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November 2, 2006

HAND DELIVERY

Honorable Sara Kyle, Chairman
c/o Sharla Dillon, Docket & Records Manager
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0505

RE: In the Matter of: Tennessee Rural Independent Coalition Petition for Suspension and Modification Pursuant to 47 U.S.C. Section 251(f)(2)
TRA Docket No. 06-00228

Dear Chairman Kyle:

Please find enclosed an original and thirteen (13) copies of the *CMRS Providers' Response to the Tennessee Rural Coalition's Supplemental Statement Regarding Petition for Section 251(f)(2) Suspension and Modification of Section 251(B)(5) TELRIC Pricing Methodology*.

An additional copy of this filing is enclosed to be "File Stamped" for our records. If you have any questions or require additional information, please let me know.

Very truly yours,

Melvin J. Malone

cc: Parties of Record

BEFORE THE
TENNESSEE REGULATORY AUTHORITY

In the Matter of:	)	
	)	
Tennessee Rural Independent Coalition Petition for Suspension and Modification Pursuant to 47 U.S.C. Section 251(f)(2)	)	**Docket No. 06-00228**

CMRS PROVIDERS' RESPONSE TO THE TENNESSEE RURAL COALITION'S SUPPLEMENTAL STATEMENT REGARDING PETITION FOR SECTION 251(f)(2) SUSPENSION AND MODIFICATION OF SECTION 251(B)(5) TELRIC PRICING METHODOLOGY

Cellco Partnership d/b/a Verizon Wireless; New Cingular Wireless PCS, LLC d/b/a Cingular Wireless; Sprint Spectrum L.P. d/b/a Sprint PCS; and T-Mobile USA, Inc., (collectively referred to herein as "the CMRS Providers") respectfully submit the *CMRS Providers' Response to the Tennessee Rural Coalition's Supplemental Statement Regarding Petition for Section 251(f)(2) Suspension and Modification of Section 251(B)(5) TELRIC Pricing Methodology*.[1] For the reasons set forth below, the CMRS Providers respectfully request that the Tennessee Rural Coalition's (the "Coalition" or "Petitioners") Petition for Section 251(f)(2) Suspension and Modification (the "*Petition*"), as amended by the Coalition's October 2, 2006, Supplemental Statement (the "*Supplemental Statement*"), be denied, or in the alternative that this matter be set for hearing subsequent to adequate discovery.

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[1] In support of the arguments presented herein, the CMRS Providers rely on previous comments/briefs filed in this docket as if incorporated fully herein.

I.

SUMMARY

The Coalition has failed to demonstrate that it is entitled to any suspension or modification pursuant to 47 U.S.C. § 251(f)(2). No Coalition member has made a showing of specific economic circumstances that would permit the Tennessee Regulatory Authority ("TRA" or "Authority") to find that the alleged costs of a TELRIC study would constitute an undue economic burden *on that specific Coalition member*. Instead, the Coalition has simply alleged that TELRIC studies will cost a certain amount (without any proof to support the allegation), but then fails to demonstrate how or in what way such alleged costs satisfy the statutory standard of "unduly economically burdensome." As the Authority has previously stated in a proceeding involving a similarly composed coalition, the burden of proof necessary to sustain a suspension or modification under section 251(f)(2) of the Federal Telecommunications Act of 1996 (the "Act") requires more than "anecdotal and general policy statements."[2] Yet, that is all the Coalition members have provided here.

In addition, the Coalition fails to establish that granting the requested relief is in the "public interest." Indeed, as discussed below, granting the *Petition* would be detrimental to competition in rural Tennessee.[3]

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[2] Order Denying Amended Petition and Establishing Dates For Implementation of Local Number Portability, *In Re: Tennessee Coalition of Rural Incumbent Telephone Companies and Cooperatives Request for Suspension of Wireline to Wireless Number Portability Obligations Pursuant to Section 251(f)(2) of the Communications Act of 1943, as Amended*, TRA Docket No. 03-00633, p. 17 (Sept. 6, 2005) ("*TRA LNP Suspension Order*").

[3] As well-documented in both TRA Consolidated Docket No. 03-00585 and this docket, the *Petition* is but the latest of several attempts by the Coalition members to avoid their obligations under the Act, as determined in the *Arbitration Order* issued in TRA Consolidated Docket No. 03-00585. In fact, via the *Petition*, the Coalition seeks to abandon the very process that they requested and the Hearing Officer accepted. *See CMRS Providers' Brief on Selected Issues Set Forth by the Hearing Officer,* TRA Consolidated Docket No. 03-00585, p. 5 (Aug. 4, 2006) ("*August 4, 2006 CMRS Brief*"). In this footnote, the CMRS Providers highlight but three (3) of the many previously asserted legal contentions of the CMRS Providers.

(continued...)

Finally, with the filing of this brief, the CMRS Providers hope in good faith to further demonstrate - though TRA Docket No. 06-00228 is not the proper proceeding to adopt a TELRIC methodology to be used by the Coalition in TRA Consolidated Docket No. 03-00585 – that TELRIC can be implemented with an easy-to-understand and user-friendly methodology. The aim of the benchmark cost model offered by the CMRS Providers and discussed herein is not only to counter the mistaken impression that a TELRIC study of rural LEC transport and termination costs must be "a great expense," but also to suggest a method by which appropriate

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(..continued)

1. By waiting to seek a suspension or modification of the TELRIC pricing standards until well after the entry of the Authority's *Arbitration Order* in TRA Consolidated Docket No. 03-00585, the Coalition members have waived their right to seek such suspension or modification. *See August 4, 2006 CMRS Brief* and *Oral Arguments of the CMRS Providers, Transcript of Proceeding*, TRA Consolidated Docket No. 03-00585 (Aug. 29, 2006).

2. As a matter of law, fundamental fairness and procedural consistency, the procedural law of the case in TRA Consolidated Docket No. 03-00585 mandated that the *Petition* be summarily dismissed. *See, e.g., Westside Mothers v.* Olszeski, 2006 WL 1976057 (6th Cir. July 17, 2006) ("The law of the case doctrine provides that when a court decides upon a rule of law, that decision should continue to govern the same issues in subsequent stages in the same case. . . . The doctrine precludes a court from reconsideration of issues decided at an early stage of the litigation, either explicitly or by necessary inference from the disposition.") (citations omitted) (copy previously filed with the Authority in the *August 4, 2006 CMRS Brief*). *See also August 4, 2006 CMRS Brief* at pp. 2, n. 3.

3. The Coalition seeks a modification or suspension of "the requirements of Section 251(b) of the Act to the extent that those requirements may be interpreted as requiring them to establish charges for transport and termination of any traffic on the basis of a Total Element Long Run Incremental Cost ("TELRIC") methodology." *See Supplemental Statement* at 1. However, a section 251(f)(2) petition involves potential suspension or modification of obligations under sections 251(b) or (c) – in this case, the (b)(5) duty to establish reciprocal compensation arrangements in the first place. Section 251(f)(2) does not allow a party – as the Coalition here seeks – to eliminate the statutory methodology upon which transport and termination rates are established. The Act's pricing standards are established in section 252(d), not section 251(b) or (c). Thus, if the Coalition is successful in this proceeding, the most the Coalition can hope for is a suspension or modification of the (b)(5) obligation to enter into "reciprocal compensation arrangements," which is not something that the Coalition has argued to date. The pricing standards of section 251(d)(2), on the other hand, cannot be suspended or modified.

To remain within the confines of the agency's directives with respect to this filing, the CMRS Providers incorporate the foregoing, and other related and previously asserted, arguments by reference as if set forth fully herein. By complying with said directives, the CMRS Providers do not waive any of the legal arguments that they have asserted in this docket or in TRA Consolidated Docket No. 03-00585 relative to the *Petition*.

transport and termination rates for each Coalition member can be determined "as efficiently as possible."[4]

In sum, the Coalition has failed to satisfy its burden in seeking a 251(f)(2) petition on any basis, and the requested relief should be denied accordingly. Instead, the Authority should continue the process, in TRA Consolidated Docket No. 03-00585, of establishing appropriate transport and termination rates for each Coalition member.[5]

II.

NO COALITION MEMBER HAS MADE A PROPER SHOWING OF SPECIFIC ECONOMIC CIRCUMSTANCES THAT WOULD JUSTIFY A FINDING OF AN UNDUE ECONOMIC BURDEN.

In seeking an exemption from the Act's pricing standards, Petitioners rely exclusively upon 47 C.F.R. § 251(f)(2)(a)(ii), which states that a request for suspension or modification shall be granted to the extent necessary "to avoid imposing a requirement that is unduly economically

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[4] *Id.* at 58, ll. 13-16 ("But we've still got to do these studies, and we've still got to do them – as long as I'm hearing officer, we're going to do them as efficiently as possible.") (Comments of Panel Member).

[5] The North Carolina Utilities Commission ("NCUC") order referenced by the Coalition is distinguishable in a host of ways from the case at hand. For example, in Tennessee, unlike in North Carolina, the rural carriers brought their 251(f)(2) petition *after* the arbitration petitions had been filed, *after* the rural carriers had been ordered to provide TELRIC studies and *after* the rural carriers had agreed to produce – and in fact suggested – that the parties agree on TELRIC methodologies in order to expedite cost proceedings under the Act. More notably, the NCUC failed to apply a recognized standard, such as that articulated by the Authority (*see, e.g., infra* p. 6, n. 10), and the Eighth Circuit (*see infra* p. 5, n. 7) or such as that employed by the Texas Public Utility Commission (*see infra* p. 6, n. 9), in determining whether the required statutory showing - undue economic burden - had been met. Moreover, at the end of the day, the NCUC ordered forward-looking cost studies. Unlike the NCUC, the Authority has applied the proper standard and established its own precedent regarding the proper evaluation of a section 251(f)(2) petition. *See TRA LNP Suspension Order.*

Finally, the Coalition has also referenced the Missoula Plan. There are no credible indications that the Missoula Plan will gain swift action from the FCC. In fact, it is our understanding that several states, and numerous other parties, have filed substantive comments with the FCC opposing the Missoula Plan. *See also August 4, 2006 CMRS Brief* at p. 3, n. 5.

burdensome." To support their argument, the Coalition members allege that the costs of preparing a TELRIC study for each member would range from $18,750 to $80,000.[6]

Although the Act itself does not provide explicit guidelines for determining what constitutes an "unduly economically burdensome" requirement, the Eighth Circuit Court of Appeals held that "it is the full economic burden on the ILEC of meeting the request that must be assessed by the state commission" such that one must look to the "whole of the economic burden the request imposes, not just a discrete part."[7] Thus, the court stated:

> Nor do we think the consideration of the whole economic burden occasioned by the request will result in state commissions "automatically" continuing the exemption, or "automatically" granting a petition for suspension or modification. In making their determination of "unduly economically burdensome," the state commissions will undoubtedly take into their judgment the fact that *the ILEC will be paid for the cost of meeting the request and may also receive a reasonable profit pursuant to § 252(d).*[8]

The Texas Public Utility Commission (the "Texas Commission") recently applied the Eighth Circuit's guidelines in the context of a 251(f)(1) proceeding to determine if a request by Sprint's CLEC for interconnection to compete in a rural LEC's territory imposed an "undue economic burden" upon the rural LEC – Consolidated. Evidence included a Commission Staff assessment that Consolidated's current profits would enable Consolidated to withstand the economic impact of interconnection with Sprint. The Commission Staff's assessment included, among other things, a showing of Consolidated's financial condition for calendar years 1999 through 2005, which included information regarding the company's rates of return through such

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[6] Supplemental Statement, TRA Docket No. 06-00228, pp. 7-12 (Oct. 2, 2006) (the "*Supplemental Statement*").

[7] *Iowa Utilities Board v. FCC,* 219 F.3d 744, 761 (8th Cir. 2000) (emphasis added), *rev'd in part on other grounds,* 535 U.S. 467 (2002).

[8] *Iowa Utilities Board,* 219 F.3d at 760-62.

period. Based on evidence of the *overall financial condition* of Consolidated, the Texas Commission found that Consolidated's prediction that it could suffer line losses of 20% after only two (2) years (and a claimed 30% loss of revenue over 5 years) following interconnection with Sprint to be *insufficient to show an undue economic burden.*[9] Like both the Eighth Circuit and the Texas Commission, the Authority has also previously recognized the necessity, in the context of an (f)(2) petition, of carefully considering the overall financial condition of any such petitioner.[10]

In contrast to the evidence outlined in the *Consolidated Order*, the *Petition* and *Supplemental Statement* filed by the Coalition in this case make no attempt whatsoever to show that any Petitioner will suffer any specific harm as a result of producing a TELRIC study.

The Coalition, for example, offers no evidence to support the allegations of the alleged costs of TELRIC studies. Instead, the Coalition's *Supplemental Statement* simply lists each Coalition member, followed by an alleged cost of a TELRIC study. Those alleged costs are supported by an affidavit from each Coalition member, containing only two (2) paragraphs. The

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[9] Order, *Petition of Sprint Communications Company L.P. to Terminate Rural Exemption as to Consolidated Communications of Fort Bend Company and Consolidated Communications of Texas Company,* Public Utility Commission of Texas, Docket 32582, pp. 7-8 (Aug. 14, 2006) ("*Consolidated Order*") (A copy of the *Consolidated Order* is attached hereto as **Exhibit 1***).*

[10] *See*, Notice, *In Re: Tennessee Coalition of Rural Incumbent Telephone Companies and Cooperatives Request for Suspension of Wireline to Wireless Number Portability Obligations Pursuant to Section 251(f)(2) of the Communications Act of 1934, As Amended*, TRA Docket No. 03-00633 (Aug. 20, 2004) (TRA advising, *sua sponte*, its intent to take administrative notice of certain financial reports relating to section 251(f)(2) petitioners). *See also, e.g., Transcript of Proceeding*, TRA Consolidated Docket No. 03-00585, pp. 66-68 (Aug. 29, 2006) ("Recovery . . . is one that's rolled into the overall – the overall fitness of a company. . . . This cost is not separate in some manner.") (Comments of Panel Member).

first identifies the name and residence of the affiant. The second paragraph of each affidavit is identical:

> I have review [sic] the statements regarding my company in the Supplemental Statement in 06-00228. The statements are true and accurate to the best of my knowledge.

This, however, is not evidence of anything.

Not only have the Coalition members failed to substantiate their claimed costs of TELRIC studies, they have failed to demonstrate how those claimed costs constitute an undue economic burden on individual Coalition members. It is untenable to assert that the alleged costs of a TELRIC study constitute an "undue economic burden" without an analysis of the financial condition of the party(ies) making the claim. At a minimum, as in the *TRA LNP Suspension Order* and the *Consolidated Order*, the alleged costs must be compared to the overall financial position of each Coalition member to determine whether such costs constitute an undue burden, or any burden at all, on each specific Coalition member. Nonetheless, *not a single Coalition member has submitted any internal financial data in support of the Petition.*

As the agency well knows, even at the most basic level of analysis, the impact of an alleged $20,000 expense on a company with $100,000 in annual revenues is far different than the impact of the same expense on a company with $1,000,000 in annual revenues, or $20,000,000, as the case may be. Thus, as a general rule, bald statements that a particular required act "costs too much" do not – and should not - constitute the basis for a finding that a requirement is "unduly economically burdensome."

For example, under the National Labor Relations Act, reinstatement of an employee to his job is an inappropriate remedy if such would be "unduly economically burdensome" for the employer – the same standard applicable in the present case. That standard, however, is not

satisfied simply by a showing of the costs associated with reinstatement. The alleged costs must be shown in relation to the financial situation of the party paying the costs.[11]

Just over a year ago, the Authority considered and unanimously rejected an argument similar to the one at hand with respect to the Coalition's request under section 251(f)(2) to suspend its 251(b)(2) obligation to provide intermodal local number portability. In that proceeding, the Authority held that the mere claim of undue economic burden, without actual proof supported by individual company financial records, was an insufficient showing to establish entitlement to a suspension under section 251(f)(2):

> The Coalition did not submit data reflecting the financial impact of additional costs associated with the completion of wireless calls under an intermodal porting situation. Section 251 of the Act and the Authority's instructions to file company-specific data require more than the anecdotal and general policy statements contained in this record.[12]

In this case, the Coalition members have done nothing other than allege that the preparation of TELRIC studies "costs too much." That is not a sufficient showing.[13]

Moreover, even if the costs of TELRIC studies alleged by the Coalition were correct, such costs, even considered solely in isolation, are not burdensome. In denying the Coalition's request for suspension of the Act's requirement to provide number portability, the Authority stated:

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[11] *Teamsters Local Union No. 171 v. NLRB*, 863 F.2d 946, 957-58 (D.C. Cir. 1988), *cert. denied*, 490 U.S. 1065 (1989) (To demonstrate "undue economic burden," the employer must show that "the Board's [remedial] order would require a substantial outlay of new capital or otherwise cause undue financial hardship.); *see also Power, Inc. v. NLRB*, 40 F.3d 409, 425 (D.C. Cir. 1994) (need to establish specific showing of substantial capital outlay or some other undue hardship to satisfy burden).

[12] *TRA LNP Suspension Order*, p. 17.

[13] The Coalition's own filings reveal, albeit unintentionally perhaps, the need for the Authority to review the overall financial condition of each member of the Coalition. *See Supplemental Statement* at 18 ("[E]ach Petitioner has . . . *limited financial . . . resources* to address the TELRIC interconnection requirement.") (emphasis added). *See also id.* at 19.

> The data revealed that intermodal LNP implementation would result in the assessment of a customer surcharge of between 4 cents ($0.04) and 26 cents ($0.26) a month per access line for five years. This range is *extremely reasonable.*[14]

Although the issue of whether the Coalition members can recoup the costs of a TELRIC study from its customer base is not currently before the Authority, the costs of TELRIC studies alleged by the Coalition, when figured on a per access line basis for five (5) years, range from 2 cents ($.02) to 26 cents ($.26) per line per month – almost exactly within the range that the Authority has found to be "extremely reasonable."[15]

In any event, the Coalition has not made a proper, if any, showing that the alleged costs of TELRIC studies (whatever those costs might be) would be "unduly economically burdensome" on any specific Coalition member, and thus the requested relief must be denied.

III.

THE COALITION HAS FAILED TO ESTABLISH THAT THE REQUESTED SUSPSENSION WOULD BE IN THE PUBLIC INTEREST.

Congress intended the Act to apply to all telecommunications carriers – including rural LECs. Accordingly, Congress established stringent standards for a rural carrier to obtain a suspension of its obligations under sections 251(b) or (c). Section 251(f)(2), in addition to requiring a showing of undue economic burden, permits state commissions to suspend or modify a carrier's obligations under sections 251(b) or (c) *only* if suspension or modification is "consistent with the public interest, convenience, and necessity."[16]

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[14] *TRA LNP Suspension Order*, p. 17. The CMRS Providers note that the Authority seemed to be considering both the impact on end users as well as the potential burden on RLECs in considering the merits of the LNP petition.

[15] An analysis of the per line costs is attached hereto as **Exhibit 2**. The analysis is based on the number of access lines for each Coalition member per their discovery responses in TRA Consolidated Docket 03-00585 and the alleged TELRIC study costs per the *Supplemental Statement.*

[16] 47 U.S.C. §§ 251(f)(2)(B).

In this case, the Coalition simply extrapolates from its allegations concerning the costs of TELRIC studies to claim that "[t]he public interest would be better served if both the limited resources of each Petitioner and those of the Authority are devoted to endeavors that improve services to Tennessee customers."[17] Such statements are clearly insufficient to meet the burden as articulated by the TRA, Congress or the FCC.

What is the "public interest" in this case? This Authority has previously noted that "in the absence of data to support specific contentions, conclusions with respect to public interest and sound policy are, at best, speculative."[18] Yet the Coalition has provided no data to support its claim that the establishment of appropriate transport and termination rates for each Petitioner is not in the public interest.

According to the Supreme Court:

> The Telecommunications Act of 1996 . . . fundamentally restructures local telephone markets. States may no longer enforce laws that impede competition, and incumbent LECs are subject to a host of duties intended to facilitate market entry.[19]

Clearly, Congress determined it was in the public interest to encourage competition in telecommunications markets.[20] Accordingly, the Federal Communications Commission ("FCC") established the TELRIC methodology for determining the rates that carriers would pay to terminate each other's traffic in a competitive environment:

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[17] *Supplemental Statement*, p. 19.

[18] *TRA LNP Suspension Order*, p. 17.

[19] *AT&T Corporation v. Iowa Utilities Board,* 525 U.S. 366; 119 S. Ct. 721; 142 L. Ed. 2d 834 (1999).

[20] *See also cf.* Tenn. Code Ann. § 65-4-123 ("The general assembly declares that the policy of this state is to foster the development of an efficient, technologically advanced, statewide system of telecommunications services by permitting competition in **all** telecommunications services markets[.]") (emphasis added).

> The 1996 Act encourages competition by removing barriers to entry and providing an opportunity for potential new entrants to purchase unbundled incumbent LEC network elements to compete efficiently to provide local exchange services. We believe that the prices that potential entrants pay for these elements should reflect forward-looking economic costs in order to encourage efficient levels of investment and entry.[21]

The thrust of a "forward-looking" cost methodology – i.e., one not based on historical or embedded costs – is to ensure that incumbent carriers do not raise their rates to recover sunk investments, or in the words of the Supreme Court, "pass these [past] inefficiencies to competitors" and thereby "defeat the competitive purpose of forcing efficient choices on all carriers whether incumbent or entrants."[22]

In the present case, the Coalition asks the Authority to relieve its members of the requirement to conduct TELRIC studies. The Coalition members, in short, seek the ability to avoid the FCC's requirement that transport and termination rates be forward-looking. Relieved of the TELRIC requirement, Coalition members would establish rates in excess of both what Congress and the FCC intended. Such higher rates will not encourage competition in rural Tennessee; certainly they will not encourage the development of wireless service in rural areas. The aim of competition is to benefit consumers through lower rates (prices) and more and/or better quality services. To frustrate the development of competing services in rural areas is to deny the afore-mentioned benefits, which are already available to urban consumers throughout Tennessee, to Tennessee's rural consumers. Moreover, the lack of competitively provided telecommunications services may deter economic development in rural areas, which must

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[21] *In Re: Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499, ¶ 672 (1996).

[22] *Verizon* v. *FCC*, 535 U.S. 467, 511, 122 S. Ct. 1646, 152 L. Ed. 2d 701 (2002).

compete with urban areas for new business and the jobs they create. Needless to say, the lack of competition is not in the public interest.

IV.

TELRIC-COMPLIANT COST STUDIES CAN BE PRODUCED EFFICIENTLY AND ECONOMICALLY.

Leaving aside the merits (or lack thereof) of the *Petition*, the CMRS Providers note that the Authority has expressed concern that the Coalition members not be burdened with unreasonable monetary and resource demands in preparing TELRIC studies.[23] The CMRS Providers do not intend to create an inappropriate burden. But, when the Coalition argues that "[a] TELRIC proceeding will result in enormous costs in terms of dollars, time and the toll on the internal resources of both the Petitioners and the Authority,"[24] the Authority must understand that such a claim has no merit.

A. Proceedings to Establish RLEC Transport and Termination Rates do not Involve the Complexity, Resources or Expenses of Proceedings Needed to Establish RBOC Loop and Other UNE Rates.

The Coalition raises the specter of a TELRIC proceeding that could last two or three years, in which the Authority would be presented with conflicting cost models and "hundreds of

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[23] At the August 29, 2006, Hearing in TRA Consolidated Docket No. 03-00585, a member of the panel commented:

> I am sympathetic with the CMRS providers, that they've got a liability out there and they need some finality to it. But I'm also sympathetic to the ICOs, that they've got to enter into a great expense in order to meet the TELRIC requirement. And I think it's incumbent upon the CMRS providers to work with them to come up with methodologies that everybody can agree to before they enter into this huge expense.

Transcript of Proceedings, TRA Consolidated Docket No. 03-00585, p. 74, ll. 3-11 (Aug. 29, 2006) (Comments of Panel Member).

[24] *Supplemental Statement* at 3.

inputs to those models," all supported by conflicting expert testimony.[25] In making this claim, the Coalition is referring to a Notice of Proposed Rulemaking issued by the FCC in 2003, which stated, in part:

> Since 1996, virtually all states have conducted at least one round of cost proceedings under these [TELRIC] rules. State pricing proceedings under the TELRIC regime have been extremely complicated and often last for two or three years at a time. State commissions typically are presented with at least two conflicting cost models, and hundreds of inputs to those models, all supported by the testimony of expert witnesses. These cases are extremely complex, as state commissions must make dozens of detailed decisions regarding the calculation of the forward-looking cost of building a local telecommunications network.[26]

The FCC here is referring to dockets for the setting of RBOC rates for loops and other UNEs, thus the reference to "the calculation of the forward-looking cost of building a local telecommunications network." Those proceedings can indeed be long and involved. Setting loops rates for an RBOC, with hundreds of wire centers, thousands of miles of loop plant and hundreds of thousands of customers, is, as the Authority well knows, an arduous task.

TRA Consolidated Docket No. 03-00585, however, *does not involve RBOC loop costs.* The cost portion of that docket will not take years, or involve hundreds of inputs, or be a drain on the resources of the Coalition members, the Authority, the CMRS Providers or anyone else. TRA Consolidated Docket No. 03-00585 involves the establishment of reciprocal compensation rates for each Coalition member – nothing more. Reciprocal compensation involves *only two*

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[25] *Id.* at 3.

[26] *In the Matter of Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers,* WC Docket No. 03-173, Notice of Proposed Rulemaking, ¶ 6 (rel. Sept. 15, 2003).

network elements: "transport" and "termination."[27] The FCC has defined these two (2) elements as:

(1) *Transport*. Transport is defined for "purposes of section 251(b)(5), as the transmission of terminating traffic that is subject to section 251(b) from the interconnection point between two carriers to the terminating carrier's end office switch that directly serves the called party (or equivalent facility provided by a non-incumbent carrier)."[28] The FCC has held that "[c]harges for transport subject to section 251(b)(5) should reflect the forward-looking cost of the particular provisioning method" that the incumbent LEC uses in its transport network.[29] For each Coalition member, transport includes the forward-looking costs of (1) interoffice fiber cable and (2) interoffice transmission equipment.

(2) *Termination*. The FCC has defined 'termination' for "purposes of section 251(b)(5) as the switching of traffic that is subject to section 251(b)(5) at the terminating carrier's end office switch (or equivalent facility) and delivery of that traffic from the switch to the called party's premises."[30] Under this definition, there are two (2) components involved in termination of traffic: "the end-office switch and the local loop."[31]

However, and this is key, the FCC has ruled that under the "additional cost" standard of Section 252(d)(2), Coalition members need not, indeed may not, include in their transport and

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[27] *Local Competition Order*, 11 FCC Rcd at 16016 ¶ 1040 ("[W]e conclude that we need to treat transport and termination as separate functions – each with its own cost.").

[28] *Id.*, 11 FCC Rcd at 16015 ¶ 1039. *See also* 47 C.F.R. § 51.701(c).

[29] *Local Competition Order*, 11 FCC Rcd at 16015 ¶ 1039.

[30] *Local Competition Order*, 11 FCC Rcd at 16015 ¶ 1040. *See also* 47 C.F.R. § 51.701(d).

[31] *Id.*, 11 FCC Rcd at 16025 ¶ 1057.

termination studies their loop costs, because LECs do not incur *additional* costs in terminating calls using loops:

> The costs of local loops and line ports associated with local switches do not vary in proportion to the number of calls terminated over these facilities. We conclude that such non-traffic sensitive costs should not be considered "additional costs" when a LEC terminates a call that originated on the network of a competing carrier.[32]

In sum, loop costs are not included in reciprocal compensation rates. Thus, proceedings to determine Coalition members' transport and termination costs *will not involve a determination of loop costs*. The arduous task involved in RBOC TELRIC proceedings will thus not arise with the Coalition's cost studies.[33]

A TELRIC study of rural LEC transport and termination costs involves, in other words, only the following two (2) elements:

> 1. Forward-looking switching costs (for companies with admittedly few switches).
>
> 2. Forward-looking costs of the inter-office fiber cable and transmission equipment (for companies with relatively few wire centers to connect).

That's it. Compared to an RBOC cost docket establishing UNE loop rates, the development of transport and termination rates for rural LECs is a relatively straightforward

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[32] *Id.*, 11 FCC Rcd at 16025 ¶ 1057. *See also Local Competition Reconsideration Order,* 11 FCC Rcd 13042, 13045 ¶ 6 (1996)("[T]he 'additional cost' to the incumbent LEC of terminating a call that originates on another network includes only usage-sensitive costs . . . but not the non-traffic sensitive costs . . . . Such non-traffic-sensitive costs, by definition, do not vary in proportion to the number of calls terminating over the LEC's facilities and, thus, are not 'additional costs.'"); *Access Charge Reform Order,* 11 FCC Rcd 21354, 21473 ¶ 274 (1996)("Arbitrated reciprocal compensation rates may not include the NTS [non-traffic sensitive] costs of either local switching or the subscriber line.").

[33] The CMRS Providers previously made this point in *Response of CMRS Providers to Cost Study Methodologies and Model Descriptions Proposed by Rural Coalition,* filed October 10, 2005, in TRA Consolidated Docket No. 03-00585.

process. The experience of the CMRS Providers in other jurisdictions has been that hearings setting such rates generally take 1-2 days. Two (2) of the CMRS Providers in this case, Cingular and T-Mobile, recently (July of 2006) participated in a hearing before the California Public Utilities Commission to establish TELRIC-based transport and termination rates for eleven (11) different RLECs. The hearing took less than one day.[34] T-Mobile and Cingular likewise participated in a proceeding before the Missouri Public Service Commission to establish TELRIC-based transport and termination rates for twenty-five (25) RLECs. The hearing (in January of 2006), which involved a host of non-cost issues in addition to the issue of TELRIC-appropriate rates for each RLEC, took two (2) days.[35]

Thus, a TELRIC study for transport and termination rates need not be burdensome to any rural carrier. Such a study can be performed using a personal computer, Excel software, electronic accounting records and basic plant records that companies maintain in the normal course of business. Attached hereto as **Exhibit 3** is the affidavit of W. Craig Conwell, a cost study practitioner who has previously given testimony on behalf of the CMRS Providers in TRA Consolidated Docket No. 03-00585, and who has also given testimony on behalf of some of the CMRS Providers in several state dockets to establish TELRIC-based transport and termination rates for rural LECs – including the dockets described above in California and Missouri. Mr. Conwell's affidavit demonstrates, *inter alia,* the following:

> 1. On average, if an RLEC starts from scratch, and uses all company-specific data, a TELRIC study of transport and termination costs can be produced in about

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[34] *In the Matter of the Petition by the Siskiyou Telephone Company (U 1017 C) for Arbitration of a Compensation Agreement with Cingular Wireless Pursuant to 47 C.F.R. §20.11(e) and Consolidated Proceedings*, Public Utilities Commission of the State of California, Case No. A.06-02-028 *et al.*

[35] *In the Matter of the Petition for Arbitration of Unresolved Issues in a Section 251(b)(5) Agreement with T-Mobile USA, Inc.*, Public Service Commission of the State of Missouri, Case No. TO-2006-0147 *et al.* (consolidated).

12 days, plus an additional 8 days (spread among all companies) for work common to all RLECs.

2. A TELRIC-compliant study will include:

a. Summary of transport and termination costs;

b. Electronic, Excel-based model showing the calculation of transport and termination costs;

c. Supporting documentation consisting of a description of key assumptions, the analyses and work papers supporting input data used and relevant source documents.

3. The same or similar data can often be used by more than one company. Examples include current plants costs, capital cost factors and economic lives.

The CMRS Providers ask the Authority to review Mr. Conwell's affidavit carefully because it refutes the Coalition's claim that the establishment of TELRIC-based transport and termination rates for the Coalition members must, of necessity, be lengthy, expensive and arduous.

B. The CMRS Providers Propose a TELRIC Benchmark Methodology that can be used by any Coalition Member to Compute Forward-Looking Transport and Termination Costs.

Mr. Conwell's estimate of the time needed for a Coalition member to complete a TELRIC study is based upon the assumption, as mentioned above, that each Coalition member uses only company-specific data and the Coalition member has not previously gathered any of this information. As Attachment A to Mr. Conwell's affidavit indicates, a substantial portion of the estimated 11.75 days involves the gathering of company-specific data; for example, interoffice cable lengths, the percent of sharing of the interoffice cable system, vendor quotations for the current costs of comparable switches, and many others. This data gathering, and thus the effort necessary to produce a TELRIC study, can be reduced substantially if Coalition members

make use of appropriate, publicly available generic data or if a Coalition members has previously gathered some of the company specific information.[36]

Accordingly, in addition to Mr. Conwell's affidavit, the CMRS Providers attach hereto as **Exhibit 4** a model that develops benchmarks for rural ILEC transport and termination costs. This "benchmark methodology" provides a straightforward and easy to follow mechanism for an RLEC to prepare a TELRIC study for transport and termination. For example, the methodology uses publicly available data for certain key inputs used to determine a Coalition member's particular costs. A Coalition member could adopt the benchmark methodology "as is," using the publicly available data as appropriate for the size of the company, and produce TELRIC-consistent transport and termination rates without the need of producing its own methodology or extensive gathering of company-specific information.[37]

A Coalition member could also adopt the benchmark methodology but substitute company-specific data for some or all of the publicly available data in the model. Mr. Conwell's estimate of 11.75 days to complete a TELRIC study was based upon the assumption that a Coalition member would use the benchmark methodology but substitute all company-specific data in place of publicly available data. The more publicly available data a Coalition member adopted in the benchmark methodology, or the more company specific data already available to the Coalition member, the shorter amount of time a TELRIC study would take.

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[36] Given that the Coalition members have each previously submitted what they considered to be TELRIC cost methodologies, it would not be unreasonable to assume that at least some of them, if not all, have already begun to gather – or have gathered - this information. Indeed, one would suppose that the alleged TELRIC cost study estimates in the *Supplemental Statement* were based in part on how much of this information is readily available to the Coalition member consultants.

[37] Some company-specific data is of course required in either situation.

Clearly, the current proceeding is not the appropriate vehicle for the Authority to rule on the appropriateness of cost studies produced by the Coalition members. Nor are the CMRS Providers suggesting that the Coalition members be required to use the attached methodology – in this proceeding or in TRA Consolidated Docket No. 03-00585. Much incorrect information has been circulated, however, concerning TELRIC studies and their relative cost and complexity. The CMRS Providers attach the benchmark cost model to counter that misinformation and also to respond in good faith to the Authority's previously expressed concerns. Again, Mr. Conwell's affidavit assumes an RLEC's use of company-specific cost data, and further assumes that Excel spreadsheets are developed to produce RLEC-specific costs; however, using the template of the benchmark cost model and, when possible, credible, publicly available cost data offers small RLECs an alternative to further reduce the effort to develop proper transport and termination rates.

C. The TELRIC Benchmark Methodology is Straightforward and Easy to Use.

The attached methodology is straight forward and easy to follow. Three (3) spreadsheets are involved: one for end office switching, one for interoffice fiber cable and one for interoffice transmission equipment. Each spreadsheet takes a single page. The spreadsheet for transmission equipment includes approximately forty (40) lines. The spreadsheets for switching and fiber cable include approximately sixty (60) lines. Many of the factors used, such as common cost factors, are identical in all three (3) spreadsheets. All three (3) spreadsheets allow for the use of publicly available generic data for various items – in the event an RLEC does not want to use actual, company-specific data or vendor quotations.

For example, the switching spreadsheet allows the use of FCC switch investment data (discounted to current value) in the calculation of switching costs. The methodology thus would

allow an RLEC to compute forward-looking switching costs based upon actual current vendor prices, or instead upon switch cost data compiled by the FCC.

Similarly, in computing interoffice fiber cable costs, the methodology would allow an RLEC one of two options in computing the percentage of fiber cable not used for transport and termination of wireless traffic: the RLEC could use actual, company-specific sharing data, or the RLEC could instead use a default assumption that 50 percent of interoffice cable is devoted to uses other than transport and termination – the figure adopted by the Missouri Public Service Commission in the above-described proceeding.

In each case in which the methodology provides for the use of publicly available generic data, the source of the data is provided. The text explaining the methodology identifies areas where the CMRS Providers propose that publicly available data can be a useful alternative to company-specific data. The text also explains areas where company-specific documentation will be needed, as well as the nature of that documentation.

Importantly, the methodology outlines where the range of forward-looking costs is likely to fall for small, medium and large RLECs, and actually computes certain default costs for those various companies – based upon publicly available data and certain generic assumptions.

In short, the CMRS Providers are persuaded that the methodology could be used as a template in TRA Consolidated Docket No. 03-00585 to produce TELRIC-complaint studies for the Coalition members without the expenditure of excessive time, money or resources on the part of the Coalition Members, the TRA or the CMRS Providers. Such a process can only occur, however, after the Authority has denied the relief requested in this case.

The CMRS Providers ask the Authority to examine carefully the proposed TELRIC benchmark methodology attached hereto. The spreadsheets, combined with the text, are

relatively self-explanatory; however, the CMRS Providers are more than willing to present additional information concerning the methodology, either by affidavit, written testimony or live testimony, should the Authority desire.[38] Although the CMRS Providers are not suggesting that any Coalition member should be required to use this template, or that this is the only manner in which to prepare a TELRIC-compliant study, the benchmark cost model does outline a compliant, good faith option.

V.

IF THE AUTHORITY DOES NOT DISMISS THE PETITION, ANY FURTHER CONSIDERATION OF THE PETITION REQUIRES A HEARING.

For the reasons discussed above, the *Petition* should be denied by the Authority. If, however, the Authority determines that further consideration of the *Petition* is warranted, the CMRS Providers submit, consistent with due process, that a hearing, subsequent to traditional pre-hearing processes, must be held in order to properly conclude this proceeding. For example, without the opportunity to subject the Coalition members' allegations of undue economic burdens, cost estimates, and "limited financial . . . resources"[39] to appropriate scrutiny through discovery, the Authority has no factual basis (other than bald, unsupported allegations) upon which to grant the *Petition*. Moreover, a hearing would likewise be warranted so that parties could be subjected to cross-examination for the benefit of the TRA. Such proceedings would be

[38] The CMRS Providers note that, as a practical matter, interconnection agreements are often in force for at least two (2) years, with automatic renewal provisions, and new TELRIC studies are not generally requested upon renewal or termination. Moreover, any concern over inappropriate requests for new studies can be addressed in the terms of the interconnection agreement itself. Finally, even in the event a new study is required, experience with the previous study should greatly reduce any potential burden associated with a second study. Thus, the Coalition's argument that the costs of preparing studies are "repetitive and cyclical" are nothing more than a red herring.

[39] *Supplemental Statement* at 18.

entirely consistent with, and mandated by, the procedures utilized by the Authority in addressing other section 251(f)(2) petitions.[40]

VI.

CONCLUSION

As discussed above, the Coalition has clearly failed to establish that the preparation of a TELRIC study is "unduly economically burdensome" or that the suspension of any such requirement is in the public interest.[41] Accordingly the CMRS Providers respectfully request that the *Petition*, as amended, be denied and that the parties be ordered to move forward with the timely establishment of permanent TELRIC-compliant rates (either with or without the potential use of the attached TELRIC Benchmark methodology) in TRA Consolidated Docket No. 03-00585.

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[40] *See TRA LNP Suspension Order* at 13 ("The Hearing Officer also established an expedited schedule for discovery and pre-filed testimony to prepare for and conduct a Hearing..."); *see also Order Granting Petitions for Intervention and Motion for Suspension pending Proceeding and Establishing Expedited Procedural Schedule*, TRA Docket No. 03-00633, p. 14 (May 7, 2004) ("The Hearing Officer finds that the Coalition has amended its filing to comply with the directives of the Authority and that an *evidentiary hearing is necessary* to determine the facts which may support the necessary elements of Section 251(f)(2).") (emphasis added).

Here, the Coalition has presented contradictory positions. In its *Supplement Statement*, the Coalition asserts that a hearing is not necessary. *See Supplemental Statement* at p. 7, n. 11. But, during oral arguments, when it benefited their positions at that stage, the Coalition represented to the Arbitration Panel that a hearing on the *Petition* was both necessary and contemplated by the Coalition. See *Transcript of Proceedings*, TRA Docket No. 03-00585, p. 18 (Aug. 29, 2006) ("... the Authority has the opportunity to, pending a full hearing on the suspension, place the suspension request into effect.") (Counsel for Coalition); s*ee also id* at 44-45 ("We fully expected that, if necessary, a full hearing on this suspension would take place.") (Counsel for Coalition).

[41] In the event, however, that the Authority determines that any further consideration of this matter is warranted, a procedural schedule setting forth appropriate discovery and hearings would be required.

Respectfully submitted this 2nd day of November, 2006.

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EXHIBIT 1

EXHIBIT 1

PUC DOCKET NO. 32582

PETITION OF SPRINT COMMUNICATIONS COMPANY, L.P. TO TERMINATE RURAL EXEMPTION AS TO CONSOLIDATED COMMUNICATIONS OF FORT BEND COMPANY AND CONSOLIDATED COMMUNICATIONS OF TEXAS COMPANY	§	**PUBLIC UTILITY COMMISSION OF TEXAS**

ORDER

I. Introduction

This Order addresses the petition of Sprint Communications Company, L.P. to terminate the rural exemption of Consolidated Communications of Fort Bend Company (CCFB) and Consolidated Communications of Texas Company (CCTX) (collectively Consolidated) pursuant to the Federal Communications Act (Communications Act) § 251(f)(1)(A).[1] Based on the evidence and relevant testimony provided during the Commission's hearing on the merits, the Commission concludes that Sprint's petition to terminate Consolidated's rural exemption should be granted.

II. Discussion

On September 1, 2005, Sprint filed petitions for compulsory arbitration with Consolidated pursuant to §§ 251 and 252 of the Communications Act.[2] On

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[1] 47 U.S.C. § 251(f)(1)(A).

[2] *Petition of Sprint Communications Company, L.P. for Compulsory Arbitration under the FTA to Establish Terms and Conditions for Interconnection Terms with Consolidated Communications of Fort Bend Company*, Docket No. 31577 (pending); *Petition of Sprint Communications Company, L.P. for Compulsory Arbitration under the FTA to Establish Terms and Conditions for Interconnection Terms with Consolidated Communications of Texas Company*, Docket No. 31578 (pending).

September 23, 2005, the Commission abated these arbitration dockets pending the Commission's decision on threshold legal issues presented in Docket No. 31038 (Sprint's interconnection arbitration with Brazos Telecommunications, Inc.).[3]

On March 31, 2006, Sprint filed a petition to terminate the rural exemptions provided by § 251(f)(1)(A) of the Communications Act as to CCFB and CCTX. The Commission's hearing on the merits in this docket convened on June 20, 2006 and concluded on June 21, 2006. Although Time Warner Cable (TWC), Brazos Telecommunications, Inc., Eastex Telephone Cooperative, Inc., and Guadalupe Valley Telephone Cooperative, Inc. filed amicus briefs in this docket, none of these parties sought intervention or participated in the hearing on the merits.

A rural telephone company in Texas is exempt from the obligations prescribed by § 251(c) of the Communications Act until the company has received a bona fide request for interconnection, services, or network elements and this Commission determines that such request is not unduly economically burdensome, is technically feasible, and is consistent with § 254 of the Communications Act (with certain exceptions).[4] Initially, the Federal Communications Commission (FCC) rules implementing the Communications Act's rural exemption stated that the burden of proof for the three elements required for terminating the rural exemption would be on the rural incumbent local exchange company (ILEC).[5] However, the Eighth Circuit invalidated the FCC's rules and provided explicit guidelines as to the plain meaning of the rural exemption. In the *Iowa II* decision, the Eighth Circuit held that "[t]he plain meaning of the statute requires the party making the request to prove that the request meets the three prerequisites to justify termination of the otherwise continuing rural exemption."[6] The FCC has concluded that the Eighth Circuit's *Iowa II* decision is binding but has declined to codify a new rule because "in light of the Eighth Circuit's reasoning that the 'plain

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[3] Docket No. 31577, Order No. 1 (Sept. 23, 2005); Docket No. 31578, Order No. 1 (Sept. 23, 2005); *Petition of Sprint Communications Company L.P. for Arbitration with Brazos Telecommunications, Inc.*, Docket No. 31038 (pending).

[4] 47 U.S.C. § 251(f)(1)(A).

[5] 47 C.F.R. § 51.405(a).

[6] *Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 762 (8th Cir. 2000), *rev'd in part on other grounds*, 535 U.S. 467 (2002)(*Iowa II*).

meaning' of the statute is clear...such a rule would merely mirror the language of the [existing] statutory provision."[7]

Accordingly, in this proceeding, Sprint had the burden of proof to establish that its interconnection request to Consolidated is: (1) bona fide; (2) technically feasible; (3) not unduly economically burdensome; and (4) consistent with the universal-service goals of § 254 of the Communications Act. As discussed during the Commission's July 20, 2006 open meeting, the Commission finds that Sprint has met its burden and that Consolidated's rural exemption under § 251(f) of the Communications Act should be lifted.

A. Bona Fide Request

A bona fide request for interconnection, services, or network elements must be for the specific purpose prescribed by section 251(c).[8] Under section 251(c), an incumbent local exchange carrier (ILEC) has the duty to provide interconnection of its network with the facilities and equipment of a telecommunications carrier for the transmission and routing of telephone exchange service and access service.[9] A request under section 251(c) will not be held invalid merely because the requesting telecommunications carrier seeks interconnection for the purpose of serving wholesale customers.[10]

In this proceeding, Sprint seeks interconnection with Consolidated in order to provide wholesale telecommunications services. Both through prefiled testimony and testimony presented at the hearing on the merits, Sprint established that it would provide telephone exchange service via its interconnection with Consolidated. While Consolidated argued that Sprint would merely be routing voice-over-internet-protocol

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[7] *In the Matter of ACS of Alaska Inc., et al, Petition to Amend Section 51.405 of the Commission's Rules to Implement the Eighth Circuit's Decision in Iowa Utilities Board v. FCC Regarding the Burden of Proof in Rural Exemption Cases Under Section 251(f)(1) of the Communications Act,* CC Docket No. 96-98, Order, 16 FCC Record 15672, 15675 (rel. Aug. 27, 2001).

[8] 47 U.S.C. § 251(f)(1)(A).

[9] 47 U.S.C. § 251(c)(2).

[10] *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended,* CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Record 21905 at ¶ 264 (rel. Dec. 24, 1996) (explaining that the term telecommunications service was not intended to create a retail/wholesale distinction).

(VoIP) calls that originate with Sprint's wholesale customer, Time Warner Cable (TWC), Consolidated did not effectively dispute that once these calls were on Sprint's network and routed to Consolidated, the calls would not be treated unlike, nor would be distinguishable from, traffic Consolidated received from other carriers.

Because the FCC has concluded that "telecommunications carrier" has the same meaning as "common carrier,"[11] the requesting telecommunications carrier under § 251(c) must be acting as a common carrier with respect to its request. The FCC has continued to apply the two-part "common carrier" test developed in *NARUC I*[12] to determine whether entities should be regulated as common carriers under the Communications Act.[13] To be a common carrier service: (1) the service must be offered to "all potential users indifferently" and (2) the carrier must allow customers to transmit information of the customer's own design and choosing.[14] Because Sprint has shown that it will not alter the content of the information transmitted by its customers, Sprint passes the second part of the *NARUC I* test.

With respect to the first part of the *NARUC I* test, serving "all potential users indifferently" does not mean that the particular services offered must practically be available to the entire public; a specialized carrier whose service is of possible use to only a fraction of the population may nonetheless be a common carrier if he *holds himself out to serve indifferently all potential users.*[15] The Commission finds that Sprint has effectively established that it offers and will offer its services to all entities who desire to take them and who have "last mile" facilities suitable to function as residential loops. Further, Consolidated admitted that it was not aware of any last-mile provider or retail provider that Sprint has been unwilling to serve.[16]

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[11] *In re Cable & Wireless, PLC.*, FCC 97-204, Order Granting Application, 12 FCC Record 8516 at ¶ 13 (rel. June 20, 1997).

[12] *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 525 F2d 630 (D.C. Cir. 1976).

[13] *See In re Cable & Wireless, PLC.*, 12 FCC Record. 8516 at ¶ 13.

[14] *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 533 F2d at 608-609.

[15] *Southwestern Bell Tel. Co. v. FCC*, 19 F.3d 1475, 1480 (D.C. Cir. 1994).

[16] Trans. at 217 (Rowe).

Sprint established that, although the pricing terms would vary from contract to contract under its interconnection terms with its wholesale customers, these price variations would not constitute a failure by Sprint to offer its services "indifferently." A common carrier does not lose its common-carrier status merely by entering into private contractual relationships with its customers.[17] Rates arrived at through negotiations between a carrier and an individual customer and then made generally available to other similarly situated customers do not *per se* violate the Communications Act's requirement for common carriers to serve indiscriminately.[18] Sprint provided testimony that the reason why it does not have a standard price list is because every interconnection imposes different costs; thus, Sprint cannot have a set price that fails to reflect these different costs.[19] Accordingly, because there is a reasonable basis for the prices to vary from contract to contract and because Sprint will indiscriminately offer its services to all qualified customers, the Commission finds that Sprint will be acting as a common carrier.

B. Technical Feasibility

The FCC has provided guidance as to the meaning of "technically feasible" in its First Report and Order, stating that "...technically feasible refers solely to technical or operational concerns, rather than economic, space or site conditions..."[20] The FCC has also found that an ILEC's existing interconnections are "substantial evidence" that a similar interconnection could be made to the ILEC at substantially similar points.[21] While Consolidated expressed concern over the technical feasibility of meeting future interconnection requests should its rural exemption be lifted, the language of

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[17] *See Southwestern Bell Tel. Co. v. FCC*, 19 F.3d 1475, 1481 (D.C. Cir. 1994).

[18] *MCI Tel. Corp. v. FCC*, 917 F.2d 30, 38 (D.C. Cir. 1990) (interpreting §202(a) of the Act, which prohibits common carriers from engaging in unjust or unreasonable discrimination in its charges or practices).

[19] Trans. at 252 (Sywenki); Rebuttal Testimony of James Burt, Sprint Exh. 1C at 15 (explaining that Sprint will enter into contracts with individual wholesale customers because, while Sprint offers the same services to all customers with suitable last-mile facilities, the network configurations and actual interconnection costs incurred by Sprint with different ILECs will not be identical for each utility that intends to use Sprint's services).

[20] *Implementation of the Local Competition Provisions on the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, 11 FCC Record 15499, ¶ 198 (rel. Aug. 8, 1996).

[21] *See id.*

§ 251(f)(1)(A) is clear that the focus of the technical-feasibility analysis should be on "such request," which would mean Sprint's specific request.

Accordingly, because Consolidated's own witnesses admitted that Sprint's request is technically feasible,[22] the Commission finds that the technical-feasibility test has been met.[23] Further, the Commission finds that Consolidated's voluntarily negotiated and Commission-approved interconnection agreements with ETS,[24] MCImetro,[25] and Level 3[26] constitute substantial evidence that the interconnection sought by Sprint is technically feasible.

C. Economic Burden

The Communications Act does not provide any definitions or guidelines to state commissions as to the meaning of the phrase "unduly economically burdensome." However, the Eighth Circuit has provided limited guidance on this issue. In *Iowa II,* the Eight Circuit held that "it is the full economic burden on the ILEC of meeting the request

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[22] *See* Direct Testimony of Robert C. Rowe, Consolidated Exh. 3 at 5.

[23] While Consolidated raises concerns in its post-hearing brief regarding the operational feasibility of Sprint's request related to the "handling of VoIP traffic Sprint will receive from Time Warner and its other cable partners and, potentially, other unidentified third parties," the Commission finds that these concerns were neither timely presented nor persuasive. *See* Consolidated's Closing Brief at 11 (July 7, 2006).

[24] *Joint Applications of Fort Bend Telephone Company d/b/a TXU Communications and ETS Telephone Company, Inc. for Approval of Interconnection Agreement under PURA and the Telecommunications Act of 1996*, Docket No. 28085 (Aug. 8, 2003).

[25] *Joint Application of Consolidated Communications of Texas Company and MCImetro Access Transmission Services, LLC Approval of Interconnection Agreement under PURA and the Telecommunications Act of 1996*, Docket No. 30157 (Sept. 20, 2004); *Joint Application of Consolidated Communications of Fort Bend Company and MCImetro Access Transmission Services, LLC Approval of Interconnection Agreement under PURA and the Telecommunications Act of 1996*, Docket No. 30665 (Feb. 4, 2005).

[26] *Joint Application of Level 3 Communications, LLC and Fort Bend Telephone Company d/b/a TXU Communications for Approval of Interconnection Agreement under PURA and the Telecommunications Act of 1996*, Docket No. 27653 (May 21, 2003); *Joint Application of Level 3 Communications, LLC and Fort Bend Telephone Company d/b/a TXU Communications for Approval of Interconnection Agreement under PURA and the Telecommunications Act of 1996*, Docket No. 26180 (Aug. 1, 2002); *Joint Application of Level 3 Communications, LLC and TXU Communications Telephone Company d/b/a TXU Communications for Approval of Amendment to Interconnection Agreement under PURA and the Telecommunications Act of 1996*, Docket No. 27654 (May 1, 2003); *Joint Application of Level 3 Communications, LLC and TXU Communications Telephone Company d/b/a TXU Communications for Approval of Interconnection Agreement under PURA and the Telecommunications Act of 1996*, Docket No. 26179 (Aug. 1, 2002).

that must be assessed."[27] Accordingly, one must look to the "whole of the economic burden the request imposes, not just a discrete part."[28] The court stated that it did not think that consideration of the whole economic burden would automatically result in state commissions continuing the exemption; rather, the state commissions "will undoubtedly take into their judgment the fact that the ILEC will be paid for the cost of meeting the request and may also receive a reasonable profit pursuant to 252(d)."[29]

It appears that the actual cost of Consolidated's interconnection with Sprint is inconsequential, as Consolidated did not raise this as an issue. Accordingly, the economic impact of such interconnection is the sole focus of this inquiry. While Consolidated claimed that the Commission must not limit its economic-impact analysis to just Sprint's request and should instead focus on the overall impact of lifting Consolidated's rural exemption, Consolidated did not provide adequate support for this claim. Additionally, the language of § 251(f)(1)(A) is clear that the focus of the economic burden analysis should be on "such request," which would mean Sprint's specific request.

The Commission is persuaded by Commission Staff's assessment that Consolidated's current supra-competitive profits would enable the company to withstand the economic impact of interconnection with Sprint. Commission Staff provided testimony regarding Consolidated's financial condition for calendar years 1999 through 2005, based on Consolidated's public responses to the Commission's data request in its universal service fund project in Project No. 31863.[30] This testimony included evidence

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[27] *See Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 760 (8th Cir. 2000), *rev'd in part on other grounds*, 535 U.S. 467 (2002) (*Iowa II*).

[28] *Id.*

[29] *Id.*

[30] Direct Testimony of Randy R. Klaus, Commission Staff Ex. 1 at 12-13 and Attachments 1 & 2; *Review and Evaluation of the Texas Universal Service Fund Pursuant to PURA Section* 56.029, Project No. 31863, Consolidated Communications of Texas Company's Responses to Universal Service Information Request (May 30, 2006); Project No. 31863, Consolidated Communications of Ford Bend Company's Responses to Universal Service Information Request (May 30, 2006).

that CCTX and CCFB both recorded record intrastate rates of return in 2005 of 25.13% and 16.56%, respectively, and record intrastate returns on equity in 2005 of 52.82% and 33.05%, respectively. While Consolidated testified that the figures set forth by Commission Staff constituted "regulatory reports," implying that other accounting methods would yield lower rates of return and revenue figures,[31] Consolidated did not present financial data to counter Commission Staff's testimony. The Commission infers from Consolidated's failure to present figures derived from "non-regulatory" accounting methods that such accounting methods would not result in substantially different results from the figures presented by Commission Staff.

Sprint provided analysis through prefiled testimony and testimony at the hearing on the merits on the projected economic impact of Sprint's interconnection with Consolidated. This analysis showed minimal line loss during the first five years of interconnection resulting in minimal losses of Texas earnings for Consolidated.[32] While Consolidated provided testimony that Sprint's analysis underestimated the potential economic impact on Consolidated, the Commission was not persuaded that an undue economic burden was evidenced by Consolidated's claim that it could lose 30% of its revenue within five years of interconnection with Sprint.[33] Further, the Commission finds that Consolidated's prediction that it could suffer line loss of 20% after only two years following interconnection to be insufficient to show an undue economic burden.[34] While Consolidated provided, in an offer of proof, an economic analysis of the projected impact of Sprint's interconnection, the Commission finds this offer of proof insufficient to establish an undue economic burden.

D. Universal Service Goals of § 254

Under § 251(f), to obtain a waiver of an ILEC's rural exemption, the requesting telecommunications carrier must show that its interconnection request is consistent with

[31] Tr. at 290 (Schultz).

[32] *See* Rebuttal Testimony of Bridger Mitchell, Sprint Exh. 2B, Confidential Exhibits BMM 3-5.

[33] Trans. at 293 (Balhoff).

[34] *See id.* at 227-228 (Balhoff).

§ 254 of the Communications Act (except for subsections (b)(7) and (c)(1)(D)), governing universal service.[35] Section 254 lists six universal-service principles, as follows: (1) quality and rates, (2) access to advanced services, (3) access in rural and high-cost areas, (4) equitable and nondiscriminatory contributions, (5) specific and predictable support mechanisms, and (6) access to advanced telecommunications services for schools, health care, and libraries. Because Sprint is not seeking eligible telecommunications-carrier designation or federal universal-service support as part of this proceeding, the public-interest tests developed in *Virginia Cellular* and *Highland Cellular* do not apply.[36]

The Commission is persuaded by the evidence of record that granting Sprint's interconnection request will bring the first, or one of the first, competitive wireline voice-service offerings to the areas served by Consolidated. The advanced services resulting from Sprint's interconnection with Consolidated will foster competition and provide rural customers with services on par with services available to customers in urban areas. Accordingly, the Commission finds that Sprint's interconnection request is consistent with § 254 of the Communications Act.

E. Terms of Interconnection Agreement

Because Sprint and Consolidated have been unable to reach agreement as to the terms of interconnection, the Commission recommends that Dockets No. 31577[37] and 31578[38] be unabated to allow for arbitration of the terms of the parties' interconnection

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[35] 47 U.S.C. § 251(f)(1)(A).

[36] *In re Federal-State Joint Board on Universal Service, Virginia Cellular Petition for Designation as an Eligible Telecommunications Carrier in the Commonwealth of Virginia*, CC Docket 96-45, Memorandum Opinion and Order, FCC 04-37 (rel. Jan. 22, 2004) at 107; *In re Federal-State Joint Board on Universal Service, Highland Cellular Petition for Designation as an Eligible Telecommunications Carrier in the Commonwealth of Virginia*, CC Docket 96-45, Memorandum Opinion and Order, FCC 04-37 (rel. April 12, 2004) at 93 and 94.

[37] *Petition of Sprint Communications Company, L.P. for Compulsory Arbitration under the FTA to Establish Terms and Conditions for Interconnection Terms with Consolidated Communications of Fort Bend Company*, Docket No. 31577 (pending).

[38] *Petition of Sprint Communications Company, L.P. for Compulsory Arbitration under the FTA to Establish Terms and Conditions for Interconnection Terms with Consolidated Communications of Texas Company*, Docket No. 31578 (pending).

agreement. The Commission further recommends that the arbitrator assigned Dockets No. 31577 and 31578 set a procedural schedule for arbitration and implementation of the arbitrated interconnection agreement.

III. Findings of Fact

1. Section 251 of the Communications Act requires telecommunications carriers such as Sprint and Consolidated to interconnect for the purpose of exchanging telephone traffic originated by their customers.

2. Sprint is a competitive local exchange carrier (CLEC) that does not currently serve customers within Consolidated's service area.

3. CCTX and CCFB are incumbent local exchange carriers that currently serve customers within Conroe, Lufkin, Katy, and surrounding areas.

4. Sprint seeks, in this proceeding, an interconnection with Consolidated within Consolidated's exchange in order to provide wholesale services to entities that have "last mile" facilities suitable to function as residential loops.

5. By letter dated January 28, 2005, Sprint requested to negotiate interconnection with Consolidated, pursuant to §§ 251 and 252 of the Communications Act.

6. On September 1, 2005, Sprint filed petitions for compulsory arbitration with Consolidated pursuant to §§ 251 and 252 of the Communications Act.[39]

7. On March 31, 2006, Sprint filed its petition to terminate the rural exemptions provided by § 251(f)(1)(A) of the Communications Act as to CCFB and CCTX.

8. The Commission convened the hearing on the-merits in this docket on June 20, 2006.

9. While TWC, Brazos Telecommunications, Inc., Eastex Telephone Cooperative, Inc., and Guadalupe Valley Telephone Cooperative, Inc. filed amicus briefs in

[39] Dockets No. 31577 and 31578.

this docket, none of these parties sought intervention nor participated in the hearing on the merits.

10. By unanimous vote at the July 20, 2006 open meeting, the Commission ordered the termination of the rural exemption held by Consolidated under § 251(f) of the Communications Act.

A. Bona Fide Request

11. Sprint has shown a sincere and clear intent to interconnect with Consolidated.

12. Sprint will provide telephone exchange service via its interconnection with Consolidated.

13. Sprint will perform the following functions via its interconnection with Consolidated that constitute the provision of telephone exchange services: (a) all inter-carrier compensation, including exchange access and reciprocal compensation; (b) all number assignment and number-administration functions; (c) telephone-number porting, whether the port is from the ILEC or a CLEC to Sprint or vice versa; (d) direct end-user services such as operator services, directory assistance, and directory-assistance call completion; (e) provision of 911 circuits to the appropriate Public Safety Answering Points through the ILEC selective routers, as well as 911-database administration; (f) end-use customer directory listing in the Consolidated telephone directory; and (g) routing of calls between subscribers within the Commission-defined telephone exchange in which Consolidated operates using Sprint's own switch, transmission equipment, and other facilities.

14. Consolidated will receive traffic from Sprint in Time Division Multiplex (TDM) mode.

15. Sprint routing of voice-over-internet-protocol (VoIP) calls that originate with TWC or Sprint's other wholesale customers does not fail to constitute telephone exchange service or access service because once these calls are on Sprint's network and routed to Consolidated, these calls are not treated unlike, nor are distinguishable from, traffic Consolidated receives from other carriers.

16. Sprint offers and will offer its services to all entities who desire to take them and who have comparable "last mile" facilities suitable to function as residential loops.

17. Sprint makes its wholesale offering generally known through its website, through presentations at industry trade shows, and through public press releases.

18. Price variations among Sprint's interconnection agreements with its wholesale customers alone do not constitute a failure by Sprint to offer its services "indifferently."

19. The price variations under Sprint's interconnection agreements with its wholesale customers will be cost-based.

20. Sprint will allow its customers to transmit intelligence of their own design and choosing, without a change of form or content.

B. Technically Feasible

21. Consolidated's voluntarily negotiated and Commission-approved interconnection agreements with ETS, MCImetro, and Level 3 serve as substantial evidence that Sprint's request to Consolidated is technically feasible.

22. Consolidated did not dispute, either in prefiled testimony or at the hearing on the merits, that it is technically feasible to offer the services sought by Sprint.

C. Unduly Economically Burdensome

23. CCTX and CCFB both recorded record (highest) intrastate returns in 2005 of $21.5 million and $4.6 million, respectively.

24. CCTX and CCFB both recorded record intrastate rates of return in 2005 of 25.13% and 16.56%, respectively.

25. CCTX and CCFB both recorded record intrastate rates of return on equity in 2005 of 52.82% and 33.05%, respectively.

26. CCTX recorded interstate and intrastate revenues in 2005 of $100.5 million, which is second and only slightly behind its record revenue level in 2004 of $101.5 million.

27. CCFB recorded interstate and intrastate revenues in 2005 of $36.3 million, which is behind its record revenue level in 2004 of $41.1million.

28. Consolidated's current supra-competitive profits would enable the company to withstand the economic impact of interconnection with Sprint.

29. Consolidated would not suffer an undue economic burden resulting from line loss or consequent loss of earnings caused by interconnection with Sprint.

30. Phantom traffic is not likely to pose an undue economic burden on Consolidated.

31. In the event that termination of its rural exemption would ever jeopardize universal service in Consolidated's serving area, the Commission could authorize Additional Financial Assistance under P.U.C. SUBST. R. § 26.408, which would allow Consolidated the opportunity to recover its necessary and reasonable operating expenses, along with an opportunity to earn a reasonable rate of return on its capital investment.

D. Consistency with FTA § 254

32. Granting Sprint's interconnection request will bring the first, or one of the first, competitive wireline voice-service offerings to the areas served by Consolidated.

33. The advanced services resulting from Sprint's interconnection with Consolidated will foster competition and provide rural customers with services on par with services available to customers in urban areas.

34. Sprint does not seek universal-service funds as part of this proceeding.

IV. Conclusions of Law

1. Section 251(f) of the Communications Act exempts rural telephone companies such as CCFB and CCTX from the statutory requirement to negotiate agreements for interconnection unless the Commission has terminated their rural exemptions.

2. The Commission has jurisdiction over this proceeding pursuant to § 251(f) of the Communications Act and § 52.002 of the Public Utility Regulatory Act, TEX. UTIL. CODE ANN. §§ 11.001-66.017 (Vernon 1998 and Supp. 2005) (PURA).

3. Under § 251(f)(1)(A) of the Communications Act, a rural telephone company is exempt from the requirements to interconnect under § 251(c) until the rural company receives a bona fide request to interconnect.

4. Bona fide is defined as in good faith, sincere, or genuine. *American Heritage Dictionary of the English Language*, 3rd Edition (Houghton Mifflin 1992).

5. A bona fide request for interconnection, services, or network elements must be for the specific purpose prescribed by § 251(c).

6. Under § 251(c), an ILEC has the duty to provide interconnection of its network with the facilities and equipment of a telecommunications carrier for the transmission and routing of telephone exchange service and access service.

7. A request under § 251(c) will not be held invalid merely because the requesting telecommunications carrier seeks interconnection for the purpose of serving wholesale customers.

8. Sprint has made a bona fide request for interconnection under § 251(c).

9. Under § 251(c), the requesting telecommunications carrier must act as a common carrier with respect to its request.

10. To be a common-carrier service: (1) the service must be offered to "all potential users indifferently" and (2) the carrier must allow customers to transmit information of the customer's own design and choosing.

11. Sprint will be operating as a common carrier with respect to its interconnection with Consolidated.

12. An ILEC's existing interconnections are "substantial evidence" that a similar interconnection could be made to the ILEC at substantially similar points.

13. The focus of the technical-feasibility analysis under § 251(f)(1)(A) should be on "such request," thus it is not appropriate to evaluate the technical feasibility of an ILEC's meeting future interconnection requests.

14. Sprint's proposal to interconnect with Consolidated is technically feasible under § 251(f)(1)(A) of the Communications Act.

15. Sprint's request to interconnect with Consolidated would not be unduly economically burdensome to Consolidated under § 251(f)(1)(A).

16. Sprint's request for interconnection is consistent with universal-service goals identified in § 254 of the Communications Act.

V. Ordering Paragraphs

1. Sprint's request to terminate the rural exemption of Consolidated is granted.

2. Arbitration of the terms of interconnection between Sprint and Consolidated shall proceed in Dockets No. 31577 and 31578, pursuant to a procedural schedule to be set by the arbitrator.

3. All other motions, requests for specific findings of fact or conclusions of law, and any other requests for general or specific relief, if not expressly granted, are denied.

SIGNED AT AUSTIN, TEXAS the 14th day of August 2006.

PUBLIC UTILITY COMMISSION OF TEXAS

PAUL HUDSON, CHAIRMAN

JULIE PARSLEY, COMMISSIONER

BARRY T. SMITHERMAN, COMMISSIONER

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EXHIBIT 2

Exhibit 2

ICO	ACCESS LINES	COST	COST PER ACCESS LINE	COST PER ACCESS LINE PER MONTH OVER 5 YRS.
Ardmore	2,936	$ 20,000.00	$ 6.81	$ 0.11
Ben Lomand	36,004	$ 50,000.00	$ 1.39	$ 0.02
Bledsoe	12,392	$ 30,000.00	$ 2.42	$ 0.04
CenturyTel of Adamsville	8,482	$ 50,000.00	$ 5.89	$ 0.10
CenturyTel of Claiborne	9,810	$ 50,000.00	$ 5.10	$ 0.08
CenturyTel of Ooltewah	8,707	$ 50,000.00	$ 5.74	$ 0.10
Concord	24,603	$ 18,750.00	$ 0.76	$ 0.01
Crocket	4,134	$ 65,655.00	$ 15.88	$ 0.26
Dekalb	20,773	$ 30,000.00	$ 1.44	$ 0.02
Highland	18,645	$ 30,000.00	$ 1.61	$ 0.03
Humphreys County	2,011	$ 18,750.00	$ 9.32	$ 0.16
Loretto	6,031	$ 42,300.00	$ 7.01	$ 0.12
Millington	27,222	$ 39,500.00	$ 1.45	$ 0.02
North Central Tel. Coop.	16,555	$ 50,000.00	$ 3.02	$ 0.05
Peoples	5,194	$ 66,060.00	$ 12.72	$ 0.21
Tellico	9,809	$ 18,750.00	$ 1.91	$ 0.03
Tennessee Tel. Co.	68,379	$ 18,750.00	$ 0.27	$ 0.00
Twin Lakes	39,416	$ 80,000.00	$ 2.03	$ 0.03
United	16,477	$ 20,000.00	$ 1.21	$ 0.02
West Tennessee	4,701	$ 69,340.00	$ 14.75	$ 0.25
Yorkville	1,968	$ 30,000.00	$ 15.24	$ 0.25

EXHIBIT 3

EXHIBIT 3

AFFIDAVIT OF W. CRAIG CONWELL

STATE OF SOUTH CAROLINA

COUNTY OF GREENVILLE

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared W. Craig Conwell, who being by me first duly sworn deposed and said that:

I, W. Craig Conwell, being of lawful age and duly sworn upon my oath, do hereby depose and state as follows:

Introduction

1. I am an independent consultant specializing in telecommunications cost analysis. My business address is 405 Hammett Road, Greer, SC, 29650.

2. I have Bachelors and Master of Science degrees in Industrial Engineering from Auburn University in Auburn, AL. I have over 30 years of experience in the telecommunications industry, with a broad background in telecommunications cost analysis as an employee of the Bell System, with Arthur Andersen & Co. in its telecommunications consulting practice, and for the past ten years as an independent consultant. In recent years, I have been extensively involved in negotiations and arbitrations of reciprocal compensation rates between incumbent local exchange carriers (ILECs) and wireless carriers. I have analyzed numerous ILEC cost studies for compliance with the FCC rules for Total Element Long Run Incremental Costs (TELRIC), and I have testified as an expert cost witness on behalf of wireless carriers in

one or more arbitrations in six states, including Tennessee.[1] I also was involved on behalf of the AT&T (previously SBC) local exchange carriers in the arbitrations establishing rates for unbundled network elements and collocation. I have provided expert testimony on one or more occasions in 13 states. Over the years, I have developed cost models, performed cost studies, participated in the design of telecommunications cost accounting systems, and taught service cost courses for the United States Telephone Association and telephone company staffs.

3. I have prepared numerous estimates of the required effort to perform cost studies and other consulting projects. As a Director with Arthur Andersen & Co., I was responsible for preparing proposals for client engagements and managing teams of consultants. The proposals included estimates of the number of personnel required for projects and hours of consulting effort. The proposals became the basis for consulting contracts. As an independent consultant, I am frequently asked by clients to provide estimates of time and necessary effort prior to undertaking a project. The process of developing project estimates involves: defining client needs and project deliverables, identifying key assumptions, defining the major tasks, identifying resource requirements, defining workflow, and estimating work days.

Purpose and Summary of Affidavit

4. The purpose of my affidavit is to provide an estimate of the effort required to perform a *forward-looking economic cost study* of transport and termination by a small ILEC. In providing the estimate, I will describe the following:

- Cost study deliverables.
- Key assumptions affecting cost study tasks, resource requirements and work effort.
- Major cost study tasks.
- Resource requirements.

[1] Cause Nos. PUD 200200150 and PUD 200300771 in Oklahoma, Docket No. 03-00585 in Tennessee, Case Nos. IO-2005-0468 and TO-2006-0147 in Missouri, Case Nos. U-14678 and U-14889 in Michigan, A.06-02-028-038, 040 in California, and Docket Nos. TC06-036 – TC06-042 in South Dakota.

- Estimated total work days.

5. Based on the assumptions listed below, I have estimated that the activities required for each ILEC to complete a TELRIC study (using exclusively company-specific data) will total, on average, 11.75 days; in addition, 7.88 days of work will be required for activities shared among all ILECs performing cost studies. This represents the time of activities from initial study planning, through data gathering and cost analysis, to preparation of study documentation. There are numerous factors that will affect the total effort (productive days of work) to perform studies. I describe these factors below. ILECs planning to undertake cost studies and making estimates of internal and external resource requirements should take these and other factors into consideration to prepare company-specific estimates.

Estimate of Cost Study Effort

6. *Cost Study Deliverables*. The cost study is to provide for each ILEC the following:

- A summary of transport and termination costs. These costs are to comply with FCC Rules at 47 C.F.R. §§51.505 and 51.511. They are to represent the forward-looking economic costs to transport and terminate telecommunications traffic originated by wireless carriers – that is, mobile-to-land traffic.[2] The summary is to provide a breakdown of transport and termination costs in terms of end office switching, transport-fiber cable and transport-transmission equipment.
- An electronic, Excel-based model showing the calculation of transport and termination costs. An exhibit to the CMRS Providers' Brief contains a copy of an Excel model used to compute transport and termination cost benchmarks. The cost study is to produce a similar Excel workbook, modified to reflect the particular circumstances of the ILEC.

[2] See 47 C.F.R. 51.505 for the definition of "forward-looking economic cost."

- Supporting documentation consisting of a description of key assumptions, the analyses and work papers supporting input data used in the cost model, and relevant source documents.

7. *Key Assumptions*. In preparing the estimate of work effort to produce these deliverables, the following key assumptions are made:

- Cost study input data are company-specific, as necessary. However, in some cases, input data may not differ materially among companies. Examples include current plant costs, capital cost factors and economic lives. When the same or similar input data can be used by more than one company, the effort to develop these data is assumed to be shared among companies. For this estimate, ten ILECs are assumed to be producing cost studies, so the effort of preparing common input data is assumed to be shared among all ten companies.
- An individual with experience and proficiency in performing transport and termination cost studies and Total Element Long Run Incremental Cost (TELRIC) model development produces the study and manages the project.
- ILEC personnel are available to provide cost study assumptions and input data. This includes information on current and forward-looking network configuration, current costs to purchase and install network elements, current and projected total demand, financial reports, *etc*.
- ILEC records regarding current network configuration (network diagrams) are available.
- ILEC records of current network element capacities and utilization (total demand) are maintained. These records show current switch equipped line and trunk capacity and in-service quantities, cable route fiber capacity and utilization, and transport transmission equipment capacities and utilization (DS1 equivalents).
- ILEC personnel can obtain vendor quotes or produce estimates of probable costs to purchase and install transport and termination network elements.

These include switches, fiber cable and transport transmission equipment (add/drop multiplexers, fiber terminals, *etc.*) Consulting engineers may have models for estimating probable plant costs.

- Since the effort for some cost study tasks depend on the size and complexity of the ILEC, a typical small ILEC is assumed in estimating the days of effort required. An ILEC with five to six end offices, a single SONET ring and one to two meet points with the transit carrier is assumed. ILECs with fewer end offices, point-to-point circuits connecting to transit carriers, and perhaps no remotes have simpler interoffice networks, and the effort required to determine transport and termination costs is less for these companies.

8. *Major Cost Study Tasks*. Attachment A lists the necessary tasks for an ILEC to produce a transport and termination cost study. The tasks are grouped among six categories. These include: initial background information gathering, three categories for the calculation of switching, transport fiber and transport transmission equipment investments, the calculation of annual cost factors and costs per minute of use (MOU), and the final review and preparation of documentation. Tasks are identified as to whether they must be repeated for each ILEC (code = 'Y'), or whether the task is performed once for all ILECs (code = 'N').

9. *Resource Requirements*. The resources required to perform transport and termination cost studies are largely *labor*. Studies can be performed using personal computers, Excel software and common information sources, such as electronic accounting records, records of network element capacities and utilization, and others. Labor resource requirements are indicated for each task in terms of the number of days of productive effort required. The following tasks are assumed to be required for producing an ILEC study: (1) obtaining background information and source data, (2) providing forward-looking estimates of total demand and capacity requirements for network elements, (3) identifying currently available technologies, (4) efficiently sizing network elements, (5) obtaining current plant cost data, (6) plant investment calculation, (7)

annual cost factor development and calculation of costs per MOU, (8) performing final review and documentation preparation, and (9) study management. "Days of effort" are provided for each task. These represent the cumulative productive days of work necessary to complete the task. The work effort may occur over several days and in parallel with other tasks.

10. There are several factors that will affect the days of effort or activity times.

- Certain tasks for ILECs with few end offices (one or two) with direct point-to-point transport links to transit carriers are more straightforward, resulting in fewer days of effort and lower costs. For example, obtaining background information (tasks 2-7 on Attachment A) involves dealing with fewer network elements and less complexity. As result, the number of days required to gather this information may be less than 3.25 days included in the estimate.
- When transport and termination cost studies are to be produced for multiple ILECs, the activity times may decline as individuals become more proficient in the tasks. Since calculating annual cost factors requires the same methods and source data, this effort should become more routine, even though factors must be computed for each company.
- The average time per ILEC for activities shared by two or more ILECs (*e.g.*, preparing cost study work plan (task 1 on Attachment A), obtaining vendor quotes (task 9), *etc.*) varies with the number of ILECs. The estimate assumes ten ILECs are producing transport and termination cost studies, so $1/10^{th}$ of the activity times for shared activities is attributed to each ILEC.

Estimated Total Work Days. Activity times (in days) are summed and shown on rows 56 and 57 of Attachment A. The activities required for each ILEC total 11.75 days; in addition, 7.88 days of work are required for activities shared among all ILECs performing cost studies.

W. Craig Conwell

W. Craig Conwell

SWORN TO AND SUBSCRIBED BEFORE
ME THIS 2 DAY OF November, 2006.

My Commission Expires August 11, 2016

SCOTT M. PITTS
NOTARY PUBLIC
SOUTH CAROLINA
My Commission Expires August 11, 2016

Attachment A

	A	B	C	D	E	F	G	H
1	**Estimate to Produce Forward-Looking Economic Cost Study**							
2								
3	**Transport and Termination**							
4					Days of Effort			
5	Task Category	Task No.	Task	Task Repeated for Each ILEC?	ILEC Personnnel	Engineer	Cost Analyst	Total
6	Background information gathering	1	Prepare cost study work plan.	N	-	-	0.75	0.75
7		2	Obtain recent financial data - balance sheets, plant account balances, expenses.	Y	0.13	-	-	0.13
8		3	Obtain network diagram showing switches, cable routes, transit carrier meet points, transport systems.	Y	0.50	-	-	0.50
9		4	Obtain end office switching information - CLLI codes, host-remote clusters, capacities and in-service quantities.	Y	0.25	-	-	0.25
10		5	Obtain interoffice (IO) fiber cable information - cable routes, cable types and sizes, fibers in service by type of use and spare capacity.	Y	0.25	-	-	0.25
11		6	Obtain interoffice transport transmission equipment information - transport system type, system size, system routing, equipment capacities and in-service quantities (DS1 equivalents) at each network node.	Y	0.50	-	-	0.50
12		7	Obtain current traffic data - total switched and interoffice minutes of use (MOU) per line and interoffice MOU per switch trunk.	Y	0.50	-	-	0.50
13		8	Advise on information requirements. Review background material.	Y	-	-	0.38	0.38
14								
15			Subtotal		2.13	-	1.13	3.25
16								
17	Calculation of switching investment	9	Obtain detailed vendor quotes or develop probable current costs to purchase and install typical, new standalone/host and remote switches (two typical configurations). Cost details show components of switch costs, driver of component quantities (lines, trunk DS1s, etc.), unit prices and other costs of construction.	N	-	1.50	-	1.50
18		10	Determine usage-sensitive portion of end office switching investment based on analysis of switch component capacities and demand variables causing exhaustion of capacity.	N	-	1.00	0.50	1.50
19		11	For each end office, estimate forward-looking capacity requirements - equipped lines, host-remote trunks, IO trunks, *etc.*	Y	0.38	-	0.13	0.50
20		12	Estimate for standalone/host and remote switches typical switch building space requirements, land and building costs per sq. ft., power plant investment per central office and percentage of power plant investment attributable to switching.	N	-	0.75	-	0.75
21		13	Structure cost model and enter data to compute usage-sensitive investment per switch and overall usage-sensitive investment per line.	Y	-	-	0.38	0.38
22								
23	Calculation of transport fiber cable investment	14	Estimate IO fiber cable route mileage by cable type and size from network diagram.	Y	0.25	-	-	0.25
24		15	Obtain current fiber cable installation costs by cable type and size.	N	-	0.38	-	0.38
25		16	Estimate forward-looking total demand for interoffice fiber cable-miles for transport system(s), loop carrier system(s), leased fibers and other.	Y	0.75	-	0.13	0.88
26		17	Estimate forward-looking total demand in DS1 equivalents (switch trunks and dedicated circuits) for each ring and/or point-to-point circuit.	Y	0.75	0.50	0.13	1.38
27		18	Estimate forward-looking annual minutes of use per switch trunk (DS0).	Y	0.13	0.13	-	0.25
28		19	Structure cost model to compute transport fiber cable investment per DS1, per switch trunk (DS0) and per IO minute of use based on total IO fiber cable investment (per ring or point-to-point circuit), the portion of fiber-miles attributable to the IO transport system, and total DS1 equivalents per ring or point-to-point circuit.	N	-	-	0.75	0.75
29		20	Enter data to compute company-specific transport fiber cable investment per IO MOU.	Y	-	-	0.25	0.25
30								
69								

	A	B	C	D	E	F	G	H
1	**Estimate to Produce Forward-Looking Economic Cost Study**							
2								
3	**Transport and Termination**							
4					Days of Effort			
5	Task Category	Task No.	Task	Task Repeated for Each ILEC?	ILEC Personnnel	Engineer	Cost Analyst	Total
31	Calculation of transport transmission equipment investment	21	Estimate total demand for switched and dedicated DS1 circuits at each network node or wirecenter and for each IO transport system. Determine efficient transport system size (OC48, OC12, OC3 or smaller).	Y	-	0.50	-	0.50
32		22	Obtain vendor quotes or develop probable current costs to purchase and install typical transmission equipment at each network node for SONET rings and/or point-to-point circuits - add/drop multiplexer, optical distribution panel, pigtails, digital cross connect, *etc.*, as necessary.	N	-	0.50	-	0.50
33		23	Develop power plant loading factor.	Y	-	-	0.25	0.25
34		24	Structure cost model to compute (1) transport transmission equipment investment per network node, (2) investment per termination at DS1 and DS0, and (3) investment per IO minute of use based on average terminations (1, 3 or more) per mobile-to-land call.	N	-	-	0.75	0.75
35		25	Enter data to compute company-specific transport transmission equipment investment per IO MOU.	Y	-	-	0.25	0.25
36								
37	Calculation of annual cost factors and costs per MOU	26	Research/estimate forward-looking debt ratios, costs of debt and equity, effective income tax rate and economic lives.	N	-	-	0.75	0.75
38		27	Compute capital cost factors.	N	-	-	0.25	0.25
39		28	Calculate direct expense factors based on recent financials, adjusted as necessary to remove retail service costs (switching, transmission equipment, cable, network support assets and general support assets).	Y	0.13	-	0.50	0.63
40		29	Calculate support asset factors for plant non-specific expenses and the costs of network support and general support assets.	Y	0.13	-	0.50	0.63
41		30	Calculate common cost factor based on recent corporate operations expenses, adjusted to remove costs of activities attributable to retail services or other specific services.	Y	0.13	-	0.38	0.50
42		31	Enter cost factors in cost model to compute recurring annual costs and costs per MOU associated with switching, transport fiber cable and transpor transmission equipment.	Y	-	-	0.25	0.25
43								
44			Subtotal		2.63	5.25	6.13	14.00
45								
46	Final review & preparation of documentation	32	Review cost model and results for accuracy and reasonableness.	Y	0.38	0.25	0.38	1.00
47		33	Document key assumptions.	Y	-	-	0.25	0.25
48		34	Organize supporting workpapers and analyses.	Y	-	0.13	0.25	0.38
49		35	Copy and organize all source documents.	Y	0.50	-	0.13	0.63
50		36	Assemble documentation.	Y	-	-	0.13	0.13
51								
52			Subtotal		0.88	0.38	1.13	2.38
53								
54								
55			Total Work Effort					
56			Activities specific to individual ILECs		5.63	1.50	4.63	11.75
57			Activities shared among ILECs		-	4.13	3.75	7.88
58								
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EXHIBIT 4

EXHIBIT 4

Forward-Looking Economic Cost Methodology For Rural ILEC Transport and Termination of Mobile-to-Land Traffic

Background

Rules for establishing cost-based rates for compensation of incumbent local exchange carriers (ILECs) transport and termination of "telecommunications traffic" originating on the networks of wireless carriers and terminating on ILEC local networks ("mobile-to-land traffic") are specified by the FCC in 47 § CFR 51.705. These rules require that transport and termination rates not exceed *forward-looking economic costs* as defined in 47 CFR §§ 51.505 and 51.511. The rules are commonly referred to as the TELRIC (Total Element Long Run Incremental Costs) rules.[1] This paper provides a relatively simple and inexpensive methodology for computing transport and termination rates that can be applied by any rural LEC – without the need of an elaborate and expensive cost study.

The methodology requires the use of certain company-specific costs but also suggests the use of certain proxy factors developed by the FCC and others. The CMRS Providers will accept the following methodology as used by any rural LEC to compute transport and termination rates. The parties may, however, still have disputes about specific inputs used. Thus, where appropriate below, The CMRS Providers will suggest inputs that they believe are appropriate, and that the CMRS Providers will not object to if employed by a rural LEC.

At various points, the methodology indicates that the CMRS Providers will accept non-proxy costs if supported by "proper documentation." Such documentation would include, in the case of prices, current vendor price quotations. In the case of company-specific data, it would include network diagrams, company property records and the like.

Termination – End Office Switching Costs Per Minute of Use

Figure 1 attached hereto demonstrates a methodology for computing costs per minute of use of standalone/host switches and remote switches of different line sizes ranging from 700 lines to 3,000 lines, typical line sizes for rural ILEC switches.

The first entry is the fixed investment for switches. The CMRS Providers will accept current vendor quotations for switches comparable to those in use by the rural ILEC. The CMRS Providers will also accept FCC cost data (in 1999 dollars) from the 10th Report and Order in the USF proceedings. If the FCC switch cost data are used, the CMRS Providers believe that they should be updated to present value, assuming a 12 percent reduction in switch prices over the past six–seven years – based on data from the Turner Price Index.

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[1] The rate elements – transport and termination – are defined in 47 § CFR 51.701(c) and (d). For rural ILECs, transport most typically includes the costs of transport facilities from a meet point with a transit carrier where mobile-to-land traffic is received to the ILEC's end office switch serving the called party. Loop costs are specifically excluded from transport and termination rates. *First Report and Order,* ¶ 1057. Termination includes the usage-sensitive portion of end office switching. If a rural ILEC operates a stand-alone tandem that switches wireless traffic, the usage-sensitive portion of tandem switching costs are also included.

For switches serving less than 700 lines, current vendor price quotations should be used. Analysis of actual rural ILEC switch investments from the Rural Utility Service indicates that the FCC switch cost data overstate investments for switches with fewer than 700 lines.

The CMRS Providers will not agree that historical switch investment data may be used. The FCC's methodology is "forward-looking," which means that switch investment must be based on what a new switch would cost today, not what it cost in the past.

The administrative fill factor of 94% is taken from the FCC's 10th Report and Order.

Additional plant investment is included for land and buildings (200 sq. ft. for standalone/host switches and 100 sq. ft. for remote switches) based on typical rural ILEC switch footprints and floor space for "cageless" collocation arrangements. The CMRS Providers will also accept footprint estimates based upon current vendor information appropriately documented.

Building and land costs per square foot in Figure 1 are taken from the HAI Model, Release 5.0a, a publicly available cost model. The CMRS Providers will also accept current appraised values properly documented.

The CMRS Providers believe that capital costs for digital electronic switching should reflect a 10 year economic life and a 10 percent weighted average cost of capital. Expense factors are estimates developed by the CMRS Providers, which will accept other factors if properly documented and calculated. The common cost factor of 10.4% is the default input value of HAI 5.0a.

A key assumption or item of input is the usage-sensitive portion of switching costs. Based on recent FCC and State commission decisions, the CMRS Providers believes that little, if any, end office switching costs are sensitive to the volume of calling placed on the switches; rather, switch capacity exhaust and costs are driven by lines. The exception is the portion of end offices for interoffice trunk equipment, which is affected by interoffice traffic volume including mobile-to-land traffic.

Figure 1 uses factors ranging from three to ten percent, based on interoffice trunk investment and costs per line computed from HAI 5.0a default input values. Current vendor price quotations solely for trunk equipment do not appear to be available, but the CMRS Providers will consider alternative methods of approximating forward-looking trunk equipment investment, if properly documented.

The CMRS Providers will not accept the 70% usage-sensitive switching factor developed by the FCC for embedded cost studies. That factor is outdated, inconsistent with modern switching pricing practices and, in any event, applies only to switched access cost studies, which have no application to the development of forward-looking transport and termination rates.

Transport – Fiber Cable Costs Per Minute of Use

Figure 2 provides a methodology for computing the cost per minute for fiber cabling used for interoffice transport; *i.e.*, transport between the ILEC standalone/host switch and the meet point with the transit carrier, and transport among host and remote switches.

Costs for two cable sizes are computed – 12 fiber and 24 fiber cable. Cable is assumed to be buried, and installed costs per foot are from HAI 5.0a. The CMRS Providers will accept other

cable sizes, if properly documented. Costs per foot of other cable sizes may be taken from HAI 5.0a. Underground cable in conduits must be justified on the basis of terrain.

Since transport cable costs vary by cable route-mileage, costs are calculated for interoffice links of five, 20 and 40 route-miles to span typical interoffice distances. Distances from ILEC standalone/host switches to the transit carrier meet point typically are short (often five miles or less), whereas interoffice links may be longer and involve one or more links. The CMRS Providers will accept properly documented cable distances rounded up to 5, 20 or 40 route miles. Longer cable distances may be computed if appropriately documented.

Capital costs and network expenses are computed similarly to end office switching, with buried cable assumed to have a 25.9 year economic life (per HAI 5.0a) and using a 10 percent cost of capital. The CMRS Providers will accept rural ILEC cost studies using these assumptions. Other assumptions should be appropriately documented and justified.

An important factor in the determination of forward-looking economic costs of transport fiber cable is the extent of cable sharing – that is, the extent to which fibers in cables are used by both the transport system carrying mobile-to-land traffic and other "users." Rural ILECs frequently use portions of interoffice cable to connect loop concentrators to switches (part of loop costs and not transport and termination), to lease fibers to other carriers and for other purposes. FCC Rule 51.511 requires that total network element costs be attributed to total demand, or in this case total fibers in use. In the methodology shown in Figure 2, four fibers are attributed to the interoffice transport system and four fibers (in the 12 or 24 fiber cable) are attributed to other users (loop concentrators, other carriers, *etc.*). This is consistent with a recent decision by the Missouri Public Service Commission. (Missouri PSC Order in Case No. TO-2006-0147, 03/23/06.) The CMRS Providers will accept a 50%/50% sharing ratio in any rural ILEC cost study without the need of documentation. The CMRS Providers will accept other sharing ratios properly documented.

Another important factor is the utilization level of the interoffice transport system, or the number of DS0 equivalents of traffic over an interoffice link. The greater the utilization, the lower the cost per minute. The CMRS Providers' methodology computes costs at three utilization levels – low utilization of 3 DS1s of traffic, which equates to only four percent of an OC3 transport system's capacity, modest utilization of 1 DS3 (33% utilization) and higher utilization of 2 DS3s (the equivalent of 1,344 voice grade trunks or DS0 special access circuits). In addition, a voice trunk (DS0 equivalent) is assumed to carry 120,533 annual minutes of use per HAI 5.0a. This reflects 30 percent utilization of 75% of the maximum capacity of a trunk. The CMRS Providers will accept a rural ILEC cost study that utilizes one of these three levels – with appropriate documentation. The CMRS Providers will also accept other utilization levels properly documented. Likewise, the CMRS Providers will accept other DS0 equivalent annual minutes of use, if properly documented.

At the end of Figure 2, transport fiber cable costs are computed for two hypothetical scenarios. In the first, mobile-to-land traffic is assumed to travel five miles from the meet point to the ILEC's host switch, over a link with 33% utilization of the transport system's bandwidth. Then, the traffic travels 20 miles to a remote, over a link with only four percent utilization. This "high cost" scenario results in costs per minute ranging from $3/10^{th}$ to $4/10^{th}$ cent per minute.[2] Scenario

[2] Note that a substantial portion of mobile-to-land traffic may terminate at the host switch, because the host is likely to have a large proportion of the ILECs lines and traffic. In this case, the second link would not be required, and its costs would not be attributable to mobile-to-land traffic.

2 assumes two links of five and 20 miles, with utilization levels of 66 and 33 percent, respectively. This lower cost, more efficient scenario results in costs per minute ranging from $4/100^{th}$ to $5/100^{th}$ cent. Based on these scenarios, the CMRS Providers would expect transport fiber cable costs to fall in the range of $0.0004 to $0.0044 per minute. Transport cable costs above the upper end of the range likely would not reflect cable sharing or would reflect very low utilization levels of transport system bandwidth or minutes of use per trunk. Cost above the upper end would require proper documentation.

Transport – Termination Equipment Costs Per Minute of Use

Figure 3 presents a methodology for the calculation of termination equipment costs, assuming an OC3 interoffice transport system, the equivalent of 2016 DS0's. The CMRS Providers believe that an OC3 transport system will generally be sufficient for the forward-looking needs of rural ILECs. The CMRS Providers are willing to consider the need for larger transport systems, with proper documentation.

The factors used in this methodology are the same as for switching and cable costs. Termination equipment investments are from the HAI 5.0a model. The CMRS Providers are willing to consider other factors and investments properly documented.

At the end of Figure 3, termination equipment costs are computed for two scenarios. Each assumes that mobile-to-land traffic passes through three terminations – one at the host switch interfacing to the transit carrier, another at the host switch for host-remote transport and the third at the remote switch. Since a substantial portion of mobile-to-land traffic would be destined to subscribers served by the host switch (or standalone switches) only one termination would be required in many cases. The scenarios reflect two interoffice links to recognize those situations in which more than one host-remote link is traversed to reach the remote end office.

Based on these scenarios, the CMRS Providers would expect termination equipment costs to fall in the range of $0.0006 - $0.0040 per minute. Costs above the upper end would require proper documentation.

Other Transport and Termination Costs

In addition to end office switching and transport costs, ILEC costs may include tandem switching and ISUP signaling, or other costs, although unlikely. Rural ILECs typically do not provide tandem switching; therefore, this cost would not apply except in unusual circumstances. Tandem switching costs per minute tend to be very small. ISUP signaling costs are included in the HAI 5.0a cost model; these costs also should be relatively minor.

Transport and Termination Forward-Looking Economic Cost Benchmark **Figure 1**

End Office Switching

	Standalone / Host			Remote			
	700 Lines	1,500 Lines	3,000 Lines	700 Lines	1,000 Lines	1,500 Lines	Source
Switching							
Fixed investment (1999 dollars)	$ 486,700	$ 486,700	$ 486,700	$ 161,800	$ 161,800	$ 161,800	FCC 10th Report and Order, USF Proceedings, ¶298.
Lines in service	700	1,500	3,000	700	1,000	1,500	
Switch line administrative fill	94%	94%	94%	94%	94%	94%	FCC 10th Report and Order
Lines of capacity	745	1,596	3,191	745	1,064	1,596	
Per line investment (1999 dollars)	$ 87	$ 87	$ 87	$ 87	$ 87	$ 87	FCC 10th Report and Order
Total switch investment (1999 dollars)	$ 551,487	$ 625,530	$ 764,360	$ 226,587	$ 254,353	$ 300,630	
Switch cost decrease	12%	12%	12%	12%	12%	12%	CA Turner Price Index per "Supplemental Consolidated Direct and Rebuttal Tesimony," Talmage O. Cox, III, Tennessee Regulatory Authority, Docket 03-00585, 07/27/04.
Total switch investment (2006 dollars)	$ 485,309	$ 550,466	$ 672,636	$ 199,397	$ 223,831	$ 264,554	
Land & buildings							
Building square feet	200	200	200	100	100	100	4 bays / standalone host & 2 bays / remote X 50 sq. ft. / bay for cageless collocation space. Per Missouri PSC Arbitration Order in Case No. TO-2006-0147 (03/23/06).
Building investment / sq. ft.	$ 75	$ 85	$ 85	$ 75	$ 75	$ 85	"HAI Model Release 5.0a Inputs Portfolio," Sec. 4.2.5.
Building investment	$ 15,000	$ 17,000	$ 17,000	$ 7,500	$ 7,500	$ 8,500	
Land investment / sq. ft.	$ 5.00	$ 7.50	$ 7.50	$ 5.00	$ 5.00	$ 7.50	"HAI Model Release 5.0a Inputs Portfolio," Sec. 4.2.6.
Land investment	$ 2,000	$ 3,000	$ 3,000	$ 1,000	$ 1,000	$ 1,500	Land sq. ft. = 2 X building sq. ft. "HAI Model Release 5.0a Inputs Portfolio," Section 4.2.1.
Capital cost factors							
End office switching	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	10 year economic life, 10% weighted average cost of capital.
Buildings	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	46.9 year economic life. HAI 5.0a Inputs Portfolio, Sec. 5.2.
Land	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	
Network expense factors							
End office switching	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	
Buildings	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	
Land	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Capital costs & network expenses							
End office switching	$ 109,194	$ 123,855	$ 151,343	$ 44,864	$ 50,362	$ 59,525	
Buildings	$ 4,110	$ 4,658	$ 4,658	$ 2,055	$ 2,055	$ 2,329	
Land	$ 308	$ 462	$ 462	$ 154	$ 154	$ 231	
Total	$ 113,612	$ 128,975	$ 156,463	$ 47,073	$ 52,571	$ 62,085	
Support expense factor	12%	12%	12%	12%	12%	12%	
Total annual costs before common costs	$ 127,246	$ 144,452	$ 175,239	$ 52,722	$ 58,879	$ 69,535	
Common cost factor	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	"HAI Model Release 5.0a Inputs Portfolio," Sec. 5.5.2.
Total annual costs, including common	$ 140,480	$ 159,475	$ 193,464	$ 58,205	$ 65,003	$ 76,766	
Usage-sensitive portion of switching costs	3%	5%	8%	6%	8%	10%	Calculated as the percentage of switch interoffice trunk investment / total switch investment.
Usage-sensitive annual costs	$ 3,715	$ 7,967	$ 15,819	$ 3,746	$ 5,324	$ 7,980	
Usage-sensitive annual costs / line	$ 5.31	$ 5.31	$ 5.27	$ 5.35	$ 5.32	$ 5.32	
Annual switched minutes of use / line	12,000	12,000	12,000	12,000	12,000	12,000	"A Survey of Unbundled Network Element Prices in the United States," PSC of WV, 03/06, footnote 14.
End office switching cost / minute of use	$ 0.0004	$ 0.0004	$ 0.0004	$ 0.0004	$ 0.0004	$ 0.0004	
Interoffice trunk investment / line	$ 18.33	$ 18.33	$ 18.33	$ 18.33	$ 18.33	$ 18.33	HAI 5.0a $18.33 = $100 investment / trunk X 1.1 installation factor / 6 lines / trunk. Inputs Portfolio, Secs. 4.5.4, 4.1.8.
Total end office switching investment / line	$ 693.30	$ 366.98	$ 224.21	$ 284.85	$ 223.83	$ 176.37	
Usage-sensitive % of end office switching	3%	5%	8%	6%	8%	10%	

Notes:

1. The minimum line size for use with the FCC switch cost data is 700 lines. Analysis of actual rural ILEC switch investments from the Rural Utility Service indicate that the FCC switch cost data overstate investments for switches with fewer than 700 lines.

Transport and Termination Forward-Looking Economic Cost Benchmark **Figure 2**

Transport - Fiber Cable

	12 Fiber Cable			24 Fiber Cable			
Interoffice link route mileage:	5 miles	20 miles	40 miles	5 miles	20 miles	40 miles	Source
Interoffice link distance (route-feet)	26,400	105,600	211,200	26,400	105,600	211,200	
Buried cable cost / foot installed	$ 2.90	$ 2.90	$ 2.90	$ 3.50	$ 3.50	$ 3.50	"HAI Model Release 5.0a Inputs Portfolio," Sec. 4.4.13.
Interoffice buried cable investment	$ 76,560	$ 306,240	$ 612,480	$ 92,400	$ 369,600	$ 739,200	
Capital cost factor	13%	13%	13%	13%	13%	13%	25.9 year economic life per HAI 5.0a Inputs Portfolio, Sec. 5.2.
Network expense factor	3%	3%	3%	3%	3%	3%	
Capital costs & network expenses	$ 12,326	$ 49,305	$ 98,609	$ 14,876	$ 59,506	$ 119,011	
Support expense factor	12%	12%	12%	12%	12%	12%	
Total annual costs before common costs	$ 13,805	$ 55,221	$ 110,442	$ 16,662	$ 66,646	$ 133,293	
Common cost factor	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	"HAI Model Release 5.0a Inputs Portfolio," Sec. 5.5.2.
Total annual costs, including common	$ 15,241	$ 60,964	$ 121,928	$ 18,394	$ 73,577	$ 147,155	
Total demand - fibers							
Interoffice transport system	4	4	4	4	4	4	"HAI Model Release 5.0a Inputs Portfolio," Sec. 4.4.14.
Other uses (loop concentrators, leased fibers, etc.)	4	4	4	4	4	4	Based on 50%/50% sharing of interoffice cable costs. Missouri PSC Order Arbitration Order in Case No. TO-2006-0147 (03/23/06).
Total	8	8	8	8	8	8	
Annual costs / fiber in service	$ 1,905	$ 7,621	$ 15,241	$ 2,299	$ 9,197	$ 18,394	
Annual costs attributable to IO transport system	$ 7,621	$ 30,482	$ 60,964	$ 9,197	$ 36,789	$ 73,577	
Total demand on IO transport system link							
Nominal capacity - OC3 transport system - DS0 equivalents	2,016	2,016	2,016	2,016	2,016	2,016	3 DS3 / OC3 X 28 DS1 / DS3 X 24 DS0 / DS1
Alternative utilization levels - DS0 equivalents							
3 DS1 - 4% utilization	72	72	72	72	72	72	
1 DS3 - 33% utilization	672	672	672	672	672	672	
2 DS3 - 66% utilization	1,344	1,344	1,344	1,344	1,344	1,344	
Annual costs / DS0 equivalent							
4% utilization	$ 105.84	$ 423.36	$ 846.73	$ 127.74	$ 510.95	$ 1,021.91	
33% utilization	$ 11.34	$ 45.36	$ 90.72	$ 13.69	$ 54.75	$ 109.49	
66% utilization	$ 5.67	$ 22.68	$ 45.36	$ 6.84	$ 27.37	$ 54.75	
Annual minutes of use / trunk	120,533	120,533	120,533	120,533	120,533	120,533	HAI 5.0a defaul value based on 30% average utilization of the maximum capacity of a trunk. Maximum capacity is 75% of nominal capacity (36 BH CCS)
Transport - fiber cable cost / MOU-link							
4% utilization	$ 0.00088	$ 0.00351	$ 0.00702	$ 0.00106	$ 0.00424	$ 0.00848	
33% utilization	$ 0.00009	$ 0.00038	$ 0.00075	$ 0.00011	$ 0.00045	$ 0.00091	
66% utilization	$ 0.00005	$ 0.00019	$ 0.00038	$ 0.00006	$ 0.00023	$ 0.00045	
Transport - fiber cable cost / MOU							
Scenario 1							
Link 1 - 5 miles from host to meet point - 33% utilization	$ 0.00009			$ 0.00011			
Link 2 - 20 miles from host to remote - 4% utilization		$ 0.00351			$ 0.00424		
Total - Scenario 1			$ 0.00361			$ 0.00435	
Scenario 2							
Link 1 - 5 miles from host to meet point - 66% utilization	$ 0.00005			$ 0.00006			
Link 2 - 20 miles from host to remote - 33% utilization		$ 0.00038			$ 0.00045		
Total - Scenario 2			$ 0.00042			$ 0.00051	

Transport and Termination Forward-Looking Economic Cost Benchmark **Figure 3**

Transport - Termination Equipment

DS0 equivalents per node:	3 DS1 - 4% utiliation	1 DS3 - 33% utilization	2 DS3 - 66% utilization	Source
Termination equipment				
OC3 / DS1 terminal multipler	$ 20,500	$ 22,000	$ 24,000	"HAI Model Release 5.0a Inputs Portfolio," Sec. 4.4.1.
Optical distribution panel	$ 1,000	$ 1,000	$ 1,000	" , Sec. 4.4.4.
Pigtails	$ 1,440	$ 1,440	$ 1,440	" , Sec. 4.4.3.
Engineering & installation - terminal mux	$ 1,760	$ 1,760	$ 1,760	" , Sec. 4.4.5, 4.4.6.
Digital cross-connect / DS3	$ 30,000	$ 30,000	$ 60,000	" , Sec. 4.4.11.
Total	$ 54,700	$ 56,200	$ 88,200	
Power plant loading	9%	9%	9%	
Total termination equipment investment	$ 59,623	$ 61,258	$ 96,138	
Capital cost factor	16.5%	16.5%	16.5%	10 year economic life, 10% cost of capital
Network expense factor	6.0%	6.0%	6.0%	
Capital costs & network expenses	$ 13,415	$ 13,783	$ 21,631	
Support expense factor	12%	12%	12%	
Total annual costs before common costs	$ 15,025	$ 15,437	$ 24,227	
Common cost factor	10.4%	10.4%	10.4%	"HAI Model Release 5.0a Inputs Portfolio," Sec. 5.5.2.
Total annual costs, including common	$ 16,588	$ 17,042	$ 26,746	
Total demand - DS0 equivalents	72	672	1,344	
Annual costs / DS0 equivalent	$ 230.38	$ 25.36	$ 19.90	
Annual minutes of use / trunk	120,533	120,533	120,533	HAI 5.0a defaul value based on 30% average utilization of the maximum capacity of a trunk. Maximum capacity is 75% of nominal capacity (36 BH CCS)
Transport - termination equipment cost / MOU-termination	$ 0.0019	$ 0.0002	$ 0.0002	
Transport - termination equipment cost / MOU				
Scenario 1				
Host - two terminations - 33% utilization on meet point link & 4% utilization on HR link	$ 0.0019	$ 0.0002		
Remote - one termination - 4% utilization	$ 0.0019			
Total - Scenario 1			$ 0.0040	
Scenario 2				
Host - two terminations - 66% utilization on meet point link & 33% utilization on HR link		$ 0.0002	$ 0.0002	
Remote - one termination - 33% utilization		$ 0.0002		
Total - Scenario 2			$ 0.0006	

CERTIFICATE OF SERVICE

I hereby certify that on November 2, 2006, a true and correct copy of the foregoing has been served on the parties of record, via the method indicated:

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