT & TEST	411X				0.8500		0.2000				
161	TN	A.8.699	52	TRAVEL	411X				0.3333		-				
162	TN	A.8.698	52	CONNECT & TEST	4AXX			1.8609	-	1.8609	-				
163	TN	A.8.698	52	CONNECT & TEST	431X			0.1133	-	0.0567	-				
164	TN	A.8.698	52	CONNECT & TEST	411X			1.1276	-	1.1276	-				
165	TN	A.13.8	46	SERVICE INQUIRY	SDWC			0.5317		0.2242					
166	TN	A.13.8	46	SERVICE INQUIRY	230X			0.7500		0.1667					
167	TN	A.13.8	46	ENGINEERING	JG57			0.4156		0.4156					
168	TN	A.13.8	46	ENGINEERING	JG57			0.3333		0.0833					
169	TN	A.13.8	46	ENGINEERING	4N4X			0.0825		0.0450					
170	TN	A.13.8	46	ENGINEERING	4M1X			0.0400		0.0400					
171	TN	A.13.8	46	CONNECT & TEST	4AXX			0.5990		0.1428					
172	TN	A.13.8	46	CONNECT & TEST	4WXX			0.0333		-					
173	TN	A.13.8	46	CONNECT & TEST	431X			0.1700		0.0850					
174	TN	A.13.8	46	CONNECT & TEST	411X			1.2193		0.5693					

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
175	TN	A 13 8	46	TRAVEL	411X			0.3333		-					
176	TN	A 13 899	46	SERVICE INQUIRY	SDWC				-		-				
177	TN	A 13 899	46	SERVICE INQUIRY	230X				0.5000		0.1667				
178	TN	A 13 899	46	ENGINEERING	JG57				-		-				
179	TN	A 13 899	46	ENGINEERING	JG57				-		-				
180	TN	A 13 899	46	ENGINEERING	4N4X				0.0442		0.0067				
181	TN	A 13 899	46	ENGINEERING	4M1X				0.0058		0.0058				
182	TN	A 13 899	46	CONNECT & TEST	4AXX				0.4823		0.0500				
183	TN	A 13 899	46	CONNECT & TEST	4WXX				-		-				
184	TN	A 13 899	46	CONNECT & TEST	431X				0.2125		0.0992				
185	TN	A 13 899	46	CONNECT & TEST	411X				0.7833		0.1333				
186	TN	A 13 899	46	TRAVEL	411X				0.3333		-				
187	TN	A 13 898	46	CONNECT & TEST	4AXX			0.8099	-	0.8099	-				
188	TN	A 13 898	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
189	TN	A 13 898	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				
190	TN	A 13 9	46	SERVICE ORDER	230X			0.0175		0.0175					
191	TN	A 13 9	46	ENGINEERING	JG57			0.0416		0.0416					
192	TN	A 13 9	46	ENGINEERING	4FXX			0.0333		0.0083					
193	TN	A 13 9	46	ENGINEERING	4N4X			0.0825		0.0450					
194	TN	A 13 9	46	ENGINEERING	4M1X			0.0400		0.0400					
195	TN	A 13 9	46	CONNECT & TEST	4AXX			0.5990		0.1428					
196	TN	A 13 9	46	CONNECT & TEST	4WXX			0.0333		-					
197	TN	A 13 9	46	CONNECT & TEST	431X			0.1700		0.0850					
198	TN	A 13 9	46	CONNECT & TEST	411X			1.2193		0.5693					
199	TN	A 13 9	46	TRAVEL	411X			0.3333		-					
200	TN	A 13 999	46	SERVICE ORDER	230X				0.0175		0.0175				
201	TN	A 13 999	46	ENGINEERING	JG57				-		-				
202	TN	A 13 999	46	ENGINEERING	4FXX				-		-				
203	TN	A 13 999	46	ENGINEERING	4N4X				0.0442		0.0067				
204	TN	A 13 999	46	ENGINEERING	4M1X				0.0058		0.0058				
205	TN	A 13 999	46	CONNECT & TEST	4AXX				0.4823		0.0500				
206	TN	A 13 999	46	CONNECT & TEST	4WXX				-		-				
207	TN	A 13 999	46	CONNECT & TEST	431X				0.2125		0.0992				
208	TN	A 13 999	46	CONNECT & TEST	411X				0.7833		0.1333				
209	TN	A 13 999	46	TRAVEL	411X				0.3333		-				
210	TN	A 13 998	46	CONNECT & TEST	4AXX			0.8099	-	0.8099	-				
211	TN	A 13 998	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
212	TN	A 13 998	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				
213	TN	A 14 8	52	SERVICE INQUIRY	SDWC			0.5317		0.2242					
214	TN	A 14 8	52	SERVICE INQUIRY	230X			0.7500		0.1667					
215	TN	A 14 8	52	ENGINEERING	JG57			0.4156		0.4156					
216	TN	A 14 8	52	ENGINEERING	JG57			0.3333		0.0833					
217	TN	A 14 8	52	ENGINEERING	4N4X			0.0825		0.0450					
218	TN	A 14 8	52	ENGINEERING	4M1X			0.0400		0.0400					
219	TN	A 14 8	52	CONNECT & TEST	4AXX			0.5990		0.1428					
220	TN	A 14 8	52	CONNECT & TEST	4WXX			0.0333		-					
221	TN	A 14 8	52	CONNECT & TEST	431X			0.1700		0.0850					
222	TN	A 14 8	52	CONNECT & TEST	411X			1.5039		0.8539					
223	TN	A 14 8	52	TRAVEL	411X			0.3333		-					
224	TN	A 14 899	52	SERVICE INQUIRY	SDWC				-		-				
225	TN	A 14 899	52	SERVICE INQUIRY	230X				0.5000		0.1667				
226	TN	A 14 899	52	ENGINEERING	JG57				-		-				
227	TN	A 14 899	52	ENGINEERING	JG57				-		-				
228	TN	A 14 899	52	ENGINEERING	4N4X				0.0442		0.0067				
229	TN	A 14 899	52	ENGINEERING	4M1X				0.0058		0.0058				
230	TN	A 14 899	52	CONNECT & TEST	4AXX				0.4823		0.0500				
231	TN	A 14 899	52	CONNECT & TEST	4WXX				-		-				
232	TN	A 14 899	52	CONNECT & TEST	431X				0.2125		0.0992				

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
233	TN	A.14.899	52	CONNECT & TEST	411X				0.8500		0.2000				
234	TN	A.14.899	52	TRAVEL	411X				0.3333		-				
235	TN	A.14.898	52	CONNECT & TEST	4AXX			1.2149	-	1.2149	-				
236	TN	A.14.898	52	CONNECT & TEST	431X			0.1133	-	0.0567	-				
237	TN	A.14.898	52	CONNECT & TEST	411X			1.1276	-	1.1276	-				
238	TN	A.14.9	52	SERVICE ORDER	230X			0.0175		0.0175					
239	TN	A.14.9	52	ENGINEERING	JG57			0.0416		0.0416					
240	TN	A.14.9	52	ENGINEERING	4FXX			0.0333		0.0083					
241	TN	A.14.9	52	ENGINEERING	4N4X			0.0825		0.0450					
242	TN	A.14.9	52	ENGINEERING	4M1X			0.0400		0.0400					
243	TN	A.14.9	52	CONNECT & TEST	4AXX			0.5990		0.1428					
244	TN	A.14.9	52	CONNECT & TEST	4WXX			0.0333		-					
245	TN	A.14.9	52	CONNECT & TEST	431X			0.1700		0.0850					
246	TN	A.14.9	52	CONNECT & TEST	411X			1.5039		0.8539					
247	TN	A.14.9	52	TRAVEL	411X			0.3333		-					
248	TN	A.14.999	52	SERVICE ORDER	230X				0.0175		0.0175				
249	TN	A.14.999	52	ENGINEERING	JG57				-		-				
250	TN	A.14.999	52	ENGINEERING	4FXX				-		-				
251	TN	A.14.999	52	ENGINEERING	4N4X				0.0442		0.0067				
252	TN	A.14.999	52	ENGINEERING	4M1X				0.0058		0.0058				
253	TN	A.14.999	52	CONNECT & TEST	4AXX				0.4823		0.0500				
254	TN	A.14.999	52	CONNECT & TEST	4WXX				-		-				
255	TN	A.14.999	52	CONNECT & TEST	431X				0.2125		0.0992				
256	TN	A.14.999	52	CONNECT & TEST	411X				0.8500		0.2000				
257	TN	A.14.999	52	TRAVEL	411X				0.3333		-				
258	TN	A.14.998	52	CONNECT & TEST	4AXX			1.2149	-	1.2149	-				
259	TN	A.14.998	52	CONNECT & TEST	431X			0.1133	-	0.0567	-				
260	TN	A.14.998	52	CONNECT & TEST	411X			1.1276	-	1.1276	-				
261	TN	A.13.10	46	SERVICE INQUIRY	SDWC			0.5317		0.2242					
262	TN	A.13.10	46	SERVICE INQUIRY	230X			0.7500		0.1667					
263	TN	A.13.10	46	ENGINEERING	JG57			0.4156		0.4156					
264	TN	A.13.10	46	ENGINEERING	JG57			0.3333		0.0833					
265	TN	A.13.10	46	ENGINEERING	4N4X			0.0825		0.0450					
266	TN	A.13.10	46	ENGINEERING.	4M1X			0.0400		0.0400					
267	TN	A.13.10	46	CONNECT & TEST	4AXX			0.5990		0.1428					
268	TN	A.13.10	46	CONNECT & TEST	4WXX			0.0333		-					
269	TN	A.13.10	46	CONNECT & TEST	431X			0.1700		0.0850					
270	TN	A.13.10	46	CONNECT & TEST	411X			1.2193		0.5693					
271	TN	A.13.10	46	TRAVEL	411X			0.3333		-					
272	TN	A.13.1099	46	SERVICE INQUIRY	SDWC				-		-				
273	TN	A.13.1099	46	SERVICE INQUIRY	230X				0.5000		0.1667				
274	TN	A.13.1099	46	ENGINEERING	JG57				-		-				
275	TN	A.13.1099	46	ENGINEERING	JG57				-		-				
276	TN	A.13.1099	46	ENGINEERING	4N4X				0.0442		0.0067				
277	TN	A.13.1099	46	ENGINEERING	4M1X				0.0058		0.0058				
278	TN	A.13.1099	46	CONNECT & TEST	4AXX				0.4823		0.0500				
279	TN	A.13.1099	46	CONNECT & TEST	4WXX				-		-				
280	TN	A.13.1099	46	CONNECT & TEST	431X				0.2125		0.0992				
281	TN	A.13.1099	46	CONNECT & TEST	411X				0.7833		0.1333				
282	TN	A.13.1099	46	TRAVEL	411X				0.3333		-				
283	TN	A.13.1098	46	CONNECT & TEST	4AXX			0.8099	-	0.8099	-				
284	TN	A.13.1098	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
285	TN	A.13.1098	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				
286	TN	A.13.11	46	SERVICE ORDER	230X			0.0175		0.0175					
287	TN	A.13.11	46	ENGINEERING	JG57			0.0416		0.0416					
288	TN	A.13.11	46	ENGINEERING	4FXX			0.0333		0.0083					
289	TN	A.13.11	46	ENGINEERING	4N4X			0.0825		0.0450					
290	TN	A.13.11	46	ENGINEERING	4M1X			0.0400		0.0400					

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
291	TN	A.13.11	46	CONNECT & TEST	4AXX			0.5990		0.1428					
292	TN	A.13.11	46	CONNECT & TEST	4WXX			0.0333		-					
293	TN	A.13.11	46	CONNECT & TEST	431X			0.1700		0.0850					
294	TN	A.13.11	46	CONNECT & TEST	411X			1.2193		0.5693					
295	TN	A.13.11	46	TRAVEL	411X			0.3333		-					
296	TN	A.13.1199	46	SERVICE ORDER	230X				0.0175		0.0175				
297	TN	A.13.1199	46	ENGINEERING	JG57				-		-				
298	TN	A.13.1199	46	ENGINEERING	4FXX				-		-				
299	TN	A.13.1199	46	ENGINEERING	4N4X				0.0442		0.0067				
300	TN	A.13.1199	46	ENGINEERING	4M1X				0.0058		0.0058				
301	TN	A.13.1199	46	CONNECT & TEST	4AXX				0.4823		0.0500				
302	TN	A.13.1199	46	CONNECT & TEST	4WXX				-		-				
303	TN	A.13.1199	46	CONNECT & TEST	431X				0.2125		0.0992				
304	TN	A.13.1199	46	CONNECT & TEST	411X				0.7833		0.1333				
305	TN	A.13.1199	46	TRAVEL	411X				0.3333		-				
306	TN	A.13.1198	46	CONNECT & TEST	4AXX			0.8099	-	0.8099	-				
307	TN	A.13.1198	46	CONNECT & TEST	431X			0.1133	-	0.0567	-				
308	TN	A.13.1198	46	CONNECT & TEST	411X			0.7517	-	0.7517	-				
309	TN	A.14.10	52	SERVICE INQUIRY	SDWC			0.5317		0.2242					
310	TN	A.14.10	52	SERVICE INQUIRY	230X			0.7500		0.1667					
311	TN	A.14.10	52	ENGINEERING	JG57			0.4156		0.4156					
312	TN	A.14.10	52	ENGINEERING	JG57			0.3333		0.0833					
313	TN	A.14.10	52	ENGINEERING	4N4X			0.0825		0.0450					
314	TN	A.14.10	52	ENGINEERING	4M1X			0.0400		0.0400					
315	TN	A.14.10	52	CONNECT & TEST	4AXX			0.5990		0.1428					
316	TN	A.14.10	52	CONNECT & TEST	4WXX			0.0333		-					
317	TN	A.14.10	52	CONNECT & TEST	431X			0.1700		0.0850					
318	TN	A.14.10	52	CONNECT & TEST	411X			1.5039		0.8539					
319	TN	A.14.10	52	TRAVEL	411X			0.3333		-					
320	TN	A.14.1099	52	SERVICE INQUIRY	SDWC				-		-				
321	TN	A.14.1099	52	SERVICE INQUIRY	230X				0.5000		0.1667				
322	TN	A.14.1099	52	ENGINEERING	JG57				-		-				
323	TN	A.14.1099	52	ENGINEERING	JG57				-		-				
324	TN	A.14.1099	52	ENGINEERING	4N4X				0.0442		0.0067				
325	TN	A.14.1099	52	ENGINEERING	4M1X				0.0058		0.0058				
326	TN	A.14.1099	52	CONNECT & TEST	4AXX				0.4823		0.0500				
327	TN	A.14.1099	52	CONNECT & TEST	4WXX				-		-				
328	TN	A.14.1099	52	CONNECT & TEST	431X				0.2125		0.0992				
329	TN	A.14.1099	52	CONNECT & TEST	411X				0.8500		0.2000				
330	TN	A.14.1099	52	TRAVEL	411X				0.3333		-				
331	TN	A.14.1098	52	CONNECT & TEST	4AXX			1.2149	-	1.2149	-				
332	TN	A.14.1098	52	CONNECT & TEST	431X			0.1133	-	0.0567	-				
333	TN	A.14.1098	52	CONNECT & TEST	411X			1.1276	-	1.1276	-				
334	TN	A.14.11	52	SERVICE ORDER	230X			0.0175		0.0175					
335	TN	A.14.11	52	ENGINEERING	JG57			0.0416		0.0416					
336	TN	A.14.11	52	ENGINEERING	4FXX			0.0333		0.0083					
337	TN	A.14.11	52	ENGINEERING	4N4X			0.0825		0.0450					
338	TN	A.14.11	52	ENGINEERING	4M1X			0.0400		0.0400					
339	TN	A.14.11	52	CONNECT & TEST	4AXX			0.5990		0.1428					
340	TN	A.14.11	52	CONNECT & TEST	4WXX			0.0333		-					
341	TN	A.14.11	52	CONNECT & TEST	431X			0.1700		0.0850					
342	TN	A.14.11	52	CONNECT & TEST	411X			1.5039		0.8539					
343	TN	A.14.11	52	TRAVEL	411X			0.3333		-					
344	TN	A.14.1199	52	SERVICE ORDER	230X				0.0175		0.0175				
345	TN	A.14.1199	52	ENGINEERING	JG57				-		-				
346	TN	A.14.1199	52	ENGINEERING	4FXX				-		-				

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
347	TN	A.14.1199	52	ENGINEERING	4N4X				0.0442		0.0067				
348	TN	A.14.1199	52	ENGINEERING	4M1X				0.0058		0.0058				
349	TN	A.14.1199	52	CONNECT & TEST	4AXX				0.4823		0.0500				
350	TN	A.14.1199	52	CONNECT & TEST	4WXX				-		-				
351	TN	A.14.1199	52	CONNECT & TEST	431X				0.2125		0.0992				
352	TN	A.14.1199	52	CONNECT & TEST	411X				0.8500		0.2000				
353	TN	A.14.1199	52	TRAVEL	411X				0.3333		-				
354	TN	A.14.1198	52	CONNECT & TEST	4AXX			1.2149	-	1.2149	-				
355	TN	A.14.1198	52	CONNECT & TEST	431X			0.1133	-	0.0567	-				
356	TN	A.14.1198	52	CONNECT & TEST	411X			1.1276	-	1.1276	-				
357		END													
358															

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	A	B	C	D	E	F	G	H	I	J	K
1	Tennessee										
2	Nonrecurring Worktimes										
3	Study Period: 2000-2002										
4											
5	A.6.5	INSTALL		2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (with LMU)							
6	A.6.599	DISCONNECT									
7	Location Life	46	Months	(=INPUTS_MISC!C9)							
8					Worktimes (Min.)			Worktimes (Hrs.)			
9	Source	Description	JFC / JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	First Install	First Disconnect	Addtl Install	Addtl Disconnect
10	Inputs_Service Inquiry, Row 15	SERVICE INQUIRY	SDWC	31.90	0.00	13.45	0.00	0.5317	0.0000	0.2242	0.0000
11	Inputs_Service Inquiry, Row 19	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	0.7500	0.5000	0.1667	0.1667
12	Inputs_Engineering, (E8*I8)+(E8*J8)+(E9*I9)+(E9*J9)+((E10*I10+E10*J10)*B5)	ENGINEERING	JG57	24.94	0.00	24.94	0.00	0.4156	0.0000	0.4156	0.0000
13	Inputs_Engineering, (E7*I7)+(E7*J7)+(*E11*I11)+(E11*J11)	ENGINEERING	4FXX	20.00	0.00	5.00	0.00	0.3333	0.0000	0.0833	0.0000
14	Inputs_Engineering, Row 19 + 20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
15	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
16	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E17*J17)+(E18*J18)+(E20*I20*L20)+(E22*I22*L22)+(E23*J23)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	38.34	28.94	10.97	3.00	0.6390	0.4823	0.1828	0.0500
17	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
18	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
19	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
20	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
21											
22											

000131

	A	B	C	D	E	F	G	H	I	J	K
23	Tennessee										
24	Nonrecurring Worktimes										
25	Study Period: 2000-2002										
26											
27	A.6.598	TESTING		2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (with LMU)							
28											
29	Location Life	46	Months	(=INPUTS_MISC!C9)							
30					Worktimes (Min.)				Worktimes (Hrs.)		
31	Source	Description	JFC / JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	First Install	First Disconnect	Addtl Install	Addtl Disconnect
32	Inputs_Connect & Test, Rows 20+22	CONNECT & TEST	4AXX	48.93	0.00	48.93	0.00	0.8156	0.0000	0.8156	0.0000
33	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
34	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000
35											

000132

	A	B	C	D	E	F	G	H	I	J	K
36	Tennessee										
37	Nonrecurring Worktimes										
38	Study Period: 2000-2002										
39											
40	**A.6.6**	**INSTALL**		**2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (without LMU)**							
41	**A.6.699**	**DISCONNECT**									
42	Location Life	46	Months	(=INPUTS_MISC!C9)							
43					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
44	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
45	Inputs_Service Order, Row (E7*I7)	SERVICE ORDER	230X	1.05	1.05	1.05	1.05	0.0175	0.0175	0.0175	0.0175
46	Inputs_Engineering, (E8*I8*K8)+(E8*J8*K8)+(E9*I9*K9)+(E9*J9*K9) +((E10*I10*K10+E10*J10*K10)*B5)	ENGINEERING	JG57	2.49	0.00	2.49	0.00	0.0416	0.0000	0.0416	0.0000
47	Inputs_Engineering, (E7*I7*K7)+(E7*J7*K7)+(*E11*I11*K11)+(E11*J11*K11)	ENGINEERING	4FXX	2.00	0.00	0.50	0.00	0.0333	0.0000	0.0083	0.0000
48	Inputs_Engineering, Row 19+20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
49	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
50	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E17*J17)+(E18*J18)+(E20*I20*L20)+(E22*I22*L22)+(E23*J23)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	38.34	28.94	10.97	3.00	0.6390	0.4823	0.1828	0.0500
51	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
52	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
53	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
54	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
55											

000133

	A	B	C	D	E	F	G	H	I	J	K
56	Tennessee										
57	Nonrecurring Worktimes										
58	Study Period: 2000-2002										
59											
60	**A.6.698**	**TESTING**		**2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (without LMU)**							
61											
62	Location Life	46	Months	(=INPUTS_MISC!C9)							
63					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
64	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
65	Inputs_Connect & Test, Rows 20+22	CONNECT & TEST	4AXX	48.93	0.00	48.93	0.00	0.8156	0.0000	0.8156	0.0000
66	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
67	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000
68											
69											
70											

000134

	A	B	C	D	E	F	G	H	I	J	K
71	Tennessee										
72	Nonrecurring Worktimes										
73	Study Period: 2000-2002										
74											
75	**A.7.5**	**INSTALL**		**2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/LMU)**							
76	**A.7.599**	**DISCONNECT**									
77	Location Life	46	Months	(=INPUTS_MISC!C9)							
78					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
79	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
80	Inputs_Service Inquiry, Row 15	SERVICE INQUIRY	SDWC	31.90	0.00	13.45	0.00	0.5317	0.0000	0.2242	0.0000
81	Inputs_Service Inquiry, Row 19	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	0.7500	0.5000	0.1667	0.1667
82	Inputs_Engineering, (E8*I8)+(E8*J8)+(E9*I9)+(E9*J9)+((E10*I10+E10*J10)*B5)	ENGINEERING	JG57	24.94	0.00	24.94	0.00	0.4156	0.0000	0.4156	0.0000
83	Inputs_Engineering, (E7*I7)+(E7*J7)+(*E11*I11)+(E11*J11)	ENGINEERING	JG57	20.00	0.00	5.00	0.00	0.3333	0.0000	0.0833	0.0000
84	Inputs_Engineering, Row 19 + 20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
85	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
86	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E17*J17)+(E18*J18)+(E21*I21*L21) +(E22*I22*L22)+(E23*J23)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	38.34	28.94	10.97	3.00	0.6390	0.4823	0.1828	0.0500
87	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
88	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
89	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
90	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
91											
92											

000135

	A	B	C	D	E	F	G	H	I	J	K
93	Tennessee										
94	Nonrecurring Worktimes										
95	Study Period: 2000-2002										
96											
97	A.7.598										
98		TESTING									
99	Location Life			2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/LMU)							
100		46	Months	(=INPUTS_MISCIC9)							
101	Source	Description	JFC / JG / WS	Worktimes (Min.)				Worktimes (Hrs.)			
				First Install	First Disconnect	Addtl Install	Addtl Disconnect	First Install	First Disconnect	Addtl Install	Addtl Disconnect
102	Inputs_Connect & Test, Rows 21+22	CONNECT & TEST	4AXX	74.43	0.00	74.43	0.00	1.2406	0.0000	1.2406	0.0000
103	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
104	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000
105											
106											

000136

	A	B	C	D	E	F	G	H	I	J	K
107	Tennessee										
108	Nonrecurring Worktimes										
109	Study Period: 2000-2002										
110											
111	A.7.6	INSTALL		2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/o LMU)							
112	A.7.699	DISCONNECT									
113	Location Life	46	Months	(=INPUTS_MISC!C9)							
114					Worktimes (Min.)				Worktimes (Hrs.)		
115	Source	Description	JFC / JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	First Install	First Disconnect	Addtl Install	Addtl Disconnect
116	Inputs_Service Order, Row (E7*I7)	SERVICE ORDER	230X	1.05	1.05	1.05	1.05	0.0175	0.0175	0.0175	0.0175
117	Inputs_Engineering, (E8*I8*K8)+(E8*J8*K8)+(E9*I9*K9)+(E9*J9*K9) +((E10*I10*K10+E10*J10*K10)*B5)	ENGINEERING	JG57	2.49	0.00	2.49	0.00	0.0416	0.0000	0.0416	0.0000
118	Inputs_Engineering, (E7*I7*K7)+(E7*J7*K7)+(*E11*I11*K11)+(E11*J11*K11)	ENGINEERING	4FXX	2.00	0.00	0.50	0.00	0.0333	0.0000	0.0083	0.0000
119	Inputs_Engineering, Row 19+20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
120	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
121	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E17*J17)+(E18*J18)+(E21*I21*L21) +(E22*I22*L22)+(E23*J23)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	38.34	28.94	10.97	3.00	0.6390	0.4823	0.1828	0.0500
122	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
123	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
124	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
125	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
126											
127											

000137

	A	B	C	D	E	F	G	H	I	J	K
128	Tennessee										
129	Nonrecurring Worktimes										
130	Study Period: 2000-2002										
131											
132	**A.7.698**	**TESTING**		**2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/o LMU)**							
133											
134	Location Life	46	Months	(=INPUTS_MISCIC9)							
135					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
136	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
137	Inputs_Connect & Test, Rows 21+22	CONNECT & TEST	4AXX	74.43	0.00	74.43	0.00	1.2406	0.0000	1.2406	0.0000
138	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
139	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000

000138

	A	B	C	D	E	F	G	H	I	J	K
140	Tennessee										
141	Nonrecurring Worktimes										
142	Study Period: 2000-2002										
143											
144	**A.8.5**	**INSTALL**									
145	**A.8.599**	**DISCONNECT**		**4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/LMU)**							
146	Location Life	52	Months	(=INPUTS_MISCIC11)							
147											
					Worktimes (Min.)				**Worktimes (Hrs.)**		
148	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
149	Inputs_Service Inquiry, Row 15	SERVICE INQUIRY	SDWC	31.90	0.00	13.45	0.00	0.5317	0.0000	0.2242	0.0000
150	Inputs_Service Inquiry, Row 19	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	0.7500	0.5000	0.1667	0.1667
151	Inputs_Engineering, (E8*I8)+(E8*J8)+(E9*I9)+(E9*J9)+((E10*I10+E10*J10)*B5)	ENGINEERING	JG57	24.94	0.00	24.94	0.00	0.4156	0.0000	0.4156	0.0000
152	Inputs_Engineering, (E7*I7)+(E7*J7)+(*E11*I11)+(E11*J11)	ENGINEERING	JG57	20.00	0.00	5.00	0.00	0.3333	0.0000	0.0833	0.0000
153	Inputs_Engineering, Row 19 + 20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
154	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
155	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E17*J17)+(E18*J18)+(E21*I21*M21) +(E22*I22*M22)+(E23*J23)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	38.34	28.94	10.97	3.00	0.6390	0.4823	0.1828	0.0500
156	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
157	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
158	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	90.23	51.00	51.23	12.00	1.5039	0.8500	0.8539	0.2000
159	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
160											

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	A	B	C	D	E	F	G	H	I	J	K
161	Tennessee										
162	Nonrecurring Worktimes										
163	Study Period: 2000-2002										
164											
165	**A.8.598**	**TESTING**									
166				**4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/LMU)**							
167	Location Life										
168		52	Months	(=INPUTS_MISCIC11)							
				Worktimes (Min.)				**Worktimes (Hrs.)**			
169	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
170	Inputs_Connect & Test, Rows 21+22	CONNECT & TEST	4AXX	111.65	0.00	111.65	0.00	1.8609	0.0000	1.8609	0.0000
171	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
172	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	67.66	0.00	67.66	0.00	1.1276	0.0000	1.1276	0.0000
173											
174											

000140

	A	B	C	D	E	F	G	H	I	J	K
175	Tennessee										
176	Nonrecurring Worktimes										
177	Study Period: 2000-2002										
178											
179	**A.8.6**	**INSTALL**									
180	**A.8.699**	**DISCONNECT**		**4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/o LMU)**							
181	Location Life										
182		52	Months	(=INPUTS_MISCIC11)							
				Worktimes (Min.)				**Worktimes (Hrs.)**			
183	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
184	Inputs_Service Order, Row (E7*I7)	SERVICE ORDER	230X	1.05	1.05	1.05	1.05	0.0175	0.0175	0.0175	0.0175
185	Inputs_Engineering, (E8*I8*K8)+(E8*J8*K8)+(E9*I9*K9)+(E9*J9*K9) +((E10*I10*K10+E10*J10*K10)*B5)	ENGINEERING	JG57	2.49	0.00	2.49	0.00	0.0416	0.0000	0.0416	0.0000
186	Inputs_Engineering, (E7*I7*K7)+(E7*J7*K7)+(*E11*I11*K11)+(E11*J11*K11)	ENGINEERING	4FXX	2.00	0.00	0.50	0.00	0.0333	0.0000	0.0083	0.0000
187	Inputs_Engineering, Row 19+20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
188	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
189	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E17*J17)+(E18*J18)+(E21*I21*M21) +(E22*I22*M22)+(E23*J23)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	38.34	28.94	10.97	3.00	0.6390	0.4823	0.1828	0.0500
190	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
191	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
192	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	90.23	51.00	51.23	12.00	1.5039	0.8500	0.8539	0.2000
193	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
194											
195											

000141

	A	B	C	D	E	F	G	H	I	J	K
196	Tennessee										
197	Nonrecurring Worktimes										
198	Study Period: 2000-2002										
199											
200	**A.8.698**	**TESTING**		**4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (w/o LMU)**							
201											
202	Location Life	52	Months	(=INPUTS_MISC!C11)							
203											
				Worktimes (Min.)				**Worktimes (Hrs.)**			
204	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
205	Inputs_Connect & Test, Rows 21+22	CONNECT & TEST	4AXX	111.65	0.00	111.65	0.00	1.8609	0.0000	1.8609	0.0000
206	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
207	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	67.66	0.00	67.66	0.00	1.1276	0.0000	1.1276	0.0000
208											
209											

000142

	A	B	C	D	E	F	G	H	I	J	K
210	Tennessee										
211	Nonrecurring Worktimes										
212	Study Period: 2000-2002										
213											
214	**A.13.8**	**INSTALL**									
215	**A.13.899**	**DISCONNECT**		**2-Wire Copper Loop - Short (w/LMU)**							
216	Location Life	46	Months	(=INPUTS_MISC!C9)							
217					**Worktimes (Min.)**			**Worktimes (Hrs.)**			
218	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
219	Inputs_Service Inquiry, Row 15	SERVICE INQUIRY	SDWC	31.90	0.00	13.45	0.00	0.5317	0.0000	0.2242	0.0000
220	Inputs_Service Inquiry, Row 19	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	0.7500	0.5000	0.1667	0.1667
221	Inputs_Engineering, (E8*I8)+(E8*J8)+(E9*I9)+(E9*J9)+((E10*I10+E10*J10)*B5)	ENGINEERING	JG57	24.94	0.00	24.94	0.00	0.4156	0.0000	0.4156	0.0000
222	Inputs_Engineering, (E7*I7)+(E7*J7)+(*E11*I11)+(E11*J11)	ENGINEERING	JG57	20.00	0.00	5.00	0.00	0.3333	0.0000	0.0833	0.0000
223	Inputs_Engineering, Row 19 + 20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
224	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
225	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*L19) +(E22*I22*L22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
226	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
227	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
228	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
229	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
230											
231											

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	A	B	C	D	E	F	G	H	I	J	K
232	Tennessee										
233	Nonrecurring Worktimes										
234	Study Period: 2000-2002										
235											
236	**A.13.898**	**TESTING**		**2-Wire Copper Loop - Short (w/LMU)**							
237											
238	Location Life										
239		46	Months	(=INPUTS_MISC!C9)							
240					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
	Source	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
241	Inputs_Connect & Test, Rows 20+22	CONNECT & TEST	4AXX	48.59	0.00	48.59	0.00	0.8099	0.0000	0.8099	0.0000
242	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
243	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000
244											
245											
246											

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	A	B	C	D	E	F	G	H	I	J	K
247	Tennessee										
248	Nonrecurring Worktimes										
249	Study Period: 2000-2002										
250											
251	**A.13.9**	**INSTALL**		**2-Wire Copper Loop - Short (w/o LMU)**							
252	**A.13.999**	**DISCONNECT**									
253	Location Life	46	Months	(=INPUTS_MISC!C9)							
254					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
255	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
256	Inputs_Service Order, Row (E7*I7)	SERVICE ORDER	230X	1.05	1.05	1.05	1.05	0.0175	0.0175	0.0175	0.0175
257	Inputs_Engineering, (E8*I8*K8)+(E8*J8*K8)+(E9*I9*K9)+(E9*J9*K9) +((E10*I10*K10+E10*J10*K10)*B5)	ENGINEERING	JG57	2.49	0.00	2.49	0.00	0.0416	0.0000	0.0416	0.0000
258	Inputs_Engineering, (E7*I7*K7)+(E7*J7*K7)+(*E11*I11*K11)+(E11*J11*K11)	ENGINEERING	4FXX	2.00	0.00	0.50	0.00	0.0333	0.0000	0.0083	0.0000
259	Inputs_Engineering, Row 19+20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
260	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
261	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*L19)+(E22*I22*L22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
262	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
263	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
264	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
265	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
266											
267											

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	A	B	C	D	E	F	G	H	I	J	K
268	Tennessee										
269	Nonrecurring Worktimes										
270	Study Period: 2000-2002										
271											
272	A.13.998	TESTING		2-Wire Copper Loop - Short (w/o LMU)							
273											
274	Location Life										
275		46	Months	(=INPUTS_MISC!C9)							
276				Worktimes (Min.)				Worktimes (Hrs.)			
	Source	Description	WS	First Install	Disconnect	Addtl Install	Disconnect	First Install	First Disconnect	Addtl Install	Disconnect
277	Inputs_Connect & Test, Rows 19+22	CONNECT & TEST	4AXX	48.59	0.00	48.59	0.00	0.8099	0.0000	0.8099	0.0000
278	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
279	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000
280											
281											

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	A	B	C	D	E	F	G	H	I	J	K
282	Tennessee										
283	Nonrecurring Worktimes										
284	Study Period: 2000-2002										
285											
286	**A.14.8**	**INSTALL**									
287	**A.14.899**	**DISCONNECT**		**4-Wire Copper Loop - Short (w/LMU)**							
288	Location Life	52	Months	(=INPUTS_MISCIC11)							
289					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
290	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
291	Inputs_Service Inquiry, Row 15	SERVICE INQUIRY	SDWC	31.90	0.00	13.45	0.00	0.5317	0.0000	0.2242	0.0000
292	Inputs_Service Inquiry, Row 19	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	0.7500	0.5000	0.1667	0.1667
293	Inputs_Engineering, (E8*I8)+(E8*J8)+(E9*I9)+(E9*J9)+((E10*I10+E10*J10)*B5)	ENGINEERING	JG57	24.94	0.00	24.94	0.00	0.4156	0.0000	0.4156	0.0000
294	Inputs_Engineering, (E7*I7)+(E7*J7)+(*E11*I11)+(E11*J11)	ENGINEERING	JG57	20.00	0.00	5.00	0.00	0.3333	0.0000	0.0833	0.0000
295	Inputs_Engineering, Row 19 + 20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
296	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
297	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*M19)+(E22*I22*M22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
298	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
299	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
300	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	90.23	51.00	51.23	12.00	1.5039	0.8500	0.8539	0.2000
301	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
302											
303											

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	A	B	C	D	E	F	G	H	I	J	K
304	Tennessee										
305	Nonrecurring Worktimes										
306	Study Period: 2000-2002										
307											
308	A.14.898	TESTING		4-Wire Copper Loop - Short (w/LMU)							
309											
310	Location Life	52	Months	(=INPUTS_MISCIC11)							
311					Worktimes (Min.)				Worktimes (Hrs.)		
312	Source	Description	WS	First Install	Disconnect	Addtl Install	Disconnect	First Install	First Disconnect	Addtl Install	Disconnect
313	Inputs_Connect & Test, Rows19+22	CONNECT & TEST	4AXX	72.89	0.00	72.89	0.00	1.2149	0.0000	1.2149	0.0000
314	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
315	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	67.66	0.00	67.66	0.00	1.1276	0.0000	1.1276	0.0000
316											
317											

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	A	B	C	D	E	F	G	H	I	J	K
318	Tennessee										
319	Nonrecurring Worktimes										
320	Study Period: 2000-2002										
321											
322	**A.14.9**	**INSTALL**									
323	**A.14.999**	**DISCONNECT**		**4-Wire Copper Loop - Short (w/o LMU)**							
324	Location Life	52	Months	(=INPUTS_MISC!C11)	**Worktimes (Min.)**				**Worktimes (Hrs.)**		
326	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
327	Inputs_Service Order, Row (E7*I7)	SERVICE ORDER	230X	1.05	1.05	1.05	1.05	0.0175	0.0175	0.0175	0.0175
328	Inputs_Engineering, (E8*I8*K8)+(E8*J8*K8)+(E9*I9*K9)+(E9*J9*K9) +((E10*I10*K10+E10*J10*K10)*B5)	ENGINEERING	JG57	2.49	0.00	2.49	0.00	0.0416	0.0000	0.0416	0.0000
329	Inputs_Engineering, (E7*I7*K7)+(E7*J7*K7)+(*E11*I11*K11)+(E11*J11*K11)	ENGINEERING	4FXX	2.00	0.00	0.50	0.00	0.0333	0.0000	0.0083	0.0000
330	Inputs_Engineering, Row 19+20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
331	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
332	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*M19) +(E22*I22*M22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
333	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
334	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
335	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	90.23	51.00	51.23	12.00	1.5039	0.8500	0.8539	0.2000
336	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
337											
338											

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	A	B	C	D	E	F	G	H	I	J	K
339	Tennessee										
340	Nonrecurring Worktimes										
341	Study Period: 2000-2002										
342											
343	A.14.998	TESTING		4-Wire Copper Loop - Short (w/o LMU)							
344											
345	Location Life	52	Months	(=INPUTS_MISCIC11)							
346					Worktimes (Min.)			Worktimes (Hrs.)			
347	Source	Description	JFC / JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	First Install	First Disconnect	Addtl Install	Addtl Disconnect
348	Inputs_Connect & Test, Rows 19+22	CONNECT & TEST	4AXX	72.89	0.00	72.89	0.00	1.2149	0.0000	1.2149	0.0000
349	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
350	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	67.66	0.00	67.66	0.00	1.1276	0.0000	1.1276	0.0000
351											
352											

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	A	B	C	D	E	F	G	H	I	J	K
353	Tennessee										
354	Nonrecurring Worktimes										
355	Study Period: 2000-2002										
356											
357	**A.13.10**	**INSTALL**									
358	**A.13.1099**	**DISCONNECT**		**2-Wire Copper Loop - Long (w/LMU)**							
359	Location Life										
360		46	Months	(=INPUTS_MISC!C9)							
				Worktimes (Min.)				**Worktimes (Hrs.)**			
361	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
362	Inputs_Service Inquiry, Row 15	SERVICE INQUIRY	SDWC	31.90	0.00	13.45	0.00	0.5317	0.0000	0.2242	0.0000
363	Inputs_Service Inquiry, Row 19	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	0.7500	0.5000	0.1667	0.1667
364	Inputs_Engineering, (E8*I8)+(E8*J8)+(E9*I9)+(E9*J9)+((E10*I10+E10*J10)*B5)	ENGINEERING	JG57	24.94	0.00	24.94	0.00	0.4156	0.0000	0.4156	0.0000
365	Inputs_Engineering, (E7*I7)+(E7*J7)+(*E11*I11)+(E11*J11)	ENGINEERING	JG57	20.00	0.00	5.00	0.00	0.3333	0.0000	0.0833	0.0000
366	Inputs_Engineering, Row 19 + 20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
367	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
368	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*L19) +(E22*I22*L22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
369	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
370	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
371	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
372	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
373											
374											

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	A	B	C	D	E	F	G	H	I	J	K
389	Tennessee										
390	Nonrecurring Worktimes										
391	Study Period: 2000-2002										
392											
393	**A.13.11**	**INSTALL**		**2-Wire Copper Loop - Long (w/o LMU)**							
394	**A.13.1199**	**DISCONNECT**									
395	Location Life	46	Months	(=INPUTS_MISCIC9)							
396					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
397	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
398	Inputs_Service Order, Row (E7*I7)	SERVICE ORDER	230X	1.05	1.05	1.05	1.05	0.0175	0.0175	0.0175	0.0175
399	Inputs_Engineering, (E8*I8*K8)+(E8*J8*K8)+(E9*I9*K9)+(E9*J9*K9) +((E10*I10*K10+E10*J10*K10)*B5)	ENGINEERING	JG57	2.49	0.00	2.49	0.00	0.0416	0.0000	0.0416	0.0000
400	Inputs_Engineering, (E7*I7*K7)+(E7*J7*K7)+(*E11*I11*K11)+(E11*J11*K11)	ENGINEERING	4FXX	2.00	0.00	0.50	0.00	0.0333	0.0000	0.0083	0.0000
401	Inputs_Engineering, Row 19+20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
402	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
403	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*L19) +(E22*I22*L22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
404	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
405	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
406	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	73.16	47.00	34.16	8.00	1.2193	0.7833	0.5693	0.1333
407	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
408											
409											

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	A	B	C	D	E	F	G	H	I	J	K
375	Tennessee										
376	Nonrecurring Worktimes										
377	Study Period: 2000-2002										
378											
379	**A.13.1098**	**TESTING**		**2-Wire Copper Loop - Long (w/LMU)**							
380											
381	Location Life	46	Months	(=INPUTS_MISCIC9)							
382					**Worktimes (Min.)**			**Worktimes (Hrs.)**			
383	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
384	Inputs_Connect & Test, Rows 20+22	CONNECT & TEST	4AXX	48.59	0.00	48.59	0.00	0.8099	0.0000	0.8099	0.0000
385	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
386	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000
387											
388											

000152

	A	B	C	D	E	F	G	H	I	J	K
410	Tennessee										
411	Nonrecurring Worktimes										
412	Study Period: 2000-2002										
413											
414	A.13.1198	TESTING		2-Wire Copper Loop - Long (w/o LMU)							
415											
416	Location Life	46	Months	(=INPUTS_MISC!C9)							
417					Worktimes (Min.)			Worktimes (Hrs.)			
418	Source	Description	JFC / JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	First Install	First Disconnect	Addtl Install	Addtl Disconnect
419	Inputs_Connect & Test, Rows 20+22	CONNECT & TEST	4AXX	48.59	0.00	48.59	0.00	0.8099	0.0000	0.8099	0.0000
420	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
421	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	45.10	0.00	45.10	0.00	0.7517	0.0000	0.7517	0.0000
422											
423											

000154

	A	B	C	D	E	F	G	H	I	J	K
424	Tennessee										
425	Nonrecurring Worktimes										
426	Study Period: 2000-2002										
427											
428	**A.14.10**	**INSTALL**									
429	**A.14.1099**	**DISCONNECT**		**4-Wire Copper Loop - Long (w/LMU)**							
430	Location Life	52	Months	(=INPUTS_MISC!C11)							
431											
				Worktimes (Min.)				Worktimes (Hrs.)			
432	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
433	Inputs_Service Inquiry, Row 15	SERVICE INQUIRY	SDWC	31.90	0.00	13.45	0.00	0.5317	0.0000	0.2242	0.0000
434	Inputs_Service Inquiry, Row 19	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	0.7500	0.5000	0.1667	0.1667
435	Inputs_Engineering, (E8*I8)+(E8*J8)+(E9*I9)+(E9*J9)+((E10*I10+E10*J10)*B5)	ENGINEERING	JG57	24.94	0.00	24.94	0.00	0.4156	0.0000	0.4156	0.0000
436	Inputs_Engineering, (E7*I7)+(E7*J7)+(*E11*I11)+(E11*J11)	ENGINEERING	JG57	20.00	0.00	5.00	0.00	0.3333	0.0000	0.0833	0.0000
437	Inputs_Engineering, Row 19 + 20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
438	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
439	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*M19) +(E22*I22*M22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
440	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
441	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
442	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	90.23	51.00	51.23	12.00	1.5039	0.8500	0.8539	0.2000
443	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
444											
445											

000155

	A	B	C	D	E	F	G	H	I	J	K
446	Tennessee										
447	Nonrecurring Worktimes										
448	Study Period: 2000-2002										
449											
450	A.14.1098	TESTING		4-Wire Copper Loop - Long (w/LMU)							
451											
452	Location Life										
453		52	Months	(=INPUTS_MISC!C11)							
				Worktimes (Min.)				Worktimes (Hrs.)			
454	Source	Description	JFC / JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	First Install	First Disconnect	Addtl Install	Addtl Disconnect
455	Inputs_Connect & Test, Rows19+22	CONNECT & TEST	4AXX	72.89	0.00	72.89	0.00	1.2149	0.0000	1.2149	0.0000
456	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
457	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	67.66	0.00	67.66	0.00	1.1276	0.0000	1.1276	0.0000
458											
459											

000156

	A	B	C	D	E	F	G	H	I	J	K
460	Tennessee										
461	Nonrecurring Worktimes										
462	Study Period: 2000-2002										
463											
464	**A.14.11**	**INSTALL**									
465	**A.14.1199**	**DISCONNECT**		**4-Wire Copper Loop - Long (w/o LMU)**							
466	Location Life	52	Months	(=INPUTS_MISC!C11)							
467					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
468	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
469	Inputs_Service Order, Row (E7*I7)	SERVICE ORDER	230X	1.05	1.05	1.05	1.05	0.0175	0.0175	0.0175	0.0175
470	Inputs_Engineering, (E8*I8*K8)+(E8*J8*K8)+(E9*I9*K9)+(E9*J9*K9) +((E10*I10*K10+E10*J10*K10)*B5)	ENGINEERING	JG57	2.49	0.00	2.49	0.00	0.0416	0.0000	0.0416	0.0000
471	Inputs_Engineering, (E7*I7*K7)+(E7*J7*K7)+(*E11*I11*K11)+(E11*J11*K11)	ENGINEERING	4FXX	2.00	0.00	0.50	0.00	0.0333	0.0000	0.0083	0.0000
472	Inputs_Engineering, Row 19+20	ENGINEERING	4N4X	4.95	2.65	2.70	0.40	0.0825	0.0442	0.0450	0.0067
473	Inputs_Engineering, Row 15	ENGINEERING	4M1X	2.40	0.35	2.40	0.35	0.0400	0.0058	0.0400	0.0058
474	Inputs_Connect & Test, (E14*I14)+(E15*I15)+(E16*I16)+(E18*J18)+(E19*I19*M19) +(E22*I22*M22)+(E24*I24)+(E25*I25)	CONNECT & TEST	4AXX	35.94	28.94	8.57	3.00	0.5990	0.4823	0.1428	0.0500
475	Inputs_Connect & Test, Row 42	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00	0.0333	0.0000	0.0000	0.0000
476	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	10.20	12.75	5.10	5.95	0.1700	0.2125	0.0850	0.0992
477	Inputs_Connect & Test, Row 31-38	CONNECT & TEST	411X	90.23	51.00	51.23	12.00	1.5039	0.8500	0.8539	0.2000
478	Inputs_Travel, Row 7	TRAVEL	411X	20.00	20.00	0.00	0.00	0.3333	0.3333	0.0000	0.0000
479											
480											

000157

	A	B	C	D	E	F	G	H	I	J	K
481	Tennessee										
482	Nonrecurring Worktimes										
483	Study Period: 2000-2002										
484											
485	**A.14.1198**	**TESTING**		**4-Wire Copper Loop - Long (w/o LMU)**							
486											
487	Location Life	52	Months	(=INPUTS_MISC!C11)							
488					**Worktimes (Min.)**				**Worktimes (Hrs.)**		
489	**Source**	**Description**	**JFC / JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
490	Inputs_Connect & Test, Rows19+22	CONNECT & TEST	4AXX	72.89	0.00	72.89	0.00	1.2149	0.0000	1.2149	0.0000
491	Inputs_Connect & Test, Row 46	CONNECT & TEST	431X	6.80	0.00	3.40	0.00	0.1133	0.0000	0.0567	0.0000
492	Inputs_Connect & Test, Rows 33+34+35+37	CONNECT & TEST	411X	67.66	0.00	67.66	0.00	1.1276	0.0000	1.1276	0.0000

000158

	A	B	C	D	E	F	G	H	I
1	Tennessee								
2	Detailed Labor Worktimes								
3	Study Period: 2000-2002								
4									
5	Item/Description				Worktimes (Min.)				
6	LOCAL CARRIER SERVICE CENTER (LCSC)	Source	Description	JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	Probability (Fallout)
7	LCSC receives request and issues service order.	Interconn Svcs.	SERVICE ORDER	230X	15.00	15.00	15.00	15.00	7%

000159

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Tennessee**											
2	**Detailed Labor Worktimes**											
3	**Study Period: 2000-2002**											
4												
5	**Item/Description**											
					Worktimes (Min.)				**Probability (Fallout)**			
6	**Complex Resale Support Group (CRSG) Work Activities**	**Source**	**Description**	**JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
7	CRSG/Acct Team receives LSR & SI	CRSG	SERVICE INQUIRY	SDWC	3.00	0.00	1.50	0.00	100%	0%	100%	0%
8	CRSG/Acct Team screens LSR & SI	CRSG	SERVICE INQUIRY	SDWC	3.00	0.00	1.50	0.00	100%	0%	100%	0%
9	CRSG contacts CLEC acknowledging receipt and begins tracking procedures	CRSG	SERVICE INQUIRY	SDWC	4.00	0.00	0.00	0.00	100%	0%	100%	0%
10	CRSG prepares SI transmittal to OSPE/SAC	CRSG	SERVICE INQUIRY	SDWC	5.00	0.00	2.00	0.00	100%	0%	100%	0%
11	CRSG receives SI response, prepares LCSC transmittal, confirms log; notifies CLEC; and closes out folder	CRSG	SERVICE INQUIRY	SDWC	10.00	0.00	5.00	0.00	100%	0%	100%	0%
12	**Order Complications:**									0%		0%
13	SI not processed within commitment	CRSG	SERVICE INQUIRY	SDWC	10.00	0.00	5.00	0.00	33%	0%	33%	0%
14	SI response requires negotiation with CLEC/OSPE	CRSG	SERVICE INQUIRY		15.00	0.00	7.50	0.00	24%	0%	24%	0%
15	**Total Minutes (Worktimes * Probabilities)**				**31.90**	**0.00**	**13.45**	**0.00**				
16												
17	**Item/Description**											
					Worktimes (Min.)							
18	**LOCAL CARRIER SERVICE CENTER (LCSC)**	**Source**	**Description**	**JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**Probability (Fallout)**			
19	LCSC receives SI from CRSG validates for accuracy and sends Firm Order Commitment (FOC) to CLEC	Interconn Svcs.	SERVICE INQUIRY	230X	45.00	30.00	10.00	10.00	100%			

000160

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Tennessee**											
2	**Detailed Labor Worktimes**											
3	**Study Period: 2000-2002**											
4												
5	**Item/Description**	**58.8%**	**INPUTS_MISC**			**Worktimes (Min.)**						
6	**SERVICE ADVOCACY CENTER (SAC)**	**Source**	**Description**	**JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**Spares Exist**	**No Spares Exist**	**Probability (Fallout)**	
7	Clerical Input	Network	ENGINEERING	4FXX	15.00	0.00	0.00	0.00	90%	10%	10%	
8	OSPE Investigation and LMU lookup	Network	ENGINEERING	JG57	10.00	0.00	10.00	0.00	90%	10%	10%	
9	OPSE finds compatible facility (No spare situation only)	Network	ENGINEERING	JG57	20.00	0.00	20.00	0.00	0%	10%	10%	
10	Pull LMU	Network	ENGINEERING	JG57	22.00	0.00	22.00	0.00	90%	10%	10%	
11	LFACS reservation	Network	ENGINEERING	4FXX	5.00	0.00	5.00	0.00	90%	10%	10%	
12												
13	**Item/Description**					**Worktimes (Min.)**						
14	**ADDRESS AND FACILITY INVENTORY (AFIG)**	**Source**	**Description**	**JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**Probability (Fallout) - Install**	**Probability (Fallout) - Disc.**		
15	Assigns loop facilities	Network	ENGINEERING	4M1X	8.00	7.00	8.00	7.00	30%	5%		
16												
17	**Item/Description**					**Worktimes (Min.)**						
18	**CIRCUIT PROVISIONING GROUP (CPG)**	**Source**	**Description**	**JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
19	Processes request	Network	ENGINEERING	4N4X	15.00	15.00	0.00	0.00	15%	15%	0%	0%
20	Designs circuit and generates DLR and WORD document for CLEC and Field	Network	ENGINEERING	4N4X	18.00	4.00	18.00	4.00	15%	10%	15%	10%
21												
22												

000161

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**Tennessee**												
2	**Detailed Labor Worktimes**												
3	**Study Period: 2000-2002**												
4													
5	**Item/Description**				**Worktimes (Min.)**								
6	**Unbundled Network Element Center (UNEC) Work Activities**	**Source**	**Description**	**JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**Probability / Reuse**	**Probability / Reuse**	**Probability / Reuse**	**2W / 4W Multiplier**	
7	**Provisioning Variables**												
8	(1) Status/Info (55% of orders at 2.4 min.)	Interconn Svcs.	CONNECT & TEST	4AXX	2.40	2.40	2.40	0	55%				
9	(2) Escalations (12% of orders at 7.2 min.)	Interconn Svcs.	CONNECT & TEST	4AXX	7.20	7.20	7.20	0	12%				
10	(3) Assist Calls (6% of orders at 15.6 min.)	Interconn Svcs.	CONNECT & TEST	4AXX	15.60	15.60	15.60	0	6%				
11	(4) Jeopardy (25% of orders at 1.8 min.)	Interconn Svcs.	CONNECT & TEST	4AXX	1.80	1.80	1.80	0	25%				
12	**Total of Worktimes * Probabilities**				**3.57**	**3.57**	**3.57**	**0.00**					
13													
14	UNEC pulls order information and assigns to work groups.	Interconn Svcs.	CONNECT & TEST	4AXX	8.00	8.00	0.00	0.00	100%			1.00	
15	Provisioning variables - when UNEC pulls order information (Row 12)	Interconn Svcs.	CONNECT & TEST	4AXX	3.57	3.57	3.57	0.00	100%			1.00	
16	Verifies and ensures accuracy of order design	Interconn Svcs.	CONNECT & TEST	4AXX	5.00	3.00	5.00	3.00	100%			1.00	
17	Creates cut sheets to verify reuse of facilities	Interconn Svcs.	CONNECT & TEST	4AXX	4.00	0.00	4.00	0.00	80%	10%	100%	1.00	
18	Ensures dispatch	Interconn Svcs.	CONNECT & TEST	4AXX	5.00	0.00	0.00	0.00	20%	100%		1.00	
19	Performs frame continuity and due date coordination and testing	Interconn Svcs.	CONNECT & TEST	4AXX	53.60	0.00	53.60	0.00	85%			1.00	1.50
20	Performs frame continuity and due date coordination and testing	Interconn Svcs.	CONNECT & TEST	4AXX	54.00	0.00	54.00	0.00	85%			1.00	
21	Performs frame continuity and due date coordination and testing	Interconn Svcs.	CONNECT & TEST	4AXX	84.00	0.00	84.00	0.00	85%			1.00	1.50
22	Provisioning variables - testing (Row 12)	Interconn Svcs.	CONNECT & TEST	4AXX	3.57	0.00	3.57	0.00	85%			1.00	1.50
23	Performs manual order coordination (remote call forward, disconnect and unbundled loop order) when service is converted on existing facilities	Interconn Svcs.	CONNECT & TEST	4AXX	20.00	0.00	20.00	0.00	80%	10%	100%	1.00	
24	UNEC contacts customer and completes order	Interconn Svcs.	CONNECT & TEST	4AXX	10.80	10.80	0.00	0.00	100%			1.00	
25	Provisioning Variables - when UNEC contacts customer and completes order (Row 12)	Interconn Svcs.	CONNECT & TEST	4AXX	3.57	3.57	0.00	0.00	100%			1.00	
26													

000162

	A	B	C	D	E	F	G	H	I	J	K	L	M
27	Item/Description				Worktimes (Min.)								
28	**SPECIAL SERVICES INSTALLATION & MAINTENANCE (SSI&M) WORK ACTIVITIES**	Source	Description	SSIM JG /WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	Probability, Dispatch Rate, Fallout)	2W / 4W Multiplier			
29													
30													
31	Processes requests	Network	CONNECT & TEST	411X	20.00	20.00	0.00	0.00	100%	1.00	1.00		
32	Places/removes cross-connect at crossbox	Network	CONNECT & TEST	411X	16.00	8.00	16.00	8.00	100%	1.00	1.50		
33	Checks continuity and dial tone	Network	CONNECT & TEST	411X	15.00	0.00	15.00	0.00	100%	1.00	1.50		
34	Trouble resolution at crossbox	Network	CONNECT & TEST	411X	45.00	0.00	45.00	0.00	30%	1.00	1.50		
35	Tests from NID	Network	CONNECT & TEST	411X	20.00	0.00	20.00	0.00	100%	1.00	1.50		
36	Tags Loop	Network	CONNECT & TEST	411X	3.00	0.00	3.00	0.00	100%	1.00	1.50		
37	Trouble resolution at premises	Network	CONNECT & TEST	411X	56.00	0.00	56.00	0.00	21%	1.00	1.50		
38	Completes order	Network	CONNECT & TEST	411X	19.00	19.00	0.00	0.00	100%	1.00	1.00		
39													
40	Item/Description				Worktimes (Min.)								
41	**WORK MANAGEMENT CENTER (WMC)**	Source	Description	JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect					
42	WMC coordinates dispatched technicians	Network	CONNECT & TEST	4WXX	2.00	0.00	0.00	0.00					
43													
44	Item/Description				Worktimes (Min.)								
45	**CENTRAL OFFICE FORCES (CO)**	Source	Description	JG / WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	15% Carried In Other Transport Elements				
46	CO Field wires circuit at collocation site.	Network	CONNECT & TEST	431X	20.00	15.00	10.00	7.00	85%				

000163

	A	B	C	D	E	F	G	H	I
1	Tennessee								
2	Detailed Labor Worktimes								
3	Study Period: 2000-2002								
4	Item/Description					Worktimes (Min.)			
6	SPECIAL SERVICES INSTALLATION & MAINTENANCE (SSI&M) WORK ACTIVITIES	Source	Description	SSIM JG /WS	First Install	First Disconnect	Addtl Install	Addtl Disconnect	Dispatch Rate
7	Dispatched to crossbox	Network	TRAVEL	411X	20.00	20.00	0.00	0.00	100%

000164

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Tennessee**											
2	**Miscellaneous Inputs**											
3	**Study Period: 2000-2002**											
4												
5												
6	**Input Description**											
7		**Source**	**Amount**									
8												
9	**Location Life - 2 wire**						**Connect / Test Percentages**					
10		LocLife.xls, Line D22	46	**months**								
11	**Location Life - 4 wire**											
12		LocLife.xls, Line D19	52	**months**			**JFC**					
13	**Subscriber Line Testing**											
14		slt.xls, Line G13	$ 0.2061				**4AXX**	**0%**		**100%**		
15	**Network Termining Wire**						**410X/411X**	**60%**		**40%**		
16		ntw.xls, Line C31	$ 0.1301				**410X/411X**	**0%**		**100%**		
17	**% of Time LMU does not exist in LFAC**						**431X**	**60%**		**40%**		
18		OSPE	58.8%				**431X**	**0%**		**100%**		
19												
20							When CO or I&M/SSIM worktimes cannot be determined to be solely testing, the assumption is made that 40% of the total worktime is for testing.					

000165

	A	B	C	D	E	F	G	H	I	J	K
1	Tennessee										
2	Index Sheet										
3	Study Period: 2000-2002										
4											
5											
6											
7											
8											
9			**Sheet Name:**		**Description:**						
10			Index		Unbundled Loop Modification						
11			Nonrecurring Labor		CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES						
12			WP100		Nonrecurring Worktimes						
13			WP200		Nonrecurring Worktimes						
14			INPUTS_SERVICE INQUIRY		Detailed Labor Worktimes						
15			INPUTS_ENGINEERING		Detailed Labor Worktimes						
16			INPUTS_CONNECT&TEST		Detailed Labor Worktimes						
17			INPUTS_TRAVEL		Detailed Labor Worktimes						
18			Input_Loop+Mod		Adjustment for Loop Modification Worktimes - ULM - Short						
19			Input_ULM LC BT		Adjustment for BT/LC Inquiries in same SI						
20			Input_Demand		Conditioning/xDSL Loop Demand						
21											
22											
23											
24											
25											
26											

000166

	A	B	C	D	E	F	G	H	I	J
1		**CALCULATOR INPUT FORM - MATERIAL/INVESTMENT DATA**								
2										
3		**Instructions:**								
4		**1. Use this worksheet to record material and/or investments to be input into the**								
5		**Calculator calculations.**								
6		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**								
7		**3. Input data, by Cost Element, leaving no blank lines. On next row**								
8		**after last line of data, type END in Cost Element Column.**								
9		**4. All data on this form should be cell-referenced to study workpapers.**								
10		**5. Do NOT change columns, headings, sheet name.**								
11										
12					**Volume**					
13		**Cost**		**Sub**	**Sensitive**	**Volume**				
14	**State**	**Element #**	**FRC**	**FRC**	**$ Amount**	**Insensitive**				
						$ Amount				
15	TN									
16		END								
17										
18										
19										
20										
21										
22										
23										
24										
25										

000167

.	A	B	C	D	E	F	G	H
1		CALCULATOR INPUT FORM - RECURRING EXPENSES DATA						
2								
3		Instructions:						
4		1. Use this worksheet to record recurring non-labor expenses to be input into the						
5		Calculator calculations.						
6		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).						
7		3. Input data, by Cost Element, leaving no blank lines. On next row						
8		after last line of data, type END in Cost Element Column.						
9		4. All data on this form should be cell-referenced to study workpapers.						
10		5. Do NOT change columns, headings, sheet name.						
11								
12								
13								
14								
15								
16								
17	State	Cost Element #	Recurring Expense Description (Limited to 25 characters)	Recurring Volume Sensitive $ Amount	Recurring Volume Insensitive $ Amount			
18	TN							
19		END						
20								
21								
22								
23								
24								
25								
26								
27								
28								
29			Maximum 10 entries per Cost Element #					
30								

000168

	A	B	C	D	E	F	G	H
1		**CALCULATOR INPUT FORM - NONRECURRING EXPENSES DATA**						
2								
3		**Instructions:**						
4		**1. Use this worksheet to record nonrecurring non-labor expenses to be input into the Calculator calculations.**						
5		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**						
6		**3. Input data, by Cost Element, leaving no blank lines. On next row**						
7		**after last line of data, type END in Cost Element Column.**						
8		**4. All data on this form should be cell-referenced to study workpapers.**						
9		**5. Do NOT change columns, headings, sheet name.**						
10		**6. Use column D when cost element has a single nonrecurring cost; use columns E & F for elements with a first**						
11		**and additional nonrecurring cost; use columns G & H for elements with an initial and subsequent nonrecurring cost.**						
12								
13								
14			**Nonrecurring**		**Nonrecurring**	**Nonrecurring**	**Nonrecurring**	**Nonrecurring**
15		**Cost**	**Expense Description**	**Nonrecurring**	**First**	**Additional**	**Initial**	**Subsequent**
16	**State**	**Element #**	**(Limited to 25 characters)**	**$ Amount**	**$ Amount**	**$ Amount**	**$ Amount**	**$ Amount**
17	TN							
18		END						
19								
20								
21								
22								
23								
24								
25								
26								
27								
28			Maximum 10 entries per Cost Element #					
29								
30								

000169

CALCULATOR INPUT FORM - RECURRING LABOR EXPENSES DATA

Instructions:

1. **Use this worksheet to record recurring expensed labor times to be input into the Calculator calculations.**
2. **All amounts shown are per unit (e.g., per call, per loop, per MOU).**
3. **Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.**
4. **All data on this form should be cell-referenced to study workpapers.**
5. **Do NOT change columns, headings, sheet name.**

	A	B	C	D	E	F	G	H
13					Work Time (Hours)			
15	State	Cost Element #	Labor Expense Description (Limited to 25 characters)	JFC/ Payband	Volume Sensitive	Volume Insensitive		
16	TN							
17		END						
37			Maximum 20 entries per Cost Element #					

000170

CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES

Instructions:
1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.
6. Use columns F & G when cost element has a single nonrecurring cost; use columns H, I, J, & K for elements with a first and additional nonrecurring cost; use columns L, M, N & O for elements with an initial and subsequent nonrecurring cost.
7. Input Cost Element Life (in months) on first row of data for each cost element. It is not necessary to repeat on each line.

Study Mid-Point Date (Mos.) 6/1/2001

State	Cost Element #	Cost Element Life (Mo)	Labor Expense Description (Limited to 25 characters)	JFC/ Payband	(For use w/ one NR) Installation Time (Hours)	(For use w/ one NR) Disconnect Time Hours	First Installation Time (Hours)	First Disconnect Time Hours	Additional Installation Time (Hours)	Additional Disconnect Time Hours	Initial Installation Time (Hours)	Initial Disconnect Time Hours	Subsequent Installation Time (Hours)	Subsequent Disconnect Time Hours
TN	A.17.2		SERVICE INQUIRY	SDWC	0.0111									
TN	A.17.2		SERVICE INQUIRY	230X	0.0157									
TN	A.17.2		ENGINEERING	JG57	1.8750									
TN	A.17.2		ENGINEERING	4FXX	0.1392									
TN	A.17.2		ENGINEERING	4M1X	0.4175									
TN	A.17.2		CONNECT & TEST	420X	5.0400									
TN	A.17.2		TRAVEL	420X	0.2500									
TN	A.17.4		SERVICE INQUIRY	SDWC			0.0018		0.0018					
TN	A.17.4		SERVICE INQUIRY	230X			0.0025		0.0025					
TN	A.17.4		ENGINEERING	JG57			0.0754		0.0754					
TN	A.17.4		ENGINEERING	4FXX			0.0056		0.0056					
TN	A.17.4		ENGINEERING	4M1X			0.0168		0.0168					
TN	A.17.4		CONNECT & TEST	420X			0.1858		0.1858					
TN	A.17.4		TRAVEL	420X			0.0101		0.0101					
	END													

Maximum of 25 entries per Cost Element #

000171

	A	B	C	D	E	F	G	H	I	J	K
1	Tennessee										
2	Nonrecurring Worktimes										
3	Study Period: 2000-2002										
4											
5	A.17.2	Unbundled Loop Modification / Load Coil - Long									
6											
7				Worktimes (Min.)	Worktimes (Hrs.)						
8	Source	Description	JFC / JG / WS	Install	Install						
9	=(('INPUTS_SERVICE INQUIRY'!E15*H7+E15/2*I7)/K7)*Input_Loop+Mod'!D12	SERVICE INQUIRY	SDWC	0.67	0.0111						
10	=(('INPUTS_SERVICE INQUIRY'!E19*H19+E19/2*I19)/K19)*Input_Loop+Mod'!D1	SERVICE INQUIRY	230X	0.94	0.0157						
11	=INPUTS_ENGINEERING!E10/J9	ENGINEERING	JG57	112.50	1.8750						
12	=INPUTS_ENGINEERING!(E11*G11+F11*H11)/J11	ENGINEERING	4FXX	8.35	0.1392						
13	=INPUTS_ENGINEERING!(E16*G16+F16*H16)/J16	ENGINEERING	4M1X	25.05	0.4175						
14	='INPUTS_CONNECT&TEST'!E24+E29	CONNECT & TEST	420X	302.40	5.0400						
15	=INPUTS_TRAVEL!E7/H7	TRAVEL	420X	15.00	0.2500						
16											
17											

000172

	A	B	C	D	E	F	G
1	**Tennessee**						
2	**Nonrecurring Worktimes**						
3	**Study Period: 2000-2002**						
4							
5	**A.17.4**	**Unbundled Loop Modification - Additive**					
6							
7				**Worktimes (Min.)**		**Worktimes (Hrs.)**	
8	**Source**	**Description**	**JFC / JG / WS**	**Install**	**Disconnect**	**Install**	**Disconnect**
9	=(('INPUTS_SERVICE INQUIRY'!E15*H7+E15/2*I7)/J7)*'Input_Loop+Mod'!D10	SERVICE INQUIRY	SDWC	0.53	0.00	0.0089	0.0000
10	=(('INPUTS_SERVICE INQUIRY'!E19*H19+E19/2*I19)/J19)*'Input_Loop+Mod'!D10	SERVICE INQUIRY	230X	0.75	0.00	0.0125	0.0000
11	=(INPUTS_ENGINEERING!E10/I9	ENGINEERING	JG57	22.50	0.00	0.3750	0.0000
12	=(INPUTS_ENGINEERING!E11*G11+F11*H11/I11	ENGINEERING	4FXX	1.67	0.00	0.0278	0.0000
13	=(INPUTS_ENGINEERING!E16*G16+F16*H16)/I16	ENGINEERING	4M1X	5.01	0.00	0.0835	0.0000
14	='INPUTS_CONNECT&TEST'!E11+E16	CONNECT & TEST	420X	55.44	0.00	0.9240	0.0000
15	=INPUTS_TRAVEL!E7/G7	TRAVEL	420X	3.00	0.00	0.0500	0.0000
16							
17	**DEMAND FOR CONDITIONING**						
18			**2000**	**2001**	**2002**		
19	=Input_Demand!E42-Input_Demand!D42	Incoming Demand	4,593	2,376	1,754		
20	=SUM(C19:E19)	Cumulative Demand	8,723				
21							
22	=Input_Demand!J43-Input_Demand!I43	Incoming Demand	232	119	88		
23	=SUM(C22:E22)	Cumulative Demand	439				
24							
25	# Loops Conditioned Not Recovered Elsewhere		4				
26							
27	**Amount To Be Recovered from xDSL Loops:**						
28	=F9*$C$25*$C$23/$C$20	SERVICE INQUIRY	SDWC			0.0018	
29	=F10*$C$25*$C$23/$C$20	SERVICE INQUIRY	230X			0.0025	
30	=F11*$C$25*$C$23/$C$20	ENGINEERING	JG57			0.0754	
31	=F12*$C$25*$C$23/$C$20	ENGINEERING	4FXX			0.0056	
32	=F13*$C$25*$C$23/$C$20	ENGINEERING	4M1X			0.0168	
33	=F14*$C$25*$C$23/$C$20	CONNECT & TEST	420X			0.1858	
34	=F15*$C$25*$C$23/$C$20	TRAVEL	420X			0.0101	

000173

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Tennessee**											
2	**Detailed Labor Worktimes**											
3	**Study Period: 2000-2002**											
4												
5	**Item/Description**				**Worktimes (Min.)**			**Probability**				
6	**COMPLEX RESALE SUPPORT GROUP (CRSG)**	**Source**	**Description**	**JG / WS**	**Install**	**Add'l Install**	**Install**	**Input_ULM LC BT**	**Input_ULM LC BT**	**# Pairs Deloaded/Short**	**# Pairs Deloaded/Long**	**# Pairs Deloaded/Subloops**
7	CRSG/Acct Team receives LSR & SI	CRSG	SERVICE INQUIRY	SDWC	3.00	1.5	100%	67%	33%	10	2	1
8	CRSG/Acct Team screens LSR & SI	CRSG	SERVICE INQUIRY	SDWC	3.00	1.5	100%	67%	33%	10	2	1
9	CRSG contacts CLEC acknowledging receipt and begins tracking procedures	CRSG	SERVICE INQUIRY	SDWC	4.00	0	100%	67%	33%	10	2	1
10	CRSG prepares SI transmittal to OSPE/SAC	CRSG	SERVICE INQUIRY	SDWC	5.00	2	100%	67%	33%	10	2	1
11	CRSG receives SI response, prepares LCSC transmittal, confirms log; notifies CLEC; and closes out folder	CRSG	SERVICE INQUIRY	SDWC	10.00	5	100%	67%	33%	10	2	1
12	**Order Complications:**							67%	33%	10	2	1
13	SI not processed within commitment	CRSG	SERVICE INQUIRY	SDWC	10.00	5	33%	67%	33%	10	2	1
14	SI response requires negotation with CLEC/OSPE	CRSG	SERVICE INQUIRY		15.00	7.5	24%	67%	33%	10	2	1
15	**Total Minutes (Worktimes * Probabilities)**				**31.90**	**13.45**						
16												
17	**Item/Description**				**Worktimes (Min.)**				**Probability**			
18	**LOCAL CARRIER SERVICE CENTER (LCSC)**	**Source**	**Description**	**JG / WS**	**Install**	**Add'l Install**		**Input_ULM LC BT**	**Input_ULM LC BT**	**# Pairs Deloaded/Short**	**# Pairs Deloaded/Long**	**# Pairs Deloaded/Long**
19	LCSC receives SI, validates for accuracy and processes for billing.	Interconn Svcs.	SERVICE INQUIRY	230X	45.00	22.50		67%	33%	10	2	1

000174

	A	B	C	D	E	F	G	H	I	J
1	**Tennessee**									
2	**Detailed Labor Worktimes**									
3	**Study Period: 2000-2002**									
4										
5	**Item/Description**				**Worktimes (Min.)**					
6	**SERVICE ADVOCACY CENTER (SAC)**	**Source**	**Description**	**JG / WS**	**Install**	**1/2 of E11**	**Inputs_ULM LC BT**	**Inputs_ULM LC BT**	**# Pairs Deloaded/ Short**	**# Pairs Deloaded/ Long**
7	Design of Engineering Work Order	Network	ENGINEERING	JG57	120.00				10	2
8	Encoding	Network	ENGINEERING	JG57	45.00				10	2
9	SAC Coordination	Network	ENGINEERING	JG57	60.00				10	2
10	**Total JG57 Time**				**225.00**					
11	Clerical log of ULM	Network	ENGINEERING	4FXX	20.00	10.00	67%	33%	10	2
12										
13										
14	**Item/Description**				**Worktimes (Min.)**					
15	**ADDRESS AND FACILITY INVENTORY (AFIG)**	**Source**	**Description**	**JG / WS**	**Install**	**1/2 of E16**	**Inputs_ULM LC BT**	**Inputs_ULM LC BT**	**# Pairs Deloaded/ Short**	**# Pairs Deloaded/ Long**
16	Receives job from OSPE and posts records.	Network	ENGINEERING	4M1X	60.00	30.00	67%	33%	10	2
17										

000175

	A	B	C	D	E	F	G	H	I
1	**Tennessee**								
2	**Detailed Labor Worktimes**								
3	**Study Period: 2000-2002**								
4									
5	**Item/Description**			**Worktimes (Min.)**					
6	**OUTSIDE PLANT CONSTRUCTION (OSPC) - Load Coil Short**	**Source**	**Description**	**JG / WS**	**Install**	**Probability**	**# Load Coils Removed**	**# Pairs Deloaded/Short**	
7	**Underground Application**					90%			
8	OSPC sets up manholes	Network	CONNECT & TEST	420X	120.00		2.1	10	
9	OSPC opens/closes splices	Network	CONNECT & TEST	420X	60.00				
10	OSPC deloads 10 pairs	Network	CONNECT & TEST	420X	90.00				
11	**Total WorkTime - ULM-LC-Short-Underground**	=((E8+E9+E10)*G8*F7)/H8			**51.03**				
12	**Buried/Aerial Application**					10%			
13	OSPC sets up site	Network	CONNECT & TEST	420X	60.00		2.1	10	
14	OSPC opens/closes splices	Network	CONNECT & TEST	420X	60.00				
15	OSPC deloads 10 pairs	Network	CONNECT & TEST	420X	90.00				
16	**Total WorkTime - ULM-LC-Short-Buried/Aerial**	=((E13+E14+E15)*G13*F12)/H13			**4.41**				
17									
18	**Item/Description**			**Worktimes (Min.)**					
19	**OUTSIDE PLANT CONSTRUCTION (OSPC) - Load Coil Long**	**Source**	**Description**	**JG / WS**	**First Install**	**Addtl Install**	**Probability**	**# Load Coils Removed**	**# Pairs Deloaded/Long**
20	**Underground Application**						90%		
21	OSPC sets up manholes	Network	CONNECT & TEST	420X	120.00			3.15	2
22	OSPC opens/closes splices	Network	CONNECT & TEST	420X	60.00				
23	OSPC deloads two pair	Network	CONNECT & TEST	420X	18.00				
24	**Total WorkTime - ULM-LC-Long-Underground**	=((E21+E22+E23)*H21*G20)/I21			**280.67**				
25	**Buried/Aerial Application**						10%		
26	OSPC sets up site	Network	CONNECT & TEST	420X	60.00			3.15	2
27	OSPC opens/closes splices	Network	CONNECT & TEST	420X	60.00				
28	OSPC deloads two pair	Network	CONNECT & TEST	420X	18.00				
29	**Total WorkTime - ULM-LC-Long-Buried/Aerial**	=((E26+E27+E28)*H26*G25)/I26			**21.74**				
30									
31	**Item/Description**			**Worktimes (Min.)**					
32	**OUTSIDE PLANT CONSTRUCTION (OSPC) - Bridged Tap**	**Source**	**Description**	**JG / WS**	**Install**		**# Bridged Taps**	**# Pairs Deloaded/Short**	
33	**Underground Application**						1.00		
34	OSPC sets up manholes	Network	CONNECT & TEST	420X	120.00			10	
35	OSPC open/close splice	Network	CONNECT & TEST	420X	60.00				
36	OSPC removes bridged tap	Network	CONNECT & TEST	420X	45.00				
37	**Total WorkTime - ULM-BTUnderground**	=((E34+E35+E36)*G33)/H34			**22.50**				
38	**Aerial/Buried Application**						2.00		
39	OSPC sets up site	Network	CONNECT & TEST	420X	60.00			10	
40	OSPC open/close splice	Network	CONNECT & TEST	420X	60.00				
41	OSPC removes bridged tap	Network	CONNECT & TEST	420X	45.00				
42	**Total WorkTime - ULM-BT-Buried/Aerial**	=((E39+E40+E41)*G38)/H39			**33.00**				
43									

000176

	A	B	C	D	E	F	G	H	I
44	Item/Description				Worktimes (Min.)				
45	**OUTSIDE PLANT CONSTRUCTION (OSPC) - Load Coil Sub-Loop**	**Source**	**Description**	**JG / WS**	**First Install**	**Addtl Install**	**Probability**	**# Load Coils Removed**	**# Pairs Deloaded/Long**
46	**Underground Application**						10%		
47	OSPC sets up manholes	Network	CONNECT & TEST	420X	120.00			1.2	1
48	OSPC opens/closes splices	Network	CONNECT & TEST	420X	60.00				
49	OSPC deloads one pair (E90/L88)	Network	CONNECT & TEST	420X	9.00	9.00			
50	**Total WorkTime - ULM-LC Sub-Loop-Underground**	=((E47+E48+E49)*H47*G46)/I47			22.68	1.08			
51	**Buried/Aerial Application**						90%		
52	OSPC sets up site	Network	CONNECT & TEST	420X	60.00			1.2	1
53	OSPC opens/closes splices	Network	CONNECT & TEST	420X	60.00				
54	OSPC deloads one pair (E94/L88)	Network	CONNECT & TEST	420X	9.00	9.00			
55	**Total WorkTime - ULM-LC Sub-Loop-Buried/Aerial**	=((E52+E53+E54)*H52*G51)/I52			139.32	9.72			
56									
57	**Item/Description**				Worktimes (Min.)				
58	**OUTSIDE PLANT CONSTRUCTION (OSPC) - Bridged Tap Sub-Loop**	**Source**	**Description**	**JG / WS**	**First Install**	**Addtl Install**		**# Bridged Taps**	**# Pairs Deloaded/Long**
59	**Underground Application**							1	
60	OSPC sets up manholes	Network	CONNECT & TEST	420X	120.00				1
61	OSPC open/close splice	Network	CONNECT & TEST	420X	60.00				
62	OSPC removes bridged tap	Network	CONNECT & TEST	420X	4.50	4.50			
63	**Total WorkTime - ULM-BT Sub-Loop-Underground**	=((E60+E61+E62)*H59)/I60			184.50	4.50			
64	**Aerial/Buried Application**							2	
65	OSPC sets up site	Network	CONNECT & TEST	420X	60.00				1
66	OSPC open/close splice	Network	CONNECT & TEST	420X	60.00				
67	OSPC removes bridged tap	Network	CONNECT & TEST	420X	4.50	4.50			
68	**Total WorkTime - ULM-BT Sub-Loop-Buried/Aerial**	=((E65+E66+E67)*H64)/I65			249.00	9.00			

000177

	A	B	C	D	E	F	G	H	I
1	**Tennessee**								
2	**Detailed Labor Worktimes**								
3	**Study Period: 2000-2002**								
4									
5	**Item/Description**				**Worktimes (Min.)**				
6	**OUTSIDE PLANT CONSTRUCTION (OSPC)**	**Source**	**Description**	**JG / WS**	**Install**	**Disconnect**	**# Pairs Deloaded/Short**	**# Pairs Deloaded/Long**	**# Pairs Deloaded/Subloops**
7	OSPC travels to load coil/ equipment sites.	Network	TRAVEL	420X	30.00	0.00	10	2	1

000178

	A	B	C	D	E	F
1	**Tennessee**					
2	**Adjustment for Loop Modification Worktimes - ULM - Short**					
3	**Study Period: 2000-2002**					
4						
5						
6						
7	**% of Loop and Modification Inquiries/Orders that arrive separately**					
8						
9						
10		Short Loops		20%		
11						
12		Long Loops		5%		
13						
14						
15						
16						
17						
18	**Source:**	Interconnection Services				

000179

	A	B	C	D	E	F	G	H
1	**Tennessee**							
2	**Adjustment for BT/LC Inquiries in same SI**							
3	**Study Period: 2000-2002**							
4								
5								
6								
7								
8	% ULM-LC and ULM-BT requests come from CLEC at same time							33%
9								
10	ULM-LC and ULM_BT requests are assumed to be separate orders with							67%
11	33% being ordered at the same time. This efficiency is captured							
12	in the ULM-LC and ULM-BT elements equally.							

000180

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Tennessee**											
2	**Conditioning/xDSL Loop Demand**											
3	**Study Period: 2000-2002**				Source: Interconnect Service							
4												
5												
6		[redacted]										
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18	**Conditioning Information For Cost Recovery**											
19		# of Loops Conditioned During Dispatch	Interconnection	10								
20		# Average Conditionings Per Order	Interconnection	2								
21		# of Conditions Reused by CLEC or BST	Interconnection	4								
22		# of Conditions Unrecovered	=D19-D20-D21	4								
23												
24												
25	**Loop and Conditioning Demand**					**Total Loops**					**With Loop Conditioning**	
26		**Service**	**Source**	**1999**	**2000**	**2001**	**2002**		**1999**	**2000**	**2001**	**2002**
27												
28		609-2W HDSL	Interconnection	0	0	57	69		0	0	11	14
29												
30		610-2W ADSL	Interconnection	49	3312	4968	6210		0	662	994	1242
31												
32		611 - 4W HDSL	Interconnection	0	9	13	17		0	2	3	3
33												
34		645 - UCL	Interconnection		1390	2084	2606					
35		2 Wire UCL (95% of all UCL)	Interconnection		1321	1980	2476		For Reference Only - Not for Use in determining Cost			
36		4 Wire UCL (5% of all UCL)	Interconnection		70	104	130					
37												
38		2W UCL Less than 18 Kfeet (95 % of total 2 Wire])	Interconnection	0	1254	1881	2352		0	251	376	470
39												
40		4W UCL Less than 18 Kfeet (95% of all 4 wire loops)	Interconnection	0	66	99	124		0	13	20	25
41												
42		**Total forecasted inservice xDSL Capable loops by year**	**=D40+D38+D32+D30+D28**	**49**	**4,642**	**7,018**	**8,772**		**-**	**928**	**1,404**	**1,754**
43		**Total Forecasted Orders for Loop Conditioning (Assume 4 loops at a time)**	**=J42/D22;K42/D22;L42/D22**							**232.075**	**350.89**	**438.585**

Assumptions:

1. Loop growth in all cases (Where there are forecasted loops in 2000) is 50% from EOY 2000 til EOY 2002; 25% thereafter

2. Percentage of loops that require conditioning is indicated in cell C6

3. UCL is subdivided as follows:
   - -95% of UCL are 2 wire
     - -95% of 2 wire UCL are under 18 kilofeet
     - -5% of 2 wire UCL are over 18 kilofeet
   - -5% of UCL are 4 wire
   - -5% of UCL are 4 wire
     - -95% of 4 wire UCL are under 18 kilofeet
     - -5% of 4 wire UCL are over 18 kilofeet

4. Each job includes 2 CLEC loops plus 2 add'l loops that will be used by CLEC in the future.Assumptions:

000181

	A	B	C	D	E	F	G	H	I	J	K
1	Tennessee										
2	Index Sheet										
3	Study Period: 2000-2002										
4											
5											
6											
7											
8											
9			**Sheet Name:**		**Description:**						
10			Index		Manual Loop Makeup						
11			Investments		CALCULATOR INPUT FORM - MATERIAL/INVESTMENT DATA						
12			Additives_Recurring		CALCULATOR INPUT FORM - RECURRING EXPENSES DATA						
13			Additives_Nonrecurring		CALCULATOR INPUT FORM - NONRECURRING EXPENSES DATA						
14			Recurring Labor		CALCULATOR INPUT FORM - RECURRING LABOR EXPENSES DATA						
15			Nonrecurring Labor		CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES						
16			WP100		Nonrecurring Worktimes						
17			INPUTS_SERVICE INQUIRY		Detailed Labor Worktimes						
18			INPUTS_ENGINEERING		Detailed Labor Worktimes						
19			INPUTS_MISC		MISCELLANEOUS INPUTS						
20											
21											
22											
23											
24											
25											

000182

	A	B	C	D	E	F	G	H	I	J
1		CALCULATOR INPUT FORM - MATERIAL/INVESTMENT DATA								
2										
3		Instructions:								
4		1. Use this worksheet to record material and/or investments to be input into the								
5		Calculator calculations.								
6		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).								
7		3. Input data, by Cost Element, leaving no blank lines. On next row								
8		after last line of data, type END in Cost Element Column.								
9		4. All data on this form should be cell-referenced to study workpapers.								
10		5. Do NOT change columns, headings, sheet name.								
11										
12					Volume	Volume				
13		Cost		Sub	Sensitive	Insensitive				
14	State	Element #	FRC	FRC	$ Amount	$ Amount				
15	TN									
16		END								
17										
18										
19										
20										
21										
22										
23										
24										
25										

000183

	A	B	C	D	E	F	G	H
1		CALCULATOR INPUT FORM - RECURRING EXPENSES DATA						
2								
3		Instructions:						
4		1. Use this worksheet to record recurring non-labor expenses to be input into the						
5		Calculator calculations.						
6		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).						
7		3. Input data, by Cost Element, leaving no blank lines. On next row						
8		after last line of data, type END in Cost Element Column.						
9		4. All data on this form should be cell-referenced to study workpapers.						
10		5. Do NOT change columns, headings, sheet name.						
11								
12								
13								
14				Recurring	Recurring			
15			Recurring	Volume	Volume			
16		Cost	Expense Description	Sensitive	Insensitive			
17	State	Element #	(Limited to 25 characters)	$ Amount	$ Amount			
18	TN							
19		END						
20								
21								
22								
23								
24								
25								
26								
27								
28								
29			Maximum 10 entries per Cost Element #					
30								

000184

	A	B	C	D	E	F	G	H
1		**CALCULATOR INPUT FORM - NONRECURRING EXPENSES DATA**						
2								
3		**Instructions:**						
4		**1. Use this worksheet to record nonrecurring non-labor expenses to be input into the Calculator calculations.**						
5		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**						
6		**3. Input data, by Cost Element, leaving no blank lines. On next row**						
7		**after last line of data, type END in Cost Element Column.**						
8		**4. All data on this form should be cell-referenced to study workpapers.**						
9		**5. Do NOT change columns, headings, sheet name.**						
10		**6. Use column D when cost element has a single nonrecurring cost; use columns E & F for elements with a first**						
11		**and additional nonrecurring cost; use columns G & H for elements with an initial and subsequent nonrecurring cost.**						
12								
13								
14			**Nonrecurring**		**Nonrecurring**	**Nonrecurring**	**Nonrecurring**	**Nonrecurring**
15		**Cost**	**Expense Description**	**Nonrecurring**	**First**	**Additional**	**Initial**	**Subsequent**
16	**State**	**Element #**	**(Limited to 25 characters)**	**$ Amount**	**$ Amount**	**$ Amount**	**$ Amount**	**$ Amount**
17	TN							
18		END						
19								
20								
21								
22								
23								
24								
25								
26								
27								
28			Maximum 10 entries per Cost Element #					
29								
30								

000185

	A	B	C	D	E	F	G	H
1		CALCULATOR INPUT FORM - RECURRING LABOR EXPENSES DATA						
2								
3		Instructions:						
4		1. Use this worksheet to record recurring expensed labor times to be input into the						
5		Calculator calculations.						
6		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).						
7		3. Input data, by Cost Element, leaving no blank lines. On next row						
8		after last line of data, type END in Cost Element Column.						
9		4. All data on this form should be cell-referenced to study workpapers.						
10		5. Do NOT change columns, headings, sheet name.						
11								
12								
13					Work Time (Hours)			
14		Cost	Labor Expense Description	JFC/	Volume	Volume		
15	State	Element #	(Limited to 25 characters)	Payband	Sensitive	Insensitive		
16	TN							
17		END						
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37			Maximum 20 entries per Cost Element #					
38								

000186

CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES

Instructions:
1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.
6. Use columns F & G when cost element has a single nonrecurring cost; use columns H, I, J, & K for elements with a first and additional nonrecurring cost; use columns L, M, N & O for elements with an initial and subsequent nonrecurring cost.
7. Input Cost Element Life (in months) on first row of data for each cost element. It is not necessary to repeat on each line.

Study Mid-Point Date (Mos.) 6/1/2001

State	Cost Element #	Cost Element Life (Mo)	Labor Expense Description (Limited to 25 characters)	JFC/ Payband	(For use w/ one NR) Installation Time (Hours)	Disconnect Time Hours	First Installation Time (Hours)	First Disconnect Time Hours	Additional Installation Time (Hours)	Additional Disconnect Time Hours	Initial Installation Time (Hours)	Initial Disconnect Time Hours	Subsequent Installation Time (Hours)	Subsequent Disconnect Time Hours
TN	J.3.3		SERVICE INQUIRY	SDWC	0.5317	-								
TN	J.3.3		SERVICE INQUIRY	230X	0.7500	-								
TN	J.3.3		ENGINEERING	JG57	0.3823	-								
TN	J.3.3		ENGINEERING	4FXX	0.2500	-								
TN	J.3.4		SERVICE INQUIRY	SDWC	0.5317	-								
TN	J.3.4		SERVICE INQUIRY	230X	0.7500	-								
TN	J.3.4		ENGINEERING	JG57	0.3823	-								
TN	J.3.4		ENGINEERING	4FXX	0.3333	-								
	END													

Maximum of 25 entries per Cost Element #

000187

	A	B	C	D	E	F	G	H	I	J	K
1	**Tennessee**										
2	**Nonrecurring Worktimes**										
3	**Study Period: 2000-2002**										
4											
5	J.3.3	**Manual Loop Make-Up w/o Facility Reservation Number**									
6											
7				**Worktimes (Min.)**		**Worktimes (Hrs.)**					
8	**Source**	**Description**	**JFC / JG / WS**	**Install**	**Disconnect**	**Install**	**Disconnect**				
9	='INPUTS_SERVICE INQUIRY'!E15	SERVICE INQUIRY	SDWC	31.90	0.00	0.5317	0.0000				
10	='INPUTS_SERVICE INQUIRY'!E18	SERVICE INQUIRY	230X	45.00	0.00	0.7500	0.0000				
11	=INPUTS_ENGINEERING, (E8*I8)+((E9*B5)*I9)	ENGINEERING	JG57	22.94	0.00	0.3823	0.0000				
12	=INPUTS_ENGINEERING, E7*I7	ENGINEERING	4FXX	15.00	0.00	0.2500	0.0000				
13											

000188

	A	B	C	D	E	F	G
14	**Tennessee**						
15	**Nonrecurring Worktimes**						
16	**Study Period: 2000-2002**						
17							
18	**J.3.4**	**Manual Loop Makeup w/Facility Reservation Number**					
19							
20				**Worktimes (Min.)**		**Worktimes (Hrs.)**	
21	**Source**	**Description**	**JFC / JG / WS**	**Install**	**Disconnect**	**Install**	**Disconnect**
22	='INPUTS_SERVICE INQUIRY'!E15	SERVICE INQUIRY	SDWC	31.90	0.00	0.5317	0.0000
23	='INPUTS_SERVICE INQUIRY'!E18	SERVICE INQUIRY	230X	45.00	0.00	0.7500	0.0000
24	=INPUTS_ENGINEERING, (E8*I8)+((E9*B5)*I9)	ENGINEERING	JG57	22.94	0.00	0.3823	0.0000
25	=INPUTS_ENGINEERING, (E7*I7)+(E10*I10)	ENGINEERING	4FXX	20.00	0.00	0.3333	0.0000
26							

000189

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Tennessee**											
2	**Detailed Labor Worktimes**											
3	**Study Period: 2000-2002**											
4												
5	**Item/Description**					**Worktimes (Min.)**				**Probability (Fallout)**		
6	**Complex Resale Support Group (CRSG) Work Activities**	**Source**	**Description**	**JG / WS**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**	**First Install**	**First Disconnect**	**Addtl Install**	**Addtl Disconnect**
7	CRSG/Acct Team receives LSR & SI	CRSG	SERVICE INQUIRY	SDWC	3.00	0.00	1.50	0.00	100%	0%	100%	0%
8	CRSG/Acct Team screens LSR & SI	CRSG	SERVICE INQUIRY	SDWC	3.00	0.00	1.50	0.00	100%	0%	100%	0%
9	CRSG contacts CLEC acknowledging receipt and begins tracking procedures	CRSG	SERVICE INQUIRY	SDWC	4.00	0.00	0.00	0.00	100%	0%	100%	0%
10	CRSG prepares SI transmittal to OSPE/SAC	CRSG	SERVICE INQUIRY	SDWC	5.00	0.00	2.00	0.00	100%	0%	100%	0%
11	CRSG receives SI response, prepares LCSC transmittal, confirms log; notifies CLEC; and closes out folder	CRSG	SERVICE INQUIRY	SDWC	10.00	0.00	5.00	0.00	100%	0%	100%	0%
12	**Order Complications:**									0%		0%
13	SI not processed within commitment	CRSG	SERVICE INQUIRY	SDWC	10.00	0.00	5.00	0.00	33%	0%	33%	0%
14	SI response requires negotation with CLEC/OSPE	CRSG	SERVICE INQUIRY		15.00	0.00	7.50	0.00	24%	0%	24%	0%
15	**Total Minutes (Worktimes * Probabilities)**				31.90	**0.00**	**13.45**	**0.00**				
16												

	A	B	C	D	E	F	G
17	**LOCAL CARRIER SERVICE CENTER (LCSC)**	**Source**	**Description**	**JG / WS**	**Install**	**Disconnect**	**Probability (Fallout)**
18	LCSC receives SI and issues service order for billing.	Interconn Svcs.	SERVICE INQUIRY	230X	45.00	0.00	100%

000190

	A	B	C	D	E	F
1	Tennessee					
2	Detailed Labor Worktimes					
3	Study Period: 2000-2002					
4						
5	Item/Description	58.8%	INPUTS_MISC			Work
6	SERVICE ADVOCACY CENTER (SAC)	Source	Description	JG / WS	First Install	First Disconnect
7	Clerical Input	Network	ENGINEERING	4FXX	15.00	0.00
8	OSPE Investigation and LMU lookup	Network	ENGINEERING	JG57	10.00	0.00
9	Pull LMU	Network	ENGINEERING	JG57	22.00	0.00
10	LFACS reservation	Network	ENGINEERING	4FXX	5.00	0.00

000191

	A	B	C	D	E	F
1	**Tennessee**					
2	**MISCELLANEOUS INPUTS**					
3	**Study Period: 2000-2002**					
4						
5						
6	**Input Description**			**Source**		**Percentage**
7						
8	% of time LMU does not			OSPE		58.8%
9	exist in LFACS					

000192

	A	B	C	D	E	F	G	H	I	J	K
1	Tennessee										
2	Index Sheet										
3	Study Period: 2000 -2002										
4											
5											
6											
7											
8											
9		**Sheet Name:**	**Sheet Name:**		**Description:**						
10			Index		LINE SHARING SPLITTER - in the Central Office						
11			Investments		CALCULATOR INPUT FORM - MATERIAL/INVESTMENT DATA						
12			Additives_Recurring		CALCULATOR INPUT FORM - RECURRING EXPENSES DATA						
13			Additives_Nonrecurring		CALCULATOR INPUT FORM - NONRECURRING EXPENSES DATA						
14			Recurring Labor		CALCULATOR INPUT FORM - RECURRING LABOR EXPENSES DATA						
15			Nonrecurring Labor		CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES						
16			INPUT_ NRC		Inputs for Nonrecurring Costs						
17			INPUT_ Recur		Inputs for Recurring Costs						
18											
19											
20											
21											
22											
23											

000193

	A	B	C	D	E	F	G	H
1		CALCULATOR INPUT FORM - MATERIAL/INVESTMENT DATA						
2								
3		Instructions:						
4		1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.						
5		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).						
6		3. Input data, by Cost Element, leaving no blank lines. On next row						
7		after last line of data, type END in Cost Element Column.						
8		4. All data on this form should be cell-referenced to study workpapers.						
9		5. Do NOT change columns, headings, sheet name.						
10								
11								
12					Volume	Volume		
13		Cost		Sub	Sensitive	Insensitive		
14	State	Element #	FRC	FRC	$ Amount	$ Amount		
15	TN							
16								
17		END						

000194

	A	B	C	D	E	F
1		**CALCULATOR INPUT FORM - RECURRING EXPENSES DATA**				
2						
3		**Instructions:**				
4		**1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.**				
5		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**				
6		**3. Input data, by Cost Element, leaving no blank lines. On next row**				
7		**after last line of data, type END in Cost Element Column.**				
8		**4. All data on this form should be cell-referenced to study workpapers.**				
9		**5. Do NOT change columns, headings, sheet name.**				
10						
11						
12						
13						
14				**Recurring**	**Recurring**	
15			**Recurring**	**Volume**	**Volume**	
16		**Cost**	**Expense Description**	**Sensitive**	**Insensitive**	
17	**State**	**Element #**	**(Limited to 25 characters)**	**$ Amount**	**$ Amount**	
18	**TN**					
19		**END**	Maximum 10 entries per Cost Element #			

000195

	A	B	C	D	E	F	G	H
1		CALCULATOR INPUT FORM - NONRECURRING EXPENSES DATA						
2								
3		Instructions:						
4		1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.						
5		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).						
6		3. Input data, by Cost Element, leaving no blank lines. On next row						
7		after last line of data, type END in Cost Element Column.						
8		4. All data on this form should be cell-referenced to study workpapers.						
9		5. Do NOT change columns, headings, sheet name.						
10		6. Use column D when cost element has a single nonrecurring cost; use columns E & F for elements with a first						
11		and additional nonrecurring cost; use columns G & H for elements with an initial and subsequent nonrecurring cost.						
12								
13								
14			Nonrecurring		Nonrecurring	Nonrecurring	Nonrecurring	Nonrecurring
15		Cost	Expense Description	Nonrecurring	First	Additional	Initial	Subsequent
16	State	Element #	(Limited to 25 characters)	$ Amount	$ Amount	$ Amount	$ Amount	$ Amount
17	TN							
18		END	Maximum 10 entries per Cost Element #					

000196

	A	B	C	D	E	F	G	H
1		CALCULATOR INPUT FORM - RECURRING LABOR EXPENSES DATA						
2								
3		Instructions:						
4		1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.						
5		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).						
6		3. Input data, by Cost Element, leaving no blank lines. On next row						
7		after last line of data, type END in Cost Element Column.						
8		4. All data on this form should be cell-referenced to study workpapers.						
9		5. Do NOT change columns, headings, sheet name.						
10								
11								
12								
13					Work Time (Hours)			
14		Cost	Labor Expense Description	JFC/	Volume	Volume		
15	State	Element #	(Limited to 25 characters)	Payband	Sensitive	Insensitive		
16	TN							
17		END	Maximum 20 entries per Cost Element #					
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								

000197

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		CALCULATOR INPUT FORM - NONRECURRING LABOR TIMES													
2															
3		Instructions:													
4		1. Use this worksheet to record nonrecurring labor times to be input into the Calculator calculations.													
5		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).													
6		3. Input data, by Cost Element, leaving no blank lines. On next row													
7		after last line of data, type END in Cost Element Column.													
8		4. All data on this form should be cell-referenced to study workpapers.													
9		5. Do NOT change columns, headings, sheet name.													
10		6. Use columns F & G when cost element has a single nonrecurring cost; use columns H, I, J, & K for elements with a first													
11		and additional nonrecurring cost; use columns L, M, N & O for elements with an initial and subsequent nonrecurring cost.													
12		7. Input Cost Element Life (in months) on first row of data for each cost element. It is not necessary to repeat on each line.													
13															
14	Study Mid-Point Date (Mos.)			Jun-01											
15															
16															
17						(For use w/ one NR)		First	First	Additional	Additional	Initial	Initial	Subsequent	Subsequent
18			Cost			Installation	Disconnect	Installation	Disconnect	Installation	Disconnect	Installation	Disconnect	Installation	Disconnect
19		Cost	Element	Labor Expense Description	JFC/	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
20	State	Element #	Life (Mo)	(Limited to 25 characters)	Payband	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)
21	TN	J.4.1	46	COSMOS / SWITCH	JG56	4.0000	0.0000								
22	TN	J.4.1	46	Circuit Capacity Management	34XX	3.0000	0.0000								
23	TN	J.4.1	46	Complex Resale Support Group	221X	0.7400	0.0000								
24	TN	J.4.1	46	Complex Resale Support Group	SDWC	0.6700	0.0000								
25	TN	J.4.1	46	LCSC	230X	0.5000	0.0000								
26	TN	J.4.2	46	COSMOS / SWITCH	JG56	4.0000	0.0000								
27	TN	J.4.2	46	Circuit Capacity Management	34XX	3.0000	0.0000								
28	TN	J.4.2	46	Complex Resale Support Group	221X	0.7400	0.0000								
29	TN	J.4.2	46	Complex Resale Support Group	SDWC	0.6700	0.0000								
30	TN	J.4.2	46	LCSC	230X	0.5000	0.0000								
31	TN	J.4.3	46	Circuit Capacity Management	34XX			0.0833	0.0000	0.0208	0.0000				
32	TN	J.4.3	46	Assignment Facility Inventory Group	4M1X			0.0467	0.0000	0.0467	0.0000				
33	TN	J.4.3	46	Work Management Center	4WXX			0.0500	0.0000	0.0500	0.0000				
34	TN	J.4.3	46	CO Install & Mtce Field - Ckt & Fac	431X			0.2500	0.0000	0.1000	0.0000				
35	TN	J.4.3	46	Circuit Capacity Management	34XX			0.0250	0.0000	0.0250	0.0000				
36	TN	J.4.3	46	Assignment Facility Inventory Group	4M1X			0.0047	0.0000	0.0047	0.0000				
37	TN	J.4.3	46	CO Install & Mtce Field - Ckt & Fac	431X			0.0330	0.0000	0.0450	0.0000				
38	TN	J.4.3	46	Installation & Maintenance	410X			0.0600	0.0000	0.0600	0.0000				
39	TN	J.4.3	46	Installation & Maintenance	410X			0.0500	0.0000	0.0000	0.0000				
40	TN	J.4.3	46	LCSC	230X			0.4500	0.0000	0.0450	0.0000				
41	TN	J.4.4	46	Assignment Facility Inventory Group	4M1X			0.0467	0.0000	0.0467	0.0000				
42	TN	J.4.4	46	Work Management Center	4WXX			0.1000	0.0000	0.1000	0.0000				
43	TN	J.4.4	46	CO Install & Mtce Field - Ckt & Fac	431X			0.3700	0.0000	0.1500	0.0000				
44	TN	J.4.4	46	LCSC	230X			0.4500	0.0000	0.0450	0.0000				
45	TN	J.4.398	46	CO Install & Mtce Field - Ckt & Fac	431X			0.1667	0.0000	0.0667	0.0000				
46	TN	J.4.398	46	CO Install & Mtce Field - Ckt & Fac	431X			0.0220	0.0000	0.0300	0.0000				
47	TN	J.4.398	46	Installation & Maintenance	410X			0.0400	0.0000	0.0400	0.0000				
48	TN	J.4.498	46	CO Install & Mtce Field - Ckt & Fac	431X			0.2467	0.0000	0.1000	0.0000				
49	TN	J.4.199	46	COSMOS / SWITCH	JG56	0.0000	2.0000								
50	TN	J.4.199	46	Circuit Capacity Management	34XX	0.0000	3.0000								
51	TN	J.4.199	46	Complex Resale Support Group	221X	0.0000	0.7400								
52	TN	J.4.199	46	Complex Resale Support Group	SDWC	0.0000	0.6700								
53	TN	J.4.199	46	LCSC	230X	0.0000	0.5000								

000198

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
54	TN	J.4.299	46	COSMOS / SWITCH	JG56	0.0000	2.0000								
55	TN	J.4.299	46	Circuit Capacity Management	34XX	0.0000	3.0000								
56	TN	J.4.299	46	Complex Resale Support Group	221X	0.0000	0.7400								
57	TN	J.4.299	46	Complex Resale Support Group	SDWC	0.0000	0.6700								
58	TN	J.4.299	46	LCSC	230X	0.0000	0.5000								
59	TN	J.4.399	46	Circuit Capacity Management	34XX			0.0000	0.0833	0.0000	0.0208				
60	TN	J.4.399	46	Assignment Facility Inventory Group	4M1X			0.0000	0.0467	0.0000	0.0467				
61	TN	J.4.399	46	Work Management Center	4WXX			0.0000	0.0500	0.0000	0.0500				
62	TN	J.4.399	46	CO Install & Mtce Field - Ckt & Fac	431X			0.0000	0.2000	0.0000	0.0833				
63	TN	J.4.399	46	LCSC	230X			0.0000	0.4500	0.0000	0.0450				
64	TN	J.4.499	46	LCSC	230X			0.0000	0.4500	0.0000	0.0450				
65	TN	J.4.6	46	Circuit Capacity Management	34XX	1.0000	0.0000								
66	TN	J.4.6	46	Complex Resale Support Group	221X	0.7400	0.0000								
67	TN	J.4.6	46	Complex Resale Support Group	SDWC	0.6700	0.0000								
68	TN	J.4.699	46	Circuit Capacity Management	34XX	0.0000	0.2500								
69	TN	J.4.699	46	Complex Resale Support Group	221X	0.0000	0.7400								
70	TN	J.4.699	46	Complex Resale Support Group	SDWC	0.0000	0.6700								
71	TN	J.4.7	46	COSMOS / SWITCH	JG56	1.5000	0.0000								
72	TN	J.4.799	46	COSMOS / SWITCH	JG56	0.0000	0.2500								
73	TN	J.4.8	46	LCSC	230X									0.5000	0.0000
74	TN	J.4.899	46	LCSC	230X									0.0000	0.5000
75		END		Maximum of 25 entries per Cost Element #											
76															
77															
78															
79															
80															
81															
82															
83															
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Tennessee														
2	Inputs for Nonrecurring Costs														
3	Study Period 2000 - 2002														
4	TN														
5								Time in Hours (Hrs)							
6	Item / Description				Cost Element	(For use w/ one NR)		First		Additional		Initial		Subsequent	
7	Element	Description	JFC / JG / WS	Source	Life (mos.)	Install	Disconnect	Install	Disconnect	Install	Disconnect	Install	Disconnect	Install	Disconnect
8															
9	0	0													
10															
11	J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office			46										
12		Network	JG56	COSMOS / SWITCH		4.0000	0.0000								
13		Engineering	34XX	Circuit Capacity Management		3.0000	0.0000								
14		Engineering	221X	Complex Resale Support Group		0.7400	0.0000								
15		Engineering	SDWC	Complex Resale Support Group		0.6700	0.0000								
16		Service Order	230X	LCSC		0.5000	0.0000								
17	J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office			46										
18		Network	JG56	COSMOS / SWITCH		4.0000	0.0000								
19		Engineering	34XX	Circuit Capacity Management		3.0000	0.0000								
20		Engineering	221X	Complex Resale Support Group		0.7400	0.0000								
21		Engineering	SDWC	Complex Resale Support Group		0.6700	0.0000								
22		Service Order	230X	LCSC		0.5000	0.0000								
23	J.4.3	Line Sharing Splitter - per Line Activation in the Central Office			46										
24		Engineering	34XX	Circuit Capacity Management				0.0833	0.0000	0.0208	0.0000				
25		Engineering (8 min x 35% fallout)	4M1X	Assignment Facility Inventory Group				0.0467	0.0000	0.0467	0.0000				
26		Connect & Test	4WXX	Work Management Center				0.0500	0.0000	0.0500	0.0000				
27		Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac				0.2500	0.0000	0.1000	0.0000				
28		LST - Engineering (15 min x 10%)	34XX	Circuit Capacity Management				0.0250	0.0000	0.0250	0.0000				
29		LST - Eng (8 min x 35% fallout x 10%)	4M1X	Assignment Facility Inventory Group				0.0047	0.0000	0.0047	0.0000				
30		LST - Connect & Test (# min x 10%)	431X	CO Install & Mtce Field - Ckt & Fac				0.0330	0.0000	0.0450	0.0000				
31		LST - Connect & Test (60 min x 10%)	410X	Installation & Maintenance				0.0600	0.0000	0.0600	0.0000				
32		LST - Travel (30 min x 10%)	410X	Installation & Maintenance				0.0500	0.0000	0.0000	0.0000				
33		Service Order	230X	LCSC				0.4500	0.0000	0.0450	0.0000				
34	J.4.4	Line Sharing Splitter per Subsequent Activity per Line Rearrangement			46										
35		Engineering (8 min x 35% fallout)	4M1X	Assignment Facility Inventory Group				0.0467	0.0000	0.0467	0.0000				
36		Connect & Test	4WXX	Work Management Center				0.1000	0.0000	0.1000	0.0000				
37		Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac				0.3700	0.0000	0.1500	0.0000				
38		Service Order	230X	LCSC				0.4500	0.0000	0.0450	0.0000				
39	J.4.398	Line Sharing Splitter - per Line Activation in the Central Office Testing			46										
40		Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac				0.1667	0.0000	0.0667	0.0000				
41		LST - Connect & Test (# min x 10%)	431X	CO Install & Mtce Field - Ckt & Fac				0.0220	0.0000	0.0300	0.0000				
42		LST - Connect & Test (60 min x 10%)	410X	Installation & Maintenance				0.0400	0.0000	0.0400	0.0000				
43															
44	J.4.498	Line Sharing Splitter per Subsequent Activity per Line Rearrangement Testing			46										
45		Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac				0.2467	0.0000	0.1000	0.0000				
46															
47	J.4.199	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office Disconnect			46										
48		Network	JG56	COSMOS / SWITCH		0.0000	2.0000								
49		Engineering	34XX	Circuit Capacity Management		0.0000	3.0000								
50		Engineering	221X	Complex Resale Support Group		0.0000	0.7400								
51		Engineering	SDWC	Complex Resale Support Group		0.0000	0.6700								
52		Service Order	230X	LCSC		0.0000	0.5000								
53	J.4.299	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office Disconnect			46										
54		Network	JG56	COSMOS / SWITCH		0.0000	2.0000								
55		Engineering	34XX	Circuit Capacity Management		0.0000	3.0000								
56		Engineering	221X	Complex Resale Support Group		0.0000	0.7400								
57		Engineering	SDWC	Complex Resale Support Group		0.0000	0.6700								
58		Service Order	230X	LCSC		0.0000	0.5000								
59	J.4.399	Line Sharing Splitter - per Line Activation in the Central Office Disconnect			46										
60		Engineering	34XX	Circuit Capacity Management				0.0000	0.0833	0.0000	0.0208				
61		Engineering (8 min x 35% fallout)	4M1X	Assignment Facility Inventory Group				0.0000	0.0467	0.0000	0.0467				
62		Connect & Test	4WXX	Work Management Center				0.0000	0.0500	0.0000	0.0500				
63		Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac				0.0000	0.2000	0.0000	0.0833				
64		Service Order	230X	LCSC				0.0000	0.4500	0.0000	0.0450				
65	J.4.499	Line Sharing Splitter per Subsequent Activity per Line Rearrangement Disconnect			46										
66		Service Order	230X	LCSC				0.0000	0.4500	0.0000	0.0450				
67															

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
68	J.4.6	**Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)**			46										
69		Engineering	34XX	Circuit Capacity Management		1.0000	0.0000								
70		Engineering	221X	Complex Resale Support Group		0.7400	0.0000								
71		Engineering	SDWC	Complex Resale Support Group		0.6700	0.0000								
72															
73	J.4.699	**Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per LSOD)**			46										
74		Engineering	34XX	Circuit Capacity Management		0.0000	0.2500								
75		Engineering	221X	Complex Resale Support Group		0.0000	0.7400								
76		Engineering	SDWC	Complex Resale Support Group		0.0000	0.6700								
77															
78	J.4.7	**Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))**													
79		Network	JG56	COSMOS / SWITCH	46	1.5000	0.0000								
80															
81	J.4.799	**Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))**													
82		Network	JG56	COSMOS / SWITCH	46	0.0000	0.2500								
83															
84	J.4.8	**Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order of J.4.7)**													
85		Service Order	230X	LCSC	46									0.5000	0.0000
86															
87	J.4.899	**Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per order of J.4.7) Disconnect**													
88		Service Order	230X	LCSC	46									0.0000	0.5000
89															
90															
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1	Tennessee					
2	Inputs for Recurring Costs					
3	Study Period: 2000 - 2002					
4	TN					
5						
6	Item / Description					
7	Element	Description	FRC	Sub FRC	Source	Amount
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BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Tennessee
Base Case - Nonrecurring Only

		New					Old					Difference				
		Non	Non-Recurring				Non	Non-Recurring				Non	Non-Recurring			
	Cost Element	Recurring	First	Additional	Initial	Subsequent	Recurring	First	Additional	Initial	Subsequent	Recurring	First	Additional	Initial	Subsequent
A.0	UNBUNDLED LOCAL LOOP															
A.6	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP															
A.6.5	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)		$186.23	$75.77				$219.87	$99.88				-$33.64	-$24.11		
A.6.6	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)		$111.02	$41.94				$120.79	$43.31				-$9.77	-$1.37		
A.6.598	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU) - Testing		$70.36	$67.97				$70.36	$67.97				$0.00	$0.00		
A.6.599	2-Wire ADSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect		$111.76	$20.81				$118.67	$18.85				-$6.91	$1.96		
A.6.698	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU) - Testing		$70.36	$67.97				$70.36	$67.97				$0.00	$0.00		
A.6.699	2-Wire ADSL Compatible Loop (Nonrecurring w/o LMU)- Disconnect		$94.14	$15.36				$101.05	$13.41				-$6.91	$1.95		
A.7	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP															
A.7.5	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)		$188.88	$76.44				$219.87	$99.88				-$30.99	-$23.44		
A.7.6	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)		$111.02	$41.94				$133.76	$43.31				-$22.74	-$1.37		
A.7.598	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing		$86.69	$84.30				$86.69	$84.30				$0.00	$0.00		
A.7.599	2-Wire HDSL Compatible Loop (Nonrecurring w/ LMU)- Disconnect		$111.76	$20.81				$118.67	$18.85				-$6.91	$1.96		
A.7.698	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing		$86.69	$84.30				$86.69	$67.97				$0.00	$16.33		
A.7.699	2-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect		$94.14	$15.36				$101.05	$13.41				-$6.91	$1.95		
A.8	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP															
A.8.5	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)		$201.84	$89.40				$284.20	$153.83				-$82.36	-$64.43		
A.8.6	4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)		$123.99	$54.91				$185.12	$107.64				-$61.13	-$52.73		
A.8.598	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Testing		$127.64	$125.25				$47.67	$47.67				$79.97	$77.58		
A.8.599	4-Wire HDSL Compatible Loop (Nonrecurring w/ LMU) - Disconnect		$117.67	$24.85				$180.85	$76.61				-$63.18	-$51.76		
A.8.698	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Testing		$127.64	$125.25				$103.81	$101.42				$23.83	$23.83		
A.8.699	4-Wire HDSL Compatible Loop (Nonrecurring w/o LMU) - Disconnect		$99.69	$19.29				$106.73	$17.30				-$7.04	$1.99		
A.13	2-WIRE COPPER LOOP															
A.13.8	2-Wire Copper Loop - short (Nonrecurring w/ LMU)		$187.34	$74.90				$218.34	$98.35				-$31.00	-$23.45		
A.13.9	2-Wire Copper Loop - short (Nonrecurring w/o LMU)		$109.48	$40.41				$119.26	$41.78				-$9.78	-$1.37		
A.13.10	2-Wire Copper Loop - long (Nonrecurring w/ LMU)		$187.34	$74.90				$286.20	$163.82				-$98.86	-$88.92		
A.13.11	2-Wire Copper Loop - long (Nonrecurring w/o LMU)		$109.48	$40.41				$187.12	$107.25				-$77.64	-$66.84		
A.13.898	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing		$70.14	$67.75				$70.14	$67.75				$0.00	$0.00		
A.13.899	2-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect		$111.76	$20.81				$118.67	$18.85				-$6.91	$1.96		
A.13.998	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing		$70.14	$67.75				$70.14	$67.75				$0.00	$0.00		
A.13.999	2-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect		$94.14	$15.36				$101.05	$13.41				-$6.91	$1.95		
A.13.109	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing		$70.14	$67.75				$70.14	$67.75				$0.00	$0.00		
A.13.109	2-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect		$111.76	$20.81				$122.85	$20.81				-$11.09	$0.00		
A.13.119	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing		$70.14	$67.75				$70.14	$67.75				$0.00	$0.00		
A.13.119	2-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect		$94.14	$15.36				$105.23	$15.36				-$11.09	$0.00		
A.14	4-WIRE COPPER LOOP															
A.14.8	4-Wire Copper Loop - short (Nonrecurring w/ LMU)		$200.31	$87.86				$330.70	$208.32				-$130.39	-$120.46		
A.14.9	4-Wire Copper Loop - short (Nonrecurring w/o LMU)		$122.45	$53.37				$231.62	$151.75				-$109.17	-$98.38		
A.14.10	4-Wire Copper Loop - long (Nonrecurring w/ LMU)		$200.31	$87.86				$330.70	$208.32				-$130.39	-$120.46		
A.14.11	4-Wire Copper Loop - long (Nonrecurring w/o LMU)		$122.45	$53.37				$231.62	$151.75				-$109.17	-$98.38		
A.14.898	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Testing		$102.82	$100.43				$103.81	$101.42				-$0.99	-$0.99		
A.14.899	4-Wire Copper Loop - short (Nonrecurring w/ LMU) - Disconnect		$117.67	$24.85				$128.99	$24.85				-$11.32	$0.00		
A.14.998	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Testing		$102.82	$100.43				$103.81	$101.42				-$0.99	-$0.99		
A.14.999	4-Wire Copper Loop - short (Nonrecurring w/o LMU) - Disconnect		$99.69	$19.29				$111.01	$19.29				-$11.32	$0.00		
A.14.109	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Testing		$102.82	$100.43				$103.81	$101.42				-$0.99	-$0.99		
A.14.109	4-Wire Copper Loop - long (Nonrecurring w/ LMU) - Disconnect		$117.67	$24.85				$128.99	$24.85				-$11.32	$0.00		
A.14.119	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Testing		$102.82	$100.43				$103.81	$101.42				-$0.99	-$0.99		
A.14.119	4-Wire Copper Loop - long (Nonrecurring w/o LMU) - Disconnect		$99.69	$19.29				$111.01	$19.29				-$11.32	$0.00		

BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Tennessee
Base Case - Nonrecurring Only

	Cost Element	New					Old					Difference				
		Non	Non-Recurring				Non	Non-Recurring				Non	Non-Recurring			
		Recurring	First	Additional	Initial	Subsequent	Recurring	First	Additional	Initial	Subsequent	Recurring	First	Additional	Initial	Subsequent
A.17	LOOP CONDITIONING															
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Removal - long	$321.99						$667.25	$22.41			Changed from First and Additional to Nonrecurring structure				
A.17.4	Unbundled Loop Modification - Additive		$12.36	$12.36				$98.87	$98.87				-$86.51	-$86.51		
J.0	OTHER															
J.3	LOOP MAKE-UP															
J.3.3	Manual Loop Make-up w/o Facility Reservation Number	$74.46					$99.61					-$25.15				
J.3.4	Manual Loop Make-up w/ Facility Reservation Number	$77.18					$105.06					-$27.88				
J.4	LINE SHARING SPLITTER IN THE CENTRAL OFFICE															
J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office	$371.63						$343.31	$15.63			Changed from First and Additional to Nonrecurring structure.				
J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office	$371.63						$343.31	$15.63			Changed from First and Additional to Nonrecurring structure				
J.4.6	Line Sharing - per CLEC/DLEC Owned Splitter in the Cenral Office (per LSOD)	$108.66						$73.15	$15.63			Changed from First and Additional to Nonrecurring structure.				
J.4.7	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))	$54.40										New				
J.4.8	Line Sharing - per CLEC/DLEC Owned Splitter in the Cenral Office (per order for J.4.7)					$15.63										New
J.4.199	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office - Disconnect	$349.37						$332.83	$18.26			Changed from First and Additional to Nonrecurring structure.				
J.4.299	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office - Disconnect	$349.37						$332.83	$18.26			Changed from First and Additional to Nonrecurring structure				
J.4.699	Line Sharing - per CLEC/DLEC Owned Splitter in the Cenral Office (per LSOD) - Disconnect	$82.12						$85.45	$18.26			Changed from First and Additional to Nonrecurring structure				
J.4.799	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs)) - Disconnect	$10.59										New				
J.4.899	Line Sharing - per CLEC/DLEC Owned Splitter in the Cenral Office (per order for J.4.7) - Disconnect					$18.26										New

Filename	Description Of Work-Time Updates	Elements Affected
TN-MOD.xls	Revised assumption of CLEC loops requiring conditioning from 40% to 20%; Revised calculation regarding number of CLEC loops unloaded on a single job from 1 to 4	A.17.4
	Restructured rate structure for ULM Long - (A.17.2) - Install Only vs First/Additional in previous filing; average 2 loops at one time and 3.15 load coils	A.17.2
TN-LMU.xls	Revised Service Advocacy Center (SAC) work times; incorporated probability of spare facilities; removed LFACS input worktimes; reduced reservation work time	J.3.3, J.3.4
TN-XDSL.xls	Revised Work Management Center (WMC) work time from 15 min to 2 min; install only	All Install & Disconnect
	Revised Service Advocacy Center (SAC) work times; incorporated probability of spare facilities; removed LFACS input worktimes; reduced reservation work time	All Install
	Updated UNEC work times for First Disconnect/Additional Install based on SME review of order design	All Additional Install & Disconnect
	Updated Complex Resale Support Group (CRSG) work time for Additional Installation from 12.13 min to 13.45 min	A.6.5, A.7.5, A.8.5, A.13.8, A.14.8, A.13.10, A.14.10
TNLineSh.xls	Changed Job Function Code (JFC) from 2730 to JG56	J.4.1, J.4.199, J.4.2, J.4.299
	Changed rate structure from First and Additional to Nonrecurring, there is no incremental cost for additional splitters on the same order.	J.4.1, J.4.199, J.4.2, J.4.299, J.4.6, J.4.699
	Changed work group from Local Carrier Service Center (LCSC) to Circuit Capacity Management (CCM) and updated worktimes.	J.4.6, J.4.699

Filename	Description Of Corrections	Elements Affected
TN-XDSL.xls	Corrected disconnect formula for JFC 431X 100%; was 60% assuming 40% was in testing	All disconnect
	Corrected formula for 411X ; was multipled against a 4-wire factor rather than a 2-wire factor	A.7.6
	Corrected testing elements for JFC 4AXX to add proper work time row to formula	A.8.598, A.8.698, A.14.898, A.14.998, A.14.1098, A.14.1198
	Removed testing from install for JFC 411X	A.8.5, A.8.6, A.14.8, A.14.9, A.13.10, A.13.11, A.14.10, A.14.11
	Removed testing from install for JFC 4AXX	A.14.8, A.14.9, A.13.10, A.13.11, A.14.10, A.14.11

Filename	Elements Added	Elements Affected
TNLineSh.xls	Line Sharing - per CLEC/DLEC Owned Splitter in the Central Office (per occurrence of each group of 24 lines (48 pairs))	J.4.7, J.4.799
	Line Sharing - per CLEC/DLEC Owned Splitter in the Cenral Office (per order for J.4.7)	J.4.8, J.4.899

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared D. Daonne Caldwell –Director – Finance, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

She is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 00-00544 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 24 pages and 3 exhibit(s).

D. Daonne Caldwell

D. Daonne Caldwell

Sworn to and subscribed
before me on 11/10/00

Suzy A. Sherwood
NOTARY PUBLIC

SUZY A. SHERWOOD
MY COMMISSION EXPIRES
APR
28
2003
FAYETTE COUNTY, GEORGIA
NOTARY PUBLIC