BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Development of local exchange company cost study methodology(ies).) DOCKET NO. 900633-TL) ORDER NO. PSC-93-1761-FOF-TL) ISSUED: December 8, 1993
---	--

The following Commissioners participated in the disposition of this matter:

J. TERRY DEASON, Chairman SUSAN F. CLARK JULIA L. JOHNSON LUIS J. LAUREDO

NOTICE OF PROPOSED AGENCY ACTION

ORDER DIRECTING DEVELOPMENT OF EMBEDDED DIRECT COST METHODOLOGY APPLICABLE TO LOCAL EXCHANGE COMPANIES

BY THE COMMISSION:

NOTICE IS HEREBY GIVEN by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are adversely affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

I. BACKGROUND

This docket was originally opened to address certain aspects of the 1990 rewrite of Chapter 364, F.S., that raised issues, both directly and indirectly, involving local exchange company costs. By Order No. 23474 we initiated the development of a uniform cost study methodology for local exchange telephone companies (LECs). It was recognized that more than one cost methodology might be required, especially given the variety of cost-related questions that could be posed.

As efforts in this docket progressed, the key issues of concern to the parties narrowed to three areas:

 the development of a costing methodology which would yield cost results that were applicable to determining prices for individual services;

13024 DEC-83

- 2) the definition of cross-subsidy of effectively competitive LEC services by LEC monopoly services consistent with the requirements of Chapter 364, F.S.; and
- 3) the appropriate treatment of shared costs in order to ensure that they are recovered from the LECs' various services in a fair and equitable manner.

By Order No. 24910 we addressed each of the above three items and refined the scope of this proceeding. First, we endorsed the adoption of an incremental cost approach as yielding results appropriate for evaluating pricing for individual services. To this end, we are in the process of formulating a proposed rule that will be addressed at a later date. Second, we addressed the issue of cross-subsidization in a separate proceeding which led to the issuance of Order No. PSC-93-1105-TP. With respect to the third item, the appropriate treatment of shared costs, we note that, strictly speaking, this is a cost recovery issue, not a costing issue; as such, its resolution is beyond the scope of this docket. Notwithstanding this, an understanding of the nature and magnitude of shared costs should be a prerequisite to the determination of equitable means to recover them.

II. DEVELOPMENT OF AN EMBEDDED DIRECT COST METHODOLOGY

By Order No. 24910 we directed our staff to evaluate embedded cost studies, with particular emphasis on embedded direct analyses, and to determine what role they can and should play in the pricing of LEC services. Upon review of Staff's analysis we find that the development of an embedded direct cost methodology is appropriate.

A. Basic Characteristics

Like all embedded cost studies, an embedded direct cost (EDC) analysis takes as its starting point the historic accounting costs from a company's books and records, and proceeds to assign or allocate these costs to various categories. However, the assignments and allocations made in an EDC analysis are constrained by a stricter standard than other types of embedded cost studies (e.g., a fully distributed cost study). Specifically, a properly conducted EDC study adheres to the principle of cost causation to the greatest degree possible through the direct assignment of costs to service and cost categories. Where an investment or operating

expense is known to be causally linked to the provision of a service but it is not possible to directly assign these costs to individual services, an allocation factor is developed to yield an estimate.

The adoption of a fairly strict cost causation standard in an EDC study simultaneously affects the types of allocations that are permissible and the number of meaningful cost categories that are Although an embedded direct cost study, like all embedded cost studies, "ties back to the books" because all costs are in fact assigned to categories, it does not assign all costs to service categories. By definition, family costs are attributable to a group of services but no causal basis exists to assign them to individual services; in accord with the cost causation principle, an EDC study would assign them to a distinct Family Cost category. Similarly, since common costs cannot be causally attributable to any single service, they would be identified and assigned to a Common Cost category. Moreover, the cost causation standard limits the level of disaggregation of the company's embedded costs that can be performed: the number of possible discrete service categories (or groupings of services into categories) in an EDC study is constrained by the requirement that a fairly rigid causal basis exists to single out specific services.

When completed, an embedded direct cost study will have assigned all of a firm's accounting cost components -- revenues, investment, expenses and taxes -- either to a service category, one or more family costs categories, or to a common cost category. For each category in the study, it is then possible to determine its total annual EDC, and then to perform historic revenue-cost comparisons.

B. Limitations of EDC Studies

As is true of any embedded cost study performed for a telecommunications firm, an EDC study has certain inherent limitations which make it inappropriate to use as a basis for setting prices for individual services. First, an embedded direct cost study reflects historic investment costs that are an amalgam of various technologies and vintages; consequently, the results do not necessarily, and probably do not, reflect the "cost" of providing a given service today.

Second, any unit cost that one might try to derive using the results of an EDC study would be flawed. At best, it would be a

proxy for an average unit cost; however, for many LEC services, average cost deviates from incremental cost, with the latter being the appropriate benchmark for pricing purposes. Directly attributable service-specific cost components exist which are essentially volume insensitive; as such, any unit cost that is derived would be highly sensitive to the quantities provided at a given time. For example, trying to derive an average unit cost in this manner for a new service that was early in its product life would distort its cost characteristics.

Third, all embedded studies disregard the demand characteristics for a given service and general conditions. However, for pricing purposes it is crucial to determine first if there is a potential demand for a service, and at what possible range of prices the service could be accepted.

Fourth, using the historic revenue-cost relationships depicted in an EDC study as a basis to apportion revenue increases or decreases may result in economically inefficient and aberrant results. In addition to the aforementioned difficulties, such a use of the EDC study's results would totally ignore any elasticities or cross-elasticities that exist and thus conceivably could result in the company significantly over- or underrecovering its revenue requirement.

Uses for an EDC Study

Although an EDC study does not yield results that can be used directly for pricing purposes, it can provide information that is useful in the overall pricing context. Incremental cost, previously endorsed by this Commission, is directly applicable for setting prices for a service since it establishes a price floor. However, incremental cost studies are generally performed for individual services; since such studies usually are not available for all LEC services, in a major rate review the cost side of the pricing equation tends to be incomplete.

An EDC study, used properly, can fill part of this void. An EDC can provide a rough measure of the historic revenue-cost relationships for broad categories of services. Since by definition the study's results are for an historic period, caution must be used in attributing the relationships to the current timeframe. Changes such as technological advances, major rate restructures, and increased market entry by competitors that may have occurred subsequent to the EDC study year may significantly

alter the relationships. However, all things equal the EDC results would be sufficiently reliable to serve as an impetus for further investigation.

Moreover, since the EDC "ties" back to the books and records of the company, it can provide a link between the revenue requirements and rate design phases of an earnings investigation. Most importantly, perhaps, the EDC provides a "big picture" overview as of a given point in time that yields information regarding the general cost characteristics of the firm's operations. For example, the relative proportion of costs assigned to family or common cost categories can provide some insight into the extent of the economies of scale and scope that are present. In addition, the relative distribution of costs across categories can provide clues as to the overall mix of direct versus volume sensitive versus volume insensitive costs. Such background information can serve as an impetus for initiating rate structure changes.

II. GUIDELINES FOR DEVELOPMENT OF EDC METHODOLOGY

In the course of investigating embedded cost studies, there have been two workshops with industry representatives to discuss the development of an embedded direct cost study methodology. Ernst & Young Telecommunications Consulting Group, on behalf of Southern Bell, GTE Florida, Sprint-Centel Florida and Sprint-United Florida, prepared a white paper summarizing their collective viewpoint as to the appropriate general framework and methodology for an EDC study. This information has been considered and portions incorporated into our proposed guidelines for the development of and EDC methodology.

There are four key principles that underlie our proposed recommended EDC approach. First, there should be a fairly limited number of homogeneous service categories, selected based on causally meaningful differences. Second, family costs and common costs should be identified separately and assigned to distinct categories. Third, costs should be directly assigned to categories where possible; where allocations are performed they should reflect underlying causal relationships. Fourth, the desire for detail and precision must be balanced against pragmatic considerations; of necessity, this principle will govern all aspects of the study. Upon consideration, we adopt the preliminary guidelines set forth below for developing an EDC study.

A. Purpose of EDC Study

The purpose of these guidelines is to structure the development of an embedded direct cost study that disaggregates a LEC's total company (intrastate and interstate) revenue requirement for a historic test period into certain service categories and shared cost (family and common costs) categories. Although the basic study will be conducted on a total company basis, it will be necessary to arrive at a method to yield an estimate of intrastate-only results.

B. Cost Categories

The LEC's revenue requirement will be disaggregated into the following categories:

- Exchange Services the costs of all local exchange access services in the aggregate, separated into two components: (a) Usage or (b) Access Line.
- Switched Access/Toll the costs for these services in the aggregate, separated into two components: (a)
 Switched Usage or (b) Transport Usage.
- Special Access/Private Line the costs for these services in the aggregate, separated into two components:

 (a) Dedicated Transport or (b) Channel Termination.
- 4. Family costs the costs attributable to a group of services but not to any given service: (a) Switched which includes fixed cost of central office equipment and related operating expenses associated with Exchange Service, Switched Access/Toll and Other categories or (b) Network which includes the cost of such items as poles, conduit, fiber optic cables and related operating expenses associated with all service categories such as Exchange Service, Switched Access/Toll, Special Access/Private Line and Other.
- 5. Common Costs overhead costs necessary to support the company operations as a whole, but which are not specifically related to the provision of any service or family of services.

 Other - the costs of all other regulated services offered by the company.

C. General Cost Assignment Principles

- Where and if possible, investments, expenses and taxes identifiable as related to a specific category (ies) will be directly assigned to that category.
- 2. Certain cost components will be attributed to one or more cost categories based on a causally related measure. For example, usage-related switching costs will be assigned to Exchange Services, Switched Access/Toll and Other based on an appropriate measure of central office usage.
- 3. Certain costs will be attributed to cost categories residually. For example, depreciation expense and reserves will be attributed to cost categories based upon the effective assignment to cost categories of the associated investment.
- 4. Certain accounts will require additional analyses to disaggregate them into cost pools in order to facilitate the assignment of costs to cost categories. For example, Account 2212, Digital Electronic Switching, will split into three subcomponents: (a) a Fixed Cost portion, which will be directly assigned to the Switched Family category; (b) Line Termination, which will be attributed to the Exchange Service and Other service categories; and (c) Usage Costs, which will be attributed to the Exchange Services, Switched Access/Toll and Other service categories.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that an embedded direct cost study methodology shall be developed as set forth in the body of this Order. It is further

ORDERED that the embedded direct cost study shall be developed consistent with the preliminary guidelines set forth in the body of this Order.

By ORDER of the Florida Public Service Commission, this 8th day of December, 1993.

STEVE TRIBBLE, Director

Division of Records and Reporting

(SEAL)

TH

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

The action proposed herein is preliminary in nature and will not become effective or final, except as provided by Rule 25-22.029, Florida Administrative Code. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, as provided by Rule 25-22.029(4), Florida Administrative Code, in the form provided by Rule 25-22.036(7)(a) and (f), Florida Administrative Code. This petition must be received by the Director, Division of Records and Reporting at his office at 101 East Gaines Street, Tallahassee, Florida 32399-0870, by the close of business on December 29, 1993.

In the absence of such a petition, this order shall become effective on the day subsequent to the above date as provided by Rule 25-22.029(6), Florida Administrative Code.

Any objection or protest filed in this docket before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

If this order becomes final and effective on the date described above, any party adversely affected may request judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or by the First District Court of Appeal in the case of a water or wastewater utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days of the effective date of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.