BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE PETITION OF ALLIANCE COMMUNICATIONS COOPERATIVE, INC., MCCOOK COOPERATIVE TELEPHONE COMPANY, BERESFORD MUNICIPAL TELEPHONE COMPANY, KENNEBEC TELEPHONE COMPANY, SANTEL COMMUNICATIONS COOPERATIVE, WEST RIVER COOPERATIVE TELEPHONE COMPANY, (COLLECTIVELY THE "RLECS") FOR ARBITRATION PURSUANT TO THE TELECOMMUNICATIONS ACT OF 1996 TO RESOLVE ISSUES RELATING TO AN INTERCONNECTION AGREEMENT WITH ALLTEL COMMUNICATIONS, INC.	Docket No. TC07-111 TC07-112 TC07-113 TC07-114 TC07-115 TC07-116

REBUTTAL TESTIMONY OF TIM EKLUND
ON BEHALF OF THE SOUTH DAKOTA RLECS

Q. Please State your Name, Employer, and Business Address.

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

Q. Are you the same Tim Eklund that submitted pre-filed direct testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. To respond to technical and regulatory issues raised in the direct testimony of W. Craig Conwell submitted on behalf of Alltel Communications, LLC (Alltel) in this proceeding.

Q. Do the RLECs' Forward-Looking Economic Cost (FLEC) studies comply with the applicable legal requirements? (Conwell Direct Testimony Page 6).

A. Yes. The RLECs' FLEC studies satisfy all statutory and regulatory requirements, including 47 CFR §§ 51.505 and 51.511.

Q. Are Mr. Conwell's criticisms that the FLEC study does not meet the standards for a FLEC study correct? (Conwell Direct Testimony Page 6).

A. No. Clearly the FLEC model meets the legal requirements. This conclusion is supported by the fact that a FLEC rate produced by the model used in this proceeding was recently validated by the Eighth Circuit Court of Appeals. The model utilized to produce the RLECs' FLEC studies in this proceeding, is substantially the same model used by Consortia to produce the FLEC study used in the arbitration between WWC License, L.L.C. and Great Plains Communications, Inc. On appeal to the Eighth Circuit Court of Appeals the case is styled as *WWC License, L.L.C. v. Boyle,* 459 F.3d 880(8th Cir. 2006). This case was decided by the United States Court of Appeals for the Eighth Circuit on August 23, 2006, and affirmed the termination and transport rate of $0.0208 per minute that was determined during the arbitration process by the Nebraska Public Service Commission. This approved rate was produced by the model that is used in these arbitration proceedings between the RLECs and Alltel.

Q. Mr. Conwell also claims that the RLECs have failed to satisfy the requirements of Federal Communications Commission (FCC) Rule 51.505(e) since the RLECs' cost studies "assume similar configurations of equipment for switches and transport electronics (between host and "non-host

switches")" (Conwell Supplemental Testimony page 5). Is Mr. Conwell's claim correct?

A: No, it is not. The RLECs used a similar configuration because that is what the rule requires. FCC Rule 51.505(b)(1) states that the studies are to use the existing locations of the incumbent LEC wire centers, and that is how the RLECs modeled their networks for the FLEC study.

Q. Mr. Conwell disagrees with the RLECs use of similar configurations between host and non-host switches and claims as a result that the RLECs have not shown lower cost configurations and thus have not proven that the most efficient network configuration requirement of § 51.505(b)(1) has been met (Conwell Supplemental Testimony page 5). Do you believe the FLEC study complies with 51.505(b)(1)?

A: Yes, I do. The testimony provided by Mr. Weber and Mr. Thompson will demonstrate that the investment cost inputs which form the basis for developing FLEC rates were based upon the most efficient technology currently available to be deployed in each of the RLECs' current wire center locations.

Q. Do you have additional comments in support of the FLEC model?

A: Yes. The RLECs' FLEC studies develop the Total Element Long-Run Incremental Cost (TELRIC) of transport and termination and a reasonable allocation of forward-looking common costs which are the components of forward-looking economic cost. The FLEC studies incorporate a network configuration according to TELRIC principles and appropriately calculate forward-looking cost. The FLEC studies have excluded retail costs attributable to transport and termination. Additionally, the following have not been included in the FLEC studies: Embedded costs, opportunity costs, and revenues subsidizing other services.

Furthermore, a reasonable projection of demand was used to determine the transport and termination rates in accordance with FCC Rule 51.511.

Q. Mr. Conwell asserts the transport and termination rates have exceeded their forward-looking economic costs (Conwell Direct Testimony Page 6). Do you agree?

A. No. The rates proposed by the RLECs to be used in the interconnection agreements do not exceed forward-looking economic costs. Although Mr. Conwell may feel that the rates are "too high", the rates should not be rejected on that basis. The RLEC rates should be approved, as it will be demonstrated that that they were developed in accordance to the FCC rules on FLEC development.

Q. Are the adjustments suggested by Mr. Conwell appropriate?

A. With the exception of issue 2.3 which I will discuss later in my rebuttal testimony, the adjustments suggested by Mr. Conwell are not appropriate. Mr. Conwell singles out specific costs as inappropriate to include in the FLEC model. The FLEC model's allocation process for common investment and operating expense already addresses many of Mr, Conwell's adjustments. To remove additional common investment and operating expense, as Mr. Conwell advocates, would result in "double dipping", in other words, making an adjustment twice instead of once. Exhibit TE-R-1 illustrates a high level overview of the FLEC model. Exhibit TE-R-2 illustrates the FLEC model's direct investment, common investment and operating expense forward-looking cost development. As mentioned previously, the rate produced by the FLEC model, illustrated in Exhibits TE-R-1 and TE-R-2, was recently validated by the Eighth Circuit Court

of Appeals in the arbitration between WWC License, L.L.C. and Great Plains Communications, Inc.

Q. Mr. Conwell identifies 18 primary issues regarding the FLEC study for consideration by the Commission. Will you address each of these issues?

A. Yes. I will address Issues 1.1-1.4, 2.1-2.6, and 3.1-3.4. Issue 1.5 is a summary of what the FLEC results for switching would be if the Commission made the requested adjustments of Mr. Conwell. Issue 2.7 is a summary of what the FLEC results for transport electronics would be if the Commission made the requested adjustments of Mr. Conwell. Issue 3.5 is a summary of what the FLEC results would be for transport outside plant would be if the Commission made the requested adjustments of Mr. Conwell. Issue 4 is a summation of all of Mr. Conwell's requested adjustments in Issue 1.5, 2.7, and 3.5. I will address the fact that given the FLEC study fully complies with the FCC rules, the Commission should reject all but one of Mr. Conwell's suggested changes.

Q. Do you agree with Mr. Conwell's claim that the forward-looking economic costs estimated by the studies are substantially overstated, and the rate cannot be set at the level of these costs (Conwell Direct Testimony page 19)?

A. No I do not. I believe that the Commission will find that the RLECs have complied with the FCC standard in developing their FLEC rate and thus the rates are set at the appropriate level.

Switching Costs

Cost Issue 1.1: What switch investments (by switch category and exchange) should be used in the RLEC cost studies?

Q. Mr. Conwell states that in the case of Santel and West River, Alltel meet points with Qwest, which is the transit provider for mobile-to-land traffic, at locations other than Woonsocket and Bison. Since these locations are not used for Alltel terminating traffic, Mr. Conwell believes that incremental

investments for the tandem switch portion for these RLECs should be removed (Conwell Direct Testimony page 27). Do you agree with Mr. Conwell if a piece of the network or a specific function of a unit is not used by Alltel, that it should be removed from the study?

A. No, I do not. As Ms. Vanicek describes in her testimony, the FCC found that the pricing of transport and termination under the "additional cost" standard should use the same economic cost-based pricing standard that it established for the pricing of unbundled elements. Ms. Vanicek explains how the FCC codified its findings into the rules for pricing transport and termination in her rebuttal testimony. Ms. Vanicek explains why it is her expert opinion that Mr. Conwell incorrectly applies the additional cost standard by arguing that if a network cost isn't Alltel specific, it should be removed from the study.

Q. Mr. Conwell's states that Kennebec "must prove to the state commission the nature and magnitude of any forward-looking costs that it seeks to recover in the prices of interconnection and unbundled network elements." (Conwell Direct Testimony page 29). Is that the purpose of the direct testimony and rebuttal testimony submitted on behalf of the RLECs?

A. Yes, the purpose of the testimony submitted by Mr. Weber, Ms. Vanicek, and me is to demonstrate to the Commission that the RLEC cost studies meet the standards as required by the FCC for the forward-looking costs that each RLEC seeks to recover through transport and termination prices.

Q. Mr. Conwell states that the important factor affecting switching is the portion of switch investment and costs that are caused by the usage-sensitive costs of switching or the additional costs of termination (Conwell Direct Testimony page 31). Does Ms. Vanicek address Mr. Conwell's assertion that the switch processor is not usage-sensitive?

A. Yes, she does.

Q. Mr. Conwell lists multiple items which he believes are common switch components that should be excluded from the study (Conwell Supplemental Testimony pages 9-12). He also states his belief that these items are either

non-usage sensitive or not attributable to terminating mobile-to-land traffic (Conwell Supplemental page 12) Did the FLEC study exclude a portion of common equipment?

A. Yes, it did. Exhibit TE-R-3 illustrates the development of switching costs following the reasonable allocation of common investment and operating expense (see Exhibit TE-R-2). Exhibit TE-R-3 shows five percent of the processor costs, including direct investment, common investment and operating expense was excluded as non-usage sensitive. This is the same approach that Consortia took for the Great Plains FLEC study used during the Great Plains-WWC arbitration proceeding.

Q. Mr. Conwell claims that the RLECs did not produce information giving details on the equipment items and it's not possible to fully evaluate the investments for compliance with §51.505(b)(1) (Conwell Supplemental Testimony page 6). Do you agree with Mr. Conwell's assessment?

A. No, I do not. The information provided by, as well as the testimony given by Mr. Weber demonstrates that the investment cost inputs which form the basis in developing the FLEC rates were based upon the most efficient technology currently available to be deployed in each of the RLECs' current wire center locations.

Q. Mr. Conwell states that Alliance and the other RLECs have failed thus far to prove that the unit investments underlying total switch investments in their cost studies are representative of the current costs the RLEC would incur to purchase and install new switches (Conwell Supplemental Testimony page 8). Do you agree with Mr. Conwell's assessment?

A. No, I do not. The information provided by, as well as the testimony given by Mr. Weber demonstrates that the investment cost inputs which form the basis in developing FLEC rates were based upon the most efficient technology currently available to be deployed in each of the RLECs' current wire center locations.

Cost Issue 1.2: What switching annual cost factors should be used?

Q. Mr. Conwell considers the annual cost factor for Beresford to be somewhat high, due to a new release of switch software (Conwell Direct Testimony pages 35-37). Is it reasonable to include the new release of switch software in Beresford's annual cost factor?

A. Yes, it is. As Mr. Conwell states, this account may include other non-recurring arrangements. It is reasonable that similar amounts of non-recurring expense have occurred in prior years and will occur in subsequent years. Beresford experienced a $28,710 expense for switch software in the base year used in the FLEC study. I chose to maintain the integrity of the FLEC model (see TE-R-2) by not manipulating the base year financial data.

Q. Mr. Conwell claims that the RLECs assume no debt and 100 percent equity in their forward-looking capital structures and without debt in the capital structure, this causes Kennebec's cost of capital to be too high (Conwell Direct Testimony page 33). Do you agree with Mr. Conwell's assessment?

A. No, I do not. The RLECs did not assume any specific capital structure in calculating the cost of capital. Instead, each RLEC, including Kennebec, maintain that the cost of capital for a rate-of-return company should be the FCC authorized rate-of-return of 11.25% on net investment. Using this FCC authorized rate on net investment is an appropriate standard.[1] This means that the capital structure used in calculating the rate of return was the assumed structure when the FCC approved the 11.25% return. The FCC calculated the rate-of-return using a capital structure that consisted of 44.2% debt. Within the same

[1] *See 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 (*"Local Competition Order"*) (rel. Aug. 8, 1996) at ¶ 702.

proceeding, the FCC also approved a cost of debt and a cost of equity and along with the approved capital structure, arrived at a return of 11.25%.

The 11.25% FCC approved rate-of-return for interstate services was adopted nearly eighteen years ago.[2] At that time incumbent LECs operated in a monopoly environment, particularly for services such as basic local exchange service and exchange access. A rate-of-return reflects two considerations – (a) the expected return by an investor investing in an enterprise that engages in the activity in question, and (b) the risk associated with that activity.[3] The market conditions in which Kennebec operates include capital market conditions, technology and competition, to name a few. There is no reasonable basis to conclude that current market conditions and risks associated with the provision of exchange telephone service and exchange access service are less than existed 18 years ago when the FCC approved an 11.25% rate-of-return. To the contrary, such rate-of-return is probably conservative today. Mr. Conwell's proffered adjustment to Kennebec's cost of capital which would effectively reduce it by 450 basis points to 6.75% is unjustified and as such must be rejected.

Q. Mr. Conwell claims that Kennebec should reduce its capital cost factor to reflect the benefits of deferred income taxes (Conwell Direct Testimony page 34). Do you agree with Mr. Conwell's claim?

A. No, I do not. Deferred taxes are not treated in the FLEC study because the study is looking at the annual cost over the full life of the plant. In the end all taxes are

[2] *See* Federal Communication Commission, ***Represcribing the Authorized Rate of return for Interstate Services of Local Exchange Carriers***. Released 12/07/1990

[3] These concepts were articulated in the well known U.S. Supreme Court case of *FPC v. Hope Natural Gas Co.,* 320 U.S. 591, 603 (1944), in which the Court wrote: "The return to the equity owner . . . should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to

paid, some of the taxes are deferred only in the early life of the plant. Deferred taxes would only play a part in an embedded point in time study.

Q. Mr. Conwell claims the direct expense factors for Kennebec appear to be high (Conwell Direct Testimony pages 35-36). Please explain the direct expense factor and why the factors are a reasonable allocation of forward-looking common cost for Kennebec.

A. Mr. Conwell would like you believe that since one company's direct expense factor is a certain percentage that Kennebec's direct expense factor will be that very same percentage. The fact is, expense factors will vary depending upon size of the company and other company characteristics. We are determining a reasonable allocation of direct expense factors based upon financial experience (see Exhibit TE-R-2). The standard is not to allocate another company's direct expense factor, which would not represent Kennebec's financial experience.

Q. Mr. Conwell claims the operating expense factors for Alliance and Kennebec are higher in comparison to the other RLECs (Conwell Direct Testimony pages 36-37). If operating expenses factors are not the same as other RLECs, does this mean it is not a reasonable allocation of forward-looking common cost for that specific company?

A. No, it does not.

Q. Is there a reasonable explanation as to why the operating expense factors for Alliance and Kennebec are higher than those of the other RLECs?

A. As previously stated, expense factors will vary depending upon size of the company and other company characteristics. We are determining a reasonable allocation of operating expense factors based upon financial experience (see Exhibit TE-R-2). The standard is not to allocate based another company's

attract capital." Capital can be attracted only if a firm can meet investors' current demands regarding a required rate of return.

operating expense factor, which would not represent Kennebec's financial experience.

Q. Mr. Conwell claims that the FCC rules require the factors used in the study are to be forward looking (Conwell Direct Testimony page 37). Do you agree with Mr. Conwell's claim?

A. No, I do not. 47 C.F.R. 51.505(c) requires a reasonable allocation of forward-looking costs. I believe the best way to determine what an RLECs' proportion of common cost will be on a forward-looking basis is to review what its allocation of common costs were in the past and adjust it for any known events that will cause it to change in the future. This is the same methodology that was used in the study by Consortia to produce the FLEC study used in the arbitration between WWC License, L.L.C. and Great Plains Communications, Inc.

Q. Mr. Conwell states that RLECs must prove that their corporate operations expense loadings that are greater than 12 percent are necessary for costs that are indeed common to all network elements and services and efficiently incurred (Conwell Direct Testimony page 39). Is 12 percent the standard pursuant to 47 C.F.R. 51.505, as claimed by Mr. Conwell?

A. No, it is not. A review of 47 C.F.R. 51.505 will prove that no such standard, such as 12 percent, exists. It is reasonable to conclude that comparing one company's factor to another company's factor is, also, not the standard.

Q. Forward-looking cost methodologies, like TELRIC, are intended to consider costs that a carrier would incur in the future.[4] Is there any reason to believe that the common cost developed in your model is not intended to calculate common cost that RLECs would incur in the future?

A. No, there is not. The common cost factors used in the study were based upon historical common cost factors. If there were reasons to believe that the forward-

[4] *See Local Competition Order* at ¶ 683.

looking common cost factors would be different and where differences were quantifiable, adjustments would be made for any known quantifiable change.

Cost Issue 1.3: What percentage or portion of the switch investment is usage sensitive and recoverable in transport and termination rates?

Q. Mr. Conwell claims that if some switch common investment, particularly the switch processor, is not driven by mobile-to-land traffic, then it should be removed from the determination of termination costs (Conwell Direct Testimony page 41). Please explain why Mr. Conwell's claim is incorrect.

A. Mr. Conwell's claim is centered around his use of the term capacity. His theory is that if Alltel's use of the processor does not exhaust the processor's capacity, then Alltel should not have to pay to use it, they should get a free ride. As Ms. Vanicek will explain, this is not how TELRIC is defined. TELRIC is defined in a manner that the term long run refers to a period long enough so that all of a firm's costs become variable -- that is, its present plant and equipment will have been worn out or rendered obsolete and will therefore need replacement.

Q. Did WWC License make a similar argument in the arbitration between WWC License and Great Plains Communications?

A. Yes, the WWC witness testified that all switching cost, including the processor, was non-traffic sensitive (See transcript-page 85, Exhibit TE-R-4). The WWC witness argued that the way the switches were currently configured, the base processor capacity would never be exhausted (See transcript-page 234-235, Exhibit TE-R-5).

Q. How did the Commission as well as the Eighth Circuit rule with regard to this issue?

A. The Nebraska Commission rejected Western Wireless claim that the processor was non-traffic sensitive. The Commission found that excluding such cost would

be inconsistent with the pricing of reciprocal compensation rates based on forward looking economic costs according to 47 CFR §§ 51.705 and 51.505. The Nebraska Commission found that the switch costs should be shared by users of switching resources.

In the Eighth Circuit case, Western Wireless argued the current and reasonably anticipated volume of traffic on the networks was so small and that the smallest available switches are so powerful, it would not be appropriate to characterize the switches as having any cost that varies with use or that contributes additional cost to the termination of calls. The court stated that Western failed to recognize that the FCC has interpreted the Act to permit state commissions to assign some common costs, like switching costs, not only on a flat-rate, per-line basis, but also on a per-minute-of-use basis.

Cost Issue 1.4; What annual minutes per switch trunk card should be used?

Q. **Mr. Conwell claims there is an issue with the minutes of use in the RLEC switching cost calculations, that there is a wide range of minutes for similarly situated companies and the RLEC cost studies do not provide the underlying reasons for such differences (Conwell Direct Testimony page 46). Is the purpose of a FLEC study to compare and explain differences in inputs between or among different companies?**

A. No, it is not. The FLEC study is a quantitative model in that it produces a per minute rate by dividing company specific demand into company specific cost (see Exhibit TE-R-1). The study itself does not provide the underlying reasons for the differences in costs between companies or the difference in demand between companies. The FLEC study is also not a comparative model, its purpose is not to run comparisons on the inputs or outputs among a group of companies. Rather, its purpose is to determine a transport and termination rate for a specific company

based upon that specific company's cost and that specific company's demand per FCC rules.

Q. Do you believe there is an issue with the switching minutes of use that is being used to develop the termination rate?

A. No, I do not. Exhibit TE-R-6 illustrates the demand calculation used in the development of the switching per minute rate and the transport per minute rate. Actual minute data from 2006 was used as a surrogate for the total minutes that the incumbent LEC would observe in the future. If there were reasons to believe that the forward-looking demand would be different and where such differences were quantifiable, adjustments would be made for any known quantifiable change.

Cost Issue 1.5: What are the forward-looking economic costs per minute for switching?

Q. Mr. Conwell states that if the Commission adopts his recommendations for Cost Issues 1.1-1.4, the expected switching cost per minute would be as shown on Exhibit WWC-5.5. (Conwell Direct Testimony page 47). Why do you believe the Commission should not adopt Mr. Conwell's recommendations?

A. First, I believe that the FLEC study and the development of its results for the per minute switching costs fully comply with 47 C.F.R. §51.505 and 47 C.F.R. §51.511. Mr. Conwell bases most of his recommendations on the basis of comparing the factors for one company against the factors developed for the other companies. Mr. Conwell then recommends throwing out or disregarding the factors from the companies with the highest factors in each category and accepting the factors from the companies that are the lowest in each category. Mr. Conwell's standard seems to be that if a company's cost ratio is higher than

the average of the lowest 3 or 4 companies, then it should be rejected. Comparing one company's cost structure against the other companies' cost structure on a category by category basis has little to do with each company's forward-looking economic costs. In effect, by running comparisons across companies and suggesting that the lowest ratios should be used to calculate costs for all companies, Mr. Conwell is suggesting the use of an unaffiliated company's cost structure as the basis for the forward-looking cost of another company. This is not the appropriate standard and Mr. Conwell's suggested revisions should be rejected.

Mr. Conwell also suggests computing costs in a manner that does not comply with the FCC's additional cost standard. In addition, Mr. Conwell misapplies the TELRIC standard in suggesting that switch processor cost be excluded from the study. Ms. Vanicek expands upon these statements in her testimony. All of the foregoing are reasons why Mr. Conwell's suggested revisions should be rejected.

Q. Mr. Conwell states that if the Commission decides not to adopt one or more of his recommendations, the RLEC switching costs still can be modified by rerunning the FLEC model using the data shown in Exhibit WWC-5.5. Do you understand why the RLECs would rerun the FLEC study if the Commission rejected Mr. Conwell's recommendations?

A. No, I do not. The Exhibit provided by Mr. Conwell seems to suggest that even if the Commission rejects Mr. Conwell's recommendations, the FLEC rate for switching should be reduced from $0.008 to $0.0008. Mr. Conwell does not explain how the rate would be reduced by 90% if no adjustments are made. I therefore recommend that the Commission reject Mr. Conwell's recommendation that the switching rate be reduced from its FLEC rate of $0.008.

Transport Electronics Costs

Q. Mr. Conwell claims that the RLECs' transport electronics costs do not comply with FCC Rule §51.511 (Conwell Direct Testimony page 51). Does Mr. Conwell offer a justification for his claim?

A. No, he does not. Claiming that the rates are too high is not an adequate justification that the rates do not comply with 47 C.F.R. §51.511. Exhibits TE-R-7 and TE-R-8 illustrate the development of Electronics and Plant costs using the reasonable allocation of common investment and operating expense. This is the same approach that Consortia took for the Great Plains FLEC study used during the Great Plains-WWC arbitration proceeding.

Q. Mr. Conwell claims that the annual cost factors for some companies are too high and inconsistent with FCC rule §51.505 (Conwell Direct Testimony page 51). Does Mr. Conwell offer a justification for his claim?

A. No, he does not.

Q. Do you agree with Mr. Conwell's claim that the minutes per voice trunk are too low (Conwell Direct Testimony page 51)?

A. No, I do not.

Cost Issue 2.1: What transport electronics base, line, and tributary investments should be used in the RLEC cost studies?

Q. Do you agree with Mr. Conwell's claim that the RLECs have not provided adequate documentation to explain the development of transport electronics costs (Conwell Direct Testimony page 51)?

A. No, I do not. The information provided by, as well as the testimony given by Mr. Weber adequately explains the development of transport electronic costs.

Q. Mr. Conwell states that for Santel, portions of the Mt. Vernon/SDN transport electronics investment likely should be removed from the transport and termination costs since Alltel does not use that part of the network (Conwell Direct Testimony page 54). If a part of the network is not used by Alltel, is it appropriate to include that costs in the network element and the transport and termination rate?

A. Yes, it is. Mr. Conwell makes this same argument throughout his testimony (see cost issue 1.1 and the next two questions). As explained in my response to Cost Issue 1.1and as more fully explained by Ms. Vanicek, Mr. Conwell incorrectly applies the additional cost standard when he argues that if a network cost isn't specific to Alltel, it should be removed from the study. As Ms. Vanicek correctly points out, the FCC found that the pricing of transport and termination under the "additional cost" standard should use the same economic cost-based pricing standard that it established for the pricing of unbundled elements.[5] In addition, I direct your attention to pages 6-7 of Ms. Vanicek's Rebuttal Testimony regarding the requirement that TELRIC be based or computed over the total network provided by an RLEC.

Q. Mr. Conwell states that for West River, portions of the investments at the Regen Hut, Reva, and the Bison/SDN should be removed from the transport and termination costs (Conwell Direct Testimony page 54). His claim is based on Alltel delivering its traffic to West River at a meet point at Maurine. Why does including the Regen Hut, Reva, and Bison transport electronics comply with FCC rules?

A. See the response to previous question.

Q. In his discussion of OC-192 rings, Mr. Conwell states the FCC Rule § 51.505(b) prohibits the allocation of costs to transport for ring capacity unrelated to the transport of mobile-to land traffic (Conwell supplemental page 20). Is Mr. Conwell's interpretation on how transport rates are to be developed correct?

A. No, it is not. See the previous response regarding the additional cost standard.

Cost Issue 2.2: Should forward-looking economic costs per unit be based on total equivalent DS-1 circuits?

Q. Will you please explain what the path method is designed to accomplish?

[5] *See Local Competition Order* at ¶ 1054.

A. Yes, I will. The purpose of the path method is to remove the cost of dedicated facilities, commonly referred to as special access circuits, from the total cost of transport facilities prior to the development of the transport rate.

Q. Mr. Conwell recommends using a DS1 equivalent method for allocating transport electronic costs between switched and special access shown in Exhibit WCC-6.1 (Conwell Direct Testimony page 60). Is this essentially the same as the bandwidth method?

A. Yes, it is.

Q. Do you agree with Mr. Conwell's approach?

A. No, I do not. Mr. Conwell uses a combination of factors based upon a theoretical capacity of the network to attempt to make this calculation. As I will demonstrate below, if prices were determined based upon Mr. Conwell's definition of cost causation, there would be little or no demand for special access circuits above the DS0 level of capacity. The FLEC Model used in this proceeding appropriately allocates transport costs based upon a path or circuit count methodology. Transport costs mostly consist of the costs of fiber optic cable and the associated electronics that send and receive the signals on the cable. Cable costs are primarily a function of the length of the cable route. Cable is more properly allocated by the path method because the cost of the cable is primarily driven by distance that a path travels, not the capacity of the path that is traveling on the cable. Further, DS1 and DS3 services incur the same provisioning, maintenance and testing costs as does one DS0. Therefore, the extent of bandwidth a circuit may have is not a relevant indication of cost causation.

Q. Does NECA allow the use of the Path Method to allocate costs between special access and switched access in the development of interstate access rates?

A. Yes it does. NECA allows use of the Path Method since it is a reasonable cost causative allocation of costs.[6]

Q. Does NECA allow using the Bandwidth Method to allocate costs between special access and switched access in the development of interstate access rates?

A. No it does not. NECA does not allow use of the Bandwidth Method or what NECA calls the voice grade equivalent method. According to NECA, the fundamental issue with this methodology is that the allocation of plant is not representative of the actual cost associated with the service.[7]

Q. If cost causation was really a function of bandwidth or DS-1 equivalence as Mr. Conwell suggests, what would be the relationship between the rates for DS-0, DS-1 and DS-3 circuits?

A. Given that a DS-1 has 24 times the bandwidth of a DS-0, one would expect to see rates that are developed on the basis of the FCC TELRIC rules to be 24 times higher than the rate of a DS-0. And given that a DS-3 has 28 times more bandwidth than a DS-1 and 672 times more bandwidth than a DS-0, one would expect to see rates that are developed on the basis of the FCC TELRIC rules to be 28 times higher than the rate of a DS-1 and 672 times greater than a DS-0.

Mr. Conwell's assertion that circuit costs are caused by bandwidth is not supported by facts or established rates developed on the basis of FLEC. Therefore, there is no support to conclude that a DS3 circuit costs 28 times more than a DS1 circuit or 672 times more than a DS0 circuit.

As an example, in a proceeding before this Commission, TC 96-184, Qwest was required, pursuant to 47 U.S.C. 252(d)(1), to develop rates for unbundled

[6] *See* NECA Cost Guidelines Paper, November 5, 2007, at page 3.

[7] *See* NECA Cost Guidelines Paper, November 5, 2007, at pages 2-3.

elements. Qwest presented to the Commission its studies based upon the TELRIC standard for dedicated transport for DS1s and DS3s and submitted a rate for DS0s based upon signaling links. As a result, the Commission approved the rates as shown in Exhibit TE-R-9, which can be found in Qwest's South Dakota Negotiation's Template.

Similar rates were filed by Qwest and approved by the Nebraska Public Service Commission in Cost Docket C-2516.

The rates developed according to the FLEC standards that were submitted by Qwest and approved by both the South Dakota Commission and the Nebraska Commission provide support that circuit costs are not a function of bandwidth as asserted by Mr. Conwell. This can be demonstrated by the following example: Assume that Beresford has 6 circuits-2 DS0s, 2 DS1s, and 2 DS3s-each consisting of one circuit of 8 miles, and another circuit of 12 miles. (See Exhibit TE-R-10 for calculations). The following ratios between circuit costs for DS0s, DS1s, and DS3s would result:

Ratio of DS1 to DS0	2.7
Ratio of DS3 to DS1	6.9
Ratio of DS3 to DS0	18.8

Under Alltel's Bandwidth Method, the ratios are as follows:

Ratio of DS1 to DS0	24
Ratio of DS3 to DS1	28
Ratio of DS3 to DS0	672

As demonstrated above, using the bandwidth method to allocate cost would have resulted in a DS1 circuit priced at $437.04 instead of $49.48 and a DS3 circuit priced at $12,237.12 instead of $343.08.

It is reasonable to conclude that the rates produced under the bandwidth method would be so high for DS1s and DS3s that demand would be reduced to near zero if not zero. 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. Is there a third method 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 will refer to as the rate equivalency method. While I do not believe that this method is as appropriate as the path method, I am 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 an alternate method. In utilizing the rate equivalency method, costs are allocated based on the ratio of retail rates for the various services provisioned on a particular cable route.

Cost Issue 2.3: Should transit circuits be included in total demand for transport?

Q. Do you agree with Mr. Conwell that the cost study does not include transit circuits in the path counts (Conwell Direct Testimony page 63)?

A. Yes, I do.

Q. Due to Mr. Conwell's testimony, have the four RLECs that have transiting circuits rerun their FLEC studies to quantify the effect of including transit circuits in total demand for transport electronics?

A. Yes, they have. The FLEC studies updated with transiting circuits are shown as Exhibit TE-R-11.

Cost Issue 2.4: What equivalent DS-1 circuits should be used for the RLECs' own voice trunks and special circuits, and transit circuits?

Q. Mr. Conwell argues that the RLECs based their demand on recent past information and not a reasonable projection (Conwell Direct Testimony page 66) and claims that it would be expected that total demand is growing. Is the demand data used by the RLECs in the FLEC studies a reasonable projection of the total demand that is likely to be experienced?

A. Yes, it is. Mr. Conwell disputes the projection of total demand and claims that it should measured in the future and input in to the current study. Although we can't currently measure future traffic, we did project future minutes based upon what was known at the time of the study. That is the demand data that was used in the study.

Q. Do you agree with Mr. Conwell that consideration should be given to basing transport costs on a smaller system, such as an OC -48 or OC-12 transport system (Conwell Direct Testimony page 67)?

A. No, I do not. There is nothing forward-looking about using yesterday's technology such as an OC-48 or OC-12 transport system. Mr. Weber will testify about the types of systems that are being placed today, which is a good indication of the types of systems that will and will not be placed on a forward-looking basis.

Cost Issue 2.5: What transport electronics annual cost factors should be used?

Q. Mr. Conwell claims that Kennebec used a capital cost factor of 21.5% and it should be reduced to 17% to reflect a mix of debt and equity capital and the effect of deferred income taxes from accelerated depreciation (Conwell Direct Testimony pages 67-68). Do you agree with Mr. Conwell's claim?

A. No, I do not. This is the same claim that Mr. Conwell raised in issue 1.2. Mr. Conwell asserted that Kennebec's entire capital structure consisted of equity and absolutely no debt. As I stated on Issue 1.2, Mr. Conwell's claim is incorrect.

Since Kennebec used the FCC's rate of 11.25%, Kennebec's capital structure, cost of debt, and cost of equity equates to what the FCC used in calculating the approved return of 11.25%. Again, Mr. Conwell's proffered adjustment to Kennebec's cost of capital which would effectively reduce it by 450 basis points to 6.75% is unjustified and as such must be rejected.

Q. Mr. Conwell believes that the annual cost factor for transport electronics should be no higher than 32.5% (Conwell Direct Testimony page 68). Does he explain where this number comes from?

A No, he does not.

Cost Issue 2.6: What annual minutes per voice trunk should be used?

Q. Mr. Conwell claims that the RLEC minutes are too low and that FCC rule 51.513 requires that the per minute cost be computed using 9,000 minutes per month per voice grade circuit (Conwell Direct Testimony page 69). Do you agree with Mr. Conwell's claim?

A. No. First, Mr. Conwell recommends using FCC Rule 51.513(c)(4) and a proxy of 9,000 minutes per month or 108,000 minutes per trunk per year. The use of this proxy is incorrect. Section 51.513 states any rate established through use of such proxies shall be superseded once the state commission has completed review of a cost study that complies with the forward-looking economic cost based pricing methodology described in §§51.505 and 51.511, and has concluded that such study is a reasonable basis for establishing element rates. The FLEC study submitted in my direct testimony complies with these requirements. The minutes that RLECs used to develop rates comply with § 51.511. Therefore, Mr. Conwell's reference to 51.513(c)(4) is not relevant.

Consequently, all usage calculations that are made to determine a per minute rate should be calculated based upon actual minutes of use. It should also be noted

that Rule 51.513 should not be used because it has been vacated by the United States Court of Appeals for the Eighth Circuit, see Iowa Utilities Bd. v. F.C.C., 219 F.3d 744 (8th Cir. 2000).

Q. Mr. Conwell obtains values for trunk usage from the HAI 5.0a model to compare with the RLEC minutes (Conwell Direct Testimony page 69). Do the companies values from which HAI parameters were derived in any way represent the type of values which are indicative of a rural LEC's network?

A. No. The types of companies that are represented in the HAI model are generally large, multi-million line Regional Bell Operating Companies (RBOCs) and are in no way indicative of the quantity of minutes one would anticipate over the networks of rural carriers. Mr. Conwell's benchmark using the minutes from the HAI model are irrelevant in comparing the quantity of minutes indicative of an RLEC.

Cost Issue 2.7: What are the forward looking economic costs per minute for transport electronics?

Q. Should the Commission adopt the rates for transport electronics as proposed by the RLECs?

A. Yes, after taking into account the adjustments made for transiting circuits, the RLECs have developed rates that are in compliance §§51.505 and 51.511 and should therefore be adopted.

Transport Outside Plant Costs

Cost Issue 3.1: What interoffice mileages should be used in the RLEC cost studies?

Q. Mr. Conwell states that he has concerns about a statement in the documentation that accompanied the RLEC FLEC studies which reads "projected cable placements are based upon the most probable and direct routes." (Conwell Direct Testimony page 75) Should the Commission have concerns regarding this statement in the documentation section that accompanied the RLEC FLEC studies?

A. No, it should not have any concerns. The relevant question is not whether the *documentation* that accompanied the FLEC study complies with the standards as set forth by the FCC. The relevant question is whether the *FLEC study* complies with the standards as set forth by the FCC. The RLECs will demonstrate that it does. And although the RLECs have incorporated the most probable routes into its FLEC analysis, use of the term direct routes instead of the term fiber-ring routes does not in any way invalidate the routes that were used in the FLEC study.

Q. Mr. Conwell provides examples where the RLECs' transport routes using fiber-ring routes are longer than the current, embedded routes (Conwell Direct Testimony page 75). Is the use of fiber-ring miles consistent with a forward-looking cost study?

A. Yes, it is. As long as the RLECs' forward-looking network would use fiber-ring technology and is using the location of its existing wire centers, then its use of fiber rings meets the standards of 47 C.F.R. § 51.505.

Q. Mr. Conwell claims that FCC rule §51.505(b)(1) (Conwell Direct Testimony page 76) requires that the cable layout on a forward looking basis be more efficient than the current layout if the future layout has more miles. Is the RLEC network design the most efficient forward-looking network given the South Dakota Codified Law (SDCL) 49-31-60 (2)?

A. Yes, it is. The forward-looking network design took into account the Legislative intent as found in SDCL § 49-31-60 (2) in which the Legislature determined that the telecommunications infrastructure of the state of South Dakota should be a layered network hierarchy on a fully integrated backbone of interconnected switched survivable rings.

Q. Why is Mr. Conwell's statement that Kennebec includes 7,200 feet of cable in the Presho exchange not relevant in the calculation of transport and termination rates (Conwell Direct Testimony page 77)?

A. The FLEC study was developed in a manner that complies with 47 C.F.R.§ 51.505. Kennebec therefore calculated its transport rate based upon the cost of all transport facilities divided by all the minutes on those same transport facilities. Ms. Vanicek explains why Mr. Conwell's claim regarding the development of the transport and termination rates based upon Alltel specific use of the network elements does not comply with the standards for rate development.

Q. Due to Mr. Conwell's testimony, has Santel rerun its FLEC studies to quantify the effect of changing Santel's transport miles?

A. Yes, they have. The FLEC studies updated with transiting circuits are shown as Exhibit TR-R-12.

Cost Issue 3.2: What transport outside plant annual cost factors should be used?

Q. Mr. Conwell claims that the annual cost factors for some of the companies are high (Conwell Direct Testimony page 78). Does Mr. Conwell offer proof on a company-by-company basis as to why a specific company's factors are too high?

A. No, he does not. Mr. Conwell claims that four of the six company's annual cost factors are too high and should be reduced, but offers no proof that the company's cost structure and its ACF does not comply with the FLEC standards as established pursuant to 47 C.F.R.§ 51.505.

Q. Mr. Conwell claims that Kennebec's capital cost factor is high for the reasons previously discussed for its switching cost factor (Conwell Direct Testimony page 79). Do you agree with Mr. Conwell?

A. No, I do not. Mr. Conwell claims that Kennebec's capital structure should be adjusted. However, as I explained in my response to Issue 1.2, since Kennebec is using the FCC's authorized rate of return of 11.25%, Kennebec's capital structure

is assumed to be the same as what was approved by the FCC when the FCC adopted 11.25% as the proper rate-of-return.

Q. Mr. Conwell offers percentages for use by certain companies as the corporate operations expense (Conwell Direct Testimony page 79). Does Mr. Conwell provide any evidence regarding why a specific company's corporate operations expense as well as its annual cost factors should be those as offered by Mr. Conwell?

A. No, he does not. Mr. Conwell's does not offer any explanation as to why the factors should be at levels that he suggests. Furthermore, Mr. Conwell does not offer any explanation or evidence that the factors used by the RLECs do not comply with the rules for FLEC development as set forth by the FCC.

Cost Issue 3.3: Should transport outside plant cost calculations be modified to be based on equivalent DS-1 circuits?

Q. Mr. Conwell claims that equivalent DS-1 circuits should be used instead of paths in calculating transport outside plant costs (Conwell Direct Testimony page 80). If costs were actually caused in the manner that Mr. Conwell claims, what would be the result in pricing and the ultimate allocation of cost between special circuits and switched circuits used to calculate the transport costs?

A. Mr. Conwell's equivalent DS-1 circuit methodology is by and large the same as the bandwidth methodology. As I described in Issue 2.2, using Mr. Conwell's methodology would cause 28 times more cost to be allocated to a DS3 circuit than to a DS1 circuit, and 672 times more cost to be allocated to a DS3 than to a DS0 circuit. As was shown in the example of Qwest, this would have resulted in Qwest's UDIT rate to be ten times more than its current DS1 UDIT rate and almost $12,000 more per month than its current DS3 UDIT rate. The ultimate result of using Mr. Conwell's method would be that the price of DS1 and DS3 circuits would be such that the demand for such circuits would be much lower,

thereby forcing more cost to be allocated away from special circuits and onto switched circuits -- driving the cost of switched circuits higher.

As I discussed in my response to Issue 2.1, Mr. Conwell's assertion that circuit costs are caused by bandwidth is not supported by facts or established rates developed on the basis of FLEC. Therefore, there is no support to conclude that a DS3 circuit costs 28 times more than a DS1 circuit or 672 times more than a DS0 circuit.

Cost Issue 3.4: What annual minutes per voice trunk should be used?

Q. Mr. Conwell claims that the RLECs should use the FCC's requirement of 9,000 minutes per month (Conwell Direct Testimony page 80). Why is Mr. Conwell's claim invalid?

A. As I explained in my response to Issue 2.6, the minutes that Mr. Conwell refers are proxy minutes and are not required to be used in determining the forward looking economic cost. As I stated previously, all usage calculations that are made to determine a per minute rate should be calculated based upon actual minutes of use. In addition, since Rule 51.513 has been vacated by the United States Court of Appeals for the Eighth Circuit, Rule 51.513 simply can not be claimed to be an enforceable FCC requirement as claimed by Mr. Conwell.

Cost Issue 3.5 What are the forward-looking economic costs per minute for transport outside plant?

Q. Based upon the adjustments that Mr. Conwell claims for issues 3.1 through 3.4, McCook's transport outside plant costs would decrease from $0.0208 per minute all the way down to two one hundredths of one cent ($0.0002). Mr. Conwell claims that he would expect the other RLECs to have numbers similar to the one of McCook. Do you agree with Mr. Conwell's conclusion?

A. No, I do not. The RLECs' cost calculations for transport outside plant are appropriate pursuant to the pricing standards of 47 C.F.R. § 51.505 and 47 C.F.R

§ 51.511 and as I discussed on Issues 3.1 through 3.4, Mr. Conwell's suggested adjustments should be rejected.

Cost Issue 4: What are the forward looking economic costs per minute for transport and termination?

Q. Mr. Conwell states that the studies should be re-run to determine costs that comply with FCC rules (Conwell Direct Testimony page 83) Since the studies already comply with the FCC rules, are there any reasons to re-run the studies?

A. No, the studies do not need to be rerun. The RLECs' cost calculations for transport and termination are appropriate pursuant to the pricing standards of 47 U.S.C. §252(d)(2) and the FCC attendant rules as established in 47 C.F.R. § 51.505 and 47 C.F.R § 51.511. I believe that this is further supported since the rates derived used the same methodologies approved in the Eighth Circuit proceeding.

Q. Does this conclude your rebuttal testimony?

A. Yes.

Model Overview McCook

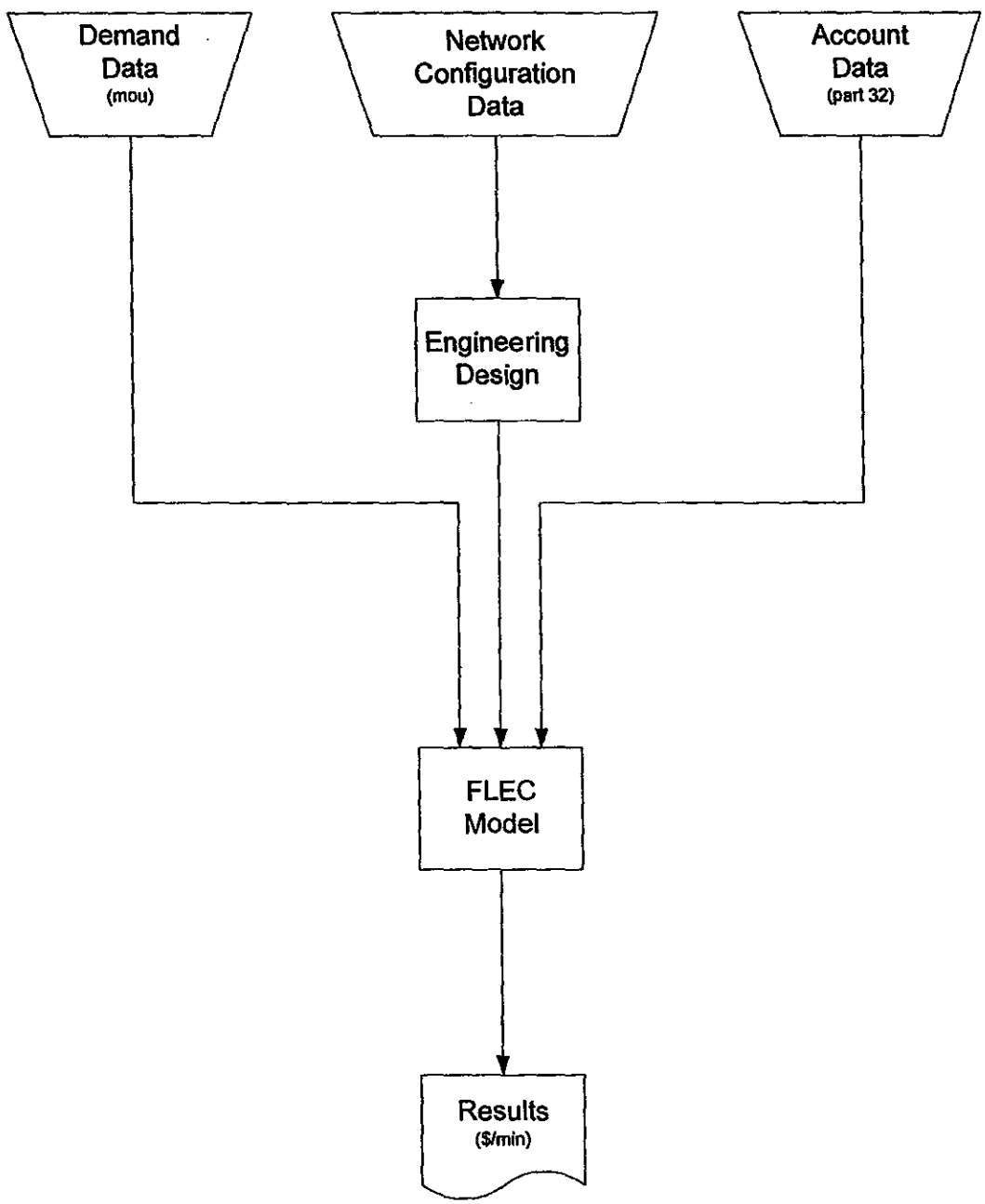

EXHIBIT
tabbies
TE-R-1

Cost Development McCook

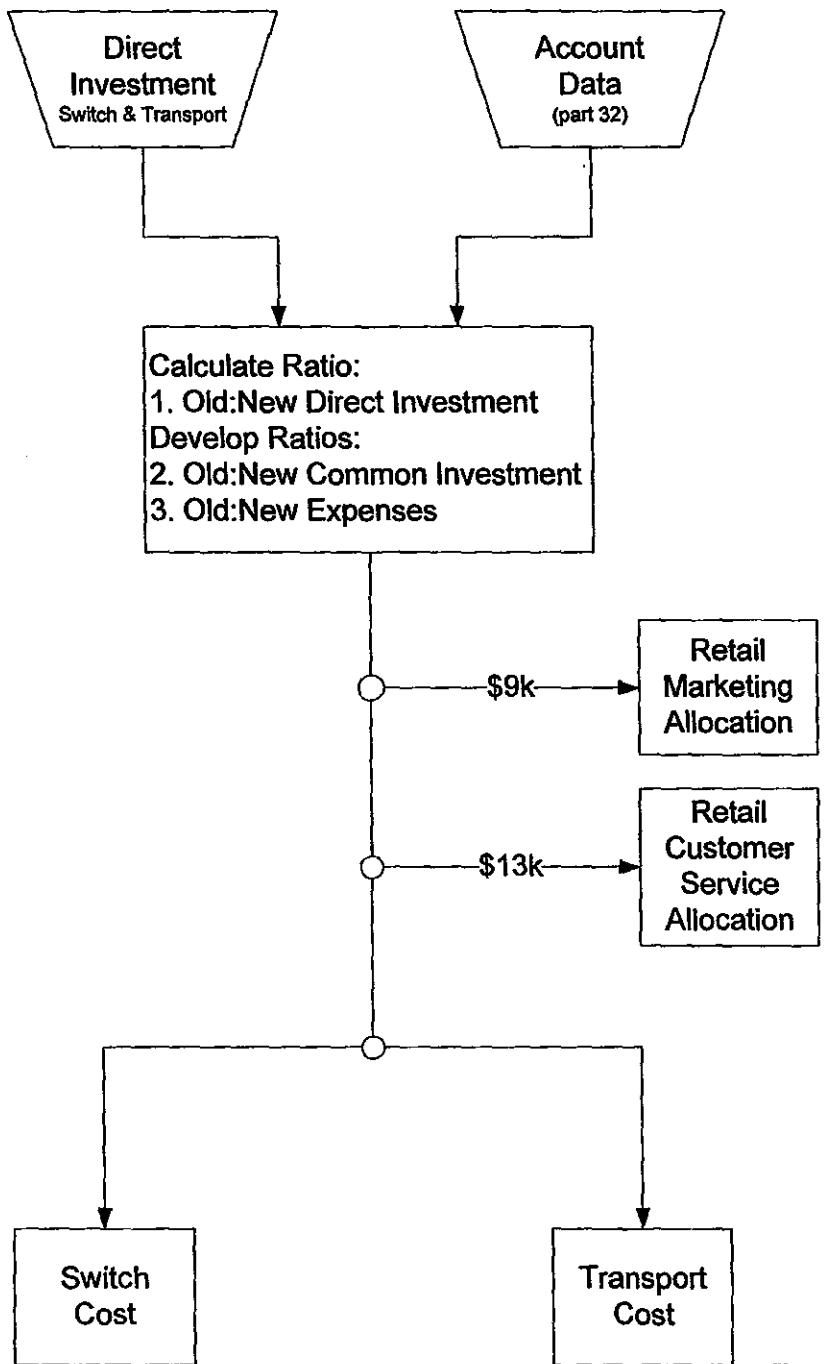

EXHIBIT
tabbies
TE-R-2

Switching Cost McCook

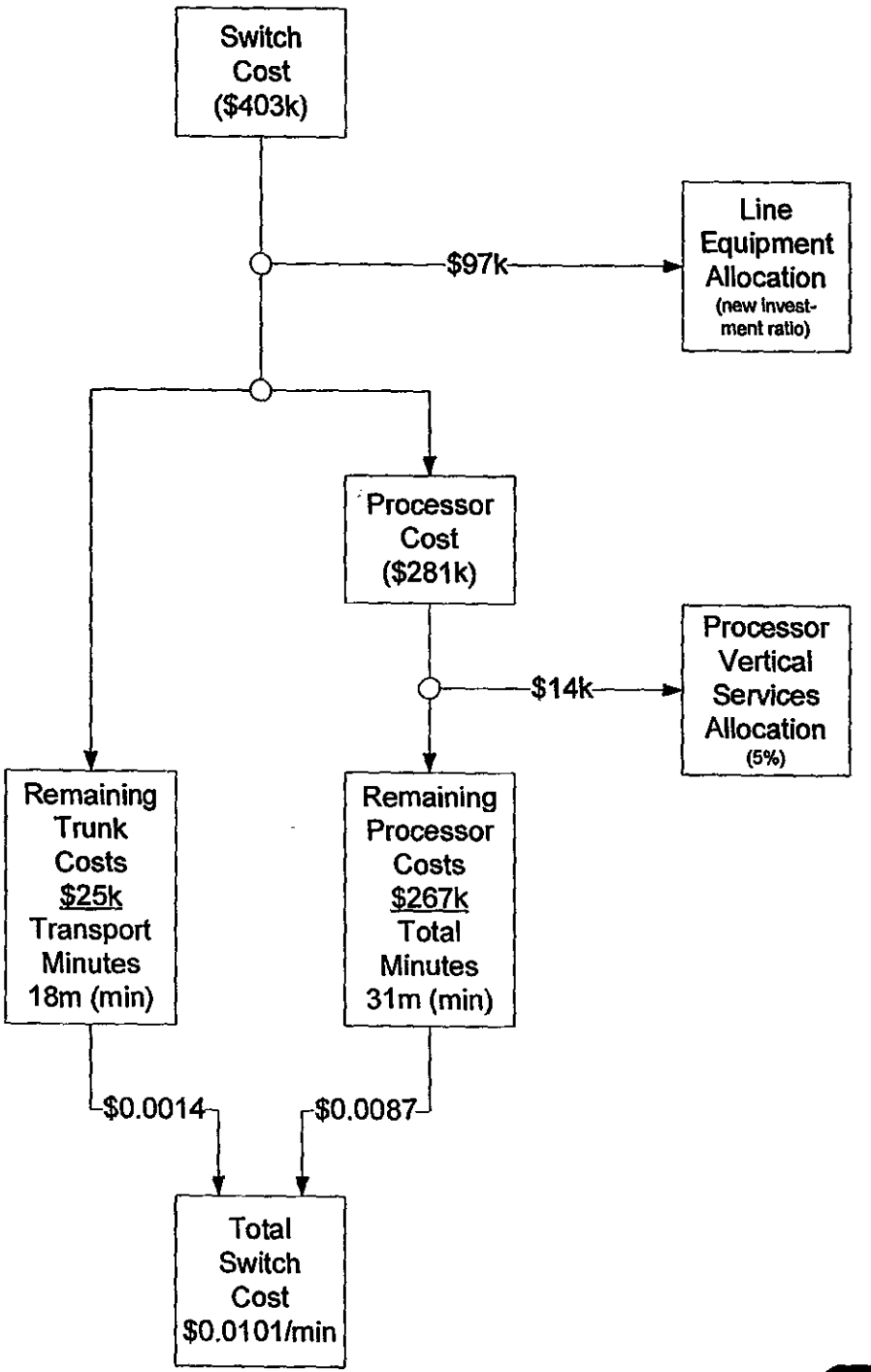

EXHIBIT
TE-R-3

83

document came from Siemens' EDDS documentation, which stands for electronic document -- electronic delivery -- I'm sorry, electronic documentation delivery system. That's a tongue twister.

MR. SCHENKENBERG: Is that information public, or is that proprietary?

THE WITNESS: It's public. I believe it mirrors what's on the web, Siemens' web.

MR. SCHENKENBERG: No objection.

ARBITRATOR GRIFFING: Then Exhibit 151 is received.

(Exhibit No. 151 is made a part of this record and may be found separate.)

MR. SCHUDEL: Dr. Griffing, even though it will be referenced later, since 152 I believe is sourced from the same Siemens information, as long as I have Mr. Weston on the stand, it would seem so we don't repeat this, efficient for me to go ahead and query him on 152 if that's acceptable to you.

ARBITRATOR GRIFFING: Any objection?

84

MR. SCHUDEL: Unless you want to just accept it.

MR. SCHENKENBERG: No objection to that process.

Q. (BY MR. SCHUDEL) I will hand you, Mr. Weston, what's been marked as Exhibit 152. After you've had a chance to look at it, would you please identify Exhibit 152 for us?

A. This document pertains to ordering procedures that Siemens requires of a telephone company such as ours. And it also includes separate pieces of -- descriptions of several pieces of equipment within the SLS environment.

Q. Were you responsible for obtaining that document for this hearing?

A. Yes, I was.

Q. And where did you source that document from?

A. It was also from the electronic delivery documentation system.

Q. So the same source as 151; is that correct?

A. That is correct.

MR. SCHUDEL: Would offer Exhibit 152 at this time.

MR. SCHENKENBERG: No objection.

MR. SCHUDEL: I would ask this

85

witness be excused. We will be recalling him later, but he can be excused for the purpose of his foundation testimony.

ARBITRATOR GRIFFING: Exhibit 152 is received. And the witness is excused.

MR. SCHUDEL: I would recall Mr. Aanerud to the stand.

(Exhibit No. 152 is made a part of this record and may be found separate.)

(DIRECT EXAMINATION RESUMED BY MR. SCHUDEL:)

Mr. Aanerud, because we had a bit of an interruption in the flow, I'm going to go back and restate my question and then allow you to proceed with your answer.

In Mr. Williams' rebuttal and Mr. Pitkin's rebuttal testimonies, they assert all switched costs are nontraffic sensitive. Do you agree with this assertion.

A. No, I do not. And data that is available from Siemens, the switch vendor, also does not support this contention. Vendor ordering --

Q. Again, I would ask you to slow and speak a little more loudly for us.

A. I'm sorry. Vendor ordering information

86

relies on busy-hour estimates for all users of the switch. The processor/matrix costs are based on estimates and are traffic sensitive.

Siemens' documentation in Exhibit 151, Section 6, titled CP113 engineering, addresses processor capacity. It states that a minimum -- at a minimum configuration, the CP113 consists of two base processors. For more call processing capacity, from one to six call processors can be added.

In my mind this is clearly based on call load and is traffic sensitive.

Siemens' documentation also states that determining the size of a processor requires -- can be done by two methods. One, typical call types per line can be estimated based on the number of lines. Or specific call information can be used to estimate load.

The methods provide a generic and more specific way of estimating the traffic-sensitive needs of switching. Just because the estimate of processor needs can be based on typical usage per line does not make it nontraffic sensitive.

If call load increases, additional processor capacity can be added, irrespective of the number

give it the weight it deserves.

(Exhibit No. 228 is made a part of this record and may be found separate.)

MR. SCHENKENBERG: Exhibit's received?

ARBITRATOR GRIFFING: Yes, Exhibit 228 is received.

Q. (BY MR. SCHENKENBERG) I'm showing you what's been identified as Exhibit 229, which was listed as a surrebuttal exhibit, which is a decision from May 5th, 2003, from the State of Utah.

MR. SCHENKENBERG: That was transmitted by e-mail. I do not have copies for you right now.

ARBITRATOR GRIFFING: I will check.

Q. (BY MR. SCHENKENBERG) Can you identify why you have asked to have this marked as a surrebuttal exhibit?

A. Yes. This is additional information that came to my attention, in fact, was actually an order from the Public Service Commission of Utah that was ordered after the filing of my April 25th, 2003, testimony.

It's an order from the Public Service

Commission of Utah issued May 5th, 2003. So it's a very recent order, that shows a continuing trend in switched costs being recovered entirely on a flat-rated basis.

MR. SCHUDEL: No objection.

ARBITRATOR GRIFFING: Exhibit 229 is received.

(Exhibit No. 229 is made a part of this record and may be found separate.)

Q. (BY MR. SCHENKENBERG) Can you give a short summary of your rebuttal testimony, Mr. Pitkin?

A. Yes. And I always love giving my summary at 5:25, you know, in the afternoon, just when everybody's ready to stop for the day.

My name's Brian Pitkin. I have a background in finance and management information systems from the University of Virginia.

And I've been doing this sort of costing work virtually my entire career.

I started off doing stand-alone costing work in the railroad industry. And then when the Telecommunications Act of 1996 was passed, I started doing telecommunications costing work in the nature of UNE costing, universal service fund

costing, access costs and interconnection costs.

During that time, I've worked with virtually every cost proxy model submitted in state and federal regulatory proceedings, including the FCC's synthesis model, their high-cost support model, the benchmark cost proxy model, which was a model developed by a group of ILECs and sponsored in state proceedings around the country, Sprint's -- I'm sorry, GTE's ICM, Bell South's telecommunications loop model and the HAI model and in -- several iterations of the HAI model, formerly the Hatfield model.

In addition, I've reviewed and analyzed a number of ILEC cost studies. Here I'm distinguishing between cost proxy models, which construct a hypothetical network, and cost studies that reflect much more of an embedded calculation of costs.

And recently I've testified on behalf of Western Wireless in North Dakota and South Dakota. Well, let me rephrase that, I provided testimony on behalf of Western Wireless. Those states settled. And we never actually went to hearing in those states.

In my testimony, I've tried to address only

the most critical issues. Exhibit 226 shows the six issues and adjustments that I'm sponsoring here in this proceeding. And I'd like to briefly walk through them.

First, with switching. We have heard and I'm sure we will hear a lot more about the specific types of switching equipment that Great Plains has sponsored in this proceeding. The RCUs, the DLUs, the DSFs, all of that switching equipment, there's probably going to be a substantial amount of additional testimony on those issues.

I guess the point I want to get across here is that in the end, none of that testimony should be relevant because switching costs should be recovered entirely on a flat-rated basis.

It's critical that cost studies under the FCC's TELRIC rules reflect cost causation. That means that if the costs of the facilities are not dependent on the usage of the -- of the element, then they can't be recovered on a usage-sensitive basis.

While it used to be true that switching costs were dependent on utilization, the way switches are currently configured, you will never

EXHIBIT
witness TE-R-5

235

exhaust the base processor capacity, at least it would take a very unusual situation. In Great Plains' network, it will never happen.

Now, while the remainder of the switching costs are not relevant, I do want to get across a couple points. RCUs do not provide switching functionality.

Now, we might hear some testimony and I'm hoping to get some testimony on this issue I guess when Great Plains' additional witnesses get up, but even if the RCUs do provide switching functionality on a stand-alone emergency basis, they will never provide the sort of switching that is used in originating and terminating wireless traffic, that traffic where it has to transit the hiA or the hiQ switch.

Similarly the DSFs which I understand are -- serve a controlling function are not required in the switching network and actually do not provide any switching functionality.

So for those reasons, number one, the RCUs and DSFs should be included from the investment summary of switching costs and, two, none of the switching costs should be traffic sensitive anyway.

236

As far as interoffice facilities go, Great Plains has selected one cost estimate that it has chosen to rely on in this proceeding. In that one project that they chose, the total cost of the project exceeded the budget by over 100 percent. It doubled the original budget of the project.

Second, the one hand-picked project that they used was outside of Herman, which has much, much higher density than Great Plains' overall network. We heard testimony that on average Great Plains' customer density is approximately two -- I don't remember the exact number but 2.5 lines per square mile. Herman just doesn't reflect those characteristics.

It's important in doing a forward-looking cost study that the costs included reflect the average costs of the network that you're modeling, not a subset of high-cost areas.

Next, we move on to sharing. Great Plains has assumed absolutely no sharing of its interoffice network. In my entire career, I have never seen that before.

In many of the ILEC cost studies, structure costs are developed using a factor and a factor

237

applied to forward-looking investments. So the cost of the structures are attributed among all the services and the way that they are actually paid based on their embedded books.

I'm not saying it's appropriate. The fact is those factors contemplate sharing.

In the HAI model, the benchmark proxy cost model, the FCC synthesis model, every model I've ever evaluated explicitly contemplates sharing of structures, of interoffice facilities.

And there are two types of sharing. One is the sharing with other entities. LEC utilities, here we have cable facilities. In addition, you view sharing with the other telecommunications plants. You have sharing with your feeder plant, sharing with your distribution plant. Those sharing assumptions are recognized. They exist every day. And they have utterly been excluded from the cost study.

Third, I discussed the land, building and power factors. Again, I've never seen in my career the approach used here by Great Plains in this cost study. Land, building and power costs being recovered solely from end office switching and transmission functions is not an appropriate

238

way to allocate those facilities.

You have buildings of all types. You have buildings performing maintenance functions, buildings performing -- you have headquarters facilities. You have buildings housing motor vehicles. You have huts and cabinets which are attributed to the building account. None of those are -- all of the outside loop plant that shares those facilities should be bearing their portion of the land, building and power costs.

In addition, power -- most of the power in the central office is used to power the loop plant, used to drive the circuit to signal across the circuit. Attributing those power costs to switching misplaces and misallocates how those costs are actually incurred.

And, finally, I want to talk about the traffic transiting network. Mr. Williams has provided to me a minute-of-use assumptions that he gathered from reviewing Great Plains' data for internet traffic. I have incorporated those assumptions into the interoffice portion of the cost studies so that all of the traffic and all of the costs are being attributed to all of the minutes transiting the network.

EXHIBIT
tabbies TE-R-5
cont'd

Minute Diagram

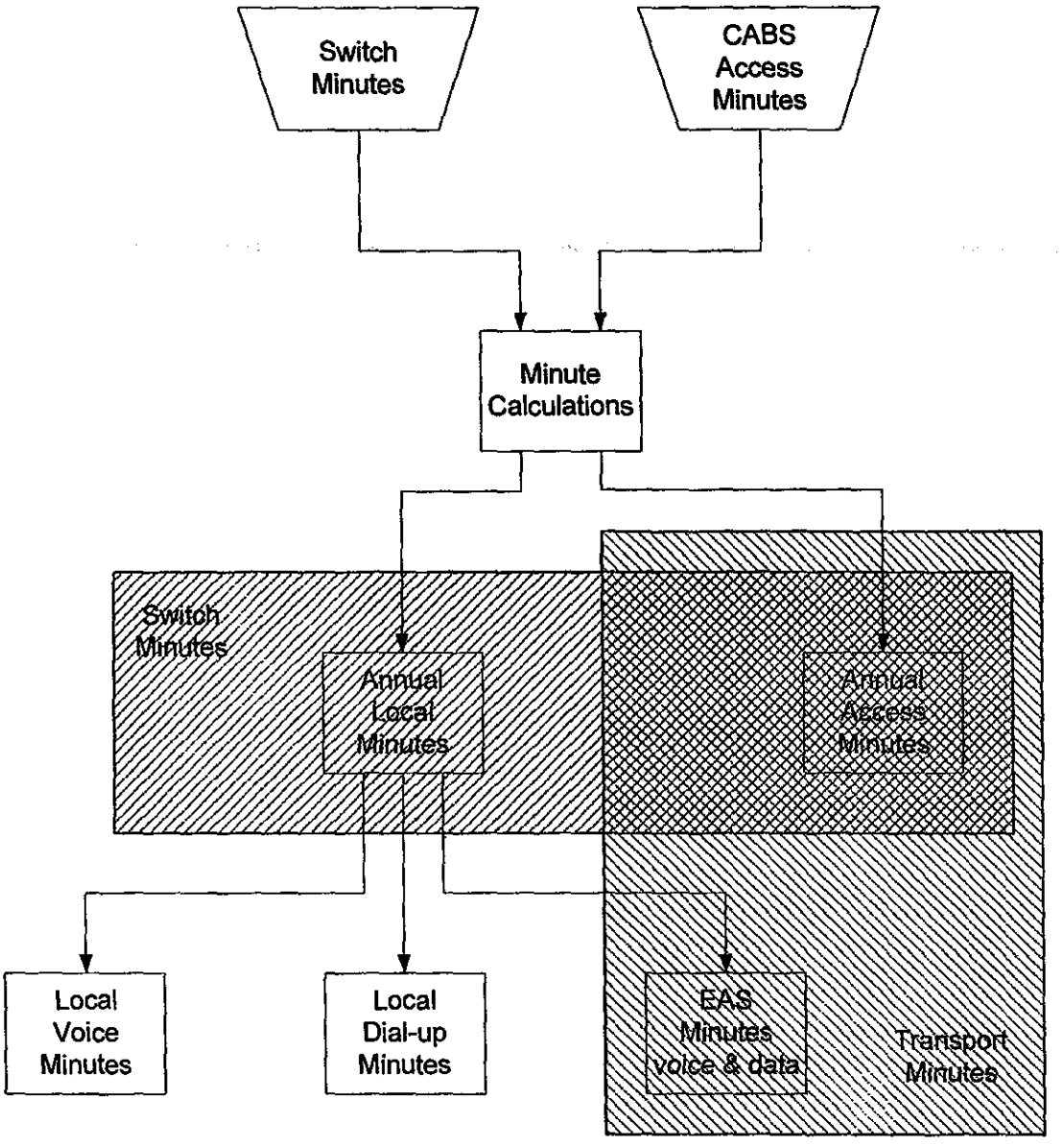

EXHIBIT
TE-R-6

Outside Plant Cost McCook

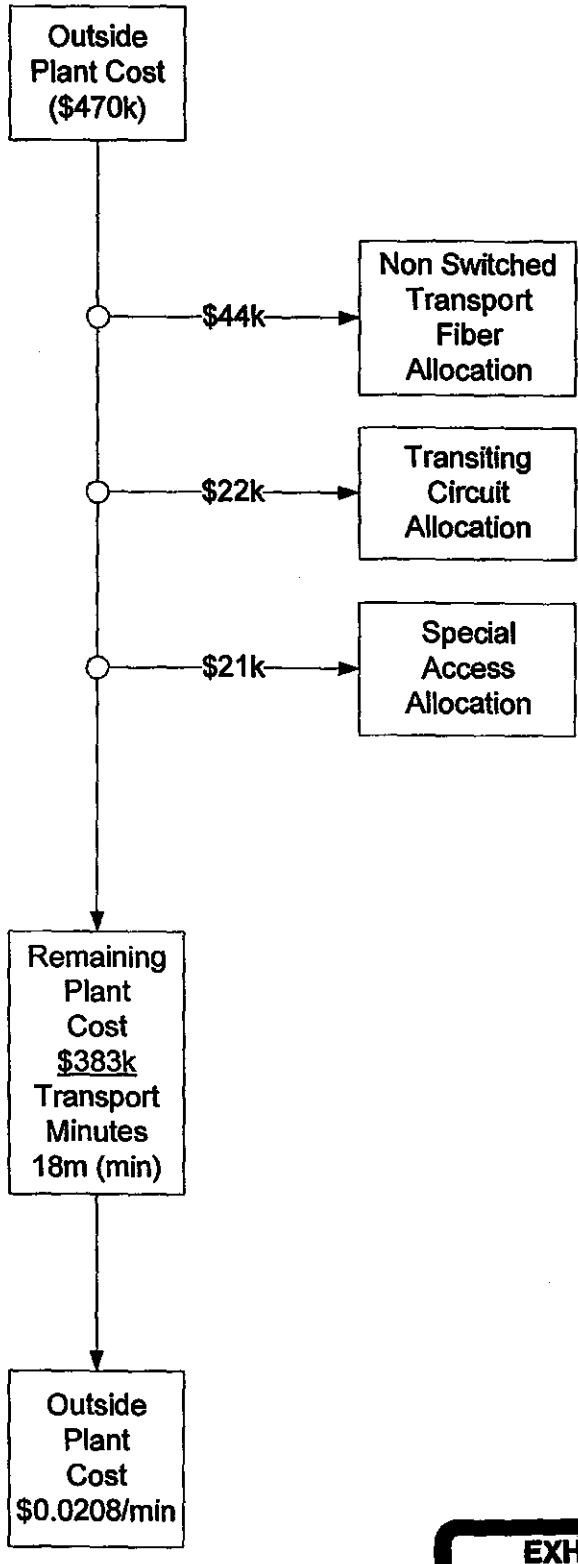

EXHIBIT
TE-R-7

Transport Electronics Cost McCook

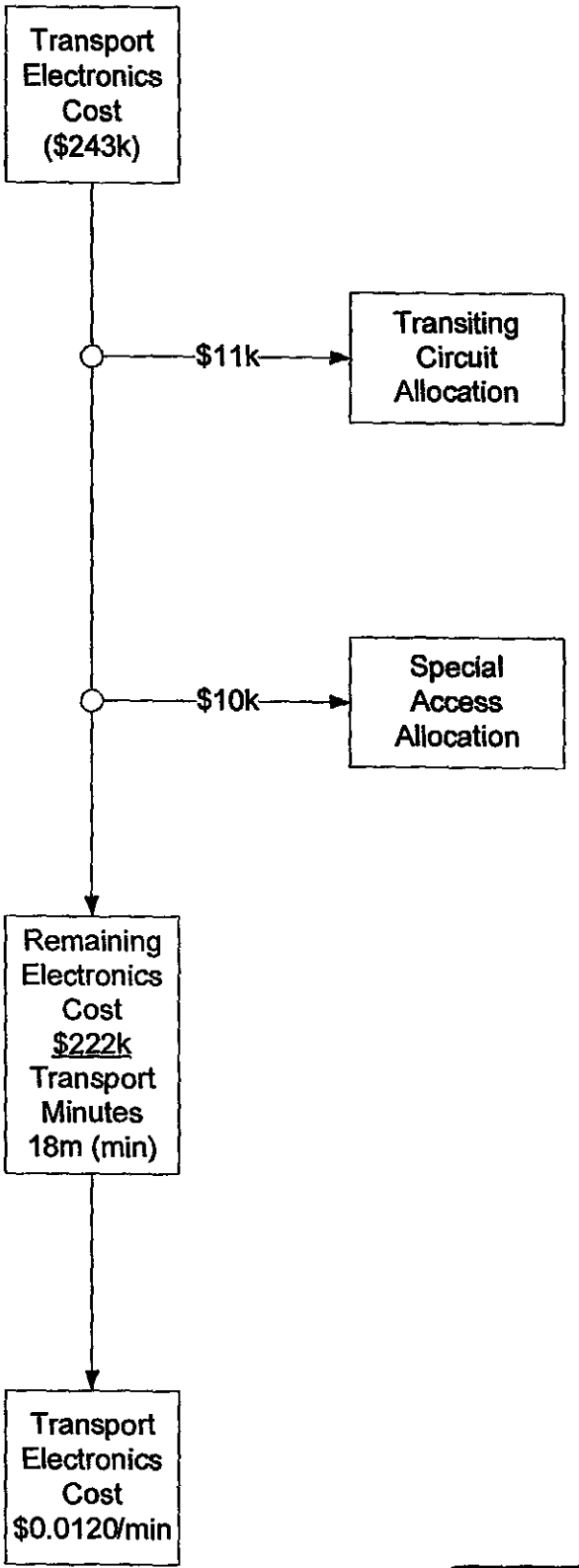

EXHIBIT
tabbies
TE-R-8

Exhibit TE-R-9

			Recurring	Recurring Per Mile
9.0 Unbundled Network Elements (UNEs)				
9.6 Unbundled Dedicated Interoffice Transport (UDIT)				
9.6.1	DS0 UDIT (Recurring Fixed & per mile)			
	9.6.1.1	Over 0 to 8 Miles	$ 17.14	$ 0.09
	9.6.1.2	Over 8 to 25 Miles	$ 17.12	$ 0.12
	9.6.1.3	Over 25 to 50 Miles	$ 17.13	$ 0.11
	9.6.1.4	Over 50 Miles	$ 17.14	$ 0.07
9.6.2	DS1 UDIT (Recurring Fixed & per mile)			
	9.6.2.1	Over 0 to 8 Miles	$ 34.75	$ 0.95
	9.6.2.2	Over 8 to 25 Miles	$ 34.76	$ 1.82
	9.6.2.3	Over 25 to 50 Miles	$ 34.76	$ 1.77
	9.6.2.4	Over 50 Miles	$ 34.75	$ 1.23
9.6.3	DS3 UDIT (Recurring Fixed & per mile)			
	9.6.3.1	Over 0 to 8 Miles	$ 236.22	$ 10.43
	9.6.3.2	Over 8 to 25 Miles	$ 236.53	$ 10.83
	9.6.3.3	Over 25 to 50 Miles	$ 236.71	$ 9.91
	9.6.3.4	Over 50 Miles	$ 243.94	$ 24.44

Exhibit TE-R-10

		Recurring	Per Mile	# Miles	Mileage cost	Total Circuit Cost
DS0 UDIT (Recurring Fixed & per mile)						
9.6.1.1	Over 0 to 8 Miles	$ 17.14	$ 0.09	8	$ 0.72	$ 17.86
9.6.1.2	Over 8 to 25 Miles	$ 17.12	$ 0.12	12	$ 1.44	$ 18.56
	Average Circuit Cost					$ 18.21
DS1 UDIT (Recurring Fixed & per mile)						
9.6.2.1	Over 0 to 8 Miles	$ 34.75	$ 0.95	8	$ 7.60	$ 42.35
9.6.2.2	Over 8 to 25 Miles	$ 34.76	$ 1.82	12	$ 21.84	$ 56.60
						$ 49.48
DS3 UDIT (Recurring Fixed & per mile)						
9.6.3.1	Over 0 to 8 Miles	$ 236.22	$ 10.43	8	$ 83.44	$ 319.66
9.6.3.2	Over 8 to 25 Miles	$ 236.53	$ 10.83	12	$ 129.96	$ 366.49
						$ 343.08

Ratio of DS1 to DS0	2.7
Ratio of DS3 to DS1	6.9
Ratio of DS3 to DS0	18.8

Alltel's Bandwidth Assumption

Ratio of DS1 to DS0	24
Ratio of DS3 to DS1	28
Ratio of DS3 to DS0	672

DS1 and DS3 UDIT Cost/Rates based upon Alltel's Bandwidth Assumption to Allocate Costs

DS1 Rate

DS0 Rate	$ 18.21
DS1/DS0 Ratio	24
DS1 Rate	$ 437.04

DS3 Rate

DS0 Rate	$ 18.21
DS1/DS0 Ratio	672
DS1 Rate	$ 12,237.12