BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

October 15, 1999

IN RE:	)	
	)	
PETITION FOR ARBITRATION BY	)	
ITC^DELTACOM COMMUNICATIONS,	)	DOCKET NO. 99-00430
INC. WITH BELLSOUTH	)	
TELECOMMUNICATIONS, INC.,	)	
PURSUANT TO THE	)	
TELECOMMUNICATIONS ACT OF 1996	)	

DIRECT TESTIMONY OF THOMAS HYDE ON BEHALF OF ITC^DELTACOM COMMUNICATIONS, INC.

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Thomas Hyde. I am Senior Manager – Industry Relations for ITC^DeltaCom Communications Inc., ("ITC^DeltaCom"). My business address is 1530 DeltaCom Drive, Anniston, Alabama 36202.

Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE AND BACKGROUND.

A. I have over 30 years of experience in telecommunications including installation, maintenance and design of switched and special toll services with AT&T; pricing, rate and tariff development with South Central Bell and BellSouth Telecommunications for various services including intrastate and interstate switched and special access; access and technology planning with the National Exchange Carrier Association (NECA); telecommunications consulting on unbundled network elements, universal service and access issues for MCI Telecommunications, Inc. In the 1980's, while responsible for the switched and special access rate and tariff development for BellSouth following the divestiture of the Bell System, I developed rates and support documentation for the implementation of access. As part of that process, I also had the responsibility of assuring the validity of the cost and demand inputs used in developing those rates. At NECA I was responsible for planning and implementation of local transport restructure, access reform, ISDN, SONET, and various other services. While providing telecommunications consulting services to MCI, I filed unbundled network element non-recurring cost, universal service benchmark and other testimony with numerous state commissions and regulatory authorities. Currently, I am Senior Manager – Industry Relations with ITC^DeltaCom. My job responsibilities required that I master diverse

telecommunications disciplines including network design, equipment installation and maintenance, rate and tariff development, project management, and technical aspects of the public switched network.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE TENNESSEE REGULATORY AUTHORITY?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will address unresolved issues between BellSouth and ITC^DeltaCom not covered by other ITC^DeltaCom witnesses. Basically, I will address the concept of parity as it involves local competition and the availability and purchase of unbundled network Elements ("UNEs") from BellSouth.

Q. HAVE ANY OF THE ISSUES ADDRESSED IN YOUR TESTIMONY BEEN RESOLVED?

A. Yes. I believe some of the issues have been resolved. Please refer to Exhibit CJR-4 in Mr. Rozycki's testimony for a list of the issues that ITC^DeltaCom believes have been resolved. I have included a discussion of these issues in my testimony because the parties have not formalized the resolution of these issues.

Q. PLEASE DESCRIBE BELLSOUTH'S RESPONSE WITH REGARD TO UNE PARITY.

A. During negotiations with BellSouth, ITC^DeltaCom requested that BellSouth agree to provide UNEs at parity with BellSouth's retail services. BellSouth's answer to these requests has been a rather flippant, "We don't buy UNEs so you cannot have parity." This

cavalier attitude ignores the fact that BellSouth services are made up of combined UNEs. The request for UNE parity with BellSouth's retail services is really less than the CLEC industry should receive.

As BellSouth's own technical references show, the transmission parameters for end-to-end service is not as stringent as those specified for portions of an end-to-end service.[1] However, since BellSouth has yet to develop these more stringent requirements, the CLEC industry must rely on the lesser quality requirements for the end-to-end retail service that ITC^DeltaCom, a purchaser of UNEs, will be competing with. BellSouth's continued refusal to provide any type of parity (other than the vague promise that UNEs furnished to ITC^DeltaCom will be as good, or bad, as the UNEs furnished to any other CLEC) will result in a competitive advantage for BellSouth and stifle the development of competition.

Q. DOES THAT MEAN THAT BELLSOUTH PROVIDES UNE LOOPS THAT ARE NOT EQUIVALENT TO THE LOOPS THAT IT PROVIDES ITS OWN CUSTOMERS?

A. Yes. On almost all UNEs that are migrated from BellSouth customers that are served via Integrated Digital Loop carrier ("IDLC") or for customers' locations where BellSouth would use IDLC for its own service, BellSouth provides an inferior service to the CLECs. This inferior service results from BellSouth's refusal to provide IDLC equivalent service in most instances. Instead, BellSouth uses either excessively long copper loops that result in

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[1] For example, TR_NWT_000335 issued by BellCore/Telecordia Issue 3, May, 1993 referenced in BellSouth's Access and Private Line Tariffs

a substandard loop caused by excessive loss on the loop as well as increasing the likelihood of noise problems, or they use the outdated UDLC technology that increases costs and will not always provide the same quality and features of IDLC. In rare instances, BellSouth does provide the "side door" IDLC connectivity, but BellSouth uses a voice grade (DS0) interface for that connection, thus degrading the quality of the loop by adding additional voice to digital conversions. It is clear from this provisioning of DS0 IDLC when it suits BellSouth, that it would also be feasible for BellSouth to provide IDLC elsewhere.

Q. PLEASE ILLUSTRATE YOUR POINT WITH AN EXAMPLE.

A. As an example of this problem, consider an existing BellSouth customer that is being served on IDLC facilities today and is using forward disconnect (a type of loop signaling) to let its PBX know that a call has been disconnected. When a CLEC wins that customer and BellSouth converts the customer from IDLC to UDLC, usually the forward disconnect does not work. The customer naturally becomes upset, the CLEC's reputation is damaged, and the customer changes back to BellSouth for the required feature. BellSouth's technical specifications state that forward disconnect, among other things, is not supported on UNE loops (even though it certainly appears to be supported on loops that BellSouth uses for providing service to its own customers). The only way for a CLEC to know whether a feature will work is to convert the customer's service. So, the CLEC industry is faced with making the choice of either foregoing competition in an entire customer segment or trying to provide service without the knowledge of whether or not BellSouth will furnish facilities of sufficient quality that the end users' service will

work. BellSouth sometimes converts the IDLC loops to long copper loops. In this case the forward disconnect works, but the loss on the loop may be so severe that it will detrimentally affect service or the loop may have too much noise for the customer to accept. In any event, the quality is less than BellSouth provides to itself.

Even when the customer does not require an "unsupported feature," problems can and do occur. Excessive loss and noise problems, for example, will affect any customer. In addition, the UDLC methodology adds extra analog to digital conversions resulting in degraded modem performance. It is a common complaint for customers to say, "I was able to send data at 33.6k with BellSouth's service, but can only achieve 24.6k with ITC^DeltaCom." When these troubles were referred to BellSouth, the BellSouth response was, "We do not guarantee bit rates." Since BellSouth will not attempt to repair the problem, the customer's only option is to "live with" the degraded service or to return to BellSouth for the higher modem speed (and as soon as the customer returns to BellSouth the modems will begin to operate at the higher speed). This lack of parity raises significant barriers to competition in Tennessee.

Q. HAS THE TENNESSEE REGULATORY AUTHORITY RESPONDED TO THE ISSUE?

A. Yes. The Tennessee Regulatory Authority ("Authority") has recognized the problems associated with the provision of equivalent loops. In the Directors' Conference of June 30, 1998 the Authority decided:

> BellSouth must, however, supply an unbundled network element loop that provides equivalent performance to the IDLC. Furthermore, the cost of such a loop must be no more than the incumbent company incurs itself when offering such

performance to its own customers. Otherwise, I believe the practice to be discriminatory.

Still, no one has claimed that the law prevents BellSouth from offering IDLC. Therefore I move that for customers served by IDLC technology, BellSouth must offer an unbundled loop which will allow end users to obtain the same level of performance as that offered by IDLC. Specifically, the unbundled loop should deliver to a CLEC a digital signal that is equivalent to that which enters a switch when IDLC is employed. For example, no additional digital to analog or analog to digital transformation required in excess to that required for BellSouth's retail service.

The cost of such an unbundled loop should be established so that it is no more than the equivalent of the loop cost associated with an IDLC connection. This should be computed by calculating the combined cost of a loop connected to a switching port with access to all software features using IDLC technology. The loop cost would be the difference between this combined cost and the cost on an unbundled switching port with access to all software features."[2]

In addition, the Authority in its Phase I order in Docket 97-01262 found that:

BST is required to provide nondiscriminatory access to network elements such as loops. To this end, BST should provide loops to a CLEC that are equivalent to the loops used by BST to serve its customers. Therefore, the Authority concludes that for customers served by IDLC technology, BST must offer an unbundled loop which will allow end users to obtain the same level of performance as that offered by IDLC. Specifically, the unbundled loop should deliver to a CLEC a digital signal which is equivalent to that which enters a switch when IDLC is employed. No additional digital to analog or analog to digital transformation should occur. [3]

In order for competition to be viable, BellSouth must provide UNEs with the same quality and at the same costs as those it provides to its retail customers.

Q. WILL ITC^DELTACOM'S ABILITY TO COMPETE BE IMPACTED BY THE AUTHORITY'S DECISION IN THIS CASE?

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[2] Minutes of the Directors' conference of Tuesday, June 30, 1998, Volume II Page 28 lines 17-25 and Page 29, lines 1-19.

[3] Interim Order on Phase I of Proceeding to Establish Prices for Interconnection and Unbundled Network Elements, Docket 97-01262 issued January 25, 1999.

A. Yes. By not requiring BellSouth to provide UNEs that are equivalent to those BellSouth provides its own retail customers, customers of CLECs, such as ITC^DeltaCom, are not receiving the same quality of loop that BellSouth provides to its own retail end users. For example, the equivalent of the UNE loop is necessary for the retail service to work. Without the loop, BellSouth cannot connect to the end user. Since the same connectivity is required for the retail service, BellSouth should be required to provide parity. If BellSouth cannot establish the more stringent parameters associated with a single component of an end-to-end service, then at an absolute minimum, BellSouth must provide UNEs at parity with the end-to-end service itself.

Q. PLEASE DESCRIBE BELLSOUTH'S RESPONSE TO ITC^DELTACOM'S REQUEST TO PROVIDE EXTENDED LOOPS.

A. Despite the fact that our current interconnection agreement requires that it do so, BellSouth declined to continue to provide the extended loop to ITC^DeltaCom. Put simply, BellSouth wanted to discontinue this service offering.

Q. PLEASE EXPLAIN THE SIGNIFICANCE OF BELLSOUTH'S POSITION ON EXTENDED LOOPS.

A. When an ITC^DeltaCom customer is served out of Central Office A but the ITC^DeltaCom collocation site is in Central Office B, ITC^DeltaCom can, under its current contract, obtain an extended loop from Central Office A to the ITC^DeltaCom collocation site in Central Office B via dedicated transport. By declining to provide the extended loop as a UNE, BellSouth forces ITC^DeltaCom to pay a higher rate for that capability or to pay the extra costs of collocation in marginal offices. ITC^DeltaCom's

current agreement provides for the parties to *"attempt in good faith to mutually devise and implement a means to extend the unbundled loop sufficient to enable DeltaCom to use a collocation arrangement at one BellSouth location per LATA. ..."* The provisions of this paragraph can only be satisfied through extended loops.

BellSouth did provide such extended loops and there are more than 2,500 such extended loops being provided by BellSouth to ITC^DeltaCom today.

Q. WHY HAS BELLSOUTH CHANGED ITS POSITION ON EXTENDED LOOPS?

A. I cannot be sure, but BellSouth apparently had no problem with this arrangement until ITC^DeltaCom requested that BellSouth improve the quality of the extended loop provisioning. BellSouth's response to the request for improved service was to stop offering the service and threaten to take away the existing service. This type of arrangement has been provided by BellSouth under the access tariffs since 1984 with a good service record. There is no reason for BellSouth to refuse to provide it under the interconnection agreement, and the Tennessee Regulatory Authority should require BellSouth to continue providing extended loops to ITC^DeltaCom. In addition, it has recently come to light that BellSouth was double billing ITC^DeltaCom for the extended loops. Almost all, if not all, of the extended loops use DS1 transport to connect to ITC^DeltaCom's collocation space. However, it appears that BellSouth was billing ITC^DeltaCom for DS0 transport as well as DS1 on the same UNE loops. BellSouth has issued credits for some of the double billing, but other amounts remain in dispute.

Q. ARE THERE OTHER UNEs THAT BELLSOUTH REFUSES TO PROVIDE?

A. Yes. BellSouth has also indicated during negotiations that it is no longer willing to provide Manual Order Coordination for the voice grade service level 1 loop even though it was included in all of the filed UNE cost studies.

Q. DOES BELLSOUTH PROVIDE PARITY IN SERVICE MAINTENANCE?

A. No. Even though there has been marginal improvement in the general quality of maintenance, there remains a long way to go to achieve parity with the maintenance provided to other BellSouth services. There have even been instances where services were not repaired until the end user returned to BellSouth as a customer. For DS1 services, ITC^DeltaCom uses the access service provided under BellSouth's FCC tariff since it is maintained at a much better level than are the UNEs.

Q. WHAT PROBLEMS HAS ITC^DELTACOM ENCOUNTERED WHEN PROVIDING SERVICE VIA UNE'S?

A. In situations where ITC^DeltaCom has physically collocated in BellSouth's central office, the loop from the customer premises to ITC^DeltaCom is leased from BellSouth via UNE loops. However, BellSouth has failed to provide the loop within parameters or tolerances necessary for the provision of quality service or, in other cases, BellSouth has provided such poor quality that a customer could not use the line for fax or modem. For example, the Bellcore standard is 8db and BellSouth's technical specification call for 10db, but the loop provided by BellSouth can well be in excess of 20db or as low as less than 1db. In addition, in many instances the loop leased from BellSouth is susceptible to noise problems. Frequently the loops provided by BellSouth will not support the same type of signaling that BellSouth was providing the end user on a retail basis and ITC^DeltaCom

cannot discover any problems regarding the signaling until after the end user has been converted to ITC^DeltaCom. When problems are encountered at the initiation of ITC^DeltaCom's service to the end user, the end user will often respond, "I did not have this problem with Bell," and ITC^DeltaCom's reputation will be damaged even though the problem may solely reside with BellSouth. The Authority should require that BellSouth provide service at least at parity to that provided to its own retail customers.

Q. ARE THERE ANY CONCERNS ABOUT THE NON-RECURRING CHARGES?

A. Yes. Witness Wood will address the non-recurring charges ("NRC") in more detail; however, I will discuss some of the problems with the NRCs.

In BellSouth's cost studies filed in the UNE cost dockets, BellSouth had certain worktimes associated with certain functions. One of those worktimes dealt with the coordination of installation by the UNE center (in the actual filed cost study, BellSouth identified the organization as the Access center and later changed the reference to the UNE center without a change in worktimes). If one takes those filed worktimes and develops an average number of loops that a BellSouth technician can coordinate per day, one finds that BellSouth can coordinate only approximately seven loops per day per person. ITC^DeltaCom is converting many more than seven loops per day and requests that the Tennessee Regulatory Authority direct BellSouth to provide dedicated technicians to ITC^DeltaCom based on the worktime in the filed cost study. One of the other major problems associated with NRCs involves the ADSL and HDSL loops. These loops are simply "plain old copper." The "advanced services" being provided on these loops is solely a function of the central office and customer premises equipment. BellSouth

recognized the lack of complex equipment on the loop in the recurring cost for xDSL (the recurring is less than voice grade recurring). The functions listed by BellSouth in the NRC costs simply will not be performed thus resulting in NRCs that are far in excess of BellSouth's costs.

Q. ARE YOU RECOMMENDING ANY NON-RECURRING CHARGES TO THE AUTHORITY?

A. Yes. Attached as Exhibit TAH-1 are Non-Recurring Charges (NRC) for 2-Wire Voice Grade SL1 and SL2, Time Specific Coordination, 4-Wire Voice Grade, 2-Wire ADSL/HDSL and 4-Wire HDSL. These costs were developed using BellSouth's cost calculator with modified inputs. The inputs were modified are as follows:

- Disconnect costs removed (ITC^DeltaCom is willing to pay disconnect costs when and if incurred)
- Coordination costs removed from additional loops (Coordination costs are per order – not per loop)
- Additional loop work times adjusted to reflect efficiencies of multiple loops on a single order (Typically by reducing the additional worktime by 50% until BellSouth can file cost studies reflecting those efficiencies)
- 2-Wire ADSL/HDSL used the Voice Grade SL2 and added time for verifying the facilities for ADSL compatibility (This does not mean that ADSL requires an SL2, only that ITC^DeltaCom plans to use the SL2 for the ADSL overlay)
- 4-Wire HDSL used the 4-Wire Voice Grade and added time for verifying the facilities for ADSL compatibility

Q. DOES BELLSOUTH PROVIDE xDSL OTHER THAN WITH UNES?

A. Yes. BellSouth provides ADSL through its FCC Tariff No. 1 directly to ISPs. It is interesting to note the NRC in the FCC tariff for ADSL. BellSouth will provide ADSL with a NRC of $50 assuming an existing voice grade local line. That $50 covers the installation of the Digital Subscriber Line Access Multiplexer ("DSLAM") equipment in the central office and a Permanent Virtual Circuit to the packet switch in addition to "conditioning" the loop. The majority (perhaps far in excess of 90%) of the charge is for the DSLAM leaving only a few dollars for the "loop conditioning". In fact, the only additional cost above voice grade incurred by BellSouth for providing xDSL is looking at loop records to determine whether or not the loop is "old fashioned copper." BellSouth recognizes this in its FCC tariff with the statement that ADSL "is a non-designed service."

Q. WHAT IS ADSL AND HOW IS AN ADSL COMPATIBLE UNE LOOP DIFFERENT FROM ADSL SERVICE OR A VOICE GRADE UNE LOOP?

A. For the loop portion of the service, there is no difference other than the huge inconsistency in the respective BellSouth non-recurring charges. ADSL is an overlay service placed on voice grade facilities. That is the case whether BellSouth provides ADSL on an existing exchange service (via an ADSL compatible loop) or a CLEC provides ADSL on an ADSL compatible UNE loop. The advanced service associated with ADSL is a function of the central office and customer premises equipment, not a function of the loop. The loop itself is old copper technology (BellSouth's first copper pair loop installed over one hundred years ago was ADSL compatible).

Thus, since ADSL is only an overlay on a voice grade loop, the appropriate NRC for ADSL is the NRC for an equivalent voice grade loop plus an incremental cost for checking to see if the loop will meet the ADSL criteria. Unfortunately, BellSouth has not produced an equivalent voice grade NRC cost. Until such time as BellSouth files an appropriate cost study, I recommend that the Tennessee Regulatory Authority set the NRC for ADSL at a fraction of the voice grade SL2 NRC rate (or voice grade SL1 if the CLEC chooses to overlay ADSL on a SL1 loop as BellSouth does).

Q. DOES BELLSOUTH PROVIDE PARITY IN SERVICE ORDER PROCESSING?

A. No. Currently BellSouth cannot process 20% to 25% of ITC^DeltaCom's orders mechanically. That results in far too many orders requiring fax transmission. Moreover, of the 75% to 80% that ITC^DeltaCom can transmit to BellSouth electronically, more than 50% require manual intervention by BellSouth due to inadequacies in BellSouth's systems. In addition, the interval for providing UNEs is far in excess of that BellSouth provides its retail customers. ITC^DeltaCom currently gives BellSouth intervals longer than the minimum required by BellSouth but still has problems with BellSouth working the order on the requested due date. The end result is that ITC^DeltaCom's customers, being accustomed to the intervals provided by BellSouth in the retail environment, expect ITC^DeltaCom to provide its service in comparable timeframes. Many of ITC^DeltaCom's orders for UNEs are delayed time and time again by BellSouth resulting in customer dissatisfaction. The Tennessee Regulatory Authority should require BellSouth to provide UNEs in a timely manner and establish performance guarantees for its failure to do so. In addition to correction of the problems with timely processing of the

service orders, BellSouth should also be required to furnish all customer and facility information necessary to allow ITC^DeltaCom to issue orders on a mechanical basis.

Q. HAS ITC^DELTACOM INFORMED BELLSOUTH OF THESE PROBLEMS?

A. Yes. ITC^DeltaCom has been providing BellSouth with specific data on performance problems for some time now. In early March of this year, ITC^DeltaCom and BellSouth representatives met to review a series of trouble reports ITC^DeltaCom had earlier reported to BellSouth concerning unbundled loop cutovers. Attached as Exhibit TAH-2 (filed under seal as confidential and proprietary) is a summary of these trouble reports ITC^DeltaCom provided to BellSouth. Exhibit TAH-3 (filed under seal as confidential and proprietary) is a summary which BellSouth itself based on the information provided by ITC^DeltaCom. the first page of the exhibit summarizes a total of 47 trouble reports. The page is entitled "Summary of Review." The letters to the right of the word "unit" relate to various divisions within BellSouth and to competitive local exchange carrier ("CLEC") as follows:

OPSE -	BellSouth Outside Plant Engineering
AFIG -	BellSouth Facility Interface Group
UNE-	BellSouth Unbundled Network Element Center
CLEC-	Competitive Local Exchange Carrier
CO-	BellSouth Central Office
LCSC-	BellSouth Local Carrier Service Center
I&M-	BellSouth Installation and Maintenance
CPG-	BellSouth Circuit Provisioning Group

PICS- BellSouth Plug In Control System

Except for the code "CLEC," each of these codes relates to a separate division within BellSouth involved in transitioning a customer from BellSouth to ITC^DeltaCom by means of an unbundled local loop cutover. In other words, BellSouth provides the loop to ITC^DeltaCom for it to provide facilities-based local exchange service to the customer.

The pages behind this summary sheet contain BellSouth's own analysis of the ITC^DeltaCom provided trouble report assigning responsibility for the problem to either ITC^DeltaCom or one of the BellSouth divisions mentioned above.

Q. WHAT DOES THE BELLSOUTH REPORT SHOW?

A. The report shows that of 47 unbundled loop orders, 41 experienced significant BellSouth-caused delays or customer service outages.

Q. HAS ITC^DELTACOM CONTINUED TO EXPERIENCE PROBLEMS OF THIS MAGNITUDE?

A. Yes. I have included as Exhibit TAH-4 (filed under seal as confidential and proprietary) a more recent set of ITC^DeltaCom trouble reports of the same type included in the summary prepared by BellSouth.

Q. HOW DO THESE REPORTS RELATE TO THE NEED FOR PERFORMANCE GUARANTEES?

A. ITC^DeltaCom, and any other competing local provider, faces tremendous obstacles in trying to convince a long-standing customer of BellSouth to switch to a new carrier. When the customer experiences problems at the very outset of this new arrangement, it immediately causes a perhaps already tentative customer to become even more anxious

about the decision to go with a new carrier. When these problems occur, it is ITC^DeltaCom that is held responsible - not BellSouth. This is so even through the problem with the transition is BellSouth's problem and acknowledged by BellSouth. ITC^DeltaCom often has to go to great lengths to retain a customer under these circumstances, for which it is not compensated by BellSouth. Performance Guarantees are critical to (1) providing BellSouth with the incentive to reduce the incidence of these types of problems, and (2) to ensure that ITC^DeltaCom and its customers are compensated for service outages and delays caused by BellSouth.

Q. HAS ITC^DELTACOM REQUESTED LANGUAGE IN ITS INTERCONNECTION AGREEMENT TO PROTECT ITS CUSTOMERS?

A. Yes. For example, ITC^DeltaCom's position on Petition Issue 2(c)(ii) is that the customer's service should not be interrupted for longer than 15 minutes between the disconnection of the old service and the connection of BellSouth's facilities to ITC^DeltaCom's collocation space. Any problems occurring in ITC^DeltaCom's facilities or equipment would not count as part of the 15 minute interval. If the proper preparation work is completed by BellSouth prior to disconnecting the customer's existing service, this parameter will not be difficult for BellSouth to meet. This language exists in the current interconnection agreement and should be part of the new agreement.

Q. DO YOU HAVE ANY OTHER EXAMPLES?

A. Yes. With respect to Petition Issue 2(c)(xiv), many of the cutover problems would be alleviated if BellSouth coordinated with ITC^DeltaCom 24 to 48 hours prior to the scheduled cutover date and performed any tests ahead of that date to insure that the

cutover will work smoothly. If BellSouth delays the cutover date, BellSouth has cost ITC^DeltaCom and its customer time and money. Thus, BellSouth should waive or refund any applicable non-recurring charges associated with that cutover. In addition, in our current contract, the party responsible for the delay should pay for the other party's reasonable labor costs. This language is in our existing agreement approved by the Authority and is Issue 2(c)(iv).

Another request ITC^DeltaCom has made on behalf of its customers is that BellSouth designate personnel for cutovers (Petition Issue 2(c)(v)). Evidently, there are not enough BellSouth personnel who are available and dedicated to insuring a smooth transition of customers' service from BellSouth to ITC^DeltaCom. ITC^DeltaCom believes that this may also reduce the number of cutovers that result in service outage to end-users.

Finally, ITC^DeltaCom has requested that certain LNP cutover procedures be implemented a set forth in Exhibit A, Attachment 5 of the arbitration petition to insure that customers are smoothly transferred from BellSouth to ITC^DeltaCom and vice versa (Petition Issue 2(f)).

Q. HAS BELLSOUTH COMMITTED TO PROVIDING THE SAME REPAIR AND MAINTENANCE PRIORITY TO ITC^DELTACOM CUSTOMERS WHO ARE SERVED VIA UNEs?

A. No. ITC^DeltaCom believes that the same restoration guidelines that currently apply to BellSouth's retail customers should apply to ITC^DeltaCom UNE customers. However,

ITC^DeltaCom believes that sufficient guidelines for this restoration do not currently exist. ITC^DeltaCom will gladly negotiate with BellSouth to develop these guidelines.

Q. WHAT IS ITC^DELTACOM'S POSITION WITH REGARD TO UNE COOPERATIVE TESTING?

A. Until such time as BellSouth provides UNEs at parity, ITC^DeltaCom needs these test results in order to ensure the quality of BellSouth's installation. If BellSouth will agree to use its "best efforts" to provide cooperative testing within two hours of request, ITC^DeltaCom will consider this part of the issue closed.

Q. WHAT IS ITC^DELTACOM'S POSITION ON ADDITIONAL COSTS ASSOCIATED WITH TROUBLE ISOLATION TO BELLSOUTH'S NETWORK?

A. The only situation where be should reimburse ITC^DeltaCom is if there is a second referral on the same trouble. In other words, after ITC^DeltaCom correctly isolates the trouble to BellSouth's network, but BellSouth fails to repair the trouble and ITC^DeltaCom is required for a second time to isolate the same trouble to BellSouth's facilities. ITC^DeltaCom should not be penalized for BellSouth's inability to repair troubles. In addition, this would be reciprocal with BellSouth's charges to ITC^DeltaCom when ITC^DeltaCom incorrectly isolates the trouble to BellSouth's network.

Q. DOES BELLSOUTH EVER MODIFY ITC^DELTACOM'S ORDER AFTER ISSUING AN FOC?

A. Yes. BellSouth frequently modifies the due date after the FOC. In fact, BellSouth often modifies the FOC due date on the due date itself after ITC^DeltaCom has dispatched its central office and customer premises technicians to work the order (as well as arranging

for third party vendors to be dispatched to the customer premises). These types of incurred costs must be reimbursed by BellSouth just as BellSouth is requesting ITC^DeltaCom to pay for the costs incurred by BellSouth to accommodate ITC^DeltaCom modifications.

Q. WHY ARE COLLOCATION ISSUES A SUBJECT OF THIS ARBITRATION?

A. Collocation is an integral part of interconnection between carriers. As has been apparent since the Telecommunications Act of 1996 ("1996 Act") was enacted, the promise of competition would be severely curtailed without the collocation of CLEC equipment in BellSouth's central offices on efficient and non-restrictive terms. Today, collocation is essential to the development and deployment of innovative new technologies necessary to meet the ever-increasing demand for high-speed, high-capacity advanced services.

The collocation issues before the Tennessee Regulatory Authority concern whether or not BellSouth is providing collocation to ITC^DeltaCom with rates, terms, and conditions that are consistent with the Communications Act of 1934, as amended by the 1996 Act (together "the Act"). Section 251(c)(6) of the Act requires incumbent LECs to "provide, on rates terms and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier. ..."[4]

Changes made to the collocation agreement must also be reflected in the "reverse" collocation agreement. That agreement covers the collocation of BellSouth equipment in ITC^DeltaCom's space.

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[4] 47 U.S.C. Section 251(c)(6).

Q. WHAT POSITIONS DID THE PARTIES TAKE DURING THE NEGOTIATIONS WITH RESPECT TO COLLOCATION ISSUES?

A. ITC^DeltaCom's position in the negotiations was, and continues to be, that BellSouth must comply with the collocation policies and rules set forth in the Federal Communications Commission's ("FCC") recent Advanced Wireline Service Order, released on March 31, 1999. Although BellSouth indicated that it would likely follow the FCC's order, BellSouth's new collocation language conflicts with the FCC's recent order. BellSouth's proposed security arrangements appear to be far in excess of that required for BellSouth's own employees. The Authority should require BellSouth to set the CLEC security arrangements to be equivalent with that required for BellSouth's own employees.

Q HAS BELLSOUTH ADDRESSED ALL ISSUES CONCERNED WITH ATTACHMENT 3 AND LISTED AS UNRESOLVED IN EXHIBIT B?

A. No. At the time of the filing of this petition, BellSouth was reviewing ITC^DeltaCom's proposed language. Thus, in order to preserve these issues, ITC^DeltaCom generally requested the same interconnection language that is in the current agreement as part of issue 5. ITC^DeltaCom then listed each section of the proposed language it provided BellSouth that it understood as open and under review as an unresolved issue in Exhibit B. The parties are currently negotiating Attachment 3. Rather than address all issues in Exhibit B that are still undecided, I request that I be able to update and supplement my testimony to the extent necessary to adequately address any unresolved issues.

Q. WHAT ARE ITC^DELTACOM'S FORECASTING NEEDS?

A. As ITC^DeltaCom expands its services, there may be instances where ITC^DeltaCom is willing to commit to a binding forecast to insure that BellSouth's network can support ITC^DeltaCom's traffic requirements. This may be particularly true in congested wire centers and tandem offices. Like many other carriers, ITC^DeltaCom's traffic has grown significantly over the past several years. ITC^DeltaCom expects that its traffic requirements will continue to expand in the immediate future. To guarantee that ITC^DeltaCom will have the requisite capacity on BellSouth's networks, ITC^DeltaCom believes that it is necessary to enter into a binding forecast with BellSouth as part of the interconnection agreement between the parties.

Q. HOW WOULD BELLSOUTH BENEFIT FROM A BINDING FORECAST ARRANGEMENT?

A. Pursuant to a binding forecast, ITC^DeltaCom will pay BellSouth for making the increased capacity available in stages, whether or not ITC^DeltaCom actually fills that capacity. The benefit for BellSouth is that it can build out its network without fearing that it will not be able to recoup its investments if the forecasts in the interconnection agreement are inaccurate. ITC^DeltaCom would cover BellSouth's costs in the event ITC^DeltaCom fell short of the binding forecast. I urge the Authority to direct BellSouth to enter into a binding forecast with ITC^DeltaCom within the interconnection agreement between the parties and require penalties should the requirements of the binding forecast not be met.

Q. WHAT IS ITC^DELTACOM'S POSITION ON NXX TESTING?

A. Due to errors and omissions in BellSouth translations of ITC^DeltaCom NXX codes, ITC^DeltaCom has found it necessary to dispatch technicians to remote locations so that they can place test calls through local service provided by BellSouth to insure that the translations have been correctly installed by BellSouth. Four out of the last five NXXs implemented by ITC^DeltaCom did not have the proper translations installed by BellSouth.

A request was made in late 1997 for BellSouth to assist in the testing of translations. BellSouth responded to that request by recommending that ITC^DeltaCom place orders for FX lines or Centrex service to every BellSouth end office if it wants to gain access to the BellSouth switches to test its NXX codes.

Establishing FX or Centrex service to the hundreds of BellSouth end offices it not cost effective for ITC^DeltaCom and would not be cost effective for BellSouth if it were placed in a similar position. ITC^DeltaCom recommends that BellSouth provide access to the BellSouth FX test network that BellSouth uses today for responses to trouble tickets. At a minimum, ITC^DeltaCom should have automated tests of the NXX codes if all end offices with correction of any errors or omissions found during these tests. This level of testing is necessary to assure that the quality of the network is maintained at high levels.

Q. PLEASE EXPLAIN THE PRINCIPLE THAT ITC^DELTACOM's REPUTATION COULD BE HARMED BY BELLSOUTH'S FAILURE TO PROVIDE PARITY SUCH THAT ITS ABILITY TO ATTRACT FUTURE CUSTOMERS WOULD BE DIMINISHED.

A. ITC^DeltaCom as a competitor in the local telecommunications market must overcome two enormous hurdles (over and above facing an established competitor who serves nearly 100% of the customers) in order to succeed.

First, the local telecommunications marketplace is a marketplace defined by quality. Customers, especially customers who feel they are "taking a chance" with a new carrier, require that their telecommunications service work well and without delay. For many businesses, a single minute without telephone service can severely harm their business; hence, a new carrier may only get one chance to prove that it can provide the required services at the required level of quality. Likewise, one failure to do so can easily brand a carrier as a "non-performer," even if the actual failure was on the part of the carrier's wholesale provider (*e.g.*, BellSouth).

Second, new carriers by definition don't have a long tenure in the marketplaces in which they can attempt to attract customers; therefore, one "bad" incident involving the quality of their service may be the only circumstance on which their entire reputation is based. Incumbent LECs such as BellSouth, on the other hand, have years of service behind them such that one bad incident can be seen as a single, isolated occurrence to be overlooked. The importance of a CLEC's reputation, and the need for specific performance standards to which the ILEC must be held in order to protect the CLEC's reputation, cannot be emphasized enough.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes. However, I reserve the right to address any issues raised by BellSouth and to supplement my testimony as necessary upon production of any discovery requests.

Tennessee
A.1.1 - 2-Wire Analog Voice Grade Loop - Service Level 1

10/14/99

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
SERVICE ORDER	2300	Customer Point Of Contact - ICSC	0.0175	0.0000	0.0175	0.0000	$42.09	$0.7366	$0.0000	$0.7366	$0.0000	0.9073	$0.6683	$0.0000
SERVICE ORDER	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0500	0.0000	$33.95	$1.6975	$0.0000	$1.6975	$0.0000	0.9073	$1.5401	$0.0000
SERVICE ORDER	471X	Acc Cust Advocate Ctr (ACAC)	0.0550	0.0550	0.0000	0.0000	$38.26	$2.1039	$2.1039	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
ENGINEERING	400X	Address & Facility Inventory (AFIG)	0.2000	0.1000	0.0000	0.0000	$33.15	$6.6300	$3.3150	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
ENGINEERING	32XX	Outside Plant Eng (FG30)	0.1000	0.0500	0.0000	0.0000	$50.84	$5.0840	$2.5420	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Pac	0.0583	0.0583	0.0333	0.0333	$42.17	$2.4599	$2.4599	$1.4057	$1.4057	0.9073	$1.2753	$1.2753
CONNECT & TEST	410X	Install & Mtce - Pots	0.3175	0.1588	0.0000	0.0000	$40.80	$12.9554	$6.4790	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
TRAVEL	410X	Install & Mtce - Pots	0.0667	0.0000	0.0000	0.0000	$40.80	$2.7200	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
							Total	$34.3873	$16.8999			Total	$3.4837	$1.2753

Tennessee
A.1.2 - 2-Wire Analog Voice Grade Loop - Service Level 2

10/14/99

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
SERVICE ORDER	2300	Customer Point Of Contact - ICSC	0.0175	0.0000	0.0175	0.0000	$42.09	$0.7366	$0.0000	$0.7366	$0.0000	0.9073	$0.6683	$0.0000
SERVICE ORDER	470X	Circuit Provisioning Group (CPG)	0.0500	0.0000	0.0500	0.0000	$36.25	$1.8125	$0.0000	$1.8125	$0.0000	0.9073	$1.6444	$0.0000
SERVICE ORDER	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0500	0.0000	$33.95	$1.6975	$0.0000	$1.6975	$0.0000	0.9073	$1.5401	$0.0000
SERVICE ORDER	471X	Acc Cust Advocate Cntr (ACAC)	0.1833	0.0000	0.1833	0.0000	$38.26	$7.0131	$0.0000	$7.0131	$0.0000	0.9073	$6.3628	$0.0000
SERVICE ORDER	411X	Install & Mtce - Spec Svcs (SSIM)	0.0614	0.0000	0.0000	0.0000	$42.96	$2.6392	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
ENGINEERING	400X	Address & Facility Inventory (AFIG)	0.2000	0.1000	0.0000	0.0000	$33.15	$6.6300	$3.3150	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
ENGINEERING	470X	Circuit Provisioning Group (CPG)	0.1300	0.0650	0.0007	0.0004	$36.25	$4.7125	$2.3563	$0.0254	$0.0145	0.9073	$0.0230	$0.0132
ENGINEERING	32XX	Outside Plant Eng (FG30)	0.1000	0.0500	0.0000	0.0000	$50.84	$5.0840	$2.5420	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0583	0.0583	0.0333	0.0333	$42.17	$2.4599	$2.4599	$1.4057	$1.4043	0.9073	$1.2753	$1.2741
CONNECT & TEST	471X	Acc Cust Advocate Cntr (ACAC)	0.9528	0.0000	0.0000	0.0000	$38.26	$36.4554	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSIM)	0.3175	0.1588	0.0000	0.0000	$42.96	$13.6412	$6.8220	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
TRAVEL	411X	Install & Mtce - Spec Svcs (SSIM)	0.0600	0.0000	0.0000	0.0000	$42.96	$2.5776	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
							Total	$85.4596	$17.4952			Total	$11.6140	$1.2672

Tennessee
A.4.1 - 4-Wire Analog Voice Grade Loop

10/14/99

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
SERVICE ORDER	2300	Customer Point Of Contact - ICSC	0.0175	0.0000	0.0175	0.0000	$42.09	$0.7366	$0.0000	$0.7366	$0.0000	0.8878	$0.6539	$0.0000
SERVICE ORDER	470X	Circuit Provisioning Group (CPG)	0.0500	0.0000	0.0500	0.0000	$36.25	$1.8125	$0.0000	$1.8125	$0.0000	0.8878	$1.6092	$0.0000
SERVICE ORDER	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0500	0.0000	$33.95	$1.6975	$0.0000	$1.6975	$0.0000	0.8878	$1.5071	$0.0000
SERVICE ORDER	471X	Acc Cust Advocate Cntr (ACAC)	0.1833	0.0000	0.0000	0.0000	$38.26	$7.0131	$0.0000	$0.0000	$0.0000	0.8878	$0.0000	$0.0000
SERVICE ORDER	411X	Install & Mtce - Spec Svcs (SSM)	0.0614	0.0000	0.0614	0.0000	$42.96	$2.6377	$0.0000	$2.6377	$0.0000	0.8878	$2.3418	$0.0000
ENGINEERING	400X	Address & Facility Inventory (AFIS)	0.2000	0.1000	0.0000	0.0000	$33.15	$6.6300	$3.3150	$0.0000	$0.0000	0.8878	$0.0000	$0.0000
ENGINEERING	470X	Circuit Provisioning Group (CPG)	0.1300	0.0650	0.0007	0.0004	$36.25	$4.7125	$2.3563	$0.0254	$0.0145	0.8878	$0.0225	$0.0129
ENGINEERING	32XX	Outside Plant Eng (FG30)	0.1000	0.0500	0.0000	0.0000	$50.84	$5.0840	$2.5420	$0.0000	$0.0000	0.8878	$0.0000	$0.0000
CONNECT & TEST	341X	Ntwk Plug-In Admin (PICS)	0.0140	0.0140	0.0000	0.0000	$36.75	$0.5145	$0.5145	$0.0000	$0.0000	0.8878	$0.0000	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0583	0.0583	0.0333	0.0333	$42.17	$2.4599	$2.4599	$1.4057	$1.4057	0.8878	$1.2480	$1.2480
CONNECT & TEST	471X	Acc Cust Advocate Cntr (ACAC)	0.9528	0.0000	0.2395	0.0000	$38.26	$36.4554	$0.0000	$9.1633	$0.0000	0.8878	$8.1352	$0.0000
CONNECT & TEST	411X	Install & Mtce - Spec Svcs (SSM)	2.4580	1.2290	0.5000	0.2500	$42.96	$105.5957	$52.7978	$21.4800	$10.7400	0.8878	$19.0701	$9.5351
TRAVEL	411X	Install & Mtce - Spec Svcs (SSM)	0.3000	0.0000	0.3000	0.0000	$42.96	$12.8880	$0.0000	$12.8880	$0.0000	0.8878	$11.4421	$0.0000
							Total	$188.2374	$63.9855			Total	$46.0298	$10.7969

Tennessee
2-Wire ADSL/HDSL Compatible Loop

10/14/99

			A		B		C	D=AxC		E=BxC		F	G=ExF	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional
SERVICE INQUIRY	2300	Customer Point Of Contact - ICSC	0.0833	0.0833	0.0000	0.0000	$42.09	$3.5075	$3.5075	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
SERVICE INQUIRY	32XX	Outside Plant Eng (FG30)	0.3000	0.1500	0.0000	0.0000	$50.84	$15.2520	$7.6260	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
SERVICE ORDER	2300	Customer Point Of Contact - ICSC	0.0175	0.0000	0.0175	0.0000	$42.09	$0.7366	$0.0000	$0.7366	$0.0000	0.9073	$0.6683	$0.0000
SERVICE ORDER	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0500	0.0000	$33.95	$1.6975	$0.0000	$1.6975	$0.0000	0.9073	$1.5401	$0.0000
SERVICE ORDER	471X	Acc Cust Advocate Cntr (ACAC)	0.1833	0.0000	0.1833	0.0000	$38.26	$7.0143	$0.0000	$7.0143	$0.0000	0.9073	$6.3640	$0.0000
SERVICE ORDER	411X	Install & Mtce - Spec Svce (SSIM)	0.1536	0.0000	0.0000	0.0000	$42.96	$6.5987	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
ENGINEERING	400X	Address & Facility Inventory (AFIG)	0.0167	0.0167	0.0000	0.0000	$33.15	$0.5525	$0.5525	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
ENGINEERING	470X	Circuit Provisioning Group (CPG)	0.1300	0.0650	0.0007	0.0004	$36.25	$4.7125	$2.3563	$0.0254	$0.0145	0.9073	$0.0230	$0.0132
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0583	0.0583	0.0333	0.0333	$42.17	$2.4599	$2.4599	$1.4057	$1.4057	0.9073	$1.2753	$1.2753
CONNECT & TEST	471X	Acc Cust Advocate Cntr (ACAC)	0.9595	0.0000	0.0000	0.0000	$38.26	$36.7105	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
CONNECT & TEST	411X	Install & Mtce - Spec Svce (SSIM)	0.3175	0.1588	0.0000	0.0000	$42.96	$13.6398	$6.8220	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
TRAVEL	411X	Install & Mtce - Spec Svce (SSIM)	0.0600	0.0000	0.0000	0.0000	$42.96	$2.5776	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000
							Total	$96.4694	$23.3242			Total	$9.8707	$1.2885

Tennessee
A.8.1 - 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop

10/14/99

			A		B		C	D=AxC		E=BxC		F	G=ExF	
			Installation Worktimes		Disconnect Worktimes		Direct	Install Cost		Disconnect Cost		Disconnect	Discounted Disconnect Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Labor Rate	First	Additional	First	Additional	Discount Factor	First	Additional
SERVICE INQUIRY	2300	Customer Point Of Contact - ICSC	0.0833	0.0833	0.0000	0.0000	$42.09	$3.5075	$3.5075	$0.0000	$0.0000	0.8878	$0.0000	$0.0000
SERVICE INQUIRY	32XX	Outside Plant Eng (FG30)	0.3000	0.1500	0.0000	0.0000	$50.84	$15.2520	$7.6260	$0.0000	$0.0000	0.8878	$0.0000	$0.0000
SERVICE ORDER	2300	Customer Point Of Contact - ICSC	0.0175	0.0000	0.0175	0.0000	$42.09	$0.7366	$0.0000	$0.7366	$0.0000	0.8878	$0.6539	$0.0000
SERVICE ORDER	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0500	0.0000	$33.95	$1.6975	$0.0000	$1.6975	$0.0000	0.8878	$1.5071	$0.0000
SERVICE ORDER	471X	Acc Cust Advocate Cntr (ACAC)	0.1833	0.0000	0.0000	0.0000	$38.26	$7.0143	$0.0000	$0.0000	$0.0000	0.8878	$0.0000	$0.0000
SERVICE ORDER	411X	Install & Mtce - Spec Svce (SSIM)	0.0814	0.0000	0.0814	0.0000	$42.96	$3.4969	$0.0000	$3.4969	$0.0000	0.8878	$3.1046	$0.0000
ENGINEERING	470X	Circuit Provisioning Group (CPG)	0.1300	0.0650	0.0007	0.0000	$36.25	$4.7125	$2.3563	$0.0254	$0.0000	0.8878	$0.0225	$0.0000
CONNECT & TEST	431X	CO Install & Mtce Field - Ckt & Fac	0.0583	0.0583	0.0333	0.0333	$42.17	$2.4599	$2.4599	$1.4057	$1.4057	0.8878	$1.2480	$1.2480
CONNECT & TEST	471X	Acc Cust Advocate Cntr (ACAC)	0.9528	0.0000	0.2395	0.0000	$38.26	$36.4541	$0.0000	$9.1633	$0.0000	0.8878	$8.1352	$0.0000
CONNECT & TEST	411X	Install & Mtce - Spec Svce (SSIM)	2.4580	1.2290	0.5000	0.2500	$42.96	$105.5857	$52.7978	$21.4800	$10.7400	0.8878	$19.0701	$9.5351
TRAVEL	411X	Install & Mtce - Spec Svce (SSIM)	0.3000	0.0000	0.3000	0.0000	$42.96	$12.8880	$0.0000	$12.8880	$0.0000	0.8878	$11.4421	$0.0000
							Total	$193.8151	$68.7475			Total	$45.1836	$10.7830

Tennessee
Order Coordination for Specified Conversion Time

10/14/99

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	4WXX	Work Management Center (WMC)	0.1667	0.0000	0.0000	0.0000	$33.95	$5.6583	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000	$5.6583	$0.0000
CONNECT & TEST	471X	Acc Cust Advocate Cntr (ACAC)	0.3333	0.0000	0.0000	0.0000	$38.26	$12.7533	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000	$12.7533	$0.0000
TRAVEL	431X	CO Install & Mtce Field - Cbt & Fac	0.1125	0.0000	0.0000	0.0000	$42.17	$4.7441	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000	$4.7441	$0.0000
														Total	23.16679167	0

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	4WXX	Work Management Center (WMC)	0.1667	0.0000	0.0000	0.0000	$33.95	$5.6583	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000	$5.6583	$0.0000
CONNECT & TEST	471X	Acc Cust Advocate Cntr (ACAC)	0.3333	0.0000	0.0000	0.0000	$38.26	$12.7533	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000	$12.7533	$0.0000
TRAVEL	431X	CO Install & Mtce Field - Cbt & Fac	0.1125	0.0000	0.0000	0.0000	$42.17	$4.7441	$0.0000	$0.0000	$0.0000	0.9073	$0.0000	$0.0000	$4.7441	$0.0000
														Total	23.16679167	0

EXHIBIT TAH-2 CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPRIETARY

IT HAS BEEN FILED WITH THE AUTHORITY, UNDER SEAL

EXHIBIT TAH-3 CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPRIETARY

IT HAS BEEN FILED WITH THE AUTHORITY, UNDER SEAL

EXHIBIT TAH-4 CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPRIETARY

IT HAS BEEN FILED WITH THE AUTHORITY, UNDER SEAL