CONFIDENTIAL TESTIMONY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE PETITION OF KENNEBEC TELEPHONE COMPANY, FOR ARBITRATION PURSUANT TO THE TELECOMMUNICATIONS ACT OF 1996 TO RESOLVE ISSUES RELATING TO AN INTERCONNECTION AGREEMENT WITH ALLTEL COMMUNICATIONS, INC.	Docket No. TC07-114

DIRECT TESTIMONY OF TIM EKLUND
ON BEHALF OF KENNEBEC TELEPHONE COMPANY

I. Introduction

A. Witness Background

Q. Please state your name, employer, and business address.

A. My name is Tim Eklund. I am employed with Consortia Consulting ("Consortia"). My business address is 9300 Underwood Avenue, Suite 310, Embassy Tower, Omaha, Nebraska, 68114.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of Kennebec Telephone Company, ("Kennebec"). Kennebec provides local telephone exchange service and exchange access services predominantly in the more rural parts of South Dakota.

Q. What is your current position?

A. I am the Director of Settlements and Financial Analysis at Consortia.

Q. What are your duties and responsibilities at Consortia?

A. I am responsible for consulting with clients regarding regulatory, financial and interconnection issues. I am also responsible for the development of economic models to facilitate competitive studies and exchange/business valuations. In addition, I manage Consortia's cost separations team which prepares interstate and state jurisdictional cost studies.

Q. What was your professional experience prior to your current position?

A. I have worked in the telecommunications industry for 25 years. Prior to my position with Consortia, I worked for Alltel (formerly known as Aliant Communications and Lincoln Telephone prior to merging with Alltel) in various accounting and finance capacities for both wireline and wireless properties.

Q. What is your educational background?

A. I have a Bachelor's Degree with an emphasis in accounting from Nebraska Wesleyan University.

B. Issues Addressed in Testimony

Q. Please describe the issues raised in this proceeding for which you will be providing testimony.

A. The areas for which I will be providing testimony fall under the first issue identified in the Petitions for Arbitration (the "Petition") identified as "Is the reciprocal compensation rate for IntraMTA Traffic proposed by each South Dakota Rural Telephone Company appropriate pursuant to the pricing standards of 47 U.S.C. §252(d)(2)?" I will also testify that in addition to complying with 47 U.S.C. §252(d)(2), Kennebec's reciprocal compensation rates comply with 47 C.F.R. § 51.505 and 47 C.F.R § 51.511 which are the Federal Communications Commission's ("FCC") attendant rules to 47 U.S.C. §252(d)(2), specifying the

basis on which incumbent local exchange carriers ("ILECs"), such as Kennebec, shall establish rates for transport and termination of telecommunications traffic. In addition, I will provide testimony regarding Issue 1 in Alltel's Response to the Petition for Arbitration.

II. The Reciprocal Compensation Rate for IntraMTA Traffic Proposed by Kennebec is Appropriate Pursuant to the Pricing Standards of 47 U.S.C. §252(d)(2).

Q. Are the proposed transport and termination rates for Kennebec that are described in your testimony compliant with the requirements of 47 U.S.C. § 252(d)(2)?

A. Yes. The transport and termination rates established for Kennebec that I am presenting are based on forward-looking economic costs and are consistent with applicable federal laws and FCC regulations.

Q. Kennebec is proposing a rate for transport and termination. What are the FCC's definitions of the terms "Transport", "Termination" and "Reciprocal Compensation"?

A. The FCC's definition of the terms "Transport" and "Termination" are found in 47 C.F.R. § 51.701. Such terms are defined as follows:

> Transport. For the purposes of this subpart, transport is the transmission and any necessary tandem switching of telecommunications traffic subject to section 251(b)(5) of the Act from the interconnection point between the two carriers to the terminating carrier's end office switch that directly serves the called party, or equivalent facility provided by a carrier other than an incumbent LEC.
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> Termination. For purposes of this subpart, termination is the switching of telecommunications traffic at the terminating carrier's end office switch, or equivalent facility, and delivery of such traffic to the called party's premises.
>
> Reciprocal compensation. For purposes of this subpart, a reciprocal compensation arrangement between two carriers is one in which each of the two carriers receives compensation from the other for the transport and termination on each carrier's network.

Q. Please identify the section of the FCC's rules that establishes how an ILEC's rates for transport and termination are to be determined?

A. 47 C.F.R. § 51.705(a)(1) establishes that such rates are to be determined based on the forward-looking economic costs of such offerings, using a cost study pursuant to 47 C.F.R. §51.505 and §51.511.

Q Has Kennebec established a rate for transport and termination consistent with 47 C.F.R. §51.705(a)(1)?

A. Yes. Kennebec determined its rates for transport and termination on the basis of 47 C.F.R. §51.705(a)(1) in accordance with a forward-looking economic cost study prepared pursuant to 47 C.F.R. §51.505 and §51.511. I will discuss in detail later in my testimony the results of this cost study.

Q. The pricing standards for transport and termination are set forth in Section 252(d)(2) of the Act. Please explain when Section 252(d)(2) is applied and what sections of the FCC's rules implemented Section 252(d)(2) of the Act?

A. Section 252 of the Act is entitled "Procedures for Negotiations, Arbitration, and Approval of Agreements." Section 252 of the Act established the procedure for agreements arrived at through voluntary negotiations, as well as the procedures for agreements arrived at through arbitration. Section 252(c) establishes the standards for arbitration, and Section 252(d) includes the pricing standards that a state commission must consider in determining whether the charges for transport and termination are just and reasonable. 47 C.F.R. §§ 51.505 and 51.511 are the FCC's rules that implement the pricing standards set forth in the Act for transport and termination.

Q. When an incumbent uses a forward-looking economic cost study to determine its rates for transport and termination, which FCC rules are required to be followed?

A. Rules 47 C.F.R. §§ 51.505 and 51.511 are referenced in 47 C.F.R. § 51.705, entitled "Incumbent LECs' rates for transport and termination." According to 51.705(a)(1), an ILEC's forward-looking economic cost for transport and termination shall be developed using a cost study pursuant to §§ 51.505 and 51.511.

§ 51.505 describes the standard to be used to develop forward-looking economic cost. The text of § 51.505 is shown below.

§ 51.505 Forward-looking economic cost ("FLEC").

(a) *In general*. The forward-looking economic cost of an element equals the sum of:

(1) the total element long-run incremental cost of an element, as described in paragraph (b); and
(2) a reasonable allocation of forward-looking common costs, as described in paragraph (c).

(b) *Total element long-run incremental cost.* The total element long-run incremental cost of an element is the forward-looking cost over the long run of the total quantity of the facilities and functions that are directly attributable to, or reasonably identifiable as incremental to, such element, calculated taking as a given the incumbent LEC's provision of other elements.

(1) Efficient network configuration. The total element long-run incremental cost of an element should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers.
(2) Forward-looking cost of capital. The forward-looking cost of capital shall be used in calculating the total element long-run incremental cost of an element.
(3) Depreciation rates. The depreciation rates used in calculating forward-looking economic costs of elements shall be economic depreciation rates.

(c) *Reasonable allocation of forward-looking common cost.*

(1) Forward-looking common costs. Forward-looking common costs are economic costs efficiently incurred in providing a group of elements or services (which may include all elements or services provided by the incumbent LEC) that cannot be attributed directly to individual elements or services.

(2) Reasonable allocation.

(i) The sum of a reasonable allocation of forward-looking common costs and the total element long-run incremental cost of an element shall not exceed the stand-alone costs associated with the element. In this context, stand-alone costs are the total forward-looking costs, including corporate costs that would be incurred to produce a given element if that element were provided by an efficient firm that produced nothing but the given element.

(ii) The sum of the allocation of forward-looking common costs for all elements and services shall equal the total forward-looking common costs, exclusive of retail costs, attributable to operating the incumbent LEC's total network, so as to provide all the elements and services offered.

(d) *Factors that may not be considered.* The following factors shall not be considered in a calculation of the forward-looking economic cost of an element:

(1) Embedded costs. Embedded costs are the costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC's books of accounts.

(2) Retail costs. Retail costs include the costs of marketing, billing, collection, and other costs associated with offering retail telecommunications services to subscribers who are not telecommunications carriers, described in § 51.609 of this part.

(3) Opportunity costs. Opportunity costs include the revenues that the incumbent LEC would have received for the sale of telecommunications services, in the absence of competition from telecommunications carriers that purchase elements.

(4) Revenues to subsidize other services. Revenues to subsidize other services include revenues associated with elements or telecommunications service offerings other than the element for which the rate is being established.

Q. Describe the FLEC standard set forth in § 51.505(a).

A. The forward-looking economic cost ("FLEC") is equal to the total element long-run incremental cost plus a reasonable allocation of forward-looking common cost.

Q. Describe the TELRIC standard in § 51.505(b).

A. According to § 51.505(b), there are three properties of total element long-run incremental cost ("TELRIC"). These three properties are an efficient network configuration (given the existing location of the ILEC's wire centers), forward-looking cost of capital, and economic depreciation rates.

Q. Describe the efficient network configuration standard in § 51.505(b)(1).

A. The efficient network configuration standard has two components. First, it requires that the network configuration be based on the most efficient technology currently available. Second, it requires that the lowest cost network configuration be used given the existing location of the ILEC's wire centers.

The FLEC study filed on behalf of Kennebec is based on current switch technology at its existing wire centers. In developing transport and termination costs for reciprocal compensation purposes, existing wire centers reduce the complexity of network design. The costs associated with interoffice transport were based on current technology used by Kennebec.

Q. Describe the forward-looking cost of capital standard in § 51.505(b)(2).

A. The FCC has defined the forward-looking cost of capital as the cost of obtaining debt and equity financing. The FCC determined to utilize the authorized federal 11.25 percent rate of return to determine forward-looking costs. According to the

FCC, states may adjust the cost of capital if a party demonstrates to a state commission that either a higher or lower cost of capital is warranted.[1]

Q. Describe the economic depreciation rates standard found in § 51.505(b)(3).

A. This standard is the forward-looking economic life or the expected life of a new investment placed today. The depreciation rates for Kennebec's asset classes were adjusted as necessary to comply with this standard.

Q. You have described the necessary standards employed in the development of TELRIC, one component of FLEC. Please describe the standards required when developing the second component of FLEC, which is the reasonable allocation of forward-looking common costs.

A. The FCC rules outline the reasonable allocation of forward-looking common costs in § 51.505(c). This allocation would include both shared and common costs which the FCC combines together as common costs. Shared costs are those costs that are shared by a subset of network elements or services. Common costs are shared by all elements or services of the ILEC. Common costs cannot be attributed directly to individual elements or services. Consistent with the FCC rules, common costs such as corporate costs may be included, whereas retail costs are excluded.

The FLEC study prepared for Kennebec developed common costs based on relationships determined from the current account balances from the accounting books of Kennebec. The ratios developed were then applied to the forward-looking costs for transport and termination.

[1] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98 and *Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket No. 95-185, First Report and Order, FCC 96-325 (rel. Aug. 8, 1996) (*"Local Competition Order"*) at para. 702.

Q What are the types of costs that are to be excluded in the development of FLEC?

A. The FLEC standard excludes specific costs that are not to be considered as outlined in § 51.505(d). Such costs include:

(1) Embedded or past costs incurred by the company;

(2) Retail costs including marketing and billing of retail services;

(3) Opportunity cost such as revenues that a company may have received absent competition; and

(4) Revenues to subsidize other services.

The FLEC study submitted on behalf of Kennebec does not include any of these items and the study fully complies with this standard.

Q. Once the forward-looking economic cost has been developed, which FCC rule defines how forward-looking economic cost per unit is to be developed?

A. Rules 47 C.F.R. §§ 51.505 and 51.511 are referenced in 47 C.F.R. § 51.705. After the forward-looking economic cost has been developed in accordance with § 51.505, the per unit costs are to be developed in accordance with § 51.511. § 51.511 reads as follows:

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

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

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

The units used to develop transport and termination rates were a projection of the total switch minutes for termination and the total transmission minutes for transport.

Q. On the basis of the definition of "transport" and "termination" in § 51.701, were other sections of the FCC rules referred to in determining the manner in which the per-unit cost should be calculated?

A. Yes. § 51.509 identifies the rate standards for specific elements. Based on the definitions of transport and termination in § 51.701, the per unit cost for local switching can be developed as set forth in § 51.509(b), and the per unit cost of shared transmission facilities can be developed as set forth in § 51.509(d). Such sub-sections of § 51.509 read as follows:

(b) Local Switching. Local switching costs shall be recovered through a combination of a flat-rated charge for line ports and one or more flat rated or per-minute usage charges for the switching matrix and line ports.

(d) Shared transmission facilities between tandem switches and end offices. The cost of shared transmission facilities between tandem switches and end offices may be recovered through usage-sensitive charges, or in a another manner consistent with the manner that the incumbent LEC incurs those costs.

The transport and termination rates presented in the FLEC study performed for Kennebec are usage sensitive charges consistent with § 51.509(b) and § 51.509(d).

Q. Explain how the model you used is consistent with the FCC FLEC standards.

A. The model presented here on behalf of Kennebec meets the requirements outlined in § 51.505 and § 51.511 of the FCC rules as follows:

1) **Total element long run incremental costs.**

Transport and termination costs include the costs of traffic sensitive switching and interoffice transport facilities. The model uses estimates of switching and transport facilities based on forward-looking network design. These costs are forward-looking and meet the standard for long run incremental costs.

2) **Efficient Network Configuration.**

Vantage Point Solutions ("Vantage Point"), a telecommunications engineering and consulting company, provided switching estimates, based on recent switch acquisitions. The switch estimates were derived using the location of existing wire centers, current subscribers, and engineering trunking guidelines. The switching cost estimate was designed to be the most efficient configuration given existing wire centers. Those costs were adjusted in the model to remove the non-traffic sensitive cost component.

Transport facility electronic costs included the use of OC192 equipment. Prices were obtained from transport estimates based on recent equipment acquisitions. The number of OC192 terminals required was based on the forward-looking network design.

Fiber cable cost per mile associated with interoffice transport was provided by Vantage Point. Total costs were developed using the forward-looking network design. This design includes miles of plant required for

EAS, Toll, and CMRS traffic. The miles included for Toll and CMRS traffic reflect the most efficient routing as determined by the forward-looking network design.

3) **Forward looking capital costs.**

The FLEC model uses the FCC's authorized rate-of-return of 11.25 percent as the forward looking capital cost.

4) **Depreciation Rates.**

The FLEC studies used depreciation rates that were based upon the economic life of each asset class.

5) **Reasonable allocation of forward-looking common costs.**

As explained previously, the approach taken to include common costs (both shared and common) is based on ratios determined from the current account balances of Kennebec. Ratios of various shared and common capital and expense amounts to total direct capital costs were calculated. These ratios were then applied to the forward-looking direct capital costs to derive a forward-looking common cost amount. This is the most widely used methodology in the industry and I believe it provides a reasonable allocation of forward-looking common costs as outlined in § 51.505(c) of the FCC rules.

6) **Forward-looking economic cost per unit. (§ 51.511)**

The forward-looking economic cost per unit of an element equals the total cost of the element divided by a reasonable projection of the total demand for that element. The FLEC model utilized the most currently available

demand levels to produce transport and termination costs on a per unit basis.

Q. Based upon the study that was prepared, what are the rates that you propose for transport and termination for each of the South Dakota Rural Telephone Companies?

A. The FLEC studies result in the following transport and termination rates per minute of use for Kennebec:

Switching Termination	$0.0251
Transport	$0.0266
Total	$0.0517

Q. Please explain how these rates were developed?

A. **Switching Termination**

1. The total forward-looking switch investment was obtained from Vantage Point. The switch investment for Kennebec was established by Vantage Point and was compared to a recent switch invoices purchased by rural LECs of various sizes to verify its reasonableness. The switch investment amount for Kennebec was based on the location of existing wire centers, current subscribers, and engineering trunking guidelines.

2. The total forward-looking switching costs also include:

   - Power, land and building investment amounts which are based on account relationships in Kennebec's current financial statements.
   - Common investment amounts which include motor vehicles, work equipment, furniture, office equipment and general purpose computers. Using Kennebec's current financial statements, a ratio of common investment to direct investment was calculated. This

ratio was then applied to the projected direct investment amounts to calculate the common investment amounts.

- Annual charges were calculated as an annuity based on the prescribed life of each asset account, a rate of return of 11.25 percent, and income tax rates. The study uses a federal tax rate of 34 percent for Kennebec.

3. Adjustments eliminating switching termination investment:

- 20 percent of the total forward-looking switch investment was excluded for the non-traffic sensitive line portion.
- 5 percent of the switch matrix and processor was excluded for their use in the provision of vertical services.

4. The summation of items 1 and 2 less 3 results in the annual net FLEC investment switching or termination cost for Kennebec.

5. In calculating expenses, the direct expenses are first calculated. The direct expenses include the labor costs associated with maintenance and repair of plant and equipment. These amounts were calculated by applying a ratio, based on account relationships in Kennebec's current financial statements, to the total forward-looking switch investment amounts.

6. The common expenses were then calculated. The common expenses include support expenses, marketing expenses split between wholesale and retail, customer services expenses split between wholesale and retail and corporate expense. Common expenses were calculated by applying the relationship of common expenses to direct expenses, based on account

relationships in Kennebec's current financial statements to the total forward-looking switch investment amounts.

Transport

1. The total forward-looking transport investment was based on a forward-looking network design.

2. The total forward-looking transport investment also includes:

   - Power, land and building investment which are based on account relationships in Kennebec's current financial statements for transmission only.
   - Common investment amounts, which include motor vehicles, work equipment, furniture, office equipment and general purpose computers. Using Kennebec's current financial statements, a ratio of common investment to direct investment was calculated. This ratio was then applied to the projected direct investment amounts to calculate the common investment amounts.
   - Annual charges were calculated as an annuity based on the prescribed life of each asset account, a rate of return of 11.25 percent and income tax rates. The study uses a federal tax rate of 34 percent for Kennebec.

3. The following adjustments to transport investment were made:

   - A portion of total forward-looking transport investment was eliminated for facilities not used in inter-office transport.

- Special transport for inter-office electronics and inter-office plant was eliminated.

4. The summation of items 1 and 2 less 3 results in the annual net FLEC investment transport cost.

5. In calculating expenses, the direct expenses are first calculated. The direct expenses include the labor costs associated with maintenance and repair of plant and equipment. These costs were calculated by applying a ratio, based on account relationships in Kennebec's current financial statements, to the total forward-looking transport amounts.

6. The common expenses were then calculated. The common expenses include support expenses, marketing expenses split between wholesale and retail, customer services expenses split between wholesale and retail and corporate expense. These expenses were calculated by applying the relationship of common expenses to direct expenses, based on account relationships in Kennebec's current financial statements to the total forward-looking transport amounts.

Demand

1. The total demand or minutes of use (MOUs), obtained from the most recent traffic studies performed for Kennebec, were used to determine the switching termination rate.

2. Local and dial-up internet MOUs were eliminated from total demand in determining the transport rate.

3. The result of item 1 less item 2 is the net FLEC demand.

Q. Do you believe that you have developed FLEC rates for Kennebec that comply with the FCC Rules?

A. Yes, I believe the cost study described in my testimony meets all of the FCC requirements for a FLEC study of transport and termination costs. I recommend that the rate levels provided in my testimony that are based on this FLEC study be approved.

Q. In its Response to the Petition for Arbitration of Kennebec, Alltel refers to cost information presented in an arbitration involving Kennebec in 2003. Was there an arbitration hearing between Kennebec and other rural telephone companies in South Dakota and Alltel (then WWC) in 2003?

A. No, there was not.

Q. Since there was not an arbitration hearing between Kennebec and Alltel in 2003, was Alltel's estimate of Kennebec's transport and termination cost reviewed by the South Dakota Public Utilities Commission ("SDPUC")?

A. No, it was not.

Q. Given that Alltel's estimate of Kennebec's transport and termination cost was not reviewed by the SDPUC in 2003, is such information relevant to determining whether Kennebec's proposed transport and termination rates are appropriate pursuant to the pricing standards of 47 U.S.C. §252(d)(2)?

A. No, it is not.

Q. Does this conclude your direct testimony?

A. Yes it does.