

ORDER NO. 96-284

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**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

UM 773

In the Matter of U S WEST Communications, )  
Inc.'s UM 351 Cost Study Summaries. )

ORDER

DISPOSITION: STIPULATION ADOPTED

**PROCEDURAL BACKGROUND**

On September 29, 1995, U S WEST Communications, Inc. (U S WEST or USWC) filed cost study summaries of major building block costs. The cost studies incorporate changes to agreements reached in UM 351. In November 1995, the Public Utility Commission of Oregon (Commission) issued notice of its intent to create a docket for the U S WEST filing and assigned it docket number UM 773.

Prehearing conferences in this matter were held on December 19, 1995, and February 6 and June 4, 1996. Participants included U S WEST, PUC Staff, and 13 intervening parties. The parties and appearances are listed on Appendix A to this order. Audit sessions and settlement conferences were held prior to the hearing in this matter.

On June 6, 1996, Staff and U S WEST entered into a Stipulation designed to resolve all issues in the case. None of the other parties signed the Stipulation.

The hearing in this matter was held on June 12, 13, 18, and 19, 1996, in Salem, Oregon, before Administrative Law Judge Allen Scott. Briefs were filed in July and August 1996.

## **BACKGROUND**

In Order No. 90-920, the Commission directed its Staff to develop a methodology for calculating the long-run incremental costs (LRIC) of telecommunications services and network building blocks. LRIC estimates are used in setting prices and in applying the test for cross-subsidization. In Order No. 93-1118 (UM 351), the Commission considered a Telecommunication Building Blocks Cost Report prepared through a series of workshops in response to the directive in Order No. 90-920. The Commission adopted the cost estimates presented by U S WEST. It also took the following actions:

1. Adopted the seven cost principles ;
2. Adopted the Test for Cross-Subsidization ;
3. Decided to apply the cost results developed for U S WEST to other regulated local exchange utilities unless alternative estimates are developed using the adopted cost principles; and,
4. Adopted the categories and subcategories of building blocks identified in the cost report as a framework for conducting cost analysis.

In Order No. 94-1056 (UM 351, July 1994), the Commission adopted revised cost estimates to supersede those adopted in Order No. 93-1118. The Commission also adopted cost estimates for additional network building blocks which had not been calculated previously using the adopted cost principles. The Commission also directed U S WEST to submit a cost study of major telecommunication building blocks for Commission approval by September 1995. The order directed that U S WEST demonstrate that its model, inputs, and assumptions comply with the cost principles adopted in Order No. 93-1118. The order also directed U S WEST and the other participants to develop cost estimates for additional telecommunications functionalities and to update Commission-approved cost estimates.

### **U S WEST Filing**

U S WEST's September 1995 filing initiating the present case is designed to comply with the Commission's directives in Order No. 94-1056 described above. The filing contains 22 cost studies for review, including data on investment inputs, annual cost factors, and

incremental cost estimates for the building blocks. The filing also requests consideration of several proposed modifications to the agreements reached in UM 351. The changes are made necessary, according to U S WEST, by several recent developments, including new federal legislation, changes in economic and financial conditions, new technology, new means of providing communications services, and corporate re-engineering. The modifications proposed in the September 1995 filing are as follows:

1. Depreciation: U S WEST asked for the use of economic lives in cost studies rather than Commission prescribed depreciation lives.
2. Classification of spare capacity investment: U S WEST asked that the appropriate classification of this investment be Volume Sensitive.
3. Terminology: U S WEST presented new terminology that it claimed is more closely aligned with industry standard language than the language used in UM 351 (I).
4. Unitized volume-insensitive costs: U S WEST expressed all costs, both volume sensitive and volume insensitive, on a per unit basis. It claimed that unitizing the costs would allow an easier comparison of prices to costs for subsidy tests, recognizes the significant decrease in volume-insensitive costs, and acknowledges the problems of identifying lump sum costs in UM 351.
5. Administrative and product management expense: These expenses were applied to building block costs.
6. Factors: U S WEST updated cost of money and other annual cost factors to reflect current conditions.
7. Models: In addition to the updated building block costs, U S WEST included descriptions of new or updated models utilized in the cost development.

U S WEST claimed that the changes it proposed respond to changes in the operating and regulatory environment in the three years since costs were filed in UM 351.

#### **STIPULATION**

Eleven audit sessions were held over a period of four months in early 1996 to allow Staff, U S WEST, and other parties to the proceeding to review the details of the cost studies and other issues presented by U S WEST's filing. With the exception of the cost studies for ISDN, Centrex, number portability, and Network Access Channel (NAC) Connection, all 22 cost studies were reviewed. On May 13 and 14, 1996, the parties held settlement meetings. U S WEST presented a draft Stipulation. Following additional negotiations, Staff and U S WEST signed a final Stipulation. All other parties declined to sign the Stipulation.

The Stipulation entered into between Staff and U S WEST resolves all issues between those two parties. Among other matters, it concludes that the cost models filed by U S WEST in this matter conform to the cost principles in UM 351 and that the building block cost studies will be used in the rate design portion of docket UT 125. The Stipulation sets out agreements as to several specific aspects of the cost studies, including cost of money, depreciation lives, display of costs, and placement and calculation of costs. It agrees to certain changes in assumptions relating to placement of facilities and agrees upon a method of treating growth spare capacity costs.

If the Commission adopts the Stipulation in its entirety, U S WEST agrees to recast and resubmit its building block cost studies in accordance with the terms of this stipulation. . . . and also provides that parties may petition the Commission for changes to the stipulation if the rapidly evolving nature of the industry merits such changes.

The provisions of the Stipulation, and a description of the signatory parties' intentions for the provisions, are summarized below. Following the outline of the Stipulation is an analysis of the specific and general arguments for and against portions of the Stipulation. The Commission's disposition of the issues follows the discussion.

### **Outline of the Stipulation**

Paragraph 1. This provision concludes that the cost models filed by U S WEST in September 1995 conform to the seven cost principles adopted by the Commission in UM 351. *See Order No. 93-1118 and Telecommunications Building Blocks, Cost Report, Volume I (July 1993).* Acceptance of the cost models refers to the model names, algorithms, and model structures. The cost models involved are as follows: Windows Personal Computer Cost Calculator (WINPC3), Switching Cost Models (SCM), Regional Loop Cost Analysis Program (RLCAP), Signaling System 7 Model (SS7M), Transport Model (TM), and Switching

Usage Model (SUM).

Agreement on the cost models does not imply agreement as to model inputs or resulting cost outputs, which will be subject to additional audits and separate consideration by the Commission. Moreover, four cost studies, including ISDN, Centrex-Plus, NAC Connection, and SS7, have not been audited and are subject to further review.

This Paragraph also provides that if U S WEST's cost studies conform to the Stipulation, they will be relied upon and used by U S WEST to perform any cost studies used in any filing through the effective date of the rate design portion of UT 125, U S WEST's general rate case, even if they do not conform to the implementation guidelines in UM 351. This provision is intended to assure that certain concerns that Staff had with the original cost studies filed by U S WEST in this case are ultimately corrected.

Paragraphs 2 and 3. Paragraph 3 provides that if the Commission accepts the Stipulation, U S WEST will recast and resubmit the 22 building block cost studies filed in September 1995 in accordance with the methodology in the Stipulation (or in accordance with modifications directed by the Commission) and in accordance with a tentative schedule established at a prehearing conference or another schedule directed by the Commission. The parties envision that Staff will then audit the studies for compliance with Commission directives in the order. The Stipulation is silent on whether the audit process would be open to anyone other than Staff and U S WEST. However, Staff states on brief that it will encourage other parties to participate in the process.

The parties anticipate that if any dispute is unresolved, another proceeding might be necessary to consider the issues. Eventually the Commission would make a final decision on the resubmitted cost studies. It is Staff's hope that the ultimate resolution to this proceeding will provide, for a period of time at least, a basis for consistency in development of cost models and cost outputs.

Paragraph 2 provides that the new cost studies ultimately coming out of this case will be used in the rate design portion of UT 125, U S WEST's general rate case. If U S WEST proposes rates in UT 125 that are below the costs developed in UM 773, U S WEST will present rate changes to the Commission which assure that the rates meet the Commission's test for cross-subsidization. (*See* discussion of Paragraph 12 below.)

Paragraph 2 also provides that within 45 days of the final order in UM 773, U

S WEST may make a rate filing with an effective date not more than 45 days thereafter.

Paragraph 4. This section of the Stipulation provides that the Stipulation is not binding on any other issues before this Commission unless otherwise specified. Thus, the stipulated findings and conclusion in this case on issues such as cost of capital and depreciation would not affect other proceedings in which those issues may arise. Staff noted that the stipulated cost of debt in this proceeding and the rate of return are not materially dissimilar from Staff's recommendations in UT 125; the congruence is, however, coincidental, as the analyses used are different. (*See* discussion of Paragraph 13 below.)

Paragraph 5. This Paragraph acknowledges that the Federal Telecommunications Act of 1996 or Federal Communications Commission (FCC) rules promulgated pursuant to the Act may require changes in costs and methods. It provides that U S WEST or Staff may present such proposed change to the Commission for approval.

Paragraph 6. This section takes note of the rapid evolution of the telecommunications industry and of the potential need for changes to the stipulated agreement before the effective date of the rate design portion of UT 125. It provides that any party may petition the Commission for changes to the Stipulation if it believes the situation merits the changes. Staff and U S WEST contemplate that the term any party refers to them as the two signatories to the Stipulation. However, they acknowledged that any entity having standing might also ask the Commission for modifications.

The changes contemplated under this section of the Stipulation are those involving matters not covered by the audit or compliance provisions of the Stipulation. An example of such a change would be a significant drop in the financial indexes causing an increase in the cost of money. This section would allow Staff or U S WEST to request a change based upon such an exigency. UM 351 (I) has a specific provision allowing for a change in cost factors if the cost of money changes by half a percentage point in any six-month period.

Paragraph 7. This section allows U S WEST to file contract specific or competitive zone specific cost studies consistent with ORS 759.050 and 759.250. The studies would have to be performed consistent with the models, factors, and methods established in the order in UM 773. The intent of this provision is to allow for cost deaveraging by U S WEST. It provides procedures for dealing with the remaining portions of the state if deaveraging occurs.

Paragraph 8. This section deals with the filings U S WEST will make following

the Commission's order in this case. (See Paragraphs 2 and 3 above). It requires that the company submit a detailed list of cost study factors, including those approved in UM 351 and those proposed in this proceeding and used in the filing. The Stipulation lists the Factor Type by name and the Accounts involved. It does not list the numerical figures themselves. The numerical figure is to be obtained from various numbers in the Stipulation. Most of the numerical factors are the same as those contained in U S WEST's filing in September 1995 and are also not changed from the figures in UM 351.

U S WEST may seek to update the cost factors, which date from more than one time period. If so, Staff expects U S WEST to notify it of the proposed changes, although the Stipulation does not specifically require such notification. Staff's desire is that a consistent set of factors be used. Staff does not, however, have a position on which set of specific factors should be used.

Paragraph 9. This section provides for audits of U S WEST's cost studies submitted following the Commission's order in this case in accordance with Paragraph 3 above. It also provides that if disputes arise between Staff and U S WEST during the development of cost studies while the order is pending, either party may request an audit session to attempt to resolve the issues.

Paragraph 10. Paragraph 10 notes that UM 351 established that the standard for developing costs for purposes of the test for cross-subsidization and ultimately for use in the setting of rates is Long Run Incremental Costs (LRIC). A definition of LRIC and a method of calculating it were adopted in UM 351. LRIC was defined as "The product of applying all seven [UM 351] workshop adopted cost principles to estimate volume-sensitive and volume-insensitive costs for building blocks." UM 351 case also referred to Total Service Long Run Incremental Cost (TSLRIC), which is a standard for incremental cost calculations. TSLRIC was defined as the sum of all building block costs (LRIC) for a particular service plus service specific costs.

UM 351 defined service-specific costs as those costs, other than building block specific costs, that are caused by offering a service. UM 351 (I) did not, however, identify or quantify service specific costs. Paragraph 10 of the Stipulation now identifies them as non-building block volume-sensitive and volume-insensitive costs related to the specific provisioning of a service which is comprised of one or more building blocks. They are costs, other than building block costs, which are caused by the company's decision to offer the service or that can be avoided by not offering the service. The Stipulation identifies certain costs which may fit

into this category, such as advertising, product management, sales expense, sales compensation, billing, collection, and business fees. It also contains an other category to allow for the possibility that presently unidentified costs may be service specific in nature.

The identification of service-specific costs will allow Staff to calculate TSLRIC estimates for use in the cross-subsidization test and in pricing. In the context of this case, U S WEST will develop the factors and Staff will analyze them during the period prior to the compliance filings following the order in this case and then after those filings have been made. U S WEST has not yet identified which costs would be volume sensitive and which would be volume insensitive. It has identified only areas of potential costs. The specifics of the calculations, such as the historical period involved and the separation of volume-insensitive costs from volume-sensitive costs are yet to be worked out.

Paragraph 11. This section provides that the appropriate statement of service costs is TSLRIC as defined in UM 351. It also provides that where building blocks do not comprise all costs of a service, the additional costs related in making the building block a service should be included in the service cost study. It provides that to develop pricing at a service level, building block volume-insensitive and service specific volume-insensitive costs must be stated on a unit basis, as are building block volume-sensitive and service specific volume-sensitive costs. Certain service specific costs not previously calculated, such as product management, advertising, and similar factors addressed elsewhere in the Stipulation, may be provided on a unit basis or in a gross amount, depending on the application. The Stipulation does not provide a method for unitizing costs. Staff believes that U S WEST will continue to do its unitization calculations using either its current annual or its average forecast. This calculation is likely to lead to an overstatement of costs. However, Staff believes these overstatements are minor and offset by other portions of the Stipulation.

This section of the Stipulation provides that for purposes of performing the test for cross-subsidization, volume-insensitive costs may have to be shown on a non-unitized basis to avoid distortion of the test results. U S WEST has traditionally provided costs on a unitized basis. The volume-insensitive costs which were not previously unitized may need to be presented on a gross basis because the only way to unitize them is to arbitrarily allocate the costs on a unit basis. U S WEST agrees in this section to provide data on a non-unitized basis when Staff requests it to do so.

Paragraph 12. This section of the Stipulation contains a proposed change in the test for cross-subsidization adopted in UM 351 (I). It revises the wording of the first part of the

test and removes the third part, which focused on revenues and costs of groups of services. The purpose of the changes is to focus on building block costs and service rates and to simplify and clarify the test.

Paragraph 13. This section sets out agreements as to certain specific aspects of U S WEST s costs studies. In Section a), the cost of money to be used in building block cost studies is set at 9.98 percent, based upon a cost of equity of 11.75 percent, a debt cost of 7.1 percent, and a debt ratio of 38 percent. Section b) establishes the P-Lives of depreciable assets and the dispersal curves to be used for certain accounts, including Digital Circuit Account, Digital Switching Account, Metallic Cable Accounts, and Fiber Accounts. Other accounts will use the historical curve shapes established in UM 767, a recent docket relating to depreciation.

Section c) describes agreements relating to display of costs. Subsection 1) defines the building block category as consisting of building block volume-sensitive and building block volume-insensitive costs. Subsections 2) and 3) of Section c) acknowledge that not all costs are calculated in the TSLRIC configuration. These additional costs include group related volume insensitive and common costs and costs allocated to large groups of unrelated services. Subsection 4) states that the costs in Subsections 1) and 2) will be summed by category into the TSLRIC costs for a service. Subsection 5) notes that the Stipulation uses the definition of TSLRIC found in UM 351. Subsection 6) incorporates an example of the mapping described in the section.

Section d) sets out 10 specific agreements regarding placement and calculation of costs. This mapping procedure is based primarily on the need to quantify service specific costs, which had been included in TSLRIC in UM 351(I) but not calculated in a usable manner.

Section e) is an agreement that certain particularly complex issues relating to classification of costs need study beyond the time available for this proceeding. Included are administrative expense, maintenance expense, non-recurring costs, and placement of facilities.

Section f) establishes a time frame for further revision of costs based on the results of the review of complex issues described in Section e). It requires U S WEST to file updates and revisions for all building block costs, based upon the results of the review of the complex items set out in Section e), no later than 12 months after the date the final rates go into effect in UT 125.

Paragraph 14. This section relates to the cost of placement of facilities. Placement costs involve labor, machinery, equipment, poles, conduit and superstructure used in the deployment of telecommunications services. This paragraph sets out a change from the conclusions on that issue arrived at in UM 351. In that case, Staff and U S WEST made assumptions that, from a cost perspective, a large proportion of placement is easy. Later analyses led to the conclusion that costs attributable to difficult placement should be increased significantly. Through negotiation, Staff and U S WEST arrived at a relative weighting placement assumption of 65 percent difficult and 35 percent easy placement. The agreement also recognizes that the 65-35 split may not be a perfect solution and that matters such as the proper mix of technologies may change matters. The parties thus agree to study the matter further to attempt to arrive at a permanent resolution (*see* Paragraph 13 e-4 above).

This Paragraph also recognizes that the cost of placement is different according to where the placement occurs. The greatest impact will be in situations involving trenching-type placement, in Distribution Groups 2, 3 and 4. On the other hand, in NAC distribution Group 1, which is primarily urban high-rise placement, the cost of placement assumptions do not change substantially regardless of the ratio. Distribution Group 5, which involves plowing, is also affected less than the groups requiring trenching.

Paragraph 15. This section of the Stipulation relates to the treatment of the costs of growth spare capacity. In UM 351 (I) they were designated as group related volume-insensitive costs. In the Stipulation they are designated as building block costs that can be either volume sensitive or volume insensitive, depending on the application. The Stipulation does not adopt terminology, such as ready to serve and standby capacity proposed by U S WEST.

Paragraph 16. In this section, the parties agree that the proper categorization of growth spare capacity as building block volume sensitive or building block volume insensitive is an issue that requires long term resolution. They note that they were unable to determine any objective fill factor for distribution and feeder facilities. They agree to the use of feeder fill factors as a surrogate for distribution and drop fill when U S WEST performs cost studies pursuant to the Stipulation. The feeder fill factors used in UM 351 (I) will be used for this purpose. They also agree that volume-insensitive costs for feeder and distribution will be included in the NAC building block, a change from UM 351 (I).

Paragraph 17. This section provides an alternative to the treatment of

distribution and drop set out in Paragraph 16: costing distribution and drop on a per customer basis (building, dwelling, or household) rather than by the use of feeder fill factors as a surrogate. This potential change recognizes that the drop and distribution may be customer related costs. U S WEST agrees to calculate those costs on that basis and on the basis set out in Paragraph 16 and to provide that data to Staff. This section provides further that issues associated with pricing and implementation of this revision will be addressed in the rate design portion of UT 125.

### **CONTESTED ISSUES**

The Stipulation was signed only by Staff and USWC. It is opposed by three active parties in the proceeding, AT&T, MCI, and the Oregon Cable Telecommunications Association (OCTA). The opponents argue that it violates or abandons principles established and reiterated by the Commission and will have significant adverse effects upon potential competitors of the local exchange companies (LECs) and the general public. These specific and general criticisms are discussed below followed by the Commission's decision on each issue.

#### **Specific Criticisms of the Stipulation**

The three opponents to the Stipulation contest several provisions of the Stipulation. The positions of the proponents and opponents are set out below.

##### **1. New Test for Cross-Subsidization.**

Paragraph 4 of the Stipulation proposes a change in the test for cross-subsidization adopted in UM 351, which contains three parts:

1. The per unit price of each service must cover its volume-sensitive costs;
2. The revenues from each service shall cover the volume-sensitive and volume-insensitive costs for the building block that comprise the service, plus any service specific costs;
3. The revenues from groups of services shall cover the volume-sensitive and volume-insensitive costs of the building blocks that comprise the services in the group, plus any group volume-insensitive costs for all the services in the group.

The proposed new test is as follows:

1. The per unit price of each service rate element must cover its building block volume-sensitive costs.
2. The revenues from each service must cover the TSLRIC of the service.

**Staff and U S WEST** contend that the change will clarify and simplify the test. The existing test, in their view, did not make a clear distinction between building blocks which are cost elements and building blocks which were, or could be, services. The first part of the new test basically reflects Staff's actual practice up to this time. Moreover, Staff has not been able to calculate the group related volume-insensitive costs that were required for the third part of the test and has never applied that part of the test to any local exchange company filing. The third part of the original test was designed to deal with issues surrounding right to use fees where there is a large block of program costs relative to features. Staff believes that few other applications for the original test are likely to occur and that the modification would allow for greater administrative ease in dealing with pricing and costing on a daily basis.

**MCI and AT&T** both ask the Commission to reject the proposal. MCI contends that the third part of the test is essential to its function of fostering effective competition in the telecommunications marketplace. It argues that the third part of the UM 351 test may provide protection to consumers from burdensome pricing in some situations where group costs exist. MCI also disputes Staff's claim that the third part of the test is administratively unwieldy. MCI presented testimony from its expert suggesting that a different conceptualization of the group cost test would make it workable. MCI summarized its analysis as follows:

In other words, rather than examining a group of functions and determining retrospectively those functions that are related, the starting point for applying the third part of the step (sic) is to identify the investment and expenses incurred in the least cost provision of a network function. Then, the appropriate test for cross-subsidy will compare the price and TSLRIC of the function, and determine whether the revenues from each group of functions exceed the function's TSLRIC by enough to recover the group cost.

**OCTA** also asks that the change not be adopted by the Commission. It presented evidence that removal of a group of costs from the cross-subsidization test may lead to anticompetitive practices and give strategic advantage to a firm. It could lead, according to

OCTA, to inclusion of group costs in other categories of the TSLRIC calculation to achieve strategic costing and pricing. For example, a company making an investment in a group of services could calculate its investment costs as part of the building block or service-related costs of current services, such as POTS (plain old telephone service). The result could be recovery of most or all of the costs of the one group of services from current customers not receiving that service and use of the revenues to develop future services. Thus, customers of the telephone company would be subsidizing future but unnamed services. OCTA argued that the third part of the original test is workable and that if the data needed for it is not now available, a zero can be used in the computation and work can continue to obtain the data in the future. OCTA comments favorably on the different method of conceptualizing suggested by MCI.

**Staff and U S WEST** criticize MCI's proposal as not simple or even demonstrably workable, particularly, Staff notes, with respect to group-related costs for groups of network functionalities involving one or more of the same functionalities (that is, with respect to overlapping groups and the various permutations thereof). Staff notes that MCI and its expert have not provided computations to show that the proposed conceptual approach is workable nor identified any cost studies which have successfully applied a group-related test to a large telephone company's network building blocks and services.

### **Commission Disposition**

The Commission concludes that the changes proposed in the Stipulation should be adopted. The elimination of the third portion of the test is justified by the evidence from Staff about the great difficulty of developing the information needed to apply the test. *A test which cannot be applied in practice is of no value, no matter how useful it appears to be in theory.* It is the present test's unworkableness, not mere convenience or preservation of Staff's sanity, as the opponents assert, that causes us to adopt the new test. The means of utilizing the existing test suggested by the opponents are abstract and not supported by any real calculations or actual experience. Staff notes in its testimony, moreover, that this third portion of the test was developed to deal with issues relating to features and that the test has limited or no applicability to other situations. The impact on consumers of dispensing with this portion of the test will, we conclude, not be significant. The concerns described by OCTA and MCI about the increased possibility of cross-subsidization are not realistic. We believe the test as modified will retain its ability to prevent subsidies and thus protect the public interest.

The Stipulation also proposes changes in the first part of the test for cross-subsidization: the insertion of the words "rate element" after the word "service," and the

insertion of the words "building block" before the words "volume sensitive costs." The Commission adopts these changes, with the following understanding. U S WEST or any other LEC submitting an incremental cost study must define its building blocks at a sufficient level, with corresponding cost estimates developed, to allow for verification that each rate element within a service is no less than its respective incremental cost. For example, "time of day" rate elements for switching, with one of the rate elements representing an off-peak period, would probably violate the test if only the average (i.e., average cost for the entire day) cost of switching was provided.

AT&T and MCI argue that the Commission specifically reaffirmed the three part cross-subsidization test in UM 351, Order No. 96-188, at 63. In fact, the Commission there merely stated that prices should conform to the test for cross-subsidization adopted by the Commission in Order No. 93-1118. The proposal now before us was not before us in that order and our reference to the existing test was obviously not intended as a repudiation of the new proposal. Based on the record in this case, where the issue has been raised and argued competently by the parties, we adopt the change proposed in the Stipulation.

## **2. Deaveraging**

Paragraph 7 of the Stipulation allows U S WEST to file contract specific or competitive zone specific cost studies consistent with ORS 759.050 and 759.250. The studies must be performed consistent with the models, factors, and methods established in this order. The intent of the provision is to allow for cost deaveraging by U S WEST. Staff anticipates that U S WEST will soon seek to cost either customer specific or zone specific outputs. The provisions in the Stipulation are designed to provide a method of dealing with those costs. The Stipulation notes that only the investment and usage weightings will change in the revised studies.

In its filing in this case, U S WEST submitted a cost study for the basic NAC which divided its costs into two zones, 1 and 2. These zones involve a geographic deaveraging which does not specifically correspond to competitive zones. Such a filing is nevertheless within the boundaries of the Stipulation. U S WEST has the discretion to deaverage in any area not less than a Commission designated competitive zone, which may be as small as one exchange, and may petition for deaveraging on a basis less than an exchange.

This section provides that if costs are deaveraged from state average values, U S WEST will remove appropriate costs from the studies for the remaining portion of the state

and provide, at Staff's request, the resulting restated studies. The Stipulation does not contemplate that other parties could demand such restated studies in the event Staff did not make such a request.

This section also provides that the test for cross-subsidization will be applied to deaveraged costs if the service rates are also deaveraged and to averaged costs if service rates are averaged. Thus, the deaveraged costs and deaveraged rates will be compared as will the averaged costs and averaged rates.

**OCTA** contends that this provision is unclear and a departure from policies developed in UM 351. Moreover, according to OCTA, these provisions could force some ratepayers in the remaining part of the state to pay higher rates after deaveraging as a result of USWC's response to competitive entry. For example, if a competitive zone were deaveraged and those costs removed, the recalculated costs for the rest of the state might be higher than before. This would, in OCTA's view, allow a dominant firm to maintain a monopoly position through strategic pricing.

**U S WEST** counters by asserting that OCTA's position is inconsistent with Commission policy. U S WEST cites UM 351 (II), Order No. 96-188, which, it says, concluded that cost differences should be reflected in rates because averaged NAC prices do not reflect underlying costs, send misleading signals to consumers and competitors and lead to uneconomic consumption of telecommunications services. The Stipulation is, according to U S WEST, designed to allow U S WEST to deaverage costs as contemplated in Order No. 96-188. U S WEST further asserts that the Stipulation is clear and needs no elucidation as requested by OCTA.

### **Commission Disposition**

In Order No. 96-188, we noted that the cost differences among NAC types should be reflected in rates at some point. (at 62) We also noted that we were concerned that NAC deaveraging will produce substantial rate increases for certain customers. (*id*) We therefore decided to retain statewide average local exchange rates across all density and distance categories. (*id*) We noted that we had no major objections to U S WEST's deaveraging proposal, which we directed be examined in its rate case.

The Stipulation is not inconsistent with these conclusions. It merely allows U S WEST to proceed with the process we established in Order No. 96-188. Any proposal by the

company will, as we noted in the prior order, be examined in the rate case. We adopt the Stipulation's provision regarding deaveraging.

### 3. The Cost of Money

In Section a) of Paragraph 13 of the Stipulation, the cost of money to be used in building block cost studies is set at 9.98 percent, based upon a cost of equity of 11.75 percent, a debt cost of 7.1 percent, and a debt ratio of 38 percent. The development of cost of money for this case is forward looking and differs from the cost of money appropriate in a rate case. All components of the determination are different. In a rate case, for example, the cost of debt is the company's embedded cost of debt. It may include existing debt that has been on the books for many years. That debt may be quite cheap. In a LRIC study, debt already on the books is ignored and the focus is on forecasts of future cost of debt. Moreover, in a rate case, the actual or pro forma capital structure is used, whereas a forward-looking or target cost of capital would be applicable in a cost study.

**OCTA, MCI, and AT&T** challenge the cost of money figure in the Stipulation. OCTA notes that in UT 125, the pending U S WEST rate case, Staff has proposed for settlement purposes a cost of money figure for U S WEST of 8.66 percent. OCTA counters Staff's argument that the cost of money figure used in cost studies is a different matter from the cost of money computation used in a rate case by asserting that the costs developed in the present case *will indeed be used* in UT 125 to help set particular rates. OCTA also argues that the debt/equity ratio in the Stipulation--38 percent debt/62 percent equity--is not in compliance with the UM 351 TSLRIC concept and a forward-looking analysis which presupposes best efficiencies. OCTA also claims that the debt/equity ratio in the Stipulation does not take into account U S WEST's reduced cost of equity resulting from the spin-off of its Media Group with attendant decreased risk.

AT&T argues that the cost of money calculation in the Stipulation is not based upon an appropriate capital structure and incremental costs of debt and common equity. If the stipulated figure is used in the pending rate case, prices in the rate case would be based upon costs that were produced using a much higher capital cost. Thus, according to AT&T, the higher than needed prices could produce a higher return than intended by the Commission. Essentially, AT&T argues, acceptance of the stipulated figure allows U S WEST to make its own determination of cost of money instead of having to abide by decisions made by the Commission.

**Staff and U S WEST** argue that the stipulated cost of money is reasonable and that the opposing parties have provided no alternative figures. Staff points out that the calculations used in Staff's recommendations in UT 125 are not inconsistent with those used in the Stipulation: the return on equity in the Stipulation of 11.75 percent is within the range of 10.2 percent to 12.9 percent recommended in UT 125; the cost of debt of 7.1 percent in the Stipulation is close to the 6.98 percent Staff will testify to in UT 125; and the overall cost of money figure of 9.98 percent figure in the Stipulation is within the 8.77 percent to 10.27 percent range Staff will recommend in UT 125. Of greater significance, however, is the fact that the cost of money to be used in an LRIC study is forward looking and considers incremental capital structure and costs without primary regard to historical data. U S WEST and Staff also note that the record indicates that small differences in the cost of money will make only slight differences in the cost of some network elements. For example, a change of one-half percent in the cost of money would have an imperceptible impact on the cost of switching and a few cents impact on the NAC costs.

Staff notes the following recent history of cost of money calculations for U S WEST: In UM 351 (I), the participants agreed that a cost of money of 11.5 percent and a debt ratio of 38 percent would be used in U S WEST cost studies. The cost of money was to be adjusted if it changed by 50 basis points or more. In its March 1994 cost estimates, U S WEST used a cost of money of 10.90 percent. In its September 1995 cost studies, U S WEST used a cost of equity of 12.50 percent and an overall cost of money of 10.40 percent. In the present Stipulation, the cost of equity factor has been reduced to 11.75 percent.

U S WEST reiterates that rate cases utilize the embedded cost of debt while cost studies use an incremental cost of debt. Rate cases use actual (book value) capital structure, but cost studies use a market value capital structure of a target mix of debt and equity financing. U S WEST also asserts that in keeping with the TSLRIC concept, the Stipulation uses forward-looking costs, not a historical cost of capital estimate. U S WEST further argues that OCTA's claim regarding the impact of the spin-off of the Media Group is irrelevant because the pertinent cost of capital is that of U S WEST Communications and not U S WEST as a whole.

### **Commission Disposition**

The Commission adopts the cost of money figure set out in the Stipulation. The evidence in the record, including the testimony of experts, establishes that it is within the range of reasonableness for purposes of U S WEST cost studies, the purpose involved in this case. The

cost of money to be determined in the pending U S WEST rate case, UT 125, is not directly relevant. That figure will partially determine the company's revenue requirement. The figure in this case will have an impact on rate design. It will not raise U S WEST's revenue requirement. In any event, the proposals in UT 125 are only proposals and are not in substantial conflict with the figure in the Stipulation. The arguments of the opponents that this cost of money figure will result in higher prices than would a lower cost of money calculation is not determinative. The question is what the appropriate cost figure is, based on the evidence. If the cost figure is sound, then the impact on prices is appropriate. In this case, the Stipulation is supported by persuasive evidence. The opponents have not provided any alternative figure based on evidence.

AT&T's argument that the adoption of the figure in the Stipulation will be an abdication by the Commission of its decision making authority is not persuasive. The stipulated figure is simply a proposal submitted to the Commission, like any other issue presented to us. If we adopt it, it is our decision. In this case, we do so based upon the record.

#### **4. Economic Depreciation Lives**

Paragraph 13 (b) establishes the prescribed lives or P-Lives of depreciable assets and the dispersal curves to be used. For all but four categories, the depreciation lives are the same as those prescribed by the Commission in UM 767, the triennial depreciation review of the depreciation assets of U S WEST. For four technology-driven categories of facilities, including Digital Circuit Account, Digital Switching Account, Metallic Cable Accounts, and Fiber Cable Accounts, the Stipulation sets lives different from those established in UM 767.

The UM 767 depreciation life projections were a composite life applicable to all vintages of plant. They are based upon averaged embedded plant. The economic lives in the Stipulation for the four above-noted plant are depreciation projections for new plant installed under the scorched node assumption. They are intended to reflect forward-looking economic conditions rather than the historical depreciation of embedded plant and equipment.

OCTA opposes the stipulated depreciation treatment. It notes that according to the evidence the treatment will shorten the life of the assets and thus result in increased costs. OCTA believes this treatment will artificially shorten the life of plant using metallic cable, namely the local loop. OCTA asserts that the copper wire will, in reality, last until the currently prescribed lives are up. If the economic life of copper wire is shortened and it becomes prematurely obsolete, end users will be asked to pick up the additional costs. U S WEST will

thereby be free to drive up the costs of the loop to its competitors while using the increased cash flow earned from competitors and the company's POTS end-users to develop future services not yet enjoyed by POTS end users. Thus, U S WEST will be able to engage in cross-subsidization of competitive services.

**AT&T** argues that U S WEST should use the depreciation treatment developed in UM 767. The proposed new treatment for some accounts will drive up the cost of the NAC. Staff, according to AT&T, provided no evidentiary basis for the new depreciation treatment and merely declared it to be reasonable. As with the cost of money issue, AT&T asserts that adoption of the stipulated agreement will be an abdication by the Commission of the decision making process.

**Staff and U S WEST** argue that the depreciation treatment is consistent with UM 351 (I), where the participants agreed that economic depreciation rates should be used in forward-looking cost studies. The four exceptions to the lives prescribed in UM 767 reflect forward-looking economic conditions rather than historical depreciation of embedded plant and equipment. UM 767, according to the evidence, was a study of the depreciation of embedded investment, not new investment as in a cost study. New investment in some accounts may be expected to have different life characteristics than those of embedded investment. The depreciation lives in the Stipulation are not arbitrary figures but are the product of analysis by Staff and U S WEST. They represent U S WEST's best estimate of how long equipment will be useful. They should be adopted by the Commission for these cost studies.

### **Commission Disposition**

The proposed depreciation treatment set out in the Stipulation is adopted. The Commission concludes that it is in keeping with the forward-looking methodology appropriate in cost studies. *See Telecommunications Cost Report*, Appendix 5, A-18, 19. UM 767, a docket dealing with depreciation rates for U S WEST, was not intended to determine the depreciation factors used in cost studies. Information more suited to cost studies should be developed and used. The four proposals for exceptions from the UM 767 lives presented in the Stipulation are designed for cost studies and are thus conceptually appropriate. We conclude, moreover, that the figures proposed for those four accounts are the product of analysis and are not arbitrary. The fact that these figures might lead to higher costs, as claimed by OCTA and AT&T, does not make them inappropriate. The goal is to arrive at sound cost estimates. The fact that a particular cost estimate is higher than it would be under some alternative theory does not make it incorrect. We conclude that these lives are proper and

should be adopted.

## **5. Display and Mapping**

Paragraph 13, sections c, d, and e, set out agreements relating to display and mapping of various categories of costs.

Section c) describes agreements relating to display of costs. Subsections 1 and 2 define the categories of costs which comprise TSLRIC: building block volume sensitive, building block volume insensitive, service specific volume sensitive, and service specific volume insensitive. Service specific costs are defined as costs which can be uniquely identified with a service or array of related services. Service specific costs do not include costs allocated to large groups of unrelated services.

Subsections 2) and 3) of Section c) acknowledge that not all costs are calculated in the TSLRIC configuration. These additional costs include group related volume insensitive and common costs and costs allocated to large groups of unrelated services. Subsection 5) notes that the Stipulation uses the definition of TSLRIC found in UM 351. Subsection 6) incorporates an example of the mapping described in the section.

Section d) sets out specific agreements regarding placement and calculation of eight cost categories: product management, administrative expenses, business fees, advertising, sales expense, sales compensation, billing and collection, and maintenance. This new mapping of company expenses is the result of the need to identify and calculate service specific costs for inclusion in TSLRIC determinations. The specific agreements set out how U S WEST's current cost factors will be applied to the particular cells of an exhibit to the Stipulation providing for computation of the various categories of cost. Advertising, for example, is currently viewed as a common expense. The Stipulation notes, however, that some advertising expenses, such as product specific advertising expenses, could be service specific. Advertising costs which are directly related to the sale of a service may be viewed as service specific costs. On the other hand, advertising that urged customers to remain with U S WEST during the telecommunications revolution would probably not be service specific.

Section e) is an agreement that certain particularly complex issues relating to classification of costs need study beyond the time available for this proceeding. U S WEST

agrees to begin working toward a solution agreeable to parties on these issues. The issues involved are administrative expense, portions of which may be service specific and not group related; maintenance expense; non-recurring costs; and easy versus difficult placement of facilities issues. On the latter issue, a compromise was reached for this proceeding (*see* Paragraph 14 below), but the parties agree in this section to study the matter further.

Section f) establishes a time frame for further revision of costs based on the results of the review of complex issues described in Section e). It requires U S WEST to file updates and revisions for all building block costs no later than 12 months after the rates in UT 125 go into effect. The revisions may also include matters other than the specific issues set out in Section e). Examples of eventualities which might necessitate such changes are FCC preemption or adoption of a U S WEST proposal that land and buildings be included as a building block cost. The Section also allows U S WEST to petition the Commission for a waiver of the requirements in the Section should conditions warrant it.

**Staff and U S WEST** believe that these agreements and accompanying exhibits will clarify and facilitate the calculation of the pertinent categories of costs. They also resolve issues of terminology. The display includes new columns and rows for service-specific costs, shared costs, and common costs. The terminology is based on the terminology adopted by the Commission in UM 351 (I), rather than that proposed in this proceeding by U S WEST.

**OCTA** asserts that the display would define product management, sales expenses, sales compensation, billing and collection and certain business fees as service specific costs to be included in the TSLRIC calculation for services. Such treatment would turn the study into an embedded cost study, rather than a TSLRIC study, according to OCTA. Staff points out, however, that the Stipulation does not specify that these costs are service specific or common costs but leaves that to be determined by analysis prior to actual calculation of cost estimates.

### **Commission Disposition**

The Commission concludes that the mapping and display and related provisions discussed above are appropriate and should be adopted. They provide for consistency in terminology. They also provide good guidelines on the application of cost factors in categories of costs. They contain provisions which will allow for or require additional study and analysis of many specific issues. They are a good step in the development of sound methods of calculation of costs. No good reason for rejecting these provisions has been provided.

## 6. Placement of Facilities

Paragraph 14 of the Stipulation relates to the cost of placement of facilities. Placement costs involve labor, machinery, equipment, poles, conduits, and superstructure used in the deployment of telecommunications services. This paragraph sets out a change from the conclusions on that issue arrived at in UM 351. In that case, Staff and U S WEST made assumptions that, from a cost perspective, a large proportion of placement is easy. They arrived at an assumption of 80 percent easy and 20 percent difficult. In the present Stipulation, Staff and U S WEST arrived at a relative weighting placement assumption of 65 percent difficult and 35 percent easy placement. The Stipulation recognizes that the 65/35 split may not be a perfect solution and that matters such as the proper mix of technologies may change the proportions. The parties thus agree in the Stipulation to study the matter further to attempt to arrive at a permanent solution (*see* Paragraph 13 e-4 above).

This paragraph of the Stipulation also recognizes that the cost of placement is different according to where the placement occurs. The greatest impact will be in situations involving trenching-type placement, Distribution Groups 2, 3 and 4. On the other hand, in NAC Distribution Group 1, which is primarily urban high-rise placement, the cost of placement assumptions do not change substantially regardless of the ratio. Distribution Group 5, which involves plowing, is also affected less than the groups requiring trenching.

**AT&T, OCTA, and MCI** all criticize the agreement regarding placement. They note that it is a dramatic change from the 80 percent easy/20 percent difficult assumption arrived at in UM 351. They note that it is explicitly the product of a compromise between Staff and U S WEST and, they argue, is not supported by the record in the case. They present several specific criticisms. First, they claim that the assumption does not take into account the cost savings that would actually be realized through a sharing by various utilities of the cost of placement. That is, under the scorched node concept applied in UM 351, the location of existing wire centers and facilities between them are retained with investments in equipment to reflect the least cost alternative. Thus, all utilities would be scorched and would be sharing replacement expenses, thereby reducing the cost to the telephone utility. They also criticize the stipulated figure for not taking into account possible cost savings from technological advances, such as the fiber ring placement in an urban setting. They also criticize the agreement for ignoring economies of scale and for ignoring the provisions of the 1996 Telecommunications Act, which requires U S WEST to make its conduits, poles, and rights-of-way available to new entrants. That requirement would reduce any need to install real distribution plant under

difficult placement assumptions.

According to the opponents, the adoption of the assumption relating to placement will embed unsubstantiated costs into the TSLRIC for the network and dramatically increase the cost of basic NAC. AT&T states that this change in assumptions will push the cost of the basic NAC 40 percent above this cost in UM 351. AT&T further asserts that the basic NAC cost for Portland has more than doubled since July 1993, and that the change in placement assumptions alone accounts for almost half of that increase.

**Staff and U S WEST** acknowledge that the 65 percent difficult/35 percent easy assumption in the Stipulation is partly a matter of compromise. The original proposal by U S WEST was for a ratio of 82 percent difficult and 18 percent easy. However, Staff and U S WEST assert that the stipulated figure is also the product of actual experience by U S WEST and review by Staff which indicates that the assumptions made in UM 351 several years ago were inaccurate and inconsistent. In UM 351, the parties made an assumption that a large portion of placement was easy while also agreeing that conceptually all costs should be considered placed as though there are no facilities in the ground. U S WEST's experience has demonstrated, however, that a much higher proportion of placement would occur in difficult conditions and the cost of placing facilities in difficult conditions is more expensive than was originally thought. Under the scorched node assumption, placement would often involve such difficult tasks as breaking asphalt streets, burrowing under sidewalks, and digging through gardens and lawns, with attendant replacement costs. Alternatively, U S WEST would employ boring, an expensive procedure, to reduce replacement costs. Staff offered testimony that the earlier assumptions in UM 351 were more suited to 1936 than to 1996.

**U S WEST** notes that the agreement does, in fact, take into account the sharing of facilities. It also argues that the claims by the opponents that current technology was not considered is inaccurate. U S WEST argues that the opponents are actually trying to require it to take into account futuristic types of technology that were rejected in UM 351, rather than a reasonable number of currently available technologies actually being used by telecommunications companies. Staff and U S WEST also note that the intervenors have not provided support for any figure different from the stipulated figure. They also emphasize that the stipulated figure is intended to be an interim number that will be modified following the further study called for in the Stipulation.

### **Commission Disposition**

The Commission accepts the figure agreed upon in the Stipulation. The record indicates that the figure used in UM 351 was not a realistic figure. According to the record, it was based on inconsistent assumptions, as Staff notes. It also used a model that does not develop different placement costs based on specific situations, such as urban and rural applications. *Cost Report*, at Appendix A5-22. It was not the Commission's intent in UM 351 or the intent of the participants in that case that conclusions drawn therein were immutable.

Although the figure agreed upon in the Stipulation is explicitly the product of a compromise, it is also based on actual experience by the company. It has been reviewed by Staff and found to be reasonable. The opponents, while criticizing the compromise figure, have not provided evidence of what the figure should be. We conclude that the stipulated figure is a reasonable figure to proceed with until the results of further study become available. This issue is significant, however, and we conclude that it is important that better assumptions be developed quickly. We direct that the additional review of this issue agreed to in the Stipulation occur as soon as practicable.

## **7. Growth Spare Capacity and Fill Factors**

Paragraphs 15 and 16 treat the issue of the costs of growth spare capacity. Growth spare capacity is the spare capacity that occurs when forecasted growth in demand requires that more than one piece of equipment be installed to provide capacity for an engineering period. The Cost Report defines it as equal to the difference between the engineering maximum ( objective fill ) of the planned increment of investment to meet forecasted demand and the current demand ( average fill ). Vol. 1, at 16. Fill is the calculation of percentage of capacity utilized. Average fill is almost always less than objective fill. The fill factor is used to spread the capacity cost of investments. Use of average fill in the denominator of the volume-sensitive cost equation will produce a higher cost result.

In UM 351 (I) these growth spare capacity costs were designated as group related volume-insensitive costs. Cost Report at 42-43. In Paragraph 15 of the Stipulation they are designated as building block costs that can be either volume sensitive or volume insensitive, depending on the application. The Stipulation does not adopt terminology, such as ready to serve and standby capacity proposed by U S WEST. Paragraph 16 acknowledges that the proper categorization of growth spare capacity as building block volume sensitive or building block volume insensitive is a matter requiring long term resolution." Staff notes that the portion of growth spare not associated with modularity, or lumpiness might appropriately be treated as volume sensitive.

Paragraph 15 also states that in accord with the treatment set out in UM 351 (I), building block volume-sensitive costs will remain a function of objective fill (engineering capacity) and building block volume-insensitive costs will remain a function of the difference between objective fill and average fill (forecasted demand). UM 351 (I) fill factors and the fill factors in the case will be, with minor exceptions, identical. The method of calculation does not change.

In Paragraph 16, the parties agree to the use of feeder fill factors as a surrogate for distribution and drop fill when U S WEST performs cost studies pursuant to the Stipulation. The feeder fill factors used in UM 351 (I) will thus be used for this purpose. They note also that they were unable to determine any objective fill factor for distribution and feeder facilities.

Paragraph 16 also provides that volume-insensitive costs for feeder and distribution will be included in the NAC building block costs (as building block volume-insensitive costs). The NACs intended are DSO or basic NACs or their equivalents, such as ISDN NACs, and not jumper NACs, DS1 or DS3 NACs. The Stipulation notes that this treatment is a change from UM 351, in which feeder volume-insensitive costs were treated as group related while distribution was treated as building block specific.

**AT&T, MCI, and OCTA** all object to the Stipulation's proposed treatment of growth spare capacity and fill factors. They point out that it is a departure from the treatment established in UM 351. In Phase I of that case, the cost of spare capacity was treated as a group-related volume-insensitive cost not to be included in TSLRIC. In the Stipulation, these costs are to be included in the cost of building blocks to the extent that the growth spare is building block specific and thus included in TSLRIC. Moreover, the Stipulation also provides that volume-insensitive costs for feeder and distribution will be included in the NAC building block. This is a change from UM 351, in which feeder costs were treated as group-related volume-insensitive costs. They also point out that in UM 351, objective fill factors, and not average fill, were to be used to calculate the cost of spare capacity. The Stipulation, however, allows U S WEST to use actual fill factors to determine the amount of building block volume-insensitive cost associated with spare capacity in the NAC, thus potentially producing a higher cost estimate.

The opponents argue that these changes are unjustified and will lead to dramatic increases in NAC costs with attendant adverse impacts on the development of true competition. MCI argues, for example, that there is no evidence that spare capacity is volume sensitive. It argues that analyses presented by U S WEST purporting to show a direct relationship between

increased volume and increased cost for spare capacity are flawed and show no more than a moderate correlation explainable by more likely factors. Thus, MCI claims, no causation between volume and spare capacity costs was found. AT&T argues that there is no basis for identifying spare capacity costs as being caused by a particular NAC. It points out that spare capacity can be used to provide future high-capacity NACs, basic NACs used to provide switched services, and perhaps other future services. Thus, according to AT&T, the Stipulation's effect of attributing all spare capacity to the basic NAC is wrong. OCTA, similarly, argues that if a facility can be used to provide more than one function, the spare capacity associated with the facility is, by definition, a group related volume-insensitive cost. OCTA takes the position that a TSLRIC model requires the assumption that the network is efficient and therefore the appropriate size. Additional spare capacity, other than small amounts needed for administrative and maintenance, should not be included in TSLRIC.

These agreements in the Stipulation, are, according to the opponents, the product of a mere compromise that will not benefit consumers. The proposed treatment of growth spare capacity will, they argue, allow U S WEST to engage in strategic pricing which will negatively impact competition. AT&T suggests that under the test for cross-subsidization, U S WEST will be able to raise the price of the basic NAC or unbundled loop above the TSLRIC. On the other hand, if U S WEST wants to compete with a provider, particularly a facilities based provider, it would be able to charge the customer a much lower price covering just the volume-sensitive costs. According to AT&T, the Stipulation thus nullifies agreements in UM 351 which prevented such manipulation. MCI agrees that the Stipulation will give U S WEST great flexibility to set prices to disadvantage competitors. U S WEST would end up with high total costs leading to higher prices which would disadvantage entering competitors who might want to resell or buy unbundled loops. It could also, however, lower prices when doing so would give it a competitive advantage.

**U S WEST** and **Staff** acknowledge that the treatment of growth spare capacity is a departure from UM 351. They note, however, that UM 351 was not intended to present the final word by the Commission on every issue relating to costs. Staff notes, for example, that the Cost Report acknowledged that service specific costs have not been identified and that there will be a need to update building block cost data. *Cost Report* at 43. Staff points out that AT&T's expert witness acknowledged that the matter of growth spare capacity needs to be examined to see how it fits into the total costing picture.

Specifically, U S WEST and Staff argue that the company presented credible evidence of a direct relationship between increased volume of working loops and increased

costs for spare capacity. The company's witness described relevant studies as follows:

Studies were made of standby capacity [growth spare] in the primary facilities group, namely outside plant feeder and distribution, inter-office transport, and switching. In all cases, the amount of standby capacity was proportional to the amount of these facilities in use. This is the criteria for volume sensitivity of costs. If the amount of standby capacity had been found to be constant, without regard to the amount of these facilities in use, then it would have been appropriate to classify them as volume insensitive.

Distribution plant is installed in chunks, either in distribution areas or buildings. Sufficient inventory of distribution plant is provided for quality and timely service based on a planning horizon. The amount of standby capacity installed is a function of the number of dwelling units anticipated in the service area. More units implies more standby capacity. A statistical study was made of all feeder loops in U S WEST. This study was provided as a response to MCI First Set of Data Requests, Request #1, incorporated here by reference. The result of this study was that standby capacity was in direct proportion to the number of working loops. This is a requirement for standby capacity to be volume sensitive.

Similar to distribution plant, digital switches and SONET based transport facilities are deployed in chunks of capacity. The amount of standby capacity available in these chunks of capacity is generally determined by the anticipated growth rate of the services using these facilities. If twice the capacity is needed, twice the standby capacity is needed. Again, the standby capacity is directly linked to the working capacity and the standby capacity is volume sensitive.

Staff and U S WEST argue that factual information that has been developed since the Cost Report requires a change in the assumptions made in the Report. Staff and U S

WEST assert that the Stipulation provisions are a reasonable compromise on this issue, particularly, as Staff points out, when considered in light of the other terms agreed to by U S WEST in the Stipulation. Staff also notes that the change is appropriate because costs in this case are not determined by class of service, such as business service or residential service, but by functional building blocks. It is thus proper to treat the building block as having building block volume-insensitive costs.

### **Commission Disposition**

The Commission adopts the treatment of growth spare capacity contained in the Stipulation. The fact that it is a departure from the policies set out in UM 351 is not fatal. Our decisions in that case contemplated changes as necessary and anticipated that issues would be updated and reviewed, specifically some of the issues relating to growth spare capacity. *Cost Report* at 43 and Appendix at A5-24. Nor does the fact that the final agreement was the product of a compromise make it unacceptable, provided the agreement is based on sound evidence and analysis. Here, the evidence provided by U S WEST and reviewed by Staff, including the studies discussed above, establishes that the changes set out in this portion of the Stipulation are appropriate. The opponents' attempts to discredit this evidence are not persuasive. The fact that the agreement in the Stipulation may result in increased costs for the NAC is not determinative. What we are trying to arrive at are, of course, appropriate costs based on reality. We conclude that the agreement set out in the Stipulation is an appropriate resolution based on the record in the case and we adopt it.

### **8. Flat Rate Interconnection**

**OCTA** objects to the Stipulation because it does not provide a basis for appropriate flat-rate interconnection costs. It argues that for competitors to make inroads, they must be able to purchase a basic input on a flat rate rather than a minutes of use basis.

**Staff** responds that the matter raised by OCTA is a pricing matter outside the scope of UM 773. Staff also notes that OCTA did not provide evidence that interconnection costs are fixed or volume insensitive.

### **Commission Disposition**

The Commission concludes that issue of flat-rate interconnection is outside the scope of UM 773 and will not be considered in this order.

## **General Criticisms of the Stipulation**

### **1. The Stipulation Abandons UM 351 Principles.**

The opponents of the Stipulation note that the Staff and affected members of the industry and other interested parties labored for years in UM 351 to develop principles applicable to the development of costs and prices in telecommunications. Of particular importance, according to the parties, were the agreements reached by all the participants in that proceeding and, specifically, the seven cost principles set out in the 1993 Telecommunications Cost Report (Cost Report). In Order Nos. 93-1118 and 94-1056, the Commission adopted the cost principles and directed their implementation.

The parties opposing the Stipulation assert that the Stipulation abandons or changes several of the important principles set out in UM 351. They note that Staff acknowledges that new cost models have been added, the test for cross-subsidization has been changed, some depreciation studies have changed, the treatment of certain cost factors has changed, and the treatment of growth spare capacity has changed. The opponents assert that these are fundamental changes which are unjustified by the record in this case or by policy considerations. The parties argue that Order No. 96-188, the Commission's recent UM 351 order relating to pricing, reaffirms the earlier principles and, moreover, contains language which may directly support the criticism of the parties opposing the Stipulation. The parties note that UM 351 orders are the product of balancing and consensus among the interests of various parties in the telecommunications industry. They assert that the present case and the Stipulation do not provide a reason for revoking the Commission's directives in UM 351.

### **Commission Disposition**

The Commission is aware of the need for some degree of continuity with respect to certain policy considerations. That is particularly true when our policy is the product of a lengthy and fully developed examination of important issues, as was the process that led up to the development of cost policy in UM 351. We believe, however, that the Stipulation is by no means a departure from the principles we developed in that case, as the opponents argue. It adheres to the seven basic cost principles and to many of the specific policy determinations we made in that case. It is thus not an abandonment of the consensus that was so strenuously and carefully worked out in that case.

The fact that there are some significant departures from specific UM 351 methodology is not in itself troubling to the Commission. The question is whether the changes are appropriate. It is quite clear, as Staff and U S WEST point out, that it has been anticipated all along that the development of cost estimates for telecommunications services and building blocks is an evolutionary process. Order No. 93-1118 Attachment at 4-5; Order No. 94-1056 at 1-2 and Appendix at 4; Telecommunications Building Blocks Cost Report, Vol. I, at 43 and Vol. II, Appendix 5, at A5-6, A5-16 to A5-31. This order has analyzed the specific departures from UM 351 noted by the opponents. We have concluded that the changes in policy set out in the Stipulation are appropriate and will lead to an improvement in our attempts to develop good cost estimates for telecommunications services and building blocks. This order is simply a step in the continuing process and the fact that it departs from prior orders is not fatal.

## **2. The Impact of the Stipulation is Uncertain.**

The opposing parties note that the Stipulation does not contain or refer to the specific costs which will result from its adoption. The Stipulation is designed to establish certain principles which, if adopted by the Commission, will be used by U S WEST to recast its cost studies. These recast cost studies will then be submitted to Staff for review and audit, and then, finally, to the Commission for approval. In other words, according to the opponents, the Commission is being asked to accept and approve a Stipulation whose ultimate impact is unknown. Witnesses for both Staff and U S WEST testified that they have not recomputed the costs based upon the agreement set out in the Stipulation and do not know what those costs will be. The best estimate Staff could offer was that the cost figures would be less than the 85 percent increase proposed by U S WEST in April 1996 during the settlement negotiations in this proceeding but that the cost of unbundled loops would increase significantly. The magnitude of the change will not be known until U S WEST prepares cost estimates. This absence of specific information on the impact of the Stipulation means, according to the opponents, that the Commission cannot tell whether the costs it is being asked to approve in the Stipulation will be appropriate or will lead ultimately to the establishment of just and reasonable rates.

## **Commission Disposition**

The opponents of the Stipulation are correct that we do not know at this point the specific costs that will result from adoption of the Stipulation. However, the question before us is whether the method set out in the Stipulation, or in UM 351 and other cases and affirmed in this case, are sound. If they are the best way available to make good estimates of costs, then

they are the policies we should follow. If they are appropriate, the costs they will lead to, and ultimately the prices, will be just and reasonable. Clearly, the Commission cannot reverse the process, as the opponents would seem to suggest. We cannot compute the costs that we might like for some reason and then design a policy scheme to arrive at those costs. To the extent possible, the cost estimates we are developing are to reflect actual costs. To achieve that goal, we need to arrive at reasonable principles and methods and then determine the consequences of those principles and methods. As we have noted in this order, we have concluded that the principles set out in the Stipulation, when applied along with our other orders relating to cost policies, are a practical means of dealing with this case. We note that, in any event, the Stipulation requires that the cost results that come from this case be submitted to Staff for review and possible audit and to us for final approval.

### **3. Negative Impact on Costs and Competition.**

The opposing parties assert that the Stipulation will significantly impede the introduction and development of competition in the telecommunications industry in Oregon. The opponents offered expert testimony suggesting that the costs of the NAC would be raised substantially by the provisions of the Stipulation. The Stipulation would, in the view of the opponents, allow U S WEST and other LECs to engage in strategic pricing to keep opponents out of the field. OCTA claims, for example, that the flaws in the Stipulation and deviations from UM 351 policy would lead to falsely inflated costs for regulated monopoly services and deflated costs for competitive services. It would therefore defeat competition before it has begun.

### **Commission Disposition**

It is understandable that the opponents of the Stipulation are concerned about the impact of the Stipulation on costs and ultimately on prices. As we noted above, the purpose of this proceeding and others relating to costs is to arrive at the best estimates of actual costs. Policies which lead to the best estimates are appropriate, whether they lead to higher or lower costs than a particular element of the industry would prefer. Adopting procedures that would lead to unrealistically low costs is not any better policy than one that would lead to unrealistically high costs. As we have noted, we conclude that the Stipulation is a good step toward the development of accurate cost estimates. The cost estimates that result from it are not inflated but are the best estimates at this time of actual costs.

### **4. The Stipulation gives too much discretion to U S WEST.**

The parties note that the Stipulation contains several provisions which appear to allow for changes in its terms or in its effects. The parties suggest that this *carte blanche* freedom given to U S WEST, in Paragraphs 4, 5, and 6, for example, would allow U S WEST to make any changes it wants. The parties argue this is a dangerous latitude and that the Commission should, at the least, permit other parties to participate in the review of cost studies filed in conformance to the Stipulation or in any proceedings relating to additional changes requested by the company.

### **Commission Disposition**

We conclude that the Stipulation does not allow too much latitude or discretion to U S WEST. The various portions of the Stipulation that allow the company to request changes are an attempt to take account of the general evolutionary nature of the process, as we have noted above, and of other changes that might necessitate modifications, such as the 1996 Federal Telecommunications Act, or other changes in the general industry environment. Even without these provisions in the Stipulation, U S WEST would have a right to request changes. In other words, the Stipulation does not provide for anything our rules and applicable statutes do not already allow. The Stipulation merely spells out some situations in which modifications might be more likely to occur.

Moreover, the Stipulation does not allow U S WEST to make unilateral modifications. Anything the company might propose would be subject to review by Staff and consideration by the Commission. Additionally, as Staff notes, other parties may participate in processes or proceedings that may result from requests for change.

### **5. The Stipulation is a compromise.**

The opposing parties argue that many provisions in the Stipulation are simply the result of an effort to compromise and are not supported by good evidence in the record. The parties argue specifically that the provisions relating to placement of facilities, depreciation lives, and the treatment of growth spare capacity are supported in Staff's briefs only by statements that they are appropriate or reasonable. The parties argue that agreements based simply on compromise are not supported by substantial evidence and should be rejected by the Commission.

### **Commission Disposition**

We disagree with the opponents' claims that some provisions in the Stipulation are not supported by evidence in the record. There is evidence in the record on all issues. In some instances the opponents ignore that evidence. In others, they disagree with it. It is their right, of course, to argue that we should not credit some evidence or should choose their evidence over that presented by U S WEST and Staff. We have reviewed the record, however, and we conclude, as we have described above, that the Stipulation's provisions are supported by convincing evidence in the record.

Moreover, we would note that the fact that some portions of the Stipulation are the product of compromise does not mean they are flawed, provided that there is some basis for them. The resolutions to the issues in this type of case are rarely definitive. There is always a range of reasonableness. If agreed-upon resolutions to issues fall within that range, we will adopt them. In this case, as we have noted throughout, we conclude that the provisions in the Stipulation are sound and reasonable resolutions to the complex issues. We conclude that the Stipulation is a good resolution of the issues and is in the public interest.

### **Relief Requested by the Opponents of the Stipulation**

**AT&T and MCI** ask that the Commission reject the Stipulation in its entirety. In the alternative, they urge the Commission to reject the following portions of the Stipulation:

1. Paragraph 15 and 16 relating to growth spare capacity.
2. Paragraph 14 relating to costs of placement of facilities.
3. Paragraph 13 (a) and (b) relating to depreciation factors and cost of money.
4. Paragraph 12 relating to the new test for cross-subsidization.

In place of these challenged provisions, AT&T and MCI ask that the Commission order U S WEST to refile its cost studies using UM 351 treatment of spare capacity and placement and the Commission approved factors for cost of money and depreciation and the Commission approved cross-subsidization test. They also ask that, in any event, the Commission order that all parties be afforded the opportunity to participate meaningfully in the development of the methodology and input as well as in the review of any new cost studies by U S WEST.

**OCTA** asks that the Commission do the following:

1. Order U S WEST to file new cost studies based on the Stipulation so that the Commission can see the impact of the Stipulation before deciding to adopt or reject it.
2. Order U S WEST to file a summary document which quantifies and compares the costs from past UM 351 studies with the new UM 773 costs computed in conformance with 1 above.
3. Provide all parties with an opportunity to review and comment on the product of 1 and 2 above.
4. Issue an order after the process set out in 1, 2, and 3 above which decides about the Stipulation based upon real numbers and which clarifies how UM 773 costs will be used in UT 125.

### **CONCLUSIONS**

The Commission has examined the Stipulation and the specific and general arguments for and against it. We have also considered the recommendations by the opposing parties as to how we should treat the Stipulation. As we have discussed throughout this order, we conclude that the provisions of the Stipulation will lead to the development of sound cost estimates. We conclude that the Stipulation is in the public interest and should be adopted in its entirety.

We note that the 1996 Telecommunications Act may have implications for the policies we have adopted in this order. We direct that cost and rate issues relating to the Act and the FCC rules adopted pursuant to the Act be addressed in UT 125.

### **ORDER**

IT IS ORDERED that:

1. The Stipulation attached as Appendix B to this order is adopted.

ORDER NO.

2. The new cost studies by U S WEST required in the Stipulation shall be filed with the Commission no later than six weeks after this Order is issued.

3. Cost and rate issues relating to the 1996 Telecommunications Act and FCC rules adopted pursuant to the Act shall be addressed in UT 125.

Made, entered, and effective \_\_\_\_\_.

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**Roger Hamilton**  
Chairman

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**Ron Eachus**  
Commissioner

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**Joan H. Smith**  
Commissioner

A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-014-0095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-013-0070(2). A party may appeal this order to a court pursuant to ORS 756.580.

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