

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the matter of Southwestern Bell Telephone Company's  
application for classification of its nonbasic services.

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) Case No. TO-89-56  
)

APPEARANCES

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and

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**HEARING EXAMINER:** Cecil I. Wright.

### **REPORT AND ORDER**

On September 9, 1988, Southwestern Bell Telephone Company (SWB) filed a petition pursuant to Section 392.361.1, R.S.Mo. (Cum. Supp. 1990), to classify certain of its services as transitionally competitive. The Commission gave notice

of the petition. The Commission has granted intervention to the following parties:

Competitive Telecommunications Association  
of Missouri (CompTel)  
United States Department of Defense and all other  
Federal Executive Agencies (DOD/FEA)  
GTE North Incorporated  
American District Telegraph Company (ADT)  
AT&T Communications of the Southwest, Inc.  
AT&T Information Systems, Inc.  
Contel of Missouri, Inc.  
Contel System of Missouri, Inc.  
Webster County Telephone Company  
American Operator Services, Inc.  
Midwest Cellular Telephone Company  
Com-Link 21 Inc. (now LDDS of Missouri, Inc.,  
d/b/a LDDS Communications)  
Kansas City Cable Partners  
Midwest Independent Coin Payphone  
Association (MICPA)  
United Telephone Company of Missouri  
ALLTEL Missouri, Inc.  
MCI Telecommunications Corporation (MCI)  
CyberTel Cellular Telephone Company  
US Sprint Communications Company  
Fidelity Telephone Company

McCaw Cellular Communications, Inc., subsequently withdrew as a party.

The Commission in its November 15, 1988 order also established a procedural schedule for this case. That procedural schedule was subsequently modified by order issued March 7, 1989 and a protective order established.

On May 17, 1989 Commission Staff filed a motion requesting the Commission clarify the scope of this case and modify the procedural schedule to allow time for additional filings. On June 9, 1989 the Commission granted Staff's motion, canceled the existing procedural schedule and set a prehearing conference for the parties to propose a new procedural schedule. On July 11, 1989 the parties filed a proposed procedural schedule which provided for two phases of pre-filed testimony and hearings. Phase I would address cost methods and cross-subsidization issues and Phase II would address classification of services, pricing and above-the-line/below-the-line treatment of costs. By order issued July 14, 1989, the Commission adopted the proposed procedural schedule.

On August 8, 1989, SWB withdrew its request to classify as transitionally competitive all services except two, Speed Calling and Billing and Collection. By order issued September 5, 1989 the Commission added Call Control Options, Selective Call Forwarding and Microlink I to the services for which classification would be considered. These services were already classified as transitionally competitive pursuant to the provisions of Section 392.220 and were to be addressed in Cases No. TR-89-256 and TR-89-257.

On March 23, 1990, SWB filed a motion requesting the Commission suspend the procedural schedule. The Commission postponed the filing of surrebuttal testimony and ordered the parties to address SWB's motion at the March 27, 1990 prehearing conference. The Commission heard arguments concerning the motion and moved the hearings in this matter from April 15, 1990 to May 10, 1990.

On April 20, 1990, SWB filed a motion to withdraw its petition to classify as transitionally competitive the remaining five services. This included the canceling of the tariffs which classified Call Control Options, Selective Call Forwarding and Microlink I as transitionally competitive. On May 2, 1990 the Commission issued an order granting SWB's motion with regard to Phase II of these proceedings but denying the motion with regard to Phase I. The Commission modified the procedural schedule to allow additional time for settlement negotiations and for SWB to file surrebuttal testimony.

This matter was finally heard on November 1 through November 9, 1990. Briefs were filed by various parties.

SWB filed a Motion In Limine requesting the Commission limit the briefs to the evidence submitted. The Commission will deny the motion.

During the hearing SWB asked that the Commission take official notice of certain documents used to cross-examine Public Counsel witness Carver. The pertinent parts of the documents were the dates each was issued or filed. SWB filed a list of the dates by letter dated February 11, 1991. SWB in the letter again asked that official notice be taken of the documents.

As stated at the hearing, official notice would be taken of the dates if no party objected. No objections were filed so the Commission will take official notice of the dates as listed in SWB's letter of February 11, 1991. The Commission will not take official notice of the documents.

Exhibit No. 44 was reserved at the hearing for a late-filed exhibit for the full answer by SWB to Staff data request No. 357. Exhibit 44 has been filed and will be received into the record.

### Findings of Fact

The Missouri Public Service Commission, having considered all of the competent and substantial evidence upon the whole record, makes the following findings of fact.

The Commission has regulated public telephone, now telecommunications, corporations pursuant to the provisions of Chapter 392 since 1913. During this period the statutes have required the Commission to set just and reasonable rates for telephone service. To fulfil this requirement the Commission adopted the traditional regulatory scheme of rate of return, rate base and expense calculations based upon an historical test year adjusted for known and measurable changes.

On September 28, 1987, the first major revisions to Chapter 392 since 1913 became effective. The new provisions are designed to provide the Commission with additional flexibility to address the increase of competition in the telecommunications industry. The Missouri General Assembly indicated in Section 392.510, R.S.Mo. (Cum. Supp. 1990) (all statutory references will be to R.S.Mo. (Cum. Supp. 1990) unless specifically indicated otherwise), the construction of the new provisions. Specifically, the new provisions are to be construed to:

- (1) Promote universally available and widely affordable telecommunications services;
- (2) Maintain and advance the efficiency and availability of telecommunications services;
- (3) Promote diversity in the supply of telecommunications services and products;

- (4) Ensure that customers pay only reasonable charges for telecommunications service;
- (5) Permit flexible regulation of competitive telecommunications companies and competitive telecommunications services; and
- (6) Allow full and fair competition to function as a substitute for regulation when consistent with the protection of ratepayers and otherwise consistent with the public interest.

To fulfil the goals and purposes stated in Section 392.530, revisions were made to traditional regulation which allowed for classification of services as either competitive or transitionally competitive (C-TC) and relaxed regulatory oversight for services so classified. This relaxed regulatory oversight would allow companies to file bands of rates for C-TC services within which rates could be changed without notice, or, for competitive services, rates could be changed with certain notice requirements. Additionally, for local exchange companies, (LECs) which provide basic local exchange service, statutory safeguards were enacted to ensure that the rates for noncompetitive (NC) services did not recover any costs associated with LECs' provisioning of transitionally competitive or competitive services. The safeguards are found in Section 392.400.

SWB was the first LEC to request classification of services as transitionally competitive. The issue of classification was delayed, pending a determination of how SWB would comply with the requirements of Section 392.400. SWB subsequently withdrew its request for classification, but the Commission ordered the hearing on the requirements of Section 392.400 be held so these issues could be addressed.

Section 392.400 has several subsections which, together, require the Commission to establish procedures for determining the costs associated with C-TC services and to ensure those costs are not recovered in rates charged for NC services. Subsection 1 states that the Commission shall not allow or establish any rate or charge for an NC service which in any way recovers the expenses, investment, incremental risk or increased cost of capital associated with the

provision of C-TC services. This prohibition very clearly requires close scrutiny of how rates for NC and C-TC services are established. The prohibition in this subsection has been described as requiring that NC services not provide a subsidy or cross-subsidy of C-TC services.

Subsection 2 requires the Commission to establish procedures, including accounting procedures, to implement the prohibition in subsection 1. Testimony in this case has focused on what is an accounting procedure.

Subsection 3, as in subsection 2, requires the Commission to develop procedures or methods for calculating costs to determine whether rates for any telecommunications service offered by an LEC are equal to or above those costs. Cost studies can be ordered by the Commission to make this determination.

Subsection 4 allows the Commission, in setting rates for NC services, to include the revenue from C-TC services, but only if those revenues, in the aggregate, exceed expenses plus a reasonable return on investment for C-TC services in the aggregate. This subsection also allows the Commission to make a determination at the time of classification whether to include the revenues and costs of a C-TC service in the aggregate calculation. Parties have described this last provision as taking a service below the line although the rates for the service would still be subject to some regulation.

Subsection 5 prohibits an LEC from pricing a C-TC service below the cost determined by the Commission if the rate is not consistent with full and fair competition. This subsection involves pricing of services and is therefore not directly related to this proceeding. Subsections 6 and 7 also provide for procedures not directly related to this proceeding.

The statutory provisions described above provide the standards against which the parties' proposals in this case are to be tested. The Commission will first summarize the proposals and then provide a resolution of those matters that can or are required to be resolved in this case.

### SWB's Proposal

A summary of SWB's proposal is set out below.

<u>PROCEDURE</u>	<u>PURPOSE</u>	<u>PREPARED</u>	<u>WHEN --</u> <u>SUBMITTED TO PSC</u>
<b>I. <u>Primary Procedures</u></b>			
A. IUC (Incremental Unit Cost Study) - (procedures already exist)	Costing tool for C-TC services. Price will be set to the market, but above incremental cost (thus assuring no receipt of subsidy). The excess over incremental costs will contribute towards recovery of shared and common costs	Maximum of every 3 years or as needed	During general revenue requirement cases for C-TC services or every 3 years and when services are initially classified
B. Stand-alone test for local service - (procedures already exist)	To ensure the only service guaranteed a monopoly is not providing a subsidy to other services	Every 3 years or as needed	During general revenue requirement cases or every 3 years
C. Contribution analysis - (procedures already exist)	Aggregate test	When required	During revenue requirement cases or every 3 years
<b>II. <u>Secondary Procedures</u></b>			
A. DCF - (current SWB process)	Prospective test used by SWB to test whether the deployment of a new service will exceed its total costs (including start-up) over time. The Commission would use in its above-the-line v. below-the-line decision (assessment of risk)	When a service is considered	At time new service is proposed and tariffs are filed requesting classification as TC or C
B. CARTS - (current SWB process)	Historical report that depicts annual results for buckets of services	Annually	Annually or during revenue requirement cases
C. CAP - (procedures already exist)	Should the Commission decide to classify a service as C-TC and order it be taken below the line, CAP procedures will be utilized (uses embedded direct costs plus a negotiated contribution level)	When required	During revenue requirement cases or sooner if necessary (e.g., under an incentive plan)



As one can see, SWB proposes to rely primarily on incremental unit cost studies to determine the cost of services classified as C-TC and to determine if a subsidy exists. These cost studies will estimate the difference between the total cost of production for a service as compared to the total cost not including the new service, or could only compare the cost of one unit of increased production versus the cost avoided by not producing the additional unit. These studies rely on future estimates of additional costs and do not include joint or overhead costs, nor do they include start-up costs.

The other study SWB recommends to determine whether a subsidy exists is the Stand-Alone Cost (SAC) study. This study is used to determine the costs for a company of producing a service in isolation, that is, without producing other services. SWB proposes to do an SAC study only for basic local exchange service and, in fact, has performed such a study.

SWB's other proposed studies are recommended for backup or additional confirmation that no subsidy is occurring and to aid in the decision of whether to take a service below the line. None of these studies allocates joint and overhead costs. The Discounted Cash Flow (DCF) study does include start-up costs, while the CAP study reflects all embedded direct costs, to which SWB would add a negotiated contribution to joint and overhead costs.

#### Public Counsel's Proposal

Public Counsel proposes the use of a Fully Distributed Cost (FDC) procedure for ensuring there is no subsidy from NC services to C-TC services. Public Counsel recommends the FDC method be applied using a Cost Allocation Manual (CAM) similar to the one developed by SWB for the Federal Communications Commission (FCC). Public Counsel is not proposing that C-TC services be priced at FDC but recommends revenue imputation where prices of C-TC services are not set to recover FDC.

### MCI's Proposal

MCI proposes the Commission adopt what it calls a "building block" costing method. This method consists of the steps listed below.

- (1) Selection of tentative prices for SWB's basic residential services based on social policy;
- (2) Identification of the building block elements of SWB's network;
- (3) Categorization of the building blocks into bottleneck monopoly building blocks (for which there is no practical alternative source besides SWB) and nonmonopoly building blocks;
- (4) Determination of types and quantities of bottleneck monopoly and nonmonopoly building blocks used to provide each of SWB's tariffed services;
- (5) Compilation of incremental costs of each of SWB's NC services other than basic residential and each of its C-TC services by combining the incremental costs of the bottleneck monopoly and nonmonopoly building blocks used to provide those tariffed services;
- (6) Projection of the revenues which would result from the tentative prices selected for SWB's basic residential services in step 1, and from tentative prices which equal the incremental costs compiled for SWB's remaining NC services and its C-TC services in step 5;
- (7) Comparison of the projected revenues from step 6 to SWB's revenue requirement and
  - (a) if projected revenues exceed revenue requirement, reduction of tentative prices selected for SWB's basic residential services to eliminate such excess; or
  - (b) if projected revenues are less than revenue requirement, addition of various nondiscriminatory "markups" above the incremental costs of particular bottleneck monopoly building blocks and thereby above the incremental costs of the NC services (other than basic residential) and C-TC services which use those bottleneck monopoly building blocks;
- (8) Confirmation of the results of step 7 as prices for SWB's basic residential services, prices for SWB's remaining NC tariffed services, and price floors for SWB's C-TC tariffed services.

MCI presents its building block method as an incremental cost approach although SWB calls it an FDC approach. Basically the method constructs floors for

C-TC services using the total long run incremental costs of building blocks of SWB's network. These building blocks, MCI contends, are the elements of the service provided by SWB and are different from the tariffed services. A tariffed service would be made up of building blocks. Example: building blocks for use of the local exchange switches just to switch would be: (1) duration of a call (minute/second); (2) call setup (either call attempt or number of digits depending on type of switch).

#### Staff's Proposals

Staff did not take a position in this case. Instead, Staff presented the two sides of the issue, without compromise or attempt to reach a middle ground.

Staff witness Curt Huttshell supports the use of the incremental cost studies for services classified as C-TC and the SAC study for NC services to determine whether NC services are subsidizing C-TC services. Huttshell agrees with SWB and ties costs to price. He contends that price floors should be set for C-TC services using Long Run Incremental Unit Cost (LRIUC). Incremental cost, Huttshell states, is calculated by determining the magnitude of the outlay avoided or saved by curtailing the quantity supplied, and one should attribute only those outlays that can be avoided or escaped to the cost of the service. This, of course, means that expenditures which are considered fixed or overhead are not regarded as a cost in incremental costing under Huttshell's proposal.

It is Huttshell's opinion that any price at or above LRIUC is not predatory because they are not unprofitable in a competitive market. Huttshell states that the time period utilized in an incremental cost study will affect its reliability and so recommends that the time period should be "sufficient to allow complete accommodation of plant and equipment to any changes in output which it is reasonable to expect will be realized, i.e., the time allowed between the installation of the discreet [sic] addition to capacity and when that addition is

expected to become fully utilized." Huttshell also states that the appropriate increment is a crucial component of the study. He recommends four considerations in choosing an increment: (1) prospective volumes of service in comparison to present volumes; (2) the rate at which such prospective volumes are likely to be reached over time; (3) the distribution of those prospective volumes over specific time periods, i.e., time of day and day of week; and (4) the degree of unused or underutilized capacity in the system. Finally, Huttshell would use the incremental cost method for determining whether a service should be treated above the line or below the line.

Bob Schallenberg, Staff's other witness, proposed the adoption of an FCC-type CAM using the FDC method. Schallenberg states that FDC will prevent subsidization because it focuses on actual, historical costs of a service, including up-front or start-up expenses and investments, the incremental costs of the service, the increased overhead incurred to support that service, and a predetermined allocation of cost responsibility to that service to defray joint and overhead costs.

Schallenberg regards the reliability of actual costs used in an FDC method as superior to the cost estimates of the incremental cost method. If actual data doesn't meet estimated data, a subsidy could occur, and therefore FDC is necessary to detect this subsidization. Schallenberg believes the cost of a C-TC service includes the start-up costs such as research, development, marketing and trial, as well as shared costs, joint and overhead costs. Schallenberg asserts that shared costs range from 47.95 percent in 1984 to 53.23 percent in 1988 of SWB's total costs. To recover this through contribution, Schallenberg contends, would require a 100 percent markup.

#### Other Parties' Proposals

The other LECs which are parties to the case generally supported incremental costing as the proper procedure or method to adopt to ensure rates for

NC services do not recover any costs associated with C-TC services. They also oppose use of the Stand-Alone Cost (SAC) study since it is costly and inconclusive and they oppose the requirement of an FDC CAM as burdensome and arbitrary. The companies' main point is that each company should be allowed to develop its own procedures for meeting the requirements of Section 392.400 and this case should not be used as a mandate for any specific procedure.

CompTel, MICPA and ADT generally support the FDC method. They support the need to recover shared costs and say the incremental cost method is subject to manipulation. These parties are dependent for their businesses on SWB services and fear unfair competition if SWB rates are not set to recover shared costs.

Department of Defense and other Federal Executive Agencies (DOD/FEA) supports incremental costing so that prices for SWB services will be competitive. DOD/FEA is a large customer of SWB and supports competitive prices. DOD/FEA believes incremental cost studies are appropriate for determining whether a subsidy exists between NC services and C-TC services.

#### Commission's Decision

The procedural history of this proceeding indicates the complexity of the requirements of the legislation enacted in 1987. It is SWB's position that Section 392.400 is a codification of Commission policy established in Case No. 18,309. Re: *Southwestern Bell Telephone Company*, 21 Mo. P.S.C. (N.S.) 397 (1977). Other parties contend that the procedures of 18,309 do not meet the requirements of Section 392.400. No middle ground was proposed and the Commission is left to interpret the requirements of Section 392.400 based upon very strong and antithetical arguments. Although the parties may find the language of 392.400 rigid, the Commission finds it allows for some flexibility and, in fact, requires flexibility because of the dynamic nature of the process of classification.

In fashioning a rational interpretation of the requirements of Section 392.400, the Commission will not attempt to resolve all of the disputes

between the parties. Some of the theoretical disputes probably cannot be resolved and are only applicable if they are relevant to the statutory requirements. Theoretical purity is not mandated by the statute and, as the evidence indicates, is not a practical solution. The Commission's goal is to interpret the statutory provisions so that the purposes of the legislative enactments of 1987 can be implemented within the boundaries established by the General Assembly.

The provisions of the 1987 legislation allowing for classification of services of interexchange carriers as C-TC were implemented in 1989. *Re: Investigation for the purpose of determining the classification of services provided by interexchange telecommunications companies within the State of Missouri*, 30 Mo. P.S.C. (N.S.) 15 (1989). The parties, after prolonged negotiations, reached agreement on how to implement the statutory provisions. In contrast, LECs have been reluctant to take advantage of the provisions. Even though the Commission offered to reach a decision by December 31, 1989, this proceeding was delayed and then proposed to be withdrawn. The reluctance of LECs to take advantage of the reduced regulation permitted by the 1987 legislation is perplexing and suggests a reluctance to leave the safety of the traditional regulatory environment or that there are few services which are subject to sufficient competition to warrant reduced regulation. Regardless of the reason for the delay, the Commission determined that it should address the provisions of Section 392.400 so that LECs would know what to expect if they do seek classification.

Subsection 392.400.1 is the cornerstone for the safeguards established in this section of the statute. Although the word "subsidy" is not used, this subsection in effect prohibits any subsidy of C-TC services through the rates charged for NC services. Subsection 2 requires the adoption of procedures which will enable the Commission to ensure the subsection 1 prohibition is accomplished. The decision concerning the appropriate procedures that will be used to determine whether a subsidy is occurring will effectively answer the costing questions of subsections 3 and 4. Since costs drive rates, the prohibition against NC rates

subsidizing C-TC services must be addressed by determining what costing procedures will detect a subsidy. The term subsidy, or cross-subsidy, is used here to mean where the rates for one service recover more than the costs of that service while the rates for another service provided by the same company do not recover its costs.

How to determine the costs of a service, then, is the essential undertaking for determining if a subsidy occurs. SWB suggests that it is economic theory that should determine costs and that economic theory only looks at incremental costs. SWB's argument is that prices drive costs and prices should be determined by the marketplace. Under economic theory, market prices must recover incremental cost or they are not economic.

Incremental costs are forward-looking and are based upon the addition to a firm's total cost when producing more of something as compared to not producing the additional items. Stated in the negative, it is the cost savings that could be realized if the service were discontinued or the additional portion not produced, keeping the level of production constant for all other services.

Incremental costs only include variable costs of production. This means that expenditures which are fixed or shared are not regarded as incremental costs. To be consistent throughout, the Commission will refer, in general, to all costs not directly assignable as either indirect costs or shared costs. This will include joint, common and overhead costs as used by the various witnesses. As defined by SWB, joint costs are those in which the ratio of output to another is fixed; common costs are those in which outputs can be produced in variable proportions; and overhead costs are those that cannot be ascribed to a group of services.

Economists believe that costs are only relevant to price if they are used in making a particular economic decision. Since overheads are fixed or sunk and must be recovered whether a new service or additional unit is produced or not, economists consider them irrelevant. It is SWB's position that these forward-

looking incremental costs are all that are necessary to determine whether a subsidy will occur. If the price of a service is above that service's incremental cost, then there is no subsidy to that service, according to SWB's witnesses.

Incremental cost studies attempt to estimate what will happen in the future by forecasting future demand, expenses and investment. They do not rely on historical data and they do not include most start-up costs. According to economic theory the only relevant costs are those that vary with the decision being made.

Diametrically opposed to incremental costing and the economic theory of costing is the Fully Distributed Cost (FDC) method. This method relies on historical data to determine what costs are assignable to a service, and where costs are shared and cannot be directly assigned, the FDC method would allocate those costs by some formula or cost indicator. To implement the FDC method, a Cost Allocation Manual (CAM) is developed. This manual details how costs are assigned to each service and how shared costs are allocated to each service. The CAM allocates or assigns costs to a service based upon actual historical data.

MCI has proposed a third method of determining costs which it has described as a building block approach. This approach, though, applies either incremental costing or fully distributed costing, depending on whom you believe, to calculate the costs of each service. The building block approach is different in the elements it uses to determine costs, not in the underlying method of cost assignment.

Based upon the evidence presented, neither incremental costing nor FDC provides a practical remedy to the problem presented by subsection 1. Incremental costing is based upon economic theory developed for competitive companies in a competitive market. SWB is a mixed-mode provider; that is, it provides services that are subject to varying degrees of competition as well as services for which there is little or no competition. Under economic theory, SWB would price services subject to competition using incremental costs and recover all shared



costs from those services subject to little or no competition. This, of course, is antithetical to the purpose of regulation and violates one of the purposes of the new legislation, the promotion of universally available and widely affordable telecommunications service.

In addition, incremental costing would only satisfy the subsidy prohibition if incremental cost studies were performed for all combinations of services. William J. Baumol, who appears to have developed the theory upon which SWB's proposal is based, describes this requirement thusly:

"It is possible for the prices of each of several competitive products individually to satisfy the incremental cost criterion and yet for several or even all of the firm's competitive products to fail it as a group. ... To avoid this difficulty, the criterion must be extended to require the revenue of each service individually and for any combination of such services to yield revenues that at least equal the corresponding incremental costs."

William J. Baumol, *Superfairness*, The MIT Press (second printing, 1987), p. 115.

Baumol states further that "the subsidy requires not only that the revenue of each product individually cover its incremental cost, but that the same be true of each and every combination of the company's outputs." *Ibid.*, p. 116. And, finally, Baumol concludes that the incremental cost test precludes the failure of the firm to cover the costs since his test demands that prices be such that each and every combination of products provide revenues that at least equal the combined incremental costs. *Ibid.*, p. 132. As can be imagined, the number of incremental cost studies necessary to establish there is no subsidy under this theory is overwhelming. Not even SWB could provide the studies deemed theoretically necessary by Baumol.

The FDC CAM is also subject to theoretical as well as practical shortcomings. First, the evidence indicates that a CAM would take almost two years to develop and would be resisted by the LECs. Public Counsel proposes using the CAM developed by SWB for the FCC as a guide, but the evidence indicates that the FCC

CAM would have to be almost completely redone to meet the requirements of Missouri operations.

The FCC CAM was developed to separate two groups of services, regulated and deregulated. For Missouri operations the CAM would have to separate the costs of any service classified as C-TC from NC services. Even if done in the aggregate for all C-TC services, the CAM would require updating as additional services were classified as C-TC. The CAM also would establish predetermined allocations of shared costs, which would eliminate any flexibility from the costing process.

Intuitively, SWB's SAC study proposal appears to be the best method to determine whether a subsidy is occurring. An SAC study for each service should determine if any service is being subsidized. SWB proposes to perform an SAC study, and in fact has performed one, to determine whether basic local service is receiving a subsidy. The theory is that if basic local service revenues do not exceed the SAC study, then basic local service is not receiving a subsidy. The stand-alone cost for a service is determined as if the company provided no other services. There are no shared costs and no economies of scale or scope. Economies of scale are where the average cost of each unit decreases as the number of units produced increases. Economies of scope are the advantages any company enjoys when it produces more than one service which use some of the same raw inputs.

An SAC study would be similar to a revenue requirement for a company with only the services studied using hypothetical instead of historical costs. As proposed by SWB, though, the SAC study would not fulfil the statutory prohibition. SWB only proposes to do an SAC study for basic service. To ensure no subsidies exist, SAC studies would have to be done on all NC services in the aggregate and probably all C-TC services in the aggregate, not just basic local service. This, of course, would require new studies each time an additional service was classified as C-TC. Theoretically, to ensure there is no subsidy received an SAC study

would have to be performed for each service and every combination of services, which would require a multitude of studies at some unexplored cost.

SWB witness Kaeshoefer admits that including many other services beyond basic local service in an SAC test would not be practical. In addition, SAC studies require the costing of a hypothetical system that does not exist, one that may have different scales, use different facilities, reflect a different architecture and perform different functions than any system that does exist. DOD/FEA witness King sees these items as shortcomings of the SAC study that can only complicate regulatory proceedings. The Commission agrees.

The building block method suffers the same infirmities as do incremental cost and FDC since it seems to incorporate some of each method. Based upon MCI witness Cornell's description of the procedures necessary to implement the building block method, it appears impractical, and perhaps inscrutable. To require SWB to separate its operations into building blocks would be extremely complex and time-consuming, and to implement this method, parties would have to pore over every aspect of SWB's operations and attempt to agree on what the building blocks are. Then SWB would be required to perform incremental cost studies, as described by Cornell, on each building block and allocate all costs at the building block level. In the context of SWB's system, this would be a monumental undertaking.

Since each of the methods proposed by the parties is deficient when it comes to their practical implementation, the Commission reviewed the methods and procedures proposed to determine which, if any, would, in practical application, ensure that subsidies do not flow from NC services to C-TC services. Any method adopted should be readily available, meet the statutory requirements, and allow SWB to seek classification of services which are subject to competitive pressure as soon as practical.

The Commission believes the solution lies in separating two aspects of SWB's operations. First, there are the existing services for which rates have been set under traditional regulation and the policies established in 18,309. If

an existing service is determined to be C-TC, there must be some method for ensuring all direct costs plus a fair proportion of indirect or shared costs are borne by that service. As stated earlier, a CAM would allocate this cost, but that allocation would not necessarily have any relationship to cost causation or the use of shared facilities or overheads attributable to that service.

The Commission has determined that the Cost Accounting Procedures (CAP) utilized by SWB in TC-89-14, et al., and proposed by SWB for below-the-line treatment in this case is the most reasonable accounting procedure proposed to use in calculating the cost of C-TC services. CAP will identify the embedded direct cost of a service and is superior to the Cost Accounting and Revenue Tracking System (CARTS) proposed by SWB. CARTS would look at families of services, which could be mixed NC and C-TC, and even SWB's witness agreed that if a group of services did not meet the CARTS test, it would not necessarily mean a subsidy was occurring. Along with the CAP study for each existing service, SWB would have to provide a proposed fair contribution to shared costs. This could be negotiated as it was in TC-89-14, et al., or could be a contested issue before the Commission.

This combined procedure for determining the costs of an existing service meets all of the statutory requirements and is readily available. CAP plus a contribution is a practical solution to determining any subsidy. It includes both direct and indirect costs. It allows a C-TC service to benefit from any economies of scale and economies of scope while contributing to shared costs and allows the Commission to see the costs associated with a service to determine whether the service should be taken below the line. The CAP is based upon historical costs, which the Commission finds is necessary to properly determine the costs associated with existing services.

Even though no party proposed taking a C-TC service below the line, subsection 4 limits the Commission to one opportunity to make that decision, at the time of classification. CAP plus a fair contribution will enable the Commission to make that determination.

CAP, though, in its current form is not complete. SWB witness Farmer recommends more comprehensive methods and procedures for CAP. Farmer is a senior manager and a certified public accountant with the firm of Arthur Andersen & Co. Farmer testified that CAP did not have the detailed criteria necessary to meet the Attestation Standards included in the Statements on Standards for Attestation Engagements issued by the American Institute of Certified Public Accountants. SWB will need to develop the detailed criteria before it proposes to classify an existing service and use CAP to determine the cost associated with that service.

The Commission has determined that different procedures should be utilized in determining the cost of new services. Since the rates for new services will not have been set under traditional regulation and costs of providing the service have not been booked, the Commission finds that an incremental cost study plus the Discounted Cash Flow (DCF) study will provide a reasonable estimation of a new service's costs. The incremental cost study for a new service studies the entire service. The testimony indicated that SWB performs its incremental cost studies in this manner for new services but does not for existing services. The incremental cost study for a new service should look at entire expected demand.

In addition to the incremental cost study SWB will be required to provide a DCF study performed for the new service. This study will include the start-up costs such as research, development, marketing and trial. SWB utilizes the DCF to determine whether to provide a new service and this information will aid the Commission in determining whether to take a new service below the line.

The Commission will not decide at this time whether a contribution to shared costs should be required of a new service. Once the incremental cost study and DCF are provided, the decision whether a contribution to shared costs is required can be made when classification is requested.

To ensure the incremental cost study and DCF study have provided a reasonably accurate forecast of the costs associated with a new service, SWB shall

be required to provide a CAP study for the new service three years after the service is tariffed. The CAP study will provide a check on SWB's study methods and can be used to adjust the rates set for the new service, if necessary. Any adjustment based upon the difference between the CAP study and incremental and DCF study can be resolved either through negotiations or by Commission decision. A reasonable contribution to shared costs should be an element in that process.

The procedures established by the Commission in this proceeding should enable SWB to enter the competitive market for new services while ensuring no subsidy exists between NC and C-TC services. The distinction between existing and new services is reasonable since existing services have been priced under traditional regulation and the policies of 18,309, and so are completely intertwined in SWB's rate structure with the focus on total revenue requirement, not subsidy and flexible pricing.

The incremental cost studies provided by SWB under 18,309 have been shown to have faults and they have not been the long run incremental cost studies required by 18,309. The evidence indicated that a long run incremental cost study has not been performed by SWB since 1983. This indicates that other factors were utilized to calculate costs and no attempt was made to guard against any subsidy. Prices were set to allow SWB to recover its revenue requirement and basic local rates were priced residually. There was no flexibility in pricing and no reduced regulation. The Commission could not reasonably, under these circumstances and when faced with the prohibition in subsection 1, allow SWB to set price floors for C-TC services using 18,309 methods. Section 392.400 is not a codification of 18,309, and 18,309 procedures do not meet the requirements imposed by this section.

The Commission's decision is also a signal to other LECs that existing procedures may be sufficient to meet the requirements of Section 392.400. Those procedures, though, for existing services must calculate the embedded direct costs of an existing service and provide a fair allocation of shared costs or propose a

reasonable negotiated contribution to shared costs. For new services LECs should provide a study showing not only the incremental costs of the entire service but a study which includes the start-up costs.

As can be seen from the approach of the Commission to the issues, there has been no attempt to resolve all of the controversy or disagreements raised regarding incremental cost or FDC. Where relevant, those disputes left unresolved will be addressed once classification is sought. The Commission has approached the issues presented in order to meet the shared goals of the provisions of Chapter 392 enacted in 1987, reasonable and fair prices and regulatory flexibility for services subject to competition. The Commission has rejected blind reliance on economic theory for practical solutions. The classification of services as C-TC will be a dynamic process and only a flexible system such as the one established in this order can meet the needs of such a process. Whether SWB and, eventually, other LECs find this solution to their benefit, only time will tell. The Commission, though, has fashioned procedures which it believes will allow classification to begin and still fulfil the requirements of Section 392.400.

### Conclusions of Law

The Missouri Public Service Commission has arrived at the following conclusions of law.

In 1987 the regulation of telecommunications services and companies was modified significantly. The new provisions were designed mainly to reduce regulatory oversight for services found to be either competitive or transitionally competitive. Telecommunications companies could seek classification of any services as either competitive or transitionally competitive except for basic local telecommunications service. If the Commission found that the service was subject to sufficient competition to justify a lesser degree of regulation, it could grant competitive or transitionally competitive status to the service. Other companies with the same or substitutable service could then request

classification of their services and if a company proposed a new service, it could designate the requested classification and have the classification go into effect within 60 days, unless otherwise ordered by the Commission.

Pursuant to this statutory scheme, companies with C-TC services could operate with reduced regulatory oversight. This includes the ability to either change prices within a band of rates or, for competitive services, change rates with limited notice, Sections 392.510 and 392.500, respectively. Tariffs still have to be filed, but changes in rates could be made either within a band or with notice.

LECs, which provide basic local telecommunications service, may always have noncompetitive services, but could seek classification of services other than basic as either transitionally competitive or competitive. The General Assembly, though, to ensure that noncompetitive services, such as basic, do not support the LECs' C-TC services, enacted the provisions of Section 392.400. These provisions were the subject of this proceeding.

Subsection 1 of 392.400 prohibits rates for NC services from recovering the expenses, investment, incremental risk or increased cost of capital associated with the provision of C-TC services. The statutory language prohibits the recovery through NC rates in any way, directly or indirectly, of the costs of C-TC services. This language eliminates a reliance on only incremental costing to set rates for C-TC services. Incremental costs do not include indirect costs or shared costs of a company. Whether forward-looking or actual costs, rates for a C-TC service must include some part of the shared costs of SWB. Although this interpretation may not comport with economic theory, the language is not ambiguous. C-TC services which share in the economies of scale and scope of an LEC must contribute fairly to the joint, common and overhead costs of the LEC.

The statutory language does not direct a CAM type allocation nor a reliance on historical costs either. Predetermined allocations of an FDC CAM are also impractical and lack the flexibility inherent in regulation of C-TC services.



The rigid accuracy of a CAM or the involved process necessary to develop a CAM is not practically suited for regulation of C-TC services. Allocation of shared costs can be flexible as long as each C-TC service provides a reasonable and fair contribution to shared costs. This does not need to be a predetermined allocation.

The Commission believes its decision to require a CAP study plus contribution for existing services satisfies the prohibition in subsection 1. Embedded direct costs plus a contribution to indirect costs developed for each service allows for the flexibility required to meet competition but ensures, in a practical manner, that indirect costs are recovered by all services. As more services are classified as C-TC, the aggregate test will allow for more flexibility. There is no magic formula for assigning shared or indirect costs. For all costs not directly assignable a decision must be made as to the proper cost allocation factor. Even after costs are assigned by cost allocation factor, there will be residual costs which must be assigned.

The use of CAP also fulfils the requirements of subsection 2, which requires that procedures, including accounting procedures, be established to implement the prohibition in subsection 1. CAP is an accounting procedure. It will be used to establish the costs for existing services and as a check of the costs calculated using incremental costs and the DCF for new services. Since the Commission has adopted a procedure which all parties agree is an accounting procedure, the question of whether an incremental cost study is an accounting procedure need not be addressed.

Subsection 3 requires the Commission to establish appropriate methods for calculating the costs of providing any telecommunications service and whether the rates for the service are equal to or greater than the cost calculated. This subsection could be interpreted to require an LEC to perform a cost study for each of its services. The Commission, though, believes it is more reasonable to view the traditional ratemaking process as meeting those costing requirements for

NC services. For services classified as C-TC the procedures established to meet the requirements of subsections 1 and 2 can be used to meet the costing requirements in this subsection.

This interpretation will limit the number of cost studies which an LEC must prepare and also leaves to another proceeding, if necessary, how to calculate the costs of basic local service. Whether to treat the local loop as a shared cost or incremental to basic service is an issue which may need to be addressed in the future but which is unnecessary to decide in this case.

The procedures established by the Commission in this proceeding can also be used to determine whether a C-TC service should be treated in aggregate calculations required by subsection 4. The Commission only has one opportunity to make the decision and must have the necessary costing information to reach a reasonable decision. Short of deregulating all services except basic local service, the only logical solution according to Alfred Kahn, the Commission must determine for each C-TC service whether costs and revenue should be included in a revenue requirement calculation.

The statute mandates that the Commission exercise its discretion to ensure that the rates of NC services do not recover any costs associated with C-TC services. The Commission has adopted procedures in this case to fulfil that obligation. The Commission concludes that procedures established in this order meet the statutory requirement and comply with the intent of the provisions of Chapter 392 enacted in 1987. After the long delay in implementing these new provisions, LECs are encouraged to take advantage of the reduced regulation where appropriate.

**IT IS THEREFORE ORDERED:**

1. That Southwestern Bell Telephone Company shall file a Cost Accounting Procedure study plus a proposed level of contribution when it seeks to

classify a service existing on the effective date of this Report And Order as competitive or transitionally competitive.

2. That Southwestern Bell Telephone Company shall file an incremental cost study and discounted cash flow study when it seeks to have a new service pursuant to Section 392.220, R.S.Mo. (Cum. Supp. 1990), classified as competitive or transitionally competitive.

3. That Southwestern Bell Telephone Company shall file a Cost Accounting Procedure study within three (3) years of the effective date of any tariff which classifies a service as competitive or transitionally competitive pursuant to Section 392.220, R.S.Mo. (Cum. Supp. 1990), as authorized in Ordered paragraph 2 in this Report And Order.

4. That late-filed Exhibit No. 44 be hereby received into evidence.

5. That official notice be hereby taken of the dates provided by Southwestern Bell Telephone Company in its letter of February 11, 1991.

6. That the Motion In Limine filed by Southwestern Bell Telephone Company be hereby denied.

7. That all other motions or objections not specifically ruled on be hereby denied and overruled.

8. That this Report And Order shall become effective on the 17th day of September, 1991.

BY THE COMMISSION

*Brent Stewart*

Brent Stewart  
Executive Secretary

(S E A L)

Steinmeier, Chm., Mueller, Rauch,  
McClure and Perkins, CC., concur  
and certify compliance with the  
provisions of Section 536.080,  
R.S.Mo. 1986.

Dated at Jefferson City, Missouri,  
on this 28th day of August, 1991.

## GLOSSARY

ADT	American District Telegraph Company
C	Competitive
CAM	Cost Allocation Manual
CAP	Cost Accounting Procedure(s)
CARTS	Cost Accounting and Revenue Tracking System
Comptel	Competitive Telecommunications Association of Missouri
C-TC	Competitive or transitionally competitive
DCF	Discounted Cash Flow
DED/FEA	United States Department of Defense and all other Federal Executive Agencies
FCC	Federal Communications Commission
FDC	Fully Distributed Cost
IUC	Incremental Unit Cost
LEC	Local exchange company
LRIUC	Long Run Incremental Cost
MCI	MCI Telecommunications Corporation
MICPA	Midwest Independent Coin Payphone Association
NC	Noncompetitive
SAC	Stand-Alone Cost
SWB	Southwestern Bell Telephone Company
TC	Transitionally competitive