#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE PETITION OF MCCOOK COOPERATIVE TELEPHONE COMPANY, KENNEBEC TELEPHONE COMPANY, SANTEL COMMUNICATIONS COOPERATIVE, WEST COOPERATIVE RIVER TELEPHONE COMPANY, (COLLECTIVELY THE "RLECS") FOR ARBITRATION PURSUANT TO THE TELECOMMUNICATIONS ACT OF 1996 TO RESOLVE ISSUES RELATING TO **INTERCONNECTION** AN AGREEMENT WITH ALLTEL COMMUNICATIONS, INC.

Docket No.

TC07-112
TC07-114
TC07-115
TC07-116

#### TESTIMONY OF TIM EKLUND ON BEHALF OF THE SOUTH DAKOTA RLECS IN RESPONSE TO THECOMMISSIONS DECISION ON JANUARY 29, 2009

#### 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. Did you submit pre-filed direct testimony and rebuttal testimony in this proceeding?

- A. Yes.
- Q. Did you testify on behalf of the Rural LECs in this proceeding?
- A. Yes.

#### Q. What is the purpose of your testimony?

- A. On January 29, 2009, the Commission discussed and ruled on the remaining pending issues before them in Dockets TC07-112 through TC07-116. The pending issues to be resolved were the following:
  - 1. The Reciprocal Compensation Rate
  - 2. The InterMTA Factor/Rate
  - 3. The Factor Billing/Traffic Factor
  - 4. The MTA Definition
  - 5. The Points of Interconnection for Direct Connections

Regarding the first issue, the Reciprocal Compensation Rate, the Commission directed the companies that had not arrived at a negotiated reciprocal compensation rate with Alltel, to rerun each of their FLEC studies to account for the following changes: 1. Recalculate the Transport Rate in order to redistribute cost between special/dedicated circuits and switched circuits using the "Rate-Equivalent" method instead of the Path method as advocated by the Rural LECs or the DS1/Bandwidth method as associated by Alltel;

Remove from the cost of switching, those cost associated with a) Centrex, b) CALEA, and c) the web self-care system/license and to recalculate the switching cost per minute with these three switching items removed from the total switch investment cost;
Update the forecasted demand for transport and recalculate the transport rate per minute using the updated transport demand.

#### Q. Which Rural LECs did the updated FLEC studies affect?

A. As Alliance and Beresford had negotiated and settled its reciprocal compensation rate with Alltel, the companies affected by the Commission's directive are: McCook, Kennebec, Santel, and West River. Each of these four RLECs' FLEC studies were rerun to comply with the Commission's directive.

# Q. Will you please list the methods that have been advocated to allocate transport costs between switch and special circuits?

A. Yes. As I described in my rebuttal testimony and at the arbitration hearing in this proceeding, transport costs need to be allocated between switched services and special services. Once an allocation percentage is developed, switched transport cost is then divided by switched minutes that use transport to provide a cost of transport per minute of use. The special services portion of the transport costs are eliminated from the cost calculation.

The RLECs and Alltel agree that there must be an allocation made for special services circuits in the FLEC Study's allocation of transport cost. However, the parties disagree

with regard to the appropriate allocation methodology. The FLEC study used during the arbitration proceeding counted special services circuits based on a circuit count. The RLECs described this method as the Path method. Alltel claimed that a DS-1 or Bandwidth method should be used. The FCC requires only that an allocation be reasonable, but does not direct an exact method of allocation. Based upon the disproportionate allocation of costs to special services caused by the use of the DS-1/Bandwidth method, the RLECs submit that the use of such method is not reasonable. In fact, as I discussed in my rebuttal testimony filed in each of the four dockets, if Alltel's method was used (allocating 24 times more cost for a DS-1 than a DS-0 and 672 times more cost for a DS-3 than a DS-0), it would result in prices for DS-1 services and DS-3 services that would be so high, there would be little or no demand for such services. In such a case, all circuit cost in the FLEC study would be allocated to transport and no cost allocated to special access. This would have the effect of driving up the cost for transport which is part of the reciprocal compensation rate, the exact opposite effect that Alltel is trying to achieve by introducing the bandwidth method.

## Q. Did you describe a third method in your testimony that could be used to allocate transport costs?

A. Yes. Although I maintain the path method used by Consortia in the RLECs' FLEC studies is reasonable and appropriately allocates underlying costs, there is another method which I referred to as the Rate Equivalency method. As I stated in my rebuttal testimony, although I believe the path method produces reasonable results, I have been mindful of the fact that, in the case decided by the United States Court of Appeals for the Eighth Circuit, the Rate Equivalency method was used as the method to allocate transport cost between switched and special circuits. In utilizing the Rate Equivalency method, costs

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are allocated based on the ratio of rates for the various services provisioned on the RLECs' cable routes.

- Q. Will you please explain the rationale for using the Rate Equivalency method for allocating transport costs between switched and special circuits?
- A. Yes. The Rate Equivalency method allocates the circuit cost between switched service and special service based upon the relative price of circuits of different bandwidths. For example, in the allocation that was used as a result of the Commission's directive to rerun the FLEC study, the Rural LECs used for their weighting, the ratio of the price of a DS1 circuit to the price of a DS0 circuit. The prices used were from the Qwest SGAT filing in the State of South Dakota. These rates were used since the SGAT rates are wholesale rates that were developed pursuant to Section 252 of the Act and approved by the Commission. Given the rates were established pursuant to Section 252, the relative rates for a DS1 versus a DS0 is therefore a function of the cost to provide each of the services. It is reasonable to weight a DS1 circuit relative to a DS0 circuit on the basis of these SGAT rates as previously approved by the Commission in the Qwest SGAT

# Q. Will you please explain how you developed the Rate Equivalency factor for each of the companies?

A. Yes. The Qwest SGAT rates for DS3, DS1 and DS0 have both a fixed cost per circuit component and a variable, per mile cost per circuit component as indicated in Table 1 attached to this testimony.

Therefore, in order to determine the price for a DS3 circuit, the price for a DS1 circuit and the price for a DS0 circuit, the average length per special access circuit must be calculated. For this calculation, the Rural LECs analyzed their entries into NECA 4 (The purpose of NECA is described in **Table 14** attached to this testimony). NECA 4 records the airline mileage of various special access circuits on each of the Rural LEC's network. The average length of the NECA 4 entries was calculated for each RLEC and this length was used as the surrogate for the average length of special circuits.

The average special access circuit length by company is shown in **Table 2** attached to this testimony.

This average circuit length was multiplied by the DS3, DS1 and DS0 special access rates per mile to determine the variable component cost per circuit. The fixed cost per circuit was then added to the variable cost component to derive the total cost per DS3 circuit, the total cost per DS1 circuit and the total cost per DS0 circuit. The total cost per DS3 circuit and the total cost per DS1 circuit were then both divided by the total cost per DS0 circuit to determine the ultimate weighting (the **Rate Equivalency**) per DS3 and DS1 circuit (**Table 3**). The DS3 and DS1 special access circuits were then multiplied by its weight to determine the relative allocation between switched and special services in the FLEC study (**Table 4**)

## Q. Has the Commission requested that Consortia re-run the FLEC studies to allocate transport cost based upon the Rate Equivalency method?

A. Yes. On January 29, 2009, the Commission directed the RLECs to rerun its FLEC study and to allocate transport costs on the basis of the Rate Equivalency method.

# Q. What is the difference in the transport rate caused by re-running the FLEC study using the Rate Equivalency method?

- A. **Table 5** compares the difference for the transport rate using the path method versus the transport rate using the Rate Equivalent method.
- Q. The Commission also requested each of the Rural LECs to re-run its FLEC study and remove the investment costs associated with Centrex, CALEA, and Web-self

#### help system from its total switching investment amount. What dollar amount was removed from the switching investment and what is the result on the switching cost per minute as a result of this change?

- A. **Table 6** shows the switching investment before and after the change and the switching rate per minute of use before and after the change.
- Q. The Commission directed each of the Rural LECs to file a new projection of forward looking transport demand. Please explain how the Rural LECs updated their projected transport demand?
- Kennebec, McCook, and West River analyzed transport demand data (transport circuits A. and transport minutes) that was available from the year 2006 through the year 2008. Santel analyzed circuit demand that was available from the year 2006 through the year 2008 and transport minutes for 2004 through the year 2005. Since Santel did not have transport demand data available after the year 2005, I analyzed transport minute growth and decline rates (where rate is defined as the percentage change from year to year) from the other RLECs to assist projecting transport minute demand for Santel. Based upon the trends of circuits and minutes during those years, the RLECs projected forward looking demand for transport circuits and transport minutes. In some cases, the forecast was based on the growth rate during past years. In cases where it was judged that the growth rate would not be sustainable, the projected demand was adjusted to result in a more sustainable and reasonable projection. The projection based on the rate of growth is shown in the column labeled "Projected 2010" in Table 7 through Table 10. The projected demand that was used as input into the Rural LECs' FLEC study is shown in the column labeled as "Study Input" in Table 7 through Table 10.
- Q. What is the result on the transport and termination rate for each Rural LEC as a result of re-running the FLEC study using updated projected minutes?

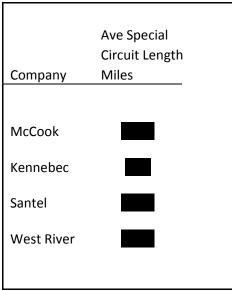
A. **Table 11** shows the transport and termination rates for each RLEC before and after rerunning the FLEC study using updated projected minutes. Although the Commission directed the RLECs to file a new projection of forward looking transport demand, doing so also effects the number of minutes used in calculating the per-minute termination rate.

#### Q. What is the result on the total transport rate for each Rural LEC as a result of rerunning the FLEC studying using updated projected transport circuits?

- Table 12 shows the transport rates for each RLEC before and after rerunning the FLEC study using updated projected transport circuits.
- Q. What is the result on the total transport and termination rate for each Rural LEC as a result of re-running the FLEC using the Rate Equivalency method, removing investment costs associated with Centrex, CALEA, and Web-self help, using updated projected transport minutes and updated projected transport circuits?
- A. Table 13 shows the transport and termination rates for each RLEC as submitted during the arbitration proceeding and after rerunning the FLEC study based upon the Commissions Finding of Fact, Conclusions of Law, and Notice of Entry and Order dated February 27, 2009.
- Q. Does this conclude your testimony?
- A. Yes.

Table 1			
	Fixed C	ost/Circuit	
Mileage			DS3
Band			
	\$	\$	\$
0 to 8			
8 plus to	\$	\$	\$
25			
25 plus to	\$	\$	\$
50			
	\$	\$	\$
Above 50			
	Variable	e Cost/Mile	2
Mileage	DS0	DS1	DS3
Band			
	\$	\$	\$
0 to 8			
8 plus to	\$	\$	\$
25			
25 plus to	\$	\$	\$
50			
	\$	\$	\$
Above 50			

#### Table 2



#### Table 3-Rate Equivalency Calculation

Company	DS0	DS1	DS3
McCook			
Variable-	\$	\$	\$
Rate/mile			
Miles			
	\$	\$	\$
Total-Variable			
	\$	\$	\$
Fixed Rate			
	\$		\$
Total Cost/Circuit			
Weight per DS0			

Company	DS0		DS1		DS3	
Kennebec						
Variable-	\$		\$		\$	
Rate/mile						
Miles						
	\$		\$		\$	
Total-Variable						
	\$	_	\$	_	\$	
Fixed Rate						
	\$	_	\$	_	\$	
Total Cost/Circuit						
Weight per DS0						

#### Table 3-Rate Equivalency Calculation

Company	DS0	DS1	DS3
Santel			
Variable-	\$	\$	\$
Rate/mile			
Miles			
	\$	\$	\$
Total-Variable			
	\$	\$	\$
Fixed Rate			
	\$	\$	\$
Total Cost/Circuit			
Weight per DS0			

Company	DS0	DS1	DS3	
West River				
Variable-	\$	\$	\$	
Rate/mile				
Miles				
	\$	\$	\$	
Total-Variable				
	\$	\$	\$	
Fixed Rate				
	\$	\$	\$	
Total Cost/Circuit				
Weight per DS0				

Table 4-Switched and Special Allocation Path and Rate Equivalency

Company		Path	Rate	Rate
McCook		Method	Equivalent	Equivalent
		Allocation		Allocation
Switched Trunks				
Special Circuits				
	DS0			
	DS1			
	DS3			
Total Specials				
Total Paths				
Percent Specials				

Company	Path	Rate	Rate
Kennebec	Method	Equivalent	Equivalent
	Allocation		Allocation
Switched Trunks			
Special Circuits			
DS	0		
DS	1		
DS	3		
Total Specials			
Total Paths			
Percent Specials			

Table 4-Switched and Special Allocation Path and Rate Equivalency

Company		Path		Rate	Rate
Santel		Metho	d	Equivalent	Equivalent
		Allocati	on		Allocation
Switched Trunks					
Special Circuits					
C	DS0				
C	DS1				
C	DS3				
Total Specials					
Total Paths					
Percent Specials					

Company		Path		Rate	Rate
West River		Method		Equivalent	Equivalent
		Allocatio	n		Allocation
Switched Trunks					
Special Circuits					
	DS0				
	DS1				
	DS3				
Total Specials					
Total Paths					
Percent Specials					

Table 5 Transport Rate Comparison Path vs Rate Equivalency

	Transport	Transport
	Rate	Rate
	Path	Rate Equivalency
	Method	Method
McCook		
Kennebec		
Santel		
West River		

# Table 6Switching Investment Comparison

	Switching Inv.	Switching Inv.		
	w/o removing	removing	Switching	Switching
	CALEA/Centrex	CALEA/Centrex	Rates	Rates
Company	/Web Self-Help	/Web Self-Help	Before	After
McCook				
Kennebec				
Santel				
West River				

Table 7-Table 10-See Attached

# Table 11Transport and Terminations Rate ComparisonsReforecast Minutes

	Transport Rates	Termination Rates	Transport Rates	Termination Rates	
	Before	Before	After	After	
Company	\$	\$	\$	\$	
McCook					
Kennebec					
Santel					
West River					

#### Table 12 Transport Rate Comparisons Reforecast Circuits

	Transport	Transport		
	Rates	Rates After		
	Before			
Company				
McCook				
Kennebec				
Santel				
West River				

#### Table 13 Transport and Termination Rate Comparisons All Changes

	Original	Original	Original	Final	Final	Final
	Transport	Termination		Transport	Termination	
	Rates	Rates	Total	Rates	Rates	Total
Company						
McCook						
Kennebec						
Santel						
West River						

#### Table 14 NECA 4 Description

Tariff No. 4 is the database that carriers reference for the ordering, billing, and provisioning of interstate access services in North America. Tariff No. 4 contains information on telecommunications providers that describes the location and technical capabilities of the wire centers which provide interstate access. It also contains interconnection information that supports the ordering, billing, and provisioning of interstate access services. The tariff is essentially composed of three sections:

Wire Center (Vertical and Horizontal Coordinates) Billing Percent (BP) Subtending Wire Center

Tariff No. 4 contains the basis for determining the distance of any particular segment of interstate access transmission for the purposes of calculating a bill for interstate access services provided to an access customer. It is also useful for determining billing ratios when services are jointly provided by more than one carrier. Tariff No. 4 is a database of information describing the location and technical capabilities of exchange carriers' wire centers from which interstate access service is provided, as well as information on billing agreements. Actual rates, terms and conditions for access services are contained in a participant's Interstate Access Tariff(s) or in contracts.