

SERVICE DATE 57  
JUN - 5 1998

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the pricing Proceeding for )	DOCKET NO. UT-960369
Interconnection, Unbundled Elements, )	
Transport and Termination, and Resale )	
..... )	
)	
In the Matter of the pricing Proceeding for )	DOCKET NO. UT-960370
Interconnection, Unbundled Elements, )	
Transport and Termination, and Resale )	
for U S WEST Communications, Inc. )	
..... )	
)	
In the Matter of the pricing Proceeding for )	DOCKET NO. UT-960371
Interconnection, Unbundled Elements, )	
Transport and Termination, and Resale )	NINTH SUPPLEMENTAL ORDER ON
for GTE Northwest Incorporated )	CLARIFICATION
..... )	

**BACKGROUND**

The Commission on April 16, 1998, entered the Eighth Supplemental Order in these consolidated proceedings, an interim order determining costs of certain telecommunications elements. Although an interim order not subject to interlocutory review, the Commission nonetheless authorized the parties to request clarification and correction of errors of fact and law. The Commission received several requests for clarification, called for answers to those requests, and in the instant Order clarifies the Eighth Supplemental Order (Order). In the instant Order we group the questions by subject.

The instant Order requires parties to provide data, information, or tariff refileing. The Commission clarifies its direction to the parties in the Order with regard to additional filing requirements, and as fully described in the text of the instant Order states the filing deadlines for complying with those filing requirements.

**MEMORANDUM**

**I. U S WEST's LOOP COST**

1. U S WEST seeks clarification and correction of the Table at page 54 of the Order. The Table reflects the Hatfield, BCPM, and RLCAP cost models' results after the changes prescribed by the Order were given effect. It also includes indications of adjustments which the Commission would have made, had it been possible for the Commission to modify the models, with a description of the likely impact of such adjustments upon the loop cost.

2. U S WEST points out that, due to a transcription error, the Table contains the same adjustments reported for GTE on page 55 of the Order. The corrected Table follows.

	Hatfield	BCPM	RLCAP
Commission's run of the model	\$13.53	\$17.23	\$13.76
Placement Costs	Increase Cost, ¶98		
Load Coils	Increase Cost, ¶145		
Special Access Lines	Increase Cost, ¶204		
Impact of Competition	Increase Cost	Increase Cost	Increase Cost
Cost of money; Depreciation			¶215, 217
Grooming			Increase Cost ¶159

3. The cost impact of adjustments for cost of money and depreciation depend upon the benchmark. U S WEST submitted versions of RLCAP using both a 9.37% and an 11.4% cost of money. We have used 9.63% as the cost of money; relative to the 9.37% and 11.64% cost of money, the loop cost estimate increases and decreases, respectively.

4. NEXTLINK, TCG, and AT&T request clarification as to the Commission's calculation of U S WEST's \$17.00 unbundled loop cost. They note that the \$17.00 figure is almost equal to the highest cost produced by any of the individual models. The three parties asked the Commission to describe the calculation it used to reach \$17.00.

5. We stated in paragraph 269 of the Order that "[o]n the first line of the Table are the costs reported by the different models after we make the changes we describe fully above. There are a few areas in which we could not modify the models to comport to our findings. In those instances, we indicate the likely impact on the loop cost."

6. We obtained the \$17.00 cost by considering the loop estimates from the three models and adjusting those estimates for the factors identified in the Order. We found that \$17.00 was a fair, just, and reasonable estimate of the cost of the loop. It is based upon the cost estimates provided by the three models and the factors (e.g., impact of competition) that were addressed by the parties during the hearings, factors which could not be adjusted for use as inputs to the models.

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## II. COMMON COSTS -- NEXTLINK/TCG/AT&T

7. NEXTLINK, TCG, and AT&T request that the Commission clarify its position on common costs. These parties believe the Order implies that common costs should not be included in the cost model, and that the Commission was neither accepting nor rejecting the pricing recommendations of GTE, WITA, or Commission Staff. Clarification Petition at 2-3.

8. In the Order, the Commission neither accepted nor rejected the pricing recommendations of GTE, WITA, or the Commission Staff. We found that common costs should not be included in the cost study.

## III. FOUR-WIRE LOOP COST -- U S WEST/GTE

9. On pages 41 and 42 of the Order, paragraphs 185-195, the Commission discusses the cost of a four-wire loop relative to a two-wire loop. The Commission concluded that the cost of a four-wire loop is 25% greater than that of a two-wire loop.

10. U S WEST contends that the conclusion that a four-wire loop is 25% more costly than a two-wire pair is an error of fact and law. The Order cites the testimony of U S WEST witness Reynolds to point out that increasing the number of in-service pairs has a small impact on the cost of service. Order at ¶195. U S WEST states that, in the example provided by Reynolds, "only the incremental cost of the distribution cable, not the TELRIC of the entire loop" was at issue. U S WEST asserts that the "25% increment allowed by the Commission does not represent TELRIC, but appears to be more of an incremental analysis."

11. GTE asks the Commission to clarify whether it examined the Company's four-wire calculations, as displayed on sheets 000159 through 000163 of its cost submission. The Commission did review the calculations, as presented in the electronic form of the study, prior to making the 25% finding.

12. TRACER contends that the appropriate price differential is five percent.

13. Upon reconsideration, we concur with U S WEST that the 25% cost difference reflects the incremental, rather than the TELRIC, cost of a four-wire loop, and that the cost value should be increased.

14. The TELRIC of a loop is a function of loop utilization, among other things. The loop utilization values that we adopted at paragraphs 165 through 181 of the Order reflect the number of working pairs within the cable sheaths. The count of the number of working pairs would include the number of working pairs used to provide four-wire loop services. As the development of the loop unit cost has taken into account the number of working pairs, each pair in the Hatfield, BCPM, and RLCAP cost models has been assigned an equal portion of the structure costs.

15. On the other hand, it is not the case that the cost of providing a four-wire loop is twice the cost of providing a two-wire loop. The cost relationship identified by U S WEST is a function of the manner in which the cost models were constructed; it does not reflect the actual economics of the network. As pointed out by U S WEST witness Reynolds, doubling the number of installed lines does not have a large impact upon the cost of service.

16. The Commission therefore must balance the economics of the network with the estimates provided by the various loop models. Given the limitations of the existing models, we will accept that doubling the number of copper pairs doubles the cost of service. This approach is consistent with the method used to derive our loop estimates of \$17.00 and \$20.00, respectively, for U S WEST and GTE. The Order states at paragraph 178: "The unit cost of production is the total cost divided by total demand." We further found at paragraphs 177 through 180 that our loop estimates would reflect the cost impact of customers subscribing to second, third, and fourth lines. The cost modeling process resulted in assigning to these lines an additional portion of the cost of placing cables in the ground. The cost impact of this assignment was a significant reduction in the estimated cost per loop pair.

17. At paragraph 179, we adopted the methodology proposed by AT&T/MCI. Under this approach, if two loops are ordered at the same location, each loop is assigned an equal share of the structure costs. Each loop uses two wires and therefore the use of two loops requires four wires. We concur therefore with GTE and U S WEST that regardless whether four wires are used to provide two, two-wire loops, or one, four-wire loop, the distribution and feeder cable costs assigned to those two configurations should be identical.

18. The assignment of structure (placement) costs to these additional lines resulted in a reduction in the cost estimate for the primary loop. AT&T/MCI witness Zepp did not propose a two tier costing structure in which all structure costs are recovered from the first pair of cables and that additional pairs at the same location be assigned only the cost of the additional material.

19. U S WEST assumes that the four-wire, "257C" investment is twice as expensive as the capital required for a two-wire loop. Order at ¶190. This strikes us as an unreasonable assumption. It is also contrary to the data reported by GTE. As does U S WEST, GTE assumes that when copper is used exclusively, the price of a four-wire loop is twice that of a two-wire loop. But for those situations in which copper is not used in the feeder, GTE reports that the cost of a four-wire loop is approximately 30% higher than a two-wire loop.

20. We direct U S WEST to re-run its four-wire loop study using more reasonable data for "257C" investment. Information demonstrating the result of running the loop cost study must be filed within two weeks of the date of this Order.

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21. For GTE, we find, as initially proposed by the Company, that the weighted average cost of a four-wire loop is 50% higher than that of a two-wire loop.<sup>1</sup>

22. This modification to our earlier finding is limited to the issue of the cost of service. The Commission makes no judgment regarding the appropriate *price* differential between a two-wire and a four-wire loop.

**IV. NON-RECURRING COST STUDIES**

23. At hearing, some parties questioned whether U S WEST's non-recurring cost studies were sufficiently forward looking. For example, AT&T/MCI noted that "U S WEST's cost studies are based, by and large, on out-dated labor estimates gathered, in some cases over 10 years ago, long before U S WEST's recent reengineering efforts."

24. U S WEST responded to this criticism by noting that the time "estimates are revised and updated as necessary." In fact, U S WEST recently modified the time estimate in one of these studies to reflect a six minute requirement as opposed to the previous 45 minutes.

25. In paragraphs 467 and 468 of the Order, we stated:

The transcript shows that U S WEST claimed that it had updated its Local Interconnection Service (LIS) Link Study in December 1997. The Company's cost witness, Ms. Santos-Rach, stated that the revised study reflected six minutes of work at the interconnection service center. [Footnote omitted.] The prior study indicated 45 minutes of work effort. Tr. 1987-88, 2068.

The December 1996 Study still reflects the 45 minute time period for the first link ordered. LIS-LINK 2 Wire/4 Wire Nonrecurring Cost Study, December 1996, at 1 of 32. We have modified the study to reflect the six minute time period. [Footnote omitted.]

26. U S WEST now argues that the testimony was incorrect and the study was done correctly:

[T]he 45 minute time estimate should not be reduced. What actually happened, and which is reflected in the cost studies, is that in the August study, the time estimate for the *initial* loop was 45 minutes,

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<sup>1</sup> The cost difference is larger for U S WEST than for GTE, because a larger portion of GTE's loops are served with digital loop carrier. When digital loop carrier is used, the additional investment is smaller than when copper is employed. Digital loop carrier investment appears in account "257C".

while the time estimate for *each additional* loop was zero. This was found to be incorrect, and an incremental 6 minutes was input to the study for additional loops. This reflects the fact that additional loops will require additional work time, while also reflecting the efficiencies of processing orders for more than one loop at a time for a single interconnection. Petition for Clarification and Reconsideration at 3-4.

27. As we pointed out in the Order, the net impact of the December study, relative to the August submission, is an increase in the estimated cost of service. We do not accept U S WEST's implicit assumption that the cost of service is increasing. We agree with AT&T/MCI that the efficiency of U S WEST's operations should be improving.

28. AT&T/MCI cross-examined U S WEST witness Santos-Rach about this issue. Santos-Rach stated unequivocally that the 45 minute assumption in the August study had been replaced by a value of six minutes in the December study. That response drew no re-direct examination of Ms. Santos-Rach of the sort that might have occurred if the answer reflected U S WEST's present perspective.

29. We deny U S WEST's petition for reconsideration on this issue. We concur with AT&T/MCI that the Company's initial time estimates were unreasonable in light of technological changes experienced by the industry during the past decade. We affirm our prior finding of six minutes at the interconnection service center.

**V. INTERCONNECTION AND TRANSPORT AND TERMINATION -- AT&T/  
TCG/NEXTLINK/; RECIPROCAL COMPENSATION -- AT&T/TCG/  
NEXTLINK/COMMISSION STAFF**

30. AT&T, TCG, and NEXTLINK request clarification on the topic of interconnection and transport and termination. These parties did not argue this matter extensively in their post-hearing briefs. TCG and NEXTLINK noted in their brief that this is an "issue that received very little attention in this proceeding." They supported the current bill-and-keep compensation scheme for transport and termination. AT&T/MCI also supported bill-and-keep. Brief at 88. AT&T, too, noted that neither U S WEST nor GTE had presented evidence showing that another compensation mechanism was more appropriate than bill-and-keep, stating that the Hatfield Model could be used to identify pertinent costs.

31. U S WEST contended it had provided a transport model that could be used to calculate the cost of transport and termination. GTE also submitted a transport model.

32. We addressed this issue in paragraphs 437 through 443 of the Order. We rejected the use of the Hatfield Model to identify the cost of transport. We stated that *if* it becomes necessary to use a cost model, the cost models of GTE and U S WEST should be employed for this purpose. Order at ¶443. We do not understand NEXTLINK, TCG,

and AT&T's statement that they need additional information on how these costs should be calculated. U S WEST did not comment on this request and GTE concurs that the Commission needs to clarify this matter.

33. We believe the Order is clear on its face. If it becomes necessary to model transport costs, the GTE and U S WEST cost models should be used. The issue of bill-and-keep is more properly a pricing issue. The Commission has not foreclosed bill-and-keep from presentation or use in Phase II of this proceeding.

**VI. OTHER UNBUNDLED NETWORK ELEMENT COSTS**

34. On May 18, 1998, U S WEST filed revised cost studies that reflected the Order's findings regarding depreciation and the cost of money. GTE has not filed revised cost studies. GTE is ordered to file the revised cost studies fully complying with the Eighth Supplemental Order within seven days of the date of the instant Order. The filing also must contain a comparison of its UNE cost estimates and the Hatfield estimates provided in Attachment A to the instant Order.

35. The parties filed little or no testimony regarding the cost estimates for tandem switching, local transport, public telephones, and operator services. Cost estimates for these items were provided by various incumbent local exchange company models, as well as the Hatfield Model. Sprint sponsored BCPM for the limited purpose of estimating the cost of the loop.

36. For tandem switching, we estimate the cost of the UNE as the average of the U S WEST and Hatfield value.<sup>2</sup>

TANDEM SWITCHING

Cost Model	Hatfield	USWC	Average
Cost Per Minute	\$0.00127	\$0.001338	\$0.001304

37. The Hatfield Model reports transport network element costs on both a per minute and DS-0 equivalent basis. At paragraph 440 of the Order, we stated that "[d]ue to our concern regarding the calculation of [the route-to-air mile ratio] value in the [Hatfield] model, we do not believe that the Hatfield Model should be used to calculate inter-office costs."

<sup>2</sup> The U S WEST cost estimate is the sum of the estimated long-run incremental cost and the attributed cost. We included both costs when we reported the RLCAP loop cost estimate of \$13.76 in the Order. The Hatfield estimates for GTE and U S WEST are provided in appendix A of the instant Order.

38. U S WEST reports transport costs in a format different from that used by the Hatfield Model. For transport termination, the Hatfield Model estimates the monthly cost per DS-0 equivalent. The Hatfield Model reports the cost of dedicated, common, and direct transport. U S WEST's cost studies do not make this distinction. U S WEST, on the other hand, estimates the cost per minute. The parties are directed to submit comments to the Commission within two weeks of the issuance of the instant Order in which they address how these different cost structures can be reconciled, and at a minimum discuss 1) the need to separately identify dedicated, common, and direct transport costs, and 2) if they support the need to make this distinction, how the U S WEST cost data can be used to estimate these different types of transport costs.

39. U S WEST has submitted its cost estimate for extension technology for integrated services digital network basic rate interface. This is a cost that U S WEST claims it incurs when it extends the ISDN BRI signal beyond approximately 18 kilofeet from the distribution frame to the network interface of the end user.

40. No party addressed the extension study in its brief and the Hatfield Model does not provide an estimate of the cost of providing the extension technology.<sup>3</sup> Therefore in Phase II, U S WEST's cost estimate of \$19.92 for direct and shared costs will serve as the price floor.

41. For operator services, the Hatfield Model does not provide unit cost estimates. Hatfield Model Folder Unit Costs, ll. 93-95. Furthermore, for operator services, U S WEST provides cost estimates for different types of calls -- information which is absent from the aggregate Hatfield Model cost data. Hatfield Model Folder Operator. Therefore, for operator services, only the U S WEST data will be used in Phase II.

42. U S WEST has not provided a cost estimate for public telephones. The Hatfield Model provides the annual cost estimate for all pay phones, but no unit cost data. The parties are directed to submit comments to the Commission within two weeks of the issuance of the instant Order regarding the need to set a UNE price for public telephones, and, if such a need exists, how the Hatfield Model cost data should be used to fulfill this objective.

43. Both the U S WEST and Hatfield models provided cost estimates for common channel signaling. The two studies provide estimates for different types of activities. The Hatfield Model reports the cost of links, STP per signaling message, and SCP per query. U S WEST reports the fixed and per mile costs for direct link transport, as well as the STP monthly cost per port. The parties are directed to submit comments to the Commission within two weeks of the issuance of the instant Order in which they address how these different cost structures and estimates can be reconciled.

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<sup>3</sup>The Hatfield Model estimates the cost of providing ordinary voice, not ISDN service.



44. U S WEST has provided cost estimates for DS1 and DS3 service, as well as EICT, regeneration, and central office multiplex. It does not appear that the Hatfield Model provides estimates for these UNEs. The parties are directed to submit comments to the Commission within two weeks of the issuance of the instant Order in which they address whether only U S WEST's cost estimates are part of the record, or whether other parties have placed cost estimates into the record in Phase 1. If different estimates were provided for the same UNEs, the Commission asks the parties to address how these different cost estimates can be reconciled with the U S WEST values.

**VII. LOOP LENGTHS -- COMMISSION STAFF**

45. In discussing the adjustment to the proxy models for loop lengths, paragraph 133 of the Order states: "In future proceedings, we strongly encourage the parties to substitute the results from a study for their value judgements." Commission Staff seeks clarification as to how the Order intends the parties to use the actual loop length data.

46. Commission Staff argues that there is no basis, theoretical or otherwise, that requires TELRIC estimates from a forward looking cost model to replicate loop lengths. They add that the FCC has not required that the current loop design be replicated.

47. We agree with Commission Staff's observation that the FCC's TELRIC methodology does not require that a forward looking model replicate existing loop lengths. We do note, however, that the FCC has also expressed an interest in seeing that the studies do take into account the current length of the loop. The FCC has adopted specific criteria to guide the states as they conduct USF studies. On February 27, 1998, the FCC set forth the information it "need[ed] to evaluate whether a state's cost study complies with criteria set forth in the *Universal Service Order*." At criterion 1, subheading (g), the Commission inquired: "Does the study's average loop length reflect the incumbent LEC's actual average loop length? If not, explain why not." *State Forward-Looking Cost Studies for Federal Universal Support CC Docket Nos. 96-45 and 97-160, DA 98-217.*

48. The FCC has encouraged the states to use a similar methodology for UNEs and USF cost estimates. *Universal Service Order, CC Docket No. 96-45, at ¶251.* The FCC has expressed an interest in validating the reasonableness of the model's results by comparing actual to estimated loop lengths.

49. We agree with Commission Staff that a forward looking cost model need not produce loop lengths that are identical to the current values. For example, on a forward looking basis, a ring might be substituted for the traditional pine tree architecture. Nevertheless, where the difference in lengths is substantial, the sponsor of the cost study should identify the magnitude of the difference, indicate how it affects cost, and explain the basis for the difference.

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50. TRACER has explained why the forward looking loop lengths may be shorter than the embedded values. We accept that there are plausible reasons for prospective loop lengths to differ from the current loop lengths. At paragraph 221 of the Order, we pointed out that the difference between the proxy models and special loop length estimates was large, ranging in values for GTE from 16% to 884%.

51. TRACER states that it "joins the Staff in asking for clarification about how the 'actual' loop lengths are to be used to provide meaningful information about appropriate TELRIC costs."

52. At paragraph 222 of the Order, we clearly stated why this information is useful: "For both the Hatfield Model and the Benchmark Cost Proxy Model, the magnitude of variation between wire center special study lengths and default proxy lengths is unacceptable. The special study data is a sensible method for validating the reasonableness of the customer location data in the models. Both models clearly fail this test."

53. TRACER also asks the Commission to clarify how the parties are to use the LEC's wire center loop length estimates "when the loop lengths are estimates and not actual lengths." TRACER's Response to Petition for Clarification at 6.

54. As with other information provided by the local exchange companies, the parties have the opportunity through discovery to determine how data was derived. Through cross-examination and the submission of testimony, TRACER, as well as other parties, have the opportunity to discuss the forensic quality of the data and suggest alternative approaches.

#### VIII. FILL FACTORS -- COMMISSION STAFF/GTE

55. In paragraph 173 of the Order, the Commission adopted the default utilization fill rates used in the Hatfield and Benchmark Cost Proxy Models for purposes of calculating TELRIC estimates. Commission Staff requests that we clarify whether we believe these values are reasonable estimates of the projected actual fill.

56. Based upon the evidence of record in this proceeding, we find the default utilization fill rates used in the Hatfield and Benchmark Cost Proxy Models are reasonable estimates of projected actual fill. In their testimony, Public Counsel, Commission Staff, and AT&T/MCI argued that the Commission should maintain its policy of objective fill. An objective fill of 85% was used for retail services. These same parties supported the adoption of the Hatfield Model. The Hatfield Model default utilization levels are lower than 85%. GTE and U S WEST argued that their fill rates should be based on their current fill rate. In their brief, U S WEST wrote: "Hatfield's default fill factors are actually fairly reasonable." Brief at IV.C.5.

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57. GTE requests clarification as to how the Commission determined that the use of a 60% fill factor, in place of GTE's 55% factor, causes a loop cost reduction of 8.7%. GTE claims that the application of the 60% factor results in a reduction of 5.6%.

58. GTE explains that the adjustment can be made by multiplying the LTM costs by 0.55, and then dividing the result by 0.60. GTE claims that the result of this exercise is a 5.6% change in cost.

59. We disagree. Performing the calculation,  $0.55/0.60$  equals 8.4%, not 5.6%.

60. We obtained the 8.7% by running the electronic form of the model, WATELRIC, at a 55% and 60% utilization level. The logarithmic percentage change was found to be 8.7%.

#### **IX. DEPRECIATION -- TRACER/COMMISSION STAFF**

61. At hearing, Commission Staff witness Spinks testified that the Commission should use the existing Commission authorized depreciation lives, but not survivor curves, ELG weightings, or salvage values.

62. At paragraph 217 of the Order, we stated:

For both GTE and U S WEST, we have used the average service lives and future net salvage values that were reported in those recent proceedings. The rates adopted in those proceedings reflect our understanding of the capital lives of the assets. We therefore conclude that the service lives are appropriate for a forward-looking economic cost model and adopt them for estimating the cost of unbundled network elements.

63. TRACER and Commission Staff ask the Commission to clarify whether the Commission 1) agrees with Mr. Spinks and has determined that only the currently authorized service lives should be used, or 2) disagrees and has determined that the service lives and the salvage values should both be used.

64. The Commission used the projected service lives and salvage values from the recent proceedings. The Order makes no ruling on ELG weightings or survivor curves and we choose not to do so at this time. Rather, for these items, we have used the models' default values.

**X. DEFERRED TAXES -- TRACER**

65. TRACER requests that the Commission clarify its Order to 1) include specific directions that all future models must properly account for the effect of deferred taxes, and 2) adjust downward the capital components of the BCPM and Hatfield loop costs to be used in this proceeding.

66. GTE responds that TRACER is re-arguing its brief, and that TRACER may revive its position in future proceedings.

67. TRACER's Brief cited the testimony of AT&T/MCI witness Klick. Brief at 31.

68. We did not adopt Mr. Klick's adjustments in our earlier decision because they appear to be inconsistent. Mr. Klick claims that BCPM errs by adding rather than subtracting the tax benefit. According to Klick, this has the effect of overstating BCPM capital costs by approximately ten percent. Mr. Klick also testified that the Hatfield Model did not take into account deferred taxes, but, if it had, it would reduce the capital component of the Hatfield costs by six to ten percent. TRACER Brief at 31.

69. If the exclusion of deferred taxes in the Hatfield Model overstates capital costs by six to ten percent, it would seem logical that the error in the BCPM would cause capital costs to be overstated by approximately 12% to 20%. Mr. Klick stated that the error in the BCPM was in the range of ten percent, not 12% to 20%.

70. The record is not sufficiently clear to allow us to reconcile the Hatfield and BCPM adjustment numbers proposed by Mr. Klick. Furthermore, neither Mr. Klick nor any other party suggested how the two proxy model algorithms should be corrected. Finally, neither Mr. Klick nor TRACER have clearly indicated what are the capital cost components. Mr. Klick states that capital costs are overstated by ten percent. It is unclear if the ten percent applies to depreciation, return and taxes, maintenance on the capital, or some combination of the different components.

71. We accept that it is appropriate to take into account deferred taxes when estimating the economic cost of providing a service. Unfortunately, the record does not support an explicit adjustment for deferred taxes. We direct the parties to re-run the loop cost studies with this input value within two weeks of the date of the instant Order. The parties must submit the revised studies, and explicitly identify and describe the modifications to the model algorithms to account for the investment tax credit. The Commission also encourages parties who did not sponsor the proxy models to submit their recommended changes to the model algorithms.

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**XI. DEAVERAGING**

72. TRACER requests that the Commission clarify how the costs of unbundled loops are to be determined on an exchange-by-exchange basis or a census block group basis if it is ultimately determined that the prices for unbundled loops shall be geographically deaveraged.

73. In the Order, we chose not to deaverage UNE and interconnection rates. It would be premature for us to declare at this time how the cost estimates should be deaveraged. When and if we order deaveraging of rates, we may or may not be considering the same set of cost studies.

**XII. IMPACT OF COMPETITION/CABLE SIZING/SHARING ADJUSTMENTS -- GTE**

74. GTE notes that our final loop cost estimate has taken into account the impact of competition. GTE requests clarification as to the numerical value of that adjustment.

75. GTE's request for clarification is denied. The Commission stated in paragraph 270 of the Order that we were unable to directly model the impact of some of our findings. For those items that could not be explicitly incorporated into the models, we have made adjustments that we find to be fair, just, and reasonable based upon the record evidence.

76. GTE requests that the Commission clarify its adjustment for cable size and sharing.

77. The Order pointed out at paragraph 270 that these two adjustments are described in qualitative terms at paragraph 188 and paragraph 68. To the extent that GTE is requesting clarification as to the numerical value of these adjustments, the request is denied.

**XIII. DROP COST ADJUSTMENT -- GTE**

78. GTE requests clarification of the drop cost adjustment related to the discussion at paragraphs 111 through 116 of the Order. GTE states that the "Commission appears to believe that GTE's cost study places only one pair of wires per customer location."

79. The Commission has not assumed that GTE has estimated the cost of installing only one pair of wires. Rather, the Commission understands GTE has individually modeled the cost of installing a drop to an individual house, rather than throughout a neighborhood.

**XIV. ACCESS LOOP ADJUSTMENT -- GTE**

80. In the Order, the Commission concluded that the Hatfield Model understates the cost of the loop due to its method of counting DS1 and DS3 loops. Order at ¶¶199-205.

81. The Commission adopted the method proposed by U S WEST for correcting this error. Because GTE did not propose an adjustment for this item, we did not make a similar change to its loop cost estimate. Rather, we recognized that if GTE had presented such information, it would have increased the estimated cost of the loop.

82. GTE now requests that the Commission apply the same methodology to GTE that we accepted for U S WEST.

83. GTE had ample opportunity to present its calculation during the hearings. Rather than propose modifications to the Hatfield Model, as U S WEST did, GTE decided to present arguments and evidence on why the model should not be used. See, for example, GTE Brief at 9-30. Having failed to convince the Commission that the Hatfield Model should not be used to estimate the cost of unbundled network elements, it now proposes to present the type of calculation that was submitted by U S WEST during the proceedings. In its Request for Clarification, GTE has presented data that are not part of the record and have not been subject to challenge by the other parties; GTE's request is denied.

**XV. COLLOCATION -- GTE**

84. GTE argues that it need not address the costs of collocation because it conforms for state purposes with the FCC rules for tariffs for this service. The Order states that the cost studies deriving pertinent costs must be the same as used for the FCC. The practical outcome may be our acceptance of the same rates filed for interstate purposes -- but the companies must file cost information nonetheless. The cost of collocation is at issue in Phase I; conformity with federal tariff rules does not address the issue of costs.

**XVI. TARIFF TERMS AND CONDITIONS**

85. U S WEST filed tariffs that do not include necessary elements, contending that the terms and conditions of service will be determined in individual contracts. This is unacceptable. The purpose of filing a tariff is to have an "off-the-shelf" price and practical construct for the service offering. The tariff is useless without all of the terms and conditions attending the service. We fail to understand how U S WEST could have miscomprehended the elemental purpose for filing the ordered tariffs, and require U S WEST to refile its tariffs within five business days of the date of the instant Order, including all terms and conditions for service at the listed rate.

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**XVI. FURTHER CLARIFICATION**


86. The parties have asked for specific information regarding the manner in which the Commission altered parties' cost models to produce the results stated in the Order. We have reviewed the Order, and believe that every variable needed to replicate the result of the Order is there stated.

87. Recognizing that the Order is long and complex, we have restated the Order's determinations in a manner intended to assist parties, and have attached that description as Appendix A to the instant Order. The description there contained is intended only as an illustration of the matters determined in the Order, much as a headnote is offered as a summary, and is neither a substitute for any provision of the Order nor new or different determinations by the Commission, but merely a description how the Order's determinations are implemented consistent with its terms.

88. All requests for clarification not addressed in the instant Order are denied. Further, all telecommunications elements not directly addressed in the instant Order will be treated in accordance with the Eighth Supplemental Order.

DATED at Olympia, Washington, and effective this *5th* day of June 1998.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

  
RICHARD HEMSTAD, Commissioner

  
WILLIAM R. GILLIS, Commissioner

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**Changes Made to RLCAP and EWINPC3  
For  
Washington Cost Proceedings**

**BORE CABLE ACTIVITY PERCENTAGE ADJUSTMENT**

Per paragraph 55 of the April 16<sup>th</sup> order, the activity percentage assigned to bore cable was changed from .50 to .05. The remaining 45% was proportionately assigned to the other activities, as the table below indicates. These changes were applied in the *TRENCH* tab of the *IDTA.xls* workbook, range F-72 to F-97. (**Note:** throughout this discussion all worksheets referred to are located in the *IDTA.xls* workbook.)

ACTIVITY PERCENTAGES:		Original Developed	Adjusted Developed
---TRENCH:	Trench & Backfill	0.05	0.10
	Rocky Trench	0.05	0.10
	Backhoe Trench	0.05	0.10
	Hand Dig Trench	0.05	0.10
	Bore Cable	0.50	0.05
	Push Pipe & Pull Cable	0.05	0.10
	Cut & Restore Asphalt	0.10	0.19
	Cut & Restore Sod	0.15	0.27
---PLOW:	Plow	0.40	0.42
	Rocky Plow	0.05	0.05
	Backhoe	0.10	0.11
	Hand Dig	0.05	0.05
	Bore Cable	0.10	0.05
	Push Pipe & Pull Cable	0.10	0.11
	Cut & Restore Asphalt	0.10	0.11
	Cut & Restore Sod	0.10	0.11
---DEVELOPER:	Trench & Backfill	0.05	0.10
	Developer Trench	0.00	0.00
	Rocky Trench	0.05	0.10
	Backhoe Trench	0.05	0.10
	Hand Dig Trench	0.05	0.10
	Bore Cable	0.50	0.05
	Push Pipe & Pull Cable	0.05	0.10
	Cut & Restore Asphalt	0.10	0.19
Cut & Restore Sod	0.15	0.27	

**FEEDER UTILIZATION**

Per paragraph 182 of the April 16<sup>th</sup> order the feeder fill rate was adjusted to 65%. This adjustment was made to range E-55 to E-59 of the *DATA* tab.



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## SHARING OF UNDERGROUND CABLE STRUCTURE

Per paragraph 62 of the April 16<sup>th</sup> order a sharing factor of 85% was applied to underground cable structure. This was done in the *data* tab of the *IDTA.xls* workbook in cells B35 and B36, respectively. The values in these cells are support structure ratios for conduit to underground copper and conduit to underground fiber, respectively. The original values in these two cells were multiplied by 85% and the results of this operation were then input into cells B35 and B36.

## DISTRIBUTION UTILIZATION

Per paragraph 180 of the April 16<sup>th</sup> order the RLCAP was adjusted to accommodate the assumption that there are 1.25 lines per household. This was done in the following manner:

1) The *addline* variable, B-40, in the *data* workbook was changed from 115,835 to 585,181. This variable represents the quantity of additional residential lines and is used to determine the percentage of households with additional lines, found in cell F-12 of the *units* worksheet. The change made in *data* was performed in order to arrive at figure of approximately 25 percent in cell F-12 of the *units* worksheet. That is, the model now is modeling the effect of 25 percent additional lines.

2) The percentage of idle lines, cell F-20 in *units*, is assumed to remain constant at approximately 3 percent. See, *In The Matter of The Interconnection Contract Between AT&T Communications of The Mountain States, Inc., And U S WEST Communications, Inc., Pursuant to 47 U.S.C. Section 252, New Mexico State Corporation Commission, Docket No. 96-411-TC (March 27, 1997), ¶38*. This constant is not entered in F-20, rather it comes into action in the range F-28 to F-32 of *units*, the working lines column. The working values (number of working lines) are based on calculations which account for the designed number of living units (the Units column), additional lines and idle dedicated primary pairs. For example, 700 units engineered minus 1.03 \* 700 units for idle pairs plus 1.25 \* 700 units for additional lines. Thus, for the DG1 wire unit in range F-28 of *units*, the following formula will be found;  $D-28 * 1.22 = 854$ .

## COMMON COSTS

This adjustment was made in the output file from *EWINPC3*. Specifically the TSLRIC costs were calculated from the data located in the *WINPC3 OUTPUT* tab of this worksheet in the following manner:  $E82+E131+E180+E229+E278+E327+E376+E425+E474+E523+E572+E621+E670+E718$

For each account in the *WINPC3 OUTPUT* tab common monthly costs was subtracted from Fully Allocated Costs. The results of this operation were then summed to arrive at fully allocated TSLRIC cost which did not include common monthly costs.

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**Changes Made to Hatfield  
For  
Washington Arbitration Proceedings**

**DEPRECIATION LIVES FOR USWEST**

The following table illustrates the input service life values which were used in place of the Hatfield model's default values for USWest. These values were derived from service lives and net salvage value inputs which were decided upon in Docket UT 95-1425.

<b>Account Category</b>	<b>Adjusted Input</b>	<b>Hatfield Default</b>
Motor Vehicles	11.43	9.16
Garage Work Equipment	14.00	11.47
Other Work Equipment	17.58	13.22
Buildings	34.38	48.99
Furniture	20.00	16.56
Office Support Equipment	15.00	11.25
Company Comm. Equipment	9.90	7.59
General Purpose Computer	6.11	6.24
Digital Electronic Switching	17.00	16.54
Operator Systems	12.00	9.94
Digital Circuit Equipment	12.12	10.09
Public Telephone Terminal Equipment	10.53	8.01
Poles	16.00	16.13
Aerial Cable - metallic	19.35	16.80
Aerial Cable - non metallic	22.58	22.11
Underground Cable - metallic	20.49	21.17
Underground Cable - non metallic	24.59	22.87
Buried - metallic	20.56	19.86
Buried - non metallic	26.17	24.13
Intrabuilding Cable - metallic	16.67	15.64
Intrabuilding Cable - non metallic	23.33	23.65
Conduit Systems	50.00	51.35

The service life and the future net salvage value for each relevant US West account was entered into an EXCEL workbook.. The service life and the future net salvage values appear below in the BCPM summary.

Next, the depreciation rate was computed according to the following formula:

$$[(1 - \text{future net salvage value}) / \text{service life}] * 100$$

The **Calculated Service Life** for input into the Hatfield model was then determined by using the

calculated depreciation rate from the previous formula in the following formula;

$$(1/\text{depreciation rate}) * 100$$

### DEPRECIATION LIVES FOR GTE

The following table illustrates the input service life values which were used in place of the Hatfield model's default values for GTE. They were derived from service lives and net salvage value inputs which were decided upon in Docket UT 94-0926. The service life and the future net salvage values appear below in the BCPM summary.

Account Category	Adjusted Input	Hatfield Default
Motor Vehicles	11.63	9.16
Garage Work Equipment	18.95	11.47
Other Work Equipment	16.67	13.22
Buildings	43.00	48.99
Furniture	22.22	16.56
Office Support Equipment	16.67	11.25
Company Comm. Equipment	8.16	7.59
General Purpose Computer	8.42	6.24
Digital Electronic Switching	17.01	16.54
Operator Systems	11.76	9.94
Digital Circuit Equipment	12.50	10.09
Public Telephone Terminal Equipment	8.89	8.01
Poles	16.00	16.13
Aerial Cable - metallic	16.54	16.80
Aerial Cable - non metallic	28.57	22.11
Underground Cable - metallic	22.61	21.17
Underground Cable - non metallic	28.57	22.87
Buried - metallic	21.90	19.86
Buried - non metallic	28.57	24.13
Intrabuilding Cable - metallic	15.38	15.64
Intrabuilding Cable - non metallic	25.00	23.65
Conduit Systems	47.62	51.35

The service life and the future net salvage value for each relevant GTE account was entered into an EXCEL workbook.

Next, the depreciation rate was computed according to the following formula:

$$\{(1 - \text{future net salvage value}) / \text{service life}\} * 100$$

The **Calculated Service Life** for input into the Hatfield model was then determined by using the calculated depreciation rate from the previous formula in the following formula;

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(1/depreciation rate) \* 100

### CAPITAL COST FACTORS--USWEST

The following revisions were made to the cost of capital factors for USWest:

<b>Expense Input</b>	<b>Current Scenario Value</b>	<b>Default Scenario Value</b>
Cost of Debt	0.0727	<b>0.0770</b>
Debt Fraction	0.4800	<b>0.4500</b>
Cost of Equity	0.1180	<b>0.1190</b>

### CAPITAL COST FACTORS--GTE

The following revisions were made to the cost of capital factors for GTE:

<b>Expense Input</b>	<b>Current Scenario Value</b>	<b>Default Scenario Value</b>
Cost of Debt	0.0790	<b>0.0770</b>
Debt Fraction	0.4440	<b>0.4500</b>
Cost of Equity	0.1125	<b>0.1190</b>

### DROP LENGTHS

For both USWest and GTE the following changes to the drop length were input into the Hatfield model:

<b>Distribution Input</b>	<b>Current Scenario Value</b>	<b>Default Scenario Value</b>
Drop Distance, feet - 0	175	<b>150</b>
Drop Distance, feet - 5	175	<b>150</b>
Drop Distance, feet - 100	125	<b>100</b>
Drop Distance, feet - 200	125	<b>100</b>
Drop Distance, feet - 650	75	<b>50</b>
Drop Distance, feet - 850	75	<b>50</b>
Drop Distance, feet - 2550	50	<b>50</b>
Drop Distance, feet - 5000	50	<b>50</b>
Drop Distance, feet - 10000	50	<b>50</b>

## STRUCTURE SHARING

For both USWest and GTE the following changes to structure sharing for distribution were input into the Hatfield model:

<b>Expense Input</b>	<b>Current Scenario Value</b>	<b>Default Scenario Value</b>
Distribution Aerial Fraction - 0	0.63	0.50
Distribution Aerial Fraction - 5	0.63	0.33
Distribution Aerial Fraction - 100	0.63	0.25
Distribution Aerial Fraction - 200	0.50	0.25
Distribution Aerial Fraction - 650	0.50	0.25
Distribution Aerial Fraction - 850	0.50	0.25
Distribution Aerial Fraction - 2550	0.35	0.25
Distribution Aerial Fraction - 5000	0.35	0.25
Distribution Aerial Fraction - 10000	0.35	0.25
Distribution Buried Fraction - 0	0.88	0.88
Distribution Buried Fraction - 5	0.88	0.88
Distribution Buried Fraction - 100	0.88	0.88
Distribution Buried Fraction - 200	0.68	0.68
Distribution Buried Fraction - 650	0.68	0.68
Distribution Buried Fraction - 850	0.68	0.68
Distribution Buried Fraction - 2550	0.55	0.55
Distribution Buried Fraction - 5000	0.55	0.55
Distribution Buried Fraction - 10000	0.55	0.55
Distribution Underground Fraction - 0	0.88	1.00
Distribution Underground Fraction - 5	0.88	0.50
Distribution Underground Fraction - 100	0.88	0.50
Distribution Underground Fraction - 200	0.63	0.50
Distribution Underground Fraction - 650	0.63	0.40
Distribution Underground Fraction - 850	0.63	0.33
Distribution Underground Fraction - 2550	0.63	0.33
Distribution Underground Fraction - 5000	0.63	0.33
Distribution Underground Fraction - 10000	0.63	0.33

For both USWest and GTE the following changes to structure sharing for feeder were input into the Hatfield model:

<b>Expense Input</b>	<b>Current Scenario Value</b>	<b>Default Scenario Value</b>
Feeder Aerial Fraction - 0	0.63	0.50
Feeder Aerial Fraction - 5	0.63	0.33
Feeder Aerial Fraction - 100	0.63	0.25
Feeder Aerial Fraction - 200	0.50	0.25
Feeder Aerial Fraction - 650	0.50	0.25
Feeder Aerial Fraction - 850	0.50	0.25
Feeder Aerial Fraction - 2550	0.35	0.25
Feeder Aerial Fraction - 5000	0.35	0.25
Feeder Aerial Fraction - 10000	0.35	0.25
Feeder Underground Fraction - 0	0.88	0.50
Feeder Underground Fraction - 5	0.88	0.50
Feeder Underground Fraction - 100	0.88	0.40
Feeder Underground Fraction - 200	0.63	0.33
Feeder Underground Fraction - 650	0.63	0.33
Feeder Underground Fraction - 850	0.63	0.33
Feeder Underground Fraction - 2550	0.63	0.33
Feeder Underground Fraction - 5000	0.63	0.33
Feeder Underground Fraction - 10000	0.63	0.33
Feeder Buried Fraction - 0	0.88	0.40
Feeder Buried Fraction - 5	0.88	0.40
Feeder Buried Fraction - 100	0.88	0.40
Feeder Buried Fraction - 200	0.68	0.40
Feeder Buried Fraction - 650	0.68	0.40
Feeder Buried Fraction - 850	0.68	0.40
Feeder Buried Fraction - 2550	0.55	0.40
Feeder Buried Fraction - 5000	0.55	0.40
Feeder Buried Fraction - 10000	0.55	0.40

### COMMON COSTS

For both USWest and GTE the Common Cost, or Corporate Overhead Factor, located in the Expense Module, was changed from 10.4% to 0.

### OPERATIONS EXPENSE FACTOR

For both USWest and GTE the Operations Expense Factor, also known as the Forward-looking Network Operations Factor, located in the Expense Module was changed from 50% to 70%. This change was made so as to model a 30% reduction due to forward looking costs instead of the 50% reduction used as a default value.

**COPPER/FIBER CROSSOVER**

For both USWest and GTE the TR-303 DLC Copper Feeder Max Distance, ft, located in the Distribution Module, was changed from 9,000 ft to 12,000 ft.

**EXTERNAL ADJUSTMENTS FOR SPECIAL ACCESS LINE COUNTS**

Since U S WEST apparently did not make an adjustment for drops and the NID, the Hatfield U S WEST loop cost was adjusted upward by \$0.66. Since GTE did not propose an adjustment for this item, a similar change was not made to its loop cost estimate. (See Par. 204 of the April 16<sup>th</sup> order.)

**CORRECTIONS FOR PROGRAMMING ERRORS IN THE HATFIELD MODEL**

Two programming changes proposed by USWest were made to the Hatfield model. These were done to correct the calculation of network expenses for buried and underground trenching and to correct for missing subfeeder.

In order to correct the calculation of network expenses for buried and underground trenching the following corrections were made to the **distribution** tab of the *R31\_expense\_wirecenter\_415.xls* workbook:

For buried trenching costs the formula =B9\*'95 Actuals'!\$F\$46 was entered into range B-36 to J-36 and the formula =B59\*'95 Actuals'!\$F\$46 was entered into range B-86 to J-86 of the **distribution** tab of the *R31\_expense\_wirecenter\_415.xls* workbook. In the **feeder** tab of the *R31\_expense\_wirecenter\_415.xls* workbook the formula =B16\*'95 Actuals'!\$F\$46 was entered into range B-51 to J-51 and the formula =B78\*'95 Actuals'!\$F\$46 was entered into range B-113 to J-113.

For underground trenching costs the formula =C11\*'95 Actuals'!\$F\$45 was entered into range C-38 to J-38 and the formula =C61\*'95 Actuals'!\$F\$45 was entered into range C-88 to J-88 of the **distribution** tab of the *R31\_expense\_wirecenter\_415.xls* workbook. In the **feeder** tab of the *R31\_expense\_wirecenter\_415.xls* workbook the formula =B14\*'95 Actuals'!\$F\$45 was entered into range B-49 to J-49 and the formula =B76\*'95 Actuals'!\$F\$45 was entered into range B-111 to J-111.

In order to correct for the missing subfeeder the following change was made to cell **G2** of the **output** tab in the **R3\_DISTRIBUTION\_410\_CORRECTIONS\_AVELOOPLENGTH.XLS** worksheet:

The original formula which read

=IF(calculations!G2=0,0,(calculations!G2+0.5\*calculations!I2))\*IF(calculations!E2=1,inputs!\$F\$25,1)+IF(calculations!BA2=1,calculations!AW2\*calculations!T2,0)

was changed to read

=(calculations!G2+0.5\*calculations!I2)\*IF(calculations!E2=1,inputs!\$F\$25,1)+IF(calculations!BA2=1,calculations!AW2\*calculations!T2,0)



### Changes Made to BCPM Model For Washington Arbitration Proceedings

#### MONTHLY OPERATING COSTS

The per line monthly operating expenses for small, medium and large companies were changed from the BCPM default values found in Table 1 below to those found in Tables 2 and 3 below. The Tables may be found in the **Expenses** tab of the *Capcost.xls* workbook. **NOTE:** Subsequent to the release of the order an inconsistency has been found between the per line operating costs used for GTE versus those used for USWest. The difference is not large; the net effect is that the USWest's monthly expense is 37 cents higher than GTE's. The difference is attributable to five accounts (See Table 5 for a graphical presentation of the differences). For GTE the monthly expense was lowered by \$1.20 to \$4.50, the amount allocated to general support. For USWest, due to an error only just discovered, the following alterations to Sprint's proposed values were made ( See Table 3 for a graphical presentation of the differences ):

Subtracted from Sprint's proposed values were General Support (\$1.20), and COE Transmission(\$.23). Added to Sprint's proposed values were Operator Systems (\$.01), Information Orig/Term (\$.07), Marketing (\$.35), and Uncollectibles (\$.17). Summed together this amounts to an \$.83 reduction from Sprint's proposed values.

**Table 1: Sprint Proposed Values**

Cost Element	USOAR Account	Residential			Business		
		Small	Medium	Large	Small	Medium	Large
Network Support	6110	\$ 0.15	\$ 0.15	\$ 0.15	\$ 0.15	\$ 0.15	\$ 0.15
General Support	6120	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20
COE Switching	6210	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operator Systems	6220	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
COE Transmission	6230	\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23	\$ 0.23
Information Orig/Term	6310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cable and Wire Facilities	6410	\$ 2.76	\$ 2.76	\$ 2.76	\$ 2.76	\$ 2.76	\$ 2.76
Other Property Plant	6510	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.03
Network Operations	6530	\$ 1.33	\$ 1.33	\$ 1.33	\$ 1.33	\$ 1.33	\$ 1.33
Access	6540	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Marketing	6610	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services	6620	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Executive and Planning	6710	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General and Administrative	6720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Uncollectibles	6790	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Expense</b>		\$ 5.70	\$ 5.70	\$ 5.70	\$ 5.70	\$ 5.70	\$ 5.70



Information Orig/Term	6310	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07
Cable and Wire Facilities	6410						
Other Property Plant	6510						
Network Operations	6530						
Access	6540						
Marketing	6610	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35
Services	6620						
Executive and Planning	6710						
General and Administrative	6720						
Uncollectibles	6790	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17
<b>Total Expense</b>		<b>(\$0.83)</b>	<b>(\$0.83)</b>	<b>(\$0.83)</b>	<b>(\$0.83)</b>	<b>(\$0.83)</b>	<b>(\$0.83)</b>



Information Orig/Term	6310	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07
Cable and Wire Facilities	6410						
Other Property Plant	6510						
Network Operations	6530						
Access	6540						
Marketing	6610	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35
Services	6620						
Executive and Planning	6710						
General and Administrative	6720						
Uncollectibles	6790	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17
<b>Total Expense</b>		<b>\$0.37</b>	<b>\$0.37</b>	<b>\$0.37</b>	<b>\$0.37</b>	<b>\$0.37</b>	<b>\$0.37</b>

**DEPRECIATION**

For depreciation the same service lives and future net salvage values as were used in the Hatfield model were used in the BCPM model for both companies. These values were derived from service lives and net salvage value inputs which were decided upon in Dockets UT 95-1425 and UT 94-0926, respectively.

**Table 1: USWest Service Lives and Future Net Salvage Values**

<u>Account Description</u>	<u>Service life</u>	<u>Future Net Salvage</u>
2112 motor vehicles	9.6	16.00%
2114 Special Purpose Vehicle	14	0.00%
2115 garage work equip	14	0.00%
2116 other work equip	16	9.00%
2121 buildings	33	4.00%
2122 furniture	20	0.00%
2123.1 office equipment	15	0.00%
2123.2 company comp equip	9.9	0.00%
2124 gen purpose equip	5.8	5.00%
2211 analog equip		0.00%
2212 digital switch equipment	17	0.00%
2220 operator systems	12	0.00%
2231 radio systems	15	-3.00%
2232 Circuit Equipment	12	1.00%
2351 public tel term equip	10	5.00%
2362 other term equip	9	0.00%
2611 pole lines	28	-75.00%
2421 Aerial cable met	24	-24.00%
2421 Aerial cable non-met	28	-24.00%

2422 Ungrd cable met	25	-22.00%
2422 Ungrd cable non-met	30	-22.00%
2423 Buried Cable met	22	-7.00%
2423 Buried Cable non-met	28	-7.00%
2426 intra bldg ca met	20	-20.00%
1426 intra bldg ca non-met	28	-20.00%
2431 Aerial wire	8.7	-124.00%
2441 conduit systems	55	-10.00%

**Table 2: GTE's Service Lives and Future Net Salvage Values**

<u>Account Description</u>	<b>Future</b>	
	<b>Service life</b>	<b>Net Salvage</b>
2112 motor vehicles	9.3	20.00%
2115 garage work equip	18	5.00%
2116 other work equip	15	10.00%
2121 buildings	43	0.00%
2122 furniture	20	10.00%
2123.1 office equipment	15	10.00%
2123.2 company comp equip	8	2.00%
2124 gen purpose equip	8	5.00%
2212 digital switch equipment	16.5	3.00%
2220 operator systems	12	-2.00%
2231 radio systems	14	0.00%
2232 Circuit Equipment	12	4.00%
2351 public tel term equip	8	10.00%
2362 other term equip	10	5.00%
2611 pole lines	28	-75.00%
2421 Aerial cable met	21	-27.00%
2421 Aerial cable non-met	30	-5.00%
2422 Ungrd cable met	26	-15.00%
2422 Ungrd cable non-met	30	-5.00%
2423 Buried Cable met	23	-5.00%
2423 Buried Cable non-met	30	-5.00%
2426 intra bldg ca met	20	-30.00%
1426 intra bldg ca non-met		
2431 Aerial wire	15	-15.00%
2441 conduit systems	50	-5.00%



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## COST OF MONEY AND TAX RATES

This data is input into the **Capital Cost Inputs** tab of the *CAPCOST.xls* workbook.

### Financial Data for USWest

Return on Equity	11.80%
Debt Rate	7.27%
Debt Ratio	48.00%
Discount Rate	7.80%
Return on Capital	9.63%

### Tax Data for USWest

Federal Tax Rate	35.0%
State Tax Rate	0.0%
Gross Receipts Tax	0.0%
Ad Valorem, Insurance, etc.	0.0%
Other Tax Rate	5.0%

### Financial Data for GTE

Return on Equity	11.25%
Debt Rate	7.90%
Debt Ratio	44.40%
Discount Rate	7.80%
Return on Capital	9.76%

### Tax Data for GTE

Federal Tax Rate	35.0%
State Tax Rate	0.0%
Gross Receipts Tax	0.0%
Ad Valorem, Insurance, etc.	0.0%
Other Tax Rate	5.0%

**FIBER/COPPER CROSSOVER**

For both the USWest and the GTE runs the following values in the **Misc Inputs** tab of the *WAGTEBcpm\_act.xls* and the *WAUSWBcpm\_act.xls* were changed;

CprMaxDistr, the maximum length of copper cable in the CBG distribution was changed to 15,000 feet. This value is to be found in cell C9 of the **Misc Inputs** tab.

The cable break point was changed to 12,000 feet. This values is to be found in cell C15 of the **Misc Inputs** tab.

**STRUCTURE SHARING**

The structure sharing which was used in the Hatfield runs was also used in the BCPM runs with two exceptions where it was found that sharing factors for density ranges in Hatfield could not be exactly mapped to corresponding density ranges in BCPM. These were:

- 1) BCPM has a density range of 151 to 500. The closest equivalent to this range in Hatfield are the ranges 100 to 200 and 200 to 650 which happen to have had different structure sharing variables assigned to them, as the table below makes plain. Therefore, it was necessary to use a weighted average for the BCPM 151 to 500 range derived from the table below which delineates the sharing factors assigned to the Hatfield density ranges which most closely correspond to the BCPM range.

Hatfield Density Ranges	Distribution Aerial in Hatfield	Distribution Buried in Hatfield
100-200	63.00%	88.00%
200-650	50.00%	68.00%

- 2) BCPM has a density range of 2001 to 5000. The closest equivalent to this range in Hatfield are the ranges 850 to 2550 and 2550 to 5000 which happen to have had different structure sharing variables assigned to them. As in 1 above a weighted average for the BCPM range was derived from the sharing factors for the Hatfield density ranges which most closely corresponded to the BCPM range.