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August 11, 2005

VIA HAND DELIVERY

Director Pat Miller
c/o Sharla Dillon, Docket and Records Manager
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0505

Re: Petition of Cellco Partnership d/b/a Verizon Wireless
for Arbitration Under the Telecommunications Act of 1996,
TRA Consolidated Docket No. 03-00585

Dear Director Miller:

Please find enclosed an original and 13 copies of the proposed TELRIC Cost Study Methodology filed on behalf of each of the members of the Rural Independent Telephone Coalition for filing in the above-referenced matter.

Sincerely,

Bill Ramsey

William T. Ramsey

/jm
enclosures

cc: Paul Walters
Mark Ashby
Edward Phillips
Charles McKee
Elaine Critides
Dan Menser
Marin Fettman
Leon Bloomfield

bcc: All clients and Steve Kraskin

BEFORE THE
TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

IN RE:

Petition of Sprint Spectrum L.P. d/b/a Sprint PCS for Arbitration under the Telecommunications Act	)	Consolidated Docket No. 03-00585
Petition of T-Mobile USA, Inc. for Arbitration under the Telecommunications Act	)	
Petition of BellSouth Mobility LLC; BellSouth Personal Communications, LLC; Chattanooga MSA Limited Partnership; Collectively d/b/a Cingular Wireless, for Arbitration under the Telecommunications Act	)	
Petition of Cellco Partnership d/b/a Verizon Wireless for Arbitration under the Telecommunications Act	)	
Petition of AT&T Wireless PCS, LLC d/b/a AT&T Wireless for Arbitration under the Telecommunications Act	)	

DESCRIPTION OF COST STUDY METHODOLGY PROPOSED BY THE MEMBERS OF THE RURAL COALITION OF SMALL LECs AND COOPERATIVES

on behalf of

Ardmore Telephone Company, Inc.
Ben Lomand Rural Telephone Cooperative, Inc.
Bledsoe Telephone Cooperative
CenturyTel of Adamsville, Inc.
CenturyTel of Claiborne, Inc.
CenturyTel of Ooltewah-Collegedale, Inc.
Concord Telephone Exchange, Inc.
Crockett Telephone Company, Inc.
Dekalb Telephone Cooperative, Inc.
Highland Telephone Cooperative, Inc.
Humphreys County Telephone Company
Loretto Telephone Company, Inc.
Millington Telephone Company
North Central Telephone Cooperative, Inc.
Peoples Telephone Company
Tellico Telephone Company, Inc.
Tennessee Telephone Company
Twin Lakes Telephone Cooperative Corporation
United Telephone Company
West Tennessee Telephone Company, Inc.
Yorkville Telephone Cooperative

August 11, 2005

The Rural Coalition of Small Local Exchange Carriers and Cooperatives (hereafter referred to as the "Coalition" or the "Independents") respectfully submits this filing in accordance with the procedural schedule established at the July 21, 2005 Status Conference in this proceeding and jointly filed on behalf of the parties on August 4, 2005. In accordance with this schedule, each member of the Coalition has been required to file "a description of its proposed TELRIC cost study methodology, specifying in detail how the company proposes to perform the study."[1] In fulfillment of this requirement, the members of the Coalition respectfully submit the following information and the attachments hereto.

While the Coalition submits this filing in the spirit of cooperation with the processes established by the Authority, the Independents restate and adhere to the position that the Coalition has set forth throughout this proceeding: as a matter of law and policy, the imposition of TELRIC cost methodology on the Independents is inappropriate and contrary to the public interest. As the Authority is aware, the Arbitration Order in this proceeding has not been issued. Accordingly, the Coalition reserves the right of each of its members to seek review of the Authority's Order, including but not limited to any aspect of the Order that would impose TELRIC cost methodology on the Independents.

Moreover, the provision of this filing and the attachments hereto does not constitute a waiver or forfeiture of any rights of any member of the Coalition to dispute in any appropriate forum any action by the Authority that would impose TELRIC costing methodology on any Independent. The Coalition and its members offer this filing for informational purposes and with the express desire that the provision of this information will foster the resolution of the issues

[1] Procedural Schedule for Rate Phase of Proceeding, filed August 4, 2005

raised in this proceeding by mutual agreement of the parties, and without further resort to formal processes.

While the Coalition will not repeat in this filing the discussion and analysis already presented on the record in this proceeding regarding the inappropriateness of imposing TELRIC costing methodology on the Independents, there are several factors that should be noted with respect to the specific requirement that each rural company file "a description of its proposed TELRIC cost study methodology, specifying in detail how the company proposes to perform the study." The very fact that this request has been imposed further demonstrates the unsettled matter of imposing TELRIC costing methodology on the Independents.

No single absolute correct methodology exists. Even the Federal Communications Commission ("FCC") has opened a proceeding questioning its own rules regarding the utilization of TELRIC for the pricing of interconnection services by non-rural incumbent local exchange carriers [2] In accordance with the existing rules and regulations of the FCC, some of the Independents have previously conducted actual embedded cost studies for purposes of establishing access charges and universal service fund amounts. In doing so, these companies have utilized the required costing procedures established by the FCC in Parts 36 and 69 of its Rules and Regulations.

Many of the Independents, however, have never been required to conduct any company-specific cost studies. The FCC has always recognized that the cost and burden of conducting company-specific studies for smaller companies may outweigh any perceived value of requiring

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[2] **IN THE MATTER OF REVIEW OF THE COMMISSION'S RULES REGARDING THE PRICING OF UNBUNDLED NETWORK ELEMENTS AND THE RESALE OF SERVICE BY INCUMBENT LOCALEXCHANGE CARRIERS** WC Docket No 03-173, FCC 03-224, Notice of Proposed Rulemaking Adopted September 10, 2003 and Released September 15, 2003

such studies. Consequently, the FCC established and maintains average schedules in lieu of imposing company-specific cost studies on those rural companies that qualify for average schedule treatment.

Requiring each Independent to file "a description of its proposed TELRIC cost study methodology, specifying in detail how the company proposes to perform the study" should not be regarded as a simple matter. Nor is the matter of determining and utilizing a forward-looking cost methodology an inexpensive matter. The Independents have not previously been required to incur the cost of performing forward-looking cost studies or maintaining on their respective staffs the expertise required to perform such studies. Accordingly, most of the Independents have looked for assistance in this matter from well respected industry consulting firms that have the expertise to conduct such forward-looking cost studies. These firms include CHR Solutions, John Staurulakis, Inc , and Parrish, Blessing & Associates. Each of these firms has provided a description of the forward-looking cost methodology and the process it will utilize to conduct the cost studies. (See Attachment A, listing the companies and the consultants and models used; and Attachment B which contains the descriptions of the methodologies used.)

To the extent practicable, the Coalition has indicated which of these firms each Independent will utilize. The Coalition will supplement the information provided herein as it becomes available.[3] The Coalition respectfully asks both the Authority and all parties to recognize that the engagement of a firm to conduct cost studies is neither simple, nor is it without significant expense consequences. The Coalition again stresses that it provides the information

[3] The Coalition respectfully submits its expectation that the Authority would not want any Independent to be required to make its determination in haste or on an imprudent basis. As described above, many of the Independents have little or no experience in working with cost studies or cost study experts Each of the methodologies and processes that will be used by the advisors available to the Independents has been placed on the record by this filing on a timely basis that enables the CMRS Providers to respond by August 21, 2005 in accordance with the procedural schedule

set forth herein and attached hereto without waiving any rights of any of its members with respect to this and all associated matters raised in this proceeding. Prior to the issuance of its Order in the Arbitration conducted within this proceeding, the Coalition respectfully urges the Authority to review and modify on its own motion any action that would impose TELRIC costing methodology on the Independents without regard to whether any perceived value or requiring such costing methodology is far outweighed by the costs and burden associated with any such requirement.

Respectfully submitted,

The Tennessee Rural Independent Coalition

By William J. Ramsey

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August 11, 2005

CERTIFICATE OF SERVICE

I hereby certify that on August 11, 2005, a copy of the foregoing document was served on the parties of record, via electronic mail:

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Bledsoe Telephone Cooperative	PBA	Jeffrey Reynolds
CenturyTel of Adamsville, Inc.	Internal	Ted Hankins
CenturyTel of Claiborne, Inc.	Internal	Ted Hankins
CenturyTel of Ooltewah-Collegedale, Inc.	Internal	Ted Hankins
Concord Telephone Exchange, Inc.	Internal	Bruce Mottern
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Highland Telephone Cooperative, Inc.	JSI	Manny Staurulakis
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Loretto Telephone Company, Inc.	JSI	Manny Staurulakis
Millington Telephone Company, Inc.	JSI	Manny Staurulakis
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Tennessee Telephone Company	Internal	Bruce Mottern
Twin Lakes Telephone Cooperative Corporation	Totherow and Lee	Gentry Underhill
United Telephone Company	JSI	Manny Staurulakis
West Tennessee Telephone Company, Inc.	JSI	Manny Staurulakis
Yorkville Telephone Cooperative	JSI	Manny Staurulakis

APPENDIX A

APPENDIX B

ARDMORE TELEPHONE COMPANY, INC.
BEN LOMAND RURAL TELEPHONE COOPERATIVE, INC.
CROCKETT TELEPHONE COMPANY, INC.
HIGHLAND TELEPHONE COOPERATIVE, INC.
LORETTO TELEPHONE COMPANY, INC.
MILLINGTON TELEPHONE COMPANY, INC.
PEOPLES TELEPHONE COMPANY
UNITED TELEPHONE COMPANY
WEST TENNESSEE TELEPHONE COMPANY, INC.
YORKVILLE TELEPHONE COOPERATIVE

BEFORE THE
TENNESSEE REGULATORY AUTHORITY

Petition of:	)	
	)	
Cellco Partnership d/b/a Verizon Wireless	)	Consolidated Docket
For Arbitration Under the	)	No. 03-00585
Telecommunications Act of 1996	)	

John Staurulakis, Inc.
Proposed Cost Study Methodology

In accord with the *Procedural Schedule for Rate Phase of Proceeding* in the above captioned consolidated docket, John Staurulakis, Inc. (JSI) provides the following summary of its proposed cost study methodology This document provides details on how JSI proposes to perform cost studies compliant with Federal Communications Commission's (FCC's) rules for the following ILECs: Ben Lomand Rural Telephone Cooperative (Ben Lomand), Highland Telephone Cooperative (Highland), Loretto Telephone Company, Inc. (Loretto), Millington Telephone Company (Millington) and Yorkville Telephone Cooperative (Yorkville). All of these companies are rural local exchange carriers (RLECs) as defined by the Telecommunications Act of 1996 (Act)

In lieu of performing a forward-looking economic cost (FLEC) study for each ILEC, JSI recommends that a FLEC study be performed for a representative sample of the five companies. Accordingly, JSI recommends performing two FLEC studies: one for Millington and one for Loretto Given the fact that Millington performs an annual toll cost study and files its own company-specific traffic sensitive rates with the FCC, much of the information needed to perform a FLEC study is readily available As such, the

time and expense involved with performing a FLEC study can be minimized without sacrificing the accuracy and legitimacy of the rates developed. Since Millington is similar in size (26,400 access lines) to Ben Lomand (35,500 access lines) and Highland (25,000 access lines), the rates developed for Millington can be utilized by Ben Lomand and Highland. In addition, Ben Lomand and Highland do not perform annual cost studies and as such, much of the required information that can be obtained from an annual toll cost study is not available thus adding a great deal of time and expense to the FLEC study process.

For Loretto (6,000 access lines) & Yorkville (1,750 access lines), JSI recommends performing a FLEC study for Loretto and allowing Yorkville to adopt the rates developed for Loretto Both companies do not perform annual toll cost studies so the cost of doing a FLEC study for each company will be expensive and time consuming. As such, JSI believes utilizing rates developed from one FLEC study for both companies will not undermine the process. According to the Telecommunications Act of 1996, RLECs have a rural exemption from Section 252 arbitration and the FCC's total element long run incremental cost (TELRIC) based cost methodology. Consequently, JSI believes allowing companies to adopt a tiered approach for this proceeding is administratively efficient and less burdensome on these rural carriers.

FCC Principles

The FCC does not have a specific model it uses or proposes that state commissions use to develop rates for reciprocal compensation. Rather than require the use of a specific

model, FCC rules permit a carrier to establish FLEC consistent with specific guiding principles. While FLEC models can and, not surprisingly, vary, the guiding principles are required to be met in order to satisfy the FCC rules These guiding principles are found in 47 CFR § 51.505 and 51.511. These are the rules referenced in 47 CFR § 51.705(a) that state commissions must use to determine the FLEC for transport and termination of the exchange of telecommunications traffic pursuant to 47 U.S.C. § 251(b)(5) when conducting an arbitration under Section 252 of the Act.

TELRIC is a term coined by the FCC to describe certain features or principles of its cost standard TELRIC has some characteristics of other types of long-run incremental cost. However, certain aspects of TELRIC are unique to the FCC cost standard. For example, under TELRIC, the FCC requires that wire centers be fixed at their current location. 47 CFR 51 505(b)(1). This constraint imposed by the FCC has significant implications for FLEC models. TELRIC represents the reasonable attribution of incremental costs of an element (in this proceeding transport and termination). There are three required properties of TELRIC: efficient network configuration, forward-looking cost of capital, and economic depreciation rates.

Efficient Network Configuration

The efficient network configuration property requires that the network configuration be measured based on the most efficient technology currently available and the lowest cost network configuration given the existing location of the RLEC wire centers. This property has two parts. the use of the most efficient technology currently

available and the hypothetical configuration of the ILEC plant with the constraint that the ILEC wire centers remain fixed.

When developing a transport and termination rate for reciprocal compensation purposes, the constraint that the wire center locations remain fixed greatly reduces the burden of satisfying this property. All switches used by the RLECs use the most efficient technology currently available: all switches use digital switch technology Digital switch technology remains the most efficient technology available because of its widespread use and reliability. While so-called soft switches are being developed and in certain limited circumstances being deployed by ILECs, soft switches are not widely deployed at present Thus, JSI recommends the continued use of digital switches for this proceeding

Cost of Capital

According to the FCC, the "cost of capital represents the annual percentage rate of return that a company's debt-holders and equity holders require as compensation for providing the debt and equity capital that a company uses to finance its assets." Federal-State Joint Board on Universal Service; Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, 14 FCC Rcd 20156, FCC 99-304, November 2, 1999, TENTH REPORT AND ORDER, ¶ 433. In its Universal Service Order for non-rural LECs, the FCC concluded that the current federal rate-of-return of 11.25 percent is a reasonable rate of return by which to determine forward-looking costs for non-rural LECs. In this proceeding, JSI proposes using this 11.25 percent rate as the cost of capital in calculating FLEC transport and termination rates for rural LECs. While individual

RLECs may have a return requirement higher than 11 25 percent, in this proceeding JSI believes that the 11.25 percent rate of return level is reasonable and administratively efficient.

Economic Depreciation

The FCC has spent a considerable amount of time evaluating depreciation rates. Its experience comes from various proceedings in which depreciation was hotly contested, such as in the X-factor proceedings The FCC describes depreciation as "the method of recognizing as an expense the cost of a capital investment. Properly calculated economic depreciation is a periodic reduction in the book value of an asset that makes the book value equal to its economic or market value." Economic depreciation rates and their corresponding economic lives are designed to capture the economic life of an asset rather than the life of an asset used for other purposes, such as tax computations

The FCC has established the economic life of assets by USOA classifications based on the record for non-rural LECs. At the time, the FCC recommended that rural carrier studies for universal service use currently authorized lives because "the assets used to provide universal service in rural, insular, and high cost areas are unlikely to face serious competitive threat in the near term." Federal-State Joint Board On Universal Service, 12 FCC Rcd 8776, FCC 97-157, REPORT AND ORDER, May 8, 1997, ¶ 250. JSI proposes using the FCC's economic lives for Digital Switching, Circuit Equipment and Cable and Wire Facilities. For Support Plant category, JSI proposes using the actual support plant depreciation rate for each RLEC.

JSI uses each RLEC debt-equity ratio, weighted debt rate, return on equity, and the economic lives of each asset classification to determine "levelized" capital cost factors The leveling process determines a single capital cost factor for the entire life of the asset classification employing a present value technique. The leveling process is far superior in developing a capital cost factor than picking the average life of an asset because it incorporates a time-value-of-money component that is used to reflect the value of a dollar today is greater than the value of a dollar in the future.

Common Costs

The FCC has established specific rules for common costs. The FCC describes "forward-looking common costs as economic costs efficiently incurred in providing a group of elements or services (which may include all elements or services provided by the incumbent LEC) that cannot be attributed directly to individual elements or services." 47 CFR § 51.505(c)(1). While forward-looking common costs by rule can be considered generally as costs covering a sub-set of elements or costs covering all elements, JSI prefers to break these two types of common costs into what are typically called "shared costs" and "common costs." Forward-looking shared costs are costs that are efficiently incurred in providing a group of elements or services, but not the entire group of elements or services This leaves forward-looking common costs as costs that are efficiently incurred in providing all elements or services. While the FCC lumps these two types of costs together in its rule, discussion by the FCC in its Local Competition Order clearly

distinguishes between these two types of cost allocations. *See* Local Competition Order ¶¶ 676, 694.

Common costs must also satisfy a reasonable allocation requirement which states that shared and common allocations, plus TELRIC for an element must not be greater than the forward-looking stand alone costs of the element. Additionally, the sum of allocable forward-looking common costs must equal total forward-looking common costs, except retail costs, that are attributed to operating the ILEC's total network

Forward-looking common costs, as defined by the FCC, are developed typically through a carrying charge factor. This process involves the development of an expense to investment ratio. The ratio is developed using total ILEC regulated and most-recent-year expenses compared to total ILEC investments. This percentage is then applied to most efficient technology and proposed network investment.

Using a carrying charge factor in this manner is consistent with the FLEC standard. (For a discussion and approval of this method by the FCC, See Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc for Provision of In-Region, InterLATA Services In Georgia and Louisiana, FCC 02-147, MEMORANDUM OPINION AND ORDER, May 15, 2002, ¶¶.51-64.)

Demand Projection

FCC rule 47 CFR § 51.511 states:

§51.511 Forward-looking economic cost per unit.

(a) The forward-looking economic cost per unit of an element equals the forward-looking economic cost of the element, as defined in §51.505, divided by a reasonable projection of the sum of the total number of units of the element that the incumbent LEC is likely to provide to requesting telecommunications carriers and the total number of units of the element that the incumbent LEC is likely to use in offering its own services, during a reasonable measuring period

(b)(1) With respect to elements that an incumbent LEC offers on a flat-rate basis, the number of units is defined as the discrete number of elements (e g., local loops or local switch ports) that the incumbent LEC uses or provides.

(2) With respect to elements that an incumbent LEC offers on a usage-sensitive basis, the number of units is defined as the unit of measurement of the usage (e.g., minutes of use or call-related database queries) of the element.

This rule states that the total FLEC of transport and termination must be divided by the number of units the LEC is likely to provide to the requesting carrier and itself. For purposes of transport and termination, the total number of units used to develop FLEC is a reasonable projection of the total number of switch minutes and total number of transmission minutes.

Modeling Details

- For switching and transmission equipment, each RLEC shall provide a current replacement price for switching and transmission functions performed at each RLEC wire center. The decision to use the forward-looking cost of existing switch vendors builds on the decision processes of switch engineers in each RLEC regarding equipment necessary to perform properly and efficiently. This vendor relation is also important because any vendor discounts the RLEC would receive should be reflected in the forward-looking cost estimate

- Where vendor prices are not available, JSI proposes using an average developed from other RLECs in order to develop the forward-looking investment costs
- Examine whether the capacity of the current switches is in excess of forward-looking capacity factors typically realized by rural LECs. The threshold JSI recommends is 75 percent. When current capacity exceeds this capacity factor, JSI proposes to adjust the vendor estimate downward to match the capacity requirement. While non-rural LEC fill factors can exceed 90 percent, the size and scope of non-rural LECs is far different than that for rural LECs. The 75 percent threshold fill factor is consistent with the engineering fill factor range applied in other FLEC studies for rural and insular LECs.
- The vendor estimates include all costs associated with the switching function up to but not including the line cards on the line-end, and up to but not including the transmission equipment on the trunk-end.
- The RLECs as a group use the most efficient transmission equipment currently available. This consists of fiber technology under the current optical carrier standards. Also, the vast majority of RLECs use fiber rings for interoffice transmission. These facilities are used for special circuits as well as for switched circuit service. JSI proposes to identify the proportion of trunks used for switched service and apply only that proportion of cost to develop the transport rate.
- For transport routes, JSI proposes obtaining a vendor quote for all transport routes for fiber facilities This per foot cost shall be used to calculate the cost

of the existing route miles between switches, network equipment and network points of interconnection. As with transmission equipment, the portion attributable to switched circuit service shall be used to develop the transport rate.

- It is generally known that the non-traffic sensitive loop plant begins at the line card serving the loop and ends at the network interface device at the customer's location In many of the forward-looking models, including the HCPM, digital loop carrier ("DLC") is utilized. The use of DLC technology moves the placement of the line card from the wire center to a geographic point in the loop plant that is closer to the end-user customer. The connection from the wire center to the DLC is typically fiber and this connection is traffic engineered. JSI proposes to include the cost of the traffic-sensitive route from a switch to its associated line cards located at DLCs. The ratio of DLC feeder investment to total loop plant from the HCPM can be used to develop this cost factor.
- FCC rule 51.701(d) states that termination includes end-office switching and delivery to the called party's premises. Under this rule, it would appear that non-traffic sensitive loop is permitted. However, one statement made by the FCC in its order promulgating the rule appears to limit the termination to only those instances where loop plant is traffic-sensitive See Local Competition Order ¶1057. Following this guidance, JSI does not include the costs associated with the line card or the copper feeder, distribution and drop between the line card location and the customer's location.

- Direct, shared and common costs are developed using the relationship of costs and gross investments for the most recent annual period JSI proposes to identify specific direct, shared and common cost for each operation involved in the transport and termination of traffic – including billing and recording costs
- Projected minutes will be developed utilizing a compound annual growth rate applied to existing minutes.
- All transit charges incurred from a tandem provider will be reflected at the actual cost per minute.

BLEDSOE TELEPHONE COOPERATIVE
DEKALB TELEPHONE COOPERATIVE, INC.

State of Tennessee
TOTAL ELEMENT LONG RUN INCREMENTAL COST ("TELRIC") STUDY METHODOLOGY
Transport and Termination Costs
Parrish, Blessing and Associates ("PBA")

Study Overview

The following methodology will apply to a local exchange carrier operating in the state of Tennessee retaining PBA (Tennessee LECs) to perform a transport and termination cost study for purposes of determining local reciprocal compensation rates. PBA will produce an estimate of the costs of transporting and terminating local traffic from wireless and wireline providers on a company-specific basis. The study will incorporate the total element long run incremental cost ("TELRIC") principles as established by the FCC in Part 51 of its Rules and the various interconnection orders clarifying and amending those rules. This study is for the purpose of establishing local reciprocal compensation rates for DTC. As such the study will only produce cost estimates for those elements relating to the transport and switching of local terminating calls. The study will not produce costs for unbundled network elements ("UNEs").

Model Platform

PBA, an economic consulting firm headquartered outside of Washington, DC has developed a model that can be used to estimate TELRIC costs associated with the transport and termination of local traffic. The PBA model, known as the Forward Looking Model ("FLM"), is a TELRIC compliant model that has been used, not only to produce TELRIC estimates for transport and termination costs, but also UNEs. The FLM develops costs by applying annual charge factors to the appropriate components of a forward looking network. In the case of the Tennessee studies, factors will be applied to those investment elements associated with the switching and transport termination of local calls.

Study Inputs

The study will utilize company-specific inputs. The network investment will reflect a Tennessee LEC's existing switch locations and a modern digital transport network in keeping with TELRIC principles. The annual charge factors will be predicated on maintaining such a network as well as appropriate levels of joint and common costs Capital recovery rates and return levels will be consistent with the FCC's Triennial Review Order ("TRO") and established in keeping with a competitive telecommunications environment.

Study Results

Utilizing Tennessee LEC-specific inputs, the model will produce the cost elements for the following network components:

Transport Facility – Switched	per minute-mile
Transport Termination – Switched	per minute
Tandem Switching	per minute
Local Switching	per minute

The local reciprocal intercarrier compensation rate can be expressed as each of the above elements separately or combined to produce a single rate.

CENTURYTEL OF ADAMSVILLE, INC.
CENTURYTEL OF CLAIBORNE, INC.
CENTURYTEL OF OOLTEWAH-COLLEGEDALE, INC.

State of Tennessee
TOTAL ELEMENT LONG RUN INCREMENTAL COST ("TELRIC")
CenturyTel
STUDY METHODOLOGY
Transport and Termination Costs

Model Platform

CenturyTel plans on utilizing the HAI proxy model to determine the transport and termination rates in Tennessee. The model outputs for each study area will be utilized to develop composite rates for Tennessee.

Study Inputs

CenturyTel will utilize the default inputs of the HAI model for each of the CenturyTel Study Areas in Tennessee.

Study Results

Utilizing CenturyTel Tennessee Study Area - model inputs, the HAI model will produce the cost elements for the following network components:

Transport Facility – Switched	per minute-mile
Transport Termination – Switched	per minute
Tandem Switching	per minute
Local Switching	per minute

The local reciprocal intercarrier compensation rate can be expressed as each of the above elements separately or combined to produce a single rate.

NORTH CENTRAL TELEPHONE COOPERATIVE, INC.

TELRIC STUDY DESCRIPTION

CHR will identify the long run incremental cost (LRIC) to provide switched minutes of use provided for local interconnection using the following assumptions and methods:

Cost Elements: Local switching, Interoffice transport and tandem switching

Inputs: The existing telephone network topology, including the location of existing wire centers and associated inter-office trunk facility locations, will be assumed.

The cost of additional switching and transport elements[1] in a forward-looking network using current technology approved for RUS borrowers and sufficient to meet projected local interconnection demand will be designed and the original engineered, furnished and installed cost calculated. Network elements include end office and tandem switches, interoffice cable and wire facilities and associated inter-office electronics. Depreciation rates will be those currently approved. Accumulated Depreciation Reserves will be normalized using Net Present Value principles, assuming new installation and a 5 year planning cycle.

Direct operating expense ratios and common cost overhead allocations will be calculated using a representative sample of other similarly situated ILECs using public data where available. Direct operating expenses will escalate based upon CPI data and will be normalized using Net Present Value principles.

Demand: Total five year ADDITIONAL demand associated with local interconnection traffic, expressed in minutes of use, will be forecast and normalized using Net Present Value principles.

Rate Development: ADDITIONAL switching and transport cost divided by ADDITIONAL demand.

[1] The additional switching and transport elements necessary to provide additional capacity for additional interconnection demand – assuming existing demand equals existing capacity – will be calculated. The additional capacity assumes full additional construction costs, e.g., new cable and electronics will be priced independent of existing capacity.

CONCORD TELEPHONE EXCHANGE, INC.
HUMPHREYS COUNTY TELEPHONE COMPANY
TELLICO TELEPHONE COMPANY, INC.
TENNESSEE TELEPHONE COMPANY

State of Tennessee
TDS Telecom – Forward Looking Incremental Interconnection Cost Model
Switch Termination and Transport Costs
Docket No. 03 – 00585

DESCRIPTION OF COST STUDY METHODOLGY

Overview:

The following methodology applies to TDS Telecom companies within the state of Tennessee (TDS). TDS will use an economic model to estimate the costs associated with terminating and transport of local traffic from wireless and wireline providers with a high level of accuracy. The methodology used to produce the individual rates is consistent with the principles established by the FCC in Part 51 of its Rules and a host of other interconnection orders that have clarified or amended those rules. TDS has and proposes to use the rates produced by the model to negotiate a fair and equitable reciprocal compensation rate between the various parties.

The Model:

TDS has internally developed a model that can be used to estimate the forward looking costs associated with the termination and transport of local traffic. This model, which TDS terms an "Interconnection Model", is TELRIC compliant. With this model, however, TDS does not go so far as to produce unbundled network elements ("UNEs"). TDS's costing protocols require all information to be documented carefully and all sources are analyzed fully to determine appropriate and accurate representation. The model will include all appropriate investments and factors associated with the switching termination and transport of local calls. The model arrives at costs for these services by applying annual charge factors on investments utilized to terminate wireline and wireless interconnected traffic.

Inputs to the Model:

The model relies on inputs from internal TDS data , (engineering, procurement costs, individual company financials, demand forecasts and annual charge factor studies), and publicly available sources (switch, building, and transport investment, depreciation rates, fill factors). TDS believes that all relevant assets must have recovery under any model, and accordingly all relevant components are included in the rate development. TDS further believes that the internally developed model is supportable and available for regulatory review.

Results:

Utilizing individual company-specific inputs, the model will produce the cost elements for the following network components:

Tranport Facility – Switched	per minute (Includes mileages)
Transport Termination	per minute
Local Switching	per minute

TDS has the ability to propose the above elements separately or combined to produce a single rate.

TWIN LAKES TELEPHONE COOPERATIVE CORPORATION

TELRIC Cost Methodology for CMRS Interconnection

The following methodology will be followed to develop transport and termination costs for Twin Lakes Telephone Cooperative (TLTC), an Incumbent Local Exchange Carrier, in the Tennessee Regulatory Authority Consolidated Docket No. 03-00585 on CMRS interconnection. The cost study will be prepared by the firms Totherow, Haile & Welch and Lee Olch Consulting. Cost measurement will be performed in conformance with FCC Part 51 rules for the pricing of interconnection These regulations prescribe the inclusion of the forward-looking direct costs of an efficient network configuration as well as a reasonable allocation of forward-looking common costs. Certain factors are required to be excluded from interconnection costs including embedded costs, retail costs, opportunity costs, and revenues to subsidize other services The following sections provide further details on the methodology to be used to develop the termination, transport, and common costs. A final section summarizes the cost elements to be developed.

Termination Costs

Switching costs will be developed according to the following methodology:

- Based on discussions with company engineers, determine the type and configuration of switches that would be installed if the company were redeploying its entire switch base today. This would include the brand (Lucent, Siemens, Nortel, etc), model (5ESS, DMS-100, etc.), type of switch (host/remote or stand-alone, tandem or end office, circuit or soft switch) and software generics to be loaded. Similar determinations would be made for signaling network equipment.
- The cost of the selected switch equipment will be obtained. Potential sources for cost data are vendor invoices or contracts for recent purchases of a given switch type, vendor quotes or bids, or vendor price lists, adjusted for the applicable discounts.
- The total cost of switches will be disaggregated into its component functions to isolate line and trunk port costs. The former is considered to be part of subscriber plant and the latter part of transport plant. Some, if not all, of this information can be derived from vendor supplied price lists or switch inventories.
- Traffic studies will need to be performed for the development of both switching and transport costs. The traffic studies will measure all traffic, i.e. originating and terminating intra- and inter-office calls for each type of service (e.g. local, EAS, toll, CMRS), for a period that is as representative as possible of traffic for a full year
- The current cost of the land and buildings used for switching and transport facilities of each type will be estimated, along with the related operating costs, and included with the switching and transport cost elements. Costs would be determined based on market values, tax assessments or, vendor prices for the huts that may be used to house small switches.

- To convert the investment cost into a recurring annual capital cost (essentially a fixed annual annuity amount that recovers the net present value of the asset's capital costs over its useful life), a capital cost factor would be developed and applied. The capital cost factor incorporates the company's current cost of equity, cost of debt, proportion of debt in the capital structure, depreciation rates for the relevant plant types and any income and other operating taxes
- The ongoing costs of maintaining and repairing switching facilities, as well as overall network operations costs (e.g., testing, power, plant administration and general engineering expenses), will also need to be developed. Ongoing operating costs can be developed by applying a ratio of current operating expenses to the gross investment in the relevant facility types as recorded on the books of the company. These ratios are then applied to the capital costs of each plant type included in the designed efficient network configuration to calculate the annual operating expenses associated with these facilities.

Transport Costs

The process for developing the interoffice transmission cost is similar in many ways to that for switching The discussion in the previous section of methodology for cost measurement, traffic studies, land & buildings, annual capital costs, and ongoing maintenance & repair operations is largely applicable to transport, so these methods will not be reiterated This section is limited to methodology that is specific to transport

- For each of the transport routes (including signaling links) determine, in conjunction with company engineers, how it would be designed and provisioned if it was built today or in the near future. Among the factors to be incorporated would be the transmission media used (fiber, copper, radio), facility placement (buried, underground/conduit, aerial/poles), standard cable size and type deployed, redundancy requirements, and engineering fill factors. TLTC maintains up-to-date interoffice facility maps that can be used, in conjunction with company engineers, to identify the forward looking technologies to be deployed and traffic routing characteristics
- It will be necessary to unitize transport costs in different ways to reflect how these facilities are used by CMRS carriers. Costs will be developed on a per minute of use basis for shared transport and on a capacity basis (e.g , DS-0 and DS-1) for dedicated transport.

Common Costs

Overheads encompass the general administrative costs of the company for functions such as accounting, legal, external relations, executive, human resources, strategic planning and a myriad of related support services (e.g., buildings, furniture and office equipment, janitorial services). Overhead costs are loaded on the direct costs developed in the study.

Element costs

Element costs will be developed only for services that are currently used by CMRS carriers. They include: local switching, tandem switching, dedicated transport, shared transport, shared signaling links, and ISUP.