IV

A PROPOSED METHODOLOGY

The preceding critique of current allocators and potential anti-competitive behavior demonstrates that in order to promote competition and protect captive ratepayers, the FCC must adopt a rigorous methodology for identifying the costs and benefits of the network upgrades. The methodology should be divided into two steps: cost analysis and cost recovery (pricing).

The Commission should adopt specific, operational principles for each step. Cost causation is just a starting point of cost analysis: how to determine cost causation must also be stipulated. While it is easy to say that incremental costs should constitute the price floor, that says little if you do not define what the increment is.

The following sections of our comments address the critical questions raised in §d beginning at page 39 of the Notice, Interconnection, Collocation, and Unbundled Elements. In lieu of answering each question individually, we will present a comprehensive methodology for pricing designed to fairly compensate the incumbent and make local competition a reality for as many consumers as possible

With respect to **cost analysis** we recommend that:

1) cost causation be analyzed, and be defined by

2) the necessary functionalities and capacities projected on

3) a forward-looking basis for those services which are intended to be offered over the network;

4) incremental costs for all services should be calculated for

5) the long term on

6) a total service basis (TSLRIC);

7) stand-alone costs (SAC) should be calculated on

8) a least cost basis: and

9) costs must be analyzed consistently across all major services using the same cost methodology with individual functionalities or specific capacities having similar costs across services.

With respect to **cost recovery** we recommend that:

10) all users should pay for all functionalities utilized:

11) prices should be subsidy free (above TSLRIC and below Y);

12) prices should be based on predictable rules that allocate shared costs across categories in proportion to a measure of cost or use: and

13) the allocation of shared costs, above all loop costs, should minimize the burden on captive ratepayers as required by Congress in §254(k) of the 1996 Act.

A. COST ANALYSIS

1. Cost Causation

Regulators must engage in cost causal analysis for the multi-product firm selling a mixture of competitive and utility services.

2. Cost Causation defined by the Functionality and Capacity Necessary to provide a Service

In order to identify the costs associated with a use or service, regulators should analyze the functionalities and capacities necessary to provide the services intended to flow from the deployment of an asset.

3. Intended Uses

The intended use of assets is also crucial to determining cost causation: For what purposes was the asset deployed? Since most assets have multiple purposes, what specific functionalities were necessary to provide each specific service? Less demanding uses should not be saddled with the costs of higher order functionalities and capacities.

4. Incremental Cost

In order to explain the other recommended principles for cost analysis, it is necessary to examine the debate over incremental cost. Simply stating that prices should be above incremental costs resolves little in the effort to protect consumers and competition, if we do not have a common understanding of what we mean by "incremental cost".

As Figure 1 suggests, defining - not to mention measuring - incremental cost is no simple matter. There are a variety of definitions of incremental cost, each of which may be appropriate for a different regulatory function. The following figure attempts to summarize the different concepts of incremental cost.

FIGURE 1:
DIFFERENT VIEWS OF INCREMENTAL COST

BREADTH					
					ALL SHARED COSTS
				+	
				GROUP FIXED	GROUP FIXED
				+	+
			DEDICATD FIXED	DEDICATD FIXED	DEDICATD FIXED
			+	+	+
		CAPACITY EXPANSN	CAPACITY EXPANSN	CAPACITY EXPANSN	CAPACITY EXPANSION
		+	+	+	+
	OUT OF POCKET	OUT OF POCKET	OUT OF POCKET	OUT OF POCKET	OUT OF POCKET
	VARIABLE	SHORT-RUN	MID-TRM PARTIAL	LONG-TRM TOTAL	LONG-TERM STAND ALONE
		SERVICE	COST		
	TIME				

In brief, the concept of incremental cost varies according to the time frame used and the breadth of costs included.

In a competitive industry under stress, short-term out-of-pocket costs are the relevant concept for the firm. They produce and sell as long as prices cover variable costs. This can never be an appropriate basis for long-term analysis since the firm never covers its fixed costs.

A somewhat longer term view adds small increments of capacity to the out-of-pocket costs, but will not allow new technologies to enter into the calculation. In this approach, current

sunk costs are taken as given. Many telephone company methodologies use this concept.

Some companies include certain dedicated fixed costs in the calculation of incremental costs. This approach does not look forward far enough to make capital costs variable.

Potential competitors, such as MCI in its "building blocks" proposal, include a broader range of costs. I refer to these as "group fixed" costs (defining the precise costs to be included requires empirical analysis). MCI captures more fixed costs in two ways: First, it treats the entire service as incremental in the long term. Second, if functionalities (or costs) are significantly utilized by a service or group of services, they would be captured by total service long run incremental cost (TSLRIC).

Finally, we have stand-alone costs. This concept adds in the increments of shared costs which are not captured by the total service incremental cost (TSLRIC) concept. It also is long term, in the sense that it must be the least cost technology.

5. Long Run Costs

Incremental costs for the multi-product, mixed competitive/ regulated firm, should be calculated on a long term basis, where all costs are variable

In a monopoly context with rate of return regulation in place, it might have been appropriate to use shorter term concepts for designing an incremental cost test to prevent cross-subsidy. There was no competition to be damaged by an unrealistically low floor price and the revenue constraint was effective. Artificially low incremental costs might have had the effect of transferring wealth between classes of customers, but they did not result in excess profits. Since competition was not allowed, they did not cause supply-side inefficiencies (although there may have been demand side inefficiencies)

In the context of emerging competition, with the revenue constraint of rate of return regulation relaxed, these flaws inherent in a short term concept of incremental cost can no longer be tolerated.

6. Total Service Cost

The long term increment to be studied must be total service, since that is variable in the long term. Looking at a small increment of the service would allow pricing at the margin that would not recover the costs associated with earlier increments of the service. In the long term, such pricing is not viable. From the point of view of designing an incremental cost test in a transition to competition, for an industry with significant economies of scale resulting from a long period of franchise monopoly, total service costs are the appropriate measure, since common costs are very large

7. Stand-Alone Cost

Stand-alone cost is another key cost concept. As the name suggests, it refers to the cost of providing the service on its own, without any other services with which to share costs. Calculation of stand-alone cost is the second step necessary to ensure the prevention of cross-subsidy.

8. Least Cost

The importance of measuring stand-alone cost on a least cost basis must be underscored. In the long term competitive market, all costs are variable and only the least cost technologies survive. Moreover, if least cost technology is not analyzed, then the door is opened to cross-subsidy and economic coercion because extra costs incurred to pursue non-basic services are attributed to basic service

9. Cost Consistency

All major services should be subject to cost analysis using similar methodologies, and similar capacities or functionalities provided by specific facilities should have similar costs for all services.

B. COST RECOVERY

If cost analysis is done properly, we should have identified the total service long run incremental costs (TSLRIC) associated with any particular service. Prices should cover those costs and make a contribution to the shared costs. Because shared costs will have to be allocated arbitrarily, the purpose of rigorous cost analysis is to diminish as far as possible the category of shared costs. In a network with significant shared costs, such as the integrated telephone/video network contemplated, the task of allocation is large and extremely important.

10. "User Pay" Principle

A key concept in telecommunications pricing is "user pay". All users of the advanced telecommunications network should pay for all functionalities that they use in reasonable proportion to the costs associated with those functionalities. Where there are joint and common costs, over-recovery of revenue (excess profits) cannot be allowed, but this does not negate the fundamental principle that all services should pay for all functionalities they utilize.

11. Subsidy Free Prices

Subsidy-free pricing is the economic efficiency standard that must be met. However, subsidy-free pricing only establishes a range of prices that are reasonable (between TSLRIC and least cost stand-alone cost).

Floor prices (eg: TSLRIC) and ceiling prices (eg: least cost, stand-alone service cost) should be identified to prevent cross-subsidy and to establish the range of acceptable prices.

12. Predictable Price Rules

Within the range of subsidy free prices, specific, predictable price rules (eg: equal mark-ups above direct costs or equal mark-downs below stand-alone cost) should be applied to ensure that competitors are not placed at a disadvantage and that consumers are compensated for the costs of facilities used to provide competitive services.

C. THE ALLOCATION OF SHARED COSTS SHOULD MINIMIZE THE BURDEN ON CAPTIVE RATEPAYERS

Where flexibility in pricing exists, pricing methodologies should minimize prices to captive ratepayers for basic service. Not only does this principle both protects captive ratepayers and promote universal service, as required by the 1996 Act, but it also promotes competition.

1. Congressional Intent

Congressional intent in this regard could not be more clearly stated.

As noted in the previous Section, Congress went well beyond a formal definition of cross-subsidy to state a clear preference for cost allocators when it required "cost allocation rules, accounting safeguards, and guidelines to ensure that services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services."

The Conference Report makes a point of stating that in adopting Section 254(k) the House

is receding to the Senate.[15] The Senate report made it clear that a reasonable share of joint and common costs was the maximum that should be included in the rates for universal service, but that less could be allocated to these services.

> The Commission and the states are required to establish any necessary cost allocation rules, accounting safeguards, and other guidelines to ensure that universal service bears no more than a reasonable share (and may bear less than a reasonable share) of the joint and common costs of facilities used to provide both competitive and noncompetitive services.[16]

2. The Loop As a Common Cost

Above all, we view the loop (the wires that connect the end-user to the network and are used to complete all telephone calls -- local, intralata long distance, and interlata long distance - and to provide enhanced services) as a shared facility. The loop is an input for every service sold in the telecommunications network. If the loop were not provided by the existing local exchange companies, telecommunications service providers would have to build their own loops, or rent the use of some other loop in order to sell their services to the public. Ratepayers do not own the loop and they do not control the incoming calls place on the network by other end-users and service providers

Because the loop is a joint and common cost shared by competitive and non-competitive services, it is subject to Section 254(k).

3. Other Economic Grounds for Minimizing the Share of Common Costs Allocated to Basic Service

Where there are unallocable common and joint costs in enterprises selling a combination

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[15]Conference Report, p. 134

[16]Conference Report, p. 129

of competitive and monopoly services, the contribution from competitive services should be maximized. Because captive ratepayers have no alternatives, regulatory mechanisms must protect them from excessive burdens. Minimizing the burden on ratepayers and maximizing the contribution of competitive services also protects competitors from unfair competition because competitors do not have access to a captive, monopoly core business to absorb costs.

As enterprises become involved in a mixture of monopoly and competitive services, additional risks may be incurred and benefits may be conferred on the monopolist. Regulatory mechanisms to insulate basic service ratepayers from the risk of competitive enterprises must be established. Increases in the cost of capital caused by those enterprises must fall on competitive businesses.

There are a variety of economic advantages gained by the local exchange carrier franchise position. These, too, provide an economic basis for lowering basic access rates. Many of the activities into which the telephone companies would like to move, and have moved, benefit in tangible and intangible ways from the fact that they are extensions of the franchise monopoly. The people who grant the franchise have a right to share in the economic benefits that the monopoly creates. Unregulated subsidiaries should not be allowed to achieve excessive rates of return because they are an extension of the franchise monopoly.

Revenue streams resulting from readily identifiable telephone company monopoly positions should be carried above the line for regulatory purposes. Cost reducing advantages for competitive services that flow from the monopoly franchise (e.g. new subscriber lists) should be recognized by fees paid to monopoly services. The value of intangible benefits (e.g. goodwill) should be estimated and paid for, thereby lowering the cost of monopoly services.

Thus, one can formally attribute fewer costs to the local category or one can attribute greater revenues to it because:

- local exchange service places lighter technological demands on the network;
- local service remains a monopoly and therefore does not require the same rate of return as competitive services; and
- the local franchise has created advantages in related lines of business.

D. CONCLUSION

This framework establishes an empirically manageable, balanced approach to pricing. It meets the fundamental economic efficiency criteria -- prevention of cross-subsidy -- without pursuing economic efficiency to extreme, burdensome, and often unachievable ends. With the basic condition of efficiency met, it blends public policy goals of protecting captive ratepayers and promoting competition by preventing economic coercion, which the local exchange companies would accomplish by allocating all of the economies of joint and common production to prevent competition from entering the marketplace.

VII.

STRANDED INVESTMENT

With efficient component pricing the incumbents seek to maximize the recovery of joint and common costs by leveraging the remaining monopoly power possessed by the incumbent. Virtually all LECs go one step farther. Each of the local exchange companies has proposed what is tantamount to a Regulatory Indemnification Plan (R.I.P., for short, because it lays to rest any chance that ratepayers will receive a fair deal in the transition to competition). The fund indemnifies telephone company stockholders against any past, present or future risk for any asset currently on their books, and those future assets for which there is a possibility that market conditions will not cover costs.

A. NO RISK INVESTMENT

1. Competitive Losses

The local exchange companies have reinterpreted their century old relationship with regulators and ratepayers as one in which they were guaranteed total recovery of all investments. In the following definition of stranded investment offered by Ameritech in Ohio, for example, it is evident the LECs envision a counter-factual ratemaking in which they will reconstruct what their business would have been like without competition and claim that every sale lost and every investment not fully utilized would have performed perfectly, but for the advent of competition. The Ohio competition proceeding provides a clear case in point.

> Stranded investment includes facilities that are no longer used to serve end users because such end users are being served by the facilities of competitors, as well

as excess capacity which was built to carry the traffic of other providers which is no longer needed because such providers are now utilizing their own facilities...

Some stranded investment may be identifiable by the presence of the competitors facilities now being used to serve the end user, substantiated by records of disconnection of service from the incumbent and establishment of service with the competitor. Other types of stranded investment, such as that associated with excess capacity no longer needed to carry competitors' traffic, can be substantiated by documentation as to changes over time as to percent utilization of incumbent's facilities, intercarrier arrangements (end office integration, tandem trunking), etc.[37]

ALLTEL's view of stranded investment is much the same.

Stranded plant is investment placed in service pursuant to regulatory requirements that becomes no longer used and useful as a result of the deployment of facilities by competitive providers [38]

The presence of new competitors will generate stranded plant when the competitors install new technology that bypasses the existing facilities, or if the competitor duplicates existing facilities of the incumbent LEC.[39]

2. Retroactive Ratemaking and the Elimination of Risk

Some LECs also propose to take this opportunity to declare that all previous investments that have not proven successful were caused by social decisions for which it must now be made whole. They propose recovering the entirety of their depreciation reserve from telecommunications ratepayers because regulators used the wrong estimation of the "true" economic life of investments and the LEC only made those investments because it thought regulators had guaranteed they would all be paid off, which the company now asserts will not happen, due to the introduction of competition.

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[37]Ohio Competition Proceeding, Ameritech, Attachment 2, pp. 24-25... 27-28.

[38]Ohio Competition Proceeding, ALLTEL, p. 27

[39]Ohio Competition Proceeding, ALLTEL, Attachment 1, p. 13

This underrecovery of capital assets arises because under past regulation depreciation rates of capital investment were held artificially low compared to the true economic lives of the investment. The expectation was that the deferred amounts would be paid by future customers. With competition, the future customers are being served by other providers as well as Ameritech. Therefore, Ameritech's future (no current) customers should not bear the full burden of this temporal subsidy. Rather, the burden should borne equitably between the customers served by Ameritech and by the new providers. For Ameritech Ohio, on an intrastate basis, this represents approximately $460 M which it proposes to amortize over 7 years as follows...[40]

GTE's rendition of these matters is virtually identical.

Local exchange carriers' existing level of investment was incurred pursuant to their obligation under a social contract. The Commission had previously found this level of investment to be reasonable, prudent and necessary to provide an appropriate level of service. All such investment was incurred as a cost of doing business under rate base regulation, and companies are entitled to recover capital regardless of when plant is used. LECs will experience at least two problems in the recovery of this embedded investment.

First, there is currently a depreciation reserve deficiency created by depreciation rates which are not indicative of competitive operations. This underrecovery of capital must be totally returned. ... Second, to the extent that LECs experience stranded plant due to competitive losses, they are also entitled to compensation for this investment previously deployed under the social contract.[41]

All embedded investments were incurred as a cost of doing business under a sole provider market structure with associated obligations and pricing constraints including rate base regulation. Accordingly, the Company is entitled to recover its capital, particularly underdepreciated capital, regardless of how the plant is idled.[42]

ALLTEL takes much the same position.

These carriers of last resort would be entitled to withdraw from the fund amounts equal to the sum of their respective rebalancing shortfall, depreciation reserve deficiency and unrecovered investment associated with stranded plant.

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[40]Ohio Competition Proceeding, Ameritech Comments, p. 109

[41]Ohio Competition Proceeding, GTE, Appendix C, p. 14

[42]Ohio Competition Proceeding, GTE, Appendix C, p. 19

> The depreciation reserve deficiency would be defined to be an amount equal to the difference between the book depreciation reserve level and the reserve level required to reflect the actual remaining life of embedded plant. This embedded plant was placed and depreciation was recorded under regulation. The approved depreciation rates applied to the investment were often set artificially low by regulators in order to keep service prices more affordable, resulting in today's level of reserve imbalances which must be recovered through explicit support in a competitive environment.[43]

The premise on which the indemnification plan is based lacks any empirical, regulatory or legal basis.

B. EMPIRICAL, THEORETICAL AND LEGAL FLAWS IN THE NO RISK ARGUMENT

The claims for by LECs for up front revenue replacement for lost opportunities and compensation for stranded investment through either the exercise of market power by overpricing remaining bottleneck facilities or through regulatory indemnification plans lacks any empirical, theoretical and legal justification.

1. Empirical Analysis Does Not Support the Claim for Revenue Replacement and Compensation for Stranded Investment

Contrary to the company arguments, there is no reason for the Commission to conclude that stranded investment currently exists. There is no reason to believe that every asset deployed by the companies was deployed to meet a social obligation. There is no reason to believe that the value of every asset which has not been fully depreciated when technology renders it obsolete was undermined by a social policy of underpricing. There is good reason to believe that the companies have already been substantially compensated for any risks of under recovery of the

[43]Ohio Competition Proceeding, Alltel, p. 27

value of the assets they wish to declare stranded.

Contrary to the company arguments, there is no reason that the Commission should conclude that stranded investment will soon exist. There is no demonstration that assets will underperform and revenue deficiencies will develop as a result of regulatory changes. There is no demonstration that assets will underperform or that revenue deficiencies will develop as a result of whatever market changes take place.

Contrary to the company arguments, there is no reason that the Commission should conclude that, even if some investment is stranded, a new regulatory mechanism must be implemented to handle it. There is no demonstration of any company specific revenue deficiency in the aggregate. There is not even a demonstration of a revenue deficiency in the specific exchanges which are said to be creating the social obligation.

In the context of the federal legislation, it should also be recognized that there are important up-side opportunities for the LECs to enter new markets. Many of these markets can be served with the facilities that have been deployed to serve the local exchange market. For regulators to recognize only the down-side potential but not the up-side would bestow all the benefits on the companies while imposing all the costs on ratepayers.

2. Economic Theory Does Not Support the Claim for Revenue Replacement and Compensation for Stranded Investment

Contrary to incumbent LECs claims, allowing them the right to claim and recover "stranded" investment is not necessary to ensure the confidence of capital markets in LEC investments. The write off of assets is a frequent occurrence in competitive industries. Although investors would like social insurance funds to ensure them against the stranding of any investment, they understand the risks and rewards and do not require such funds for all

investment. These risk premiums have already been reflected in the handsome returns earned by incumbent local exchange companies.

The difference between embedded historical costs and the forward-looking, most efficient is made up of at least four components.

> (1) Excessive profits. Unjustifiably high profits have resulted from the inability of regulators to reduce rates of return and the institution of price cap regulation (which vastly under-estimated productivity gains), and a lack of competition for core services.
>
> (2) Strategic investments. Under regulation, the local companies have deployed capital assets in anticipation of movement into other businesses (e.g. video delivery and long distance service), the costs of which have been recovered in local service rates.
>
> (3) Inefficient costs. Unnecessarily high costs have resulted from decades of local franchise monopoly and have been perpetuated by the starting point of price indexing under price regulation.
>
> (4) Outmoded costs. Embedded costs associated with the pattern of investments that occur in a capital intensive industry with long-lived assets, uneven competition, and changing regulation could exceed theoretical forward-looking, long-run costs. The combination of an obligation to make certain investments, dramatically declining costs of providing service in an industry typified by lumpy investment, and regulatory changes may have left some assets which were prudently economic at one moment, no longer economically viable.

These costs would not be recovered in a competitive marketplace and should not be recovered under any reasonable theory of economic regulation.

- A persistent pattern of excess profits has existed for a decade.
- Similarly, consumer advocates have expressed continuing concern about the misallocation of over investment in the network to local rates and believe that these should be removed.
- Regulation was never intended to countenance inefficiency and the purpose of introducing competition is to eliminate it.

- Regulators never indemnified companies from technological obsolescence and have already compensated them for those risks.

Claims that these are opportunities which would be afforded companies in competitive markets are incorrect. Where decades of monopoly have created artificial scarcity, opportunity costs are meaningless. The difference between the net book historical cost and the so called market value is a function of franchise monopoly status, not economic efficiency. Whether it is the loop in telecommunications, the grid in electricity, or the pipe in natural gas, those capital assets were deployed subject to a franchise granted by the people and backed up by mandated scarcity. In the transition to competition, we must never forget that the fruits of this monopoly belong to ratepayers whose franchise created them and whose rates paid for them.

Where decades of monopoly power have existed, the availability of substitutes has been artificially restricted. Therefore the demand elasticities economists would use to place the heaviest burden on captive customers (Ramsey pricing) are distorted. In a prematurely deregulated context, these pricing rules simply transfer wealth from residential ratepayers to large business customers (by shifting the cost burden) and utility stockholders (because the restraint on excess profits is not operative). Wealth transfers typically exceed efficiency gains by a factor of four to one or more.

The weaknesses of Ramsey pricing are clear in other respects as well. As a theoretical proposition, the Ramsey pricing rule rests on an extreme and extensive set of assumptions which have virtually no chance of actually being met in reality and should not be applied in a competitive marketplace. As an empirical matter, the Ramsey pricing rule is intractable, since it requires data on demand elasticities which are not available. As a matter of public policy, the failure to meet theoretical assumptions and the weakness of the data mean that the Ramsey

pricing rule neither guarantees efficiency nor pro-competitive outcomes.

Moreover, any change in market share will be small and unfold over time. Those investors who are risk averse, will have more than adequate time to dispose of their incumbent LEC holdings at prices far in excess of the book value of the assets that they own. If it becomes necessary to write off investment as so frequently happens in competitive industries, a new set of investors, more tolerant of risk and seeking potentially higher rewards, will enter the industry.

Competitors could be placed at a severe disadvantage as a result of the recovery of "stranded" investment. If the incumbent LECs are allowed to declare investment "stranded" whenever they lose customers and market share, they will be operating with a massive financial cushion. This will lower the risk that they face and continually reinforce their financial position. Competitors, who have no such cushion will be at a disadvantage.

3. Current Law Does Not Support the Claim for Revenue Replacement and Compensation for Stranded Investment

The claims of the LECs to revenue replacement and stranded investment rest on a version of the regulatory compact between stockholders and ratepayers that never existed. The guarantee of recovery that LECs claim is an ex post effort to recover assets and recoup actions for which management bears responsibility and stockholders have already been handsomely compensated.

To compensate companies for uneconomic investments, when they have already been compensated for the risk of those investments, constitutes a double recovery of costs which violates the fundamental principles of just and reasonable rates. Far from guaranteeing this complete recovery of all costs rendered uneconomic by competition, current law places the burden of the risk of competition squarely on the shoulders of utilities and shields them only

from the most dire financial outcome -- bankruptcy. The extremely strong financial performance of local exchange companies undermines any claims that failure to recover obsolete and uneconomic investment will threaten the financial soundness of these companies.

C. A RESPONSIBLE APPROACH TO STRANDED INVESTMENT

If the Commission decides that it should create a new form of regulatory treatment for investments that are likely to "stranded" as a result of changes in regulatory policy, it should do so with great care.

CFA and CU believe the Commission has an obligation to analyze the nature of this "stranded" investment before it allows recovery. This requires careful consideration of the circumstances under which investments were made and the extent to which management exercised choice in keeping assets on the books.

- Some investments may have been rendered obsolete in pursuit of marketing opportunities.
- Some investments may have been rendered obsolete as a result of technological progress, which the Commission certainly could not and never promised to control.
- Some investments may have gone bad because they were management mistakes.
- Some investments may have gone bad because they had bad luck.

None of these reasons for "stranded" investment have anything to do with the obligation to serve and CFA and CU maintain they should not be compensated as if they were a result of the obligation to serve. Competitive firms routinely write-down the value of assets for a variety of reasons, when they feel that they are under performing.

There has never been a guarantee of recovery of costs in the "social contract" between the company and the people, only an opportunity to earn a return commensurate with the risk incurred. Therefore, the key question is to separate out risks which the company incurred knowingly and for which it has been compensated from risks that it has not been compensated for, would not have taken but for the "social contract," and no longer believes it can be compensated for because of the alleged change in the terms of the "social contract."

There are two steps we believe the Commission could take to an estimate the previous compensation of risk, that prevent compensating the company twice, while also meeting the duty to compensate the company fairly.

First, if the Commission finds that the company's effort to split the ratebase entails an overrecovery of risk premiums, it must identify the risk premium. It could split the ratebase between social investment and (for lack of a better term) entrepreneurial investment (just as the company wants to do). The incumbent could be required to identify the specific assets which it claims were provided to meet its social obligation to serve which it now claims were undercompensated. The Commission could reconstruct the revenue stream (return of and on capital) that was associated with those assets. It could calculate the risk premium earned on those assets as the difference between the rate of return allowed on equity and on long term debt.

Some portion of this difference could be identified by the Commission as compensation for the risk of being "stranded." This could be deposited as a credit to the carrier of last resort account and drawn down before the company begins to collect its future carrier of last resort costs.

There is at least one specific measure the Commission could use as an indicator of the risk of being "stranded." The Commission can identify comparable companies used for the purposes of setting the return on equity over the life of the asset which was "stranded" (most rate proceedings include such a list). It could calculate the write-down of assets taken by these companies in the period just prior to and during the life of the "stranded" asset. This potential write down of assets was part of the expectation of comparable risk. To the extent that the incumbent telephone company has failed to take write-downs of a similar order of magnitude (relative to its assets, e.g. as a percentage of assets) it is seeking to be overcompensated for the stranding of investment. That is, it was allowed a comparable rate of return, but did not take a comparable write-down of assets. It now seeks a return of and on those assets which comparable companies have written down and taken off their books.

The following steps are necessary to ensure that ratepayers are fairly treated when regulators are asked to charge them for stranded investment.

(1) Any recovery of stranded investment requires a showing that there is

(a) a company specific revenue deficiency in the aggregate,

(b) a revenue deficiency in the specific exchanges which are said to be creating the social obligation, and

(c) the revenue deficiency threatens the financial integrity of the company.

(2) The Commission shall establish regulations which rigorously define uncompensated capital costs associated with "stranded" "obligation to serve investments" including steps to

(a) identify precise assets which are alleged to be "stranded;"

(b) determine whether the assets were deployed to meet an obligation to serve, not a marketing opportunity

(c) ensure that the assets were the least cost method for discharging the obligation to serve and exclude any imprudence in the investment decision: and

(d) determine the extent to which the risk of the investment being "stranded" has already been compensated by the risk premium allowed to the utility;

(3) Having rigorously identified the value of the 'stranded" investment, the Commission should provide for the recovery of those investments in a competitive neutral manner that spreads the burden of the social obligations to all the beneficiaries of that obligation. It should

(a) order the company to write off the value of "stranded" investment;

(b) determine tax benefits of write off and flow these back through to ratepayers:

(c) seek to recover the maximum amount possible in the disposal of those assets (e.g. offer for sale to the highest bidder or salvage what it can in other ways):

(d) provide for the recovery of remaining costs from a industry-wide recovery fund (probably the universal service fund).

(4) LECs shall be precluded from competing in areas in which they have sought "stranded" investment recovery for significant assets for a five year period.

VIII.

COST ALLOCATION ON THE INFORMATION SUPERHIGHWAY

The concepts discussed in the previous chapters can be well demonstrated with a review of the debate over broadband. video dialtone (VDT) networks which has been placed before the FCC. Hotly debated cost numbers have been put on the table. The issue of cost allocation has been raised repeatedly.

Local exchange companies want to minimize the size of investment attributed to the broadband network and treat video investments as incremental. declaring the broadband network just the next step in telephony. By doing so. they seek to attribute few if any shared costs to the video side. On the other side are potential competitors and consumers. They argue that this allocation creates at least a strategic price advantage. if not a technical cross-subsidy, for the local exchange company's competitive services. It also improperly burdens ratepayers.

In this section, the debate around cost estimates in the U.S. is described. For the purposes of this analysis. two examples, one offered by a telephone company witness[44]. and one offered by a cable company witness[45]. are considered to underscore the need for careful analysis of cost structures and cost allocations along the lines of those proposed in the previous

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[44] Robert G. Harris. Video Dialtone Cost Allocation: The Position of Pacific Bell, October 28, 1994, hereafter "Harris". Although this particular example has not. to my knowledge. been filed with the Federal Communications Commission. the first footnote in the paper notes that Harris has testified in support of the Pacific Bell application for a video dialtone license.

[45] Leland L. Johnson. Designing Safeguards Against Cross-Subsidization in Video Dialtone Service. CC Docket No. 87-266. October 3. 1994. submitted on behalf of Adelphia Communications Corporation. Cablevision Industries. Comcast Corporation. and Cox Enterprises. Inc.. hereafter "Johnson".

section.

A. ISOLATING INCREMENTAL AND COMMON COSTS

Table 1 shows the results of the primary examples used by these witnesses. Both of these are hypotheticals. Neither witness claims that the actual numbers are reflective of actual costs, although it is clear that they believe that they are

TABLE 1
HYPOTHETICAL COST STRUCTURES OF VIDEO/TELEPHONE NETWORKS

	HARRIS	JOHNSON
INTEGRATED SYSTEM	$1000	$1650
VIDEO ONLY	700	1400
TELEPHONE ONLY	900	800
INCREMENTAL COST OF VIDEO	100	850
INCREMENTAL COST OF TELEPHONE	300	250
COMMON COSTS	600	550

Robert G. Harris, Video Dialtone Cost Allocation: The Position of Pacific Bell, October 28, 1994, hereafter "Harris". Although this particular example has not, to my knowledge, been filed with the Federal Communications Commission, the first footnote in the paper notes that Harris has testified in support of the Pacific Bell application for a video dialtone license.

Leland L. Johnson, Designing Safeguards Against Cross-Subsidization in Video Dialtone Service, CC Docket No. 87-266, October 3, 1994, submitted on behalf of Adelphia Communications Corporation, Cablevision Industries, Comcast Corporation, and Cox Enterprises, Inc.

The analysis involves calculating stand-alone costs for video, telephony and an integrated network. By subtracting the stand-alone costs (SAC) of each system from the costs of the integrated system, we derive an estimate of the incremental costs (IC) of adding the other service.