Telecommunications Competitive Services

Competition in the Telecommunications Industry

The primary objective of regulation is to produce results in the utility sectors of the economy which parallel those that would be obtained under conditions of competition. Unfortunately, however, despite the best efforts of the regulators, regulation cannot be expected always to achieve this high standard. For instance, it may be difficult or impossible for regulators to determine whether a utility's management is performing adequately.

Further, when much of the telephone industry is dominated by a handful of large holding companies, it can be exceedingly difficult for regulators to learn whether an adequate rate of technological progress is being achieved. If there are no for comparison,, there is little chance that regulators will even be able to perceive the fact that dominant firms are unsuccessful at creating new technological improvements, much less act on it.

It might be argued that this problem could be avoided, since independent manufacturers could always develop new technologies and sell the resulting products to the telephone holding companies. However, this may not be a viable solution. Independent manufacturers might be unwilling to engage in research and development work in an area where future sales will depend upon the decisions of a small number of utility holding companies. This problem is further aggravated when these same holding companies have manufacturing and distributing subsidiaries which are in direct competition with the independent manufacturers Certainly, the prospects for an independent firm developing a new technology are not as bright if the potential market is limited to a few dominant utility holding companies, each of which has a large investment in the old technology. In contrast, if the market consists of hundreds of thousands of end users of the equipment, the prospects are much brighter. With such relatively large numbers of potential customers, it seems much more likely that there will be some customers willing to purchase the new equipment, in order to avail themselves of the new technology.

In short, by allowing competition in those portions of the telecommunications business where a monopoly is not required, regulators can reduce the problem of ensuring efficiency and providing incentives for technological progress, at least within the competitive areas.

Segments of the Telecommunications Industry Where Competitive Services are Desirable

There are many services offered by telephone utilities which, if standing alone, would surely be considered poor choices for natural monopoly status. A large number of these services can be grouped under the two headings of Terminal Equipment (key stations and telephone instruments, for instance) and Intercity Lines (long-distance telephone message toll service, and private line service). To illustrate, in the terminal equipment category, the shell which encloses the working parts of a telephone instrument could logically be supplied under competitive conditions just as easily as the furniture upon which the instrument rests. In f act, so long as technology is reasonably standardized, there is no compelling reason why the entire instrument itself could not be marketed competitively. Aside from the engineering problems associated with making sure all of the equipment will work together, there is no reason why the company which provides the lines between

subscribers must also be the company which provides the various instruments, switchboards, bells, lights, automatic dialers and other gadgets (the terminal equipment) which are attached to these lines.

Certainly, there is no economic reason why a subscriber must obtain his phone from the telephone utility, rather than through some other supplier. Yet, in this instance there is also no engineering problem, since the same equipment would be involved regardless of the direct supplier.

If telephone instruments are directly supplied to consumers under conditions of competition, regulators need not be concerned with simulating the results of competition: the results would follow directly. Thus, if a particular firm happens to be inefficient and unable to produce such instruments at minimum cost, under competition consumers would be free to choose another supplier. In contrast, in the absence of competition, the customers of a particular telephone utility may be forced to use equipment manufactured by an inefficient firm, even if it costs more than alternative equipment.

By allowing competition in the market for terminal equipment, the Federal Communications Commission has increased the pressures on telephone utilities, and their manufacturing affiliates, to operate efficiently. Further, competition has brought on more sources of supply to dissatisfied customers, certainly an important achievement in itself. Moreover, in many instances the result of FCC decisions has been to provide customers with a wider variety of products from which they may choose. Finally, the recent rapid advances in the development of key systems, private branch exchanges, and other equipment suggest that the FCC decisions opening up competition have increased the rate of technological advance.

Problems in Mixing Competetition with Regulation

Unfortunately, allowing competition in some areas of the telephone business, while retaining the regulated monopoly arrangement in other areas, does create some significant problems. All of these problems stem from the fact that a utility can use its monopoly position to subsidize the competitive portions of its operations. Unless constrained by regulation, the utility can underprice its competitive services, recouping any resulting losses by increasing its prices in the monopoly portion of its operation.

Reasons to Believe a Utility will Engage in Underpricing of those Services which are Subject to Competition

The unfortunate fact is that strong incentives exist for a telephone utility to engage in such underpricing. Furthermore, there are no offsetting incentives for a utility to engage in overpricing of competitive services. Hence, there is every reason to expect these problems to arise in actual practice. Underpricing of competitive services is consistent with the normal pattern of price discrimination by a monopolist. When close substitutes are available for a product, which is generally the case where competition is present, the utility will face relatively elastic demand. Therefore, the discriminative monopolist will normally reduce the price of the product for which close substitutes are available.

The standard theory of price discrimination rests upon the assumption of profit maximizing. If the profit incentive is diminished (by the presence of regulation, for example), economic theory suggests that it will be replaced by other incentives. For example, management might logically become more concerned with maximizing sales

volume, or its own prestige, power and income. Whatever the goals, it is readily apparent that a loss of market share to independent competitors will be detrimental to management's interests. In order to maintain or increase market share, as well as to maintain the overall dollar volume of sales, management will have a strong incentive to reduce the price on competitive items.

This propensity for a utility's management to underprice competitive items will be magnified by the fact that the utility's stockholders need not absorb any losses resulting from underpricing. Regulators are generally concerned with the firm's overall profit level, rather than the profits from any one portion of the utility's operations. Accordingly, if underpricing competitive services to maintain market share happens to reduce the firm's profits, this can be offset by increasing the prices on monopoly services. If this is done, so as to leave the utility's overall return unchanged, the utility's stockholders will be protected from any adverse consequences of underpricing.

In general, underpricing will be attractive to a utility's management, because it will help hide any management deficiencies. If the utility does not engage in underpricing of competitive items, there is always the danger that it will not be successful in the competitive marketplace. Perhaps the utility's costs are higher than necessary, or its sales people are not adequately trained or supervised, or their technology is obsolete. Whatever the reason, failure in the competitive market would lower the utility's prestige, reduce the justification for relatively high management salaries, and so on. Perhaps even more importantly, failure in the competitive market will bring unwanted notoriety and regulatory scrutiny.

Thus, management may have every reason to be fearful of pricing its competitive services at a high enough level to cover its full costs. The safest path is to underprice the competitive services, making up f or the resulting losses by overpricing those services where competition does not exist, and thereby minimizing the danger of competitive failure.

Concerns of a State Public Utillity Commission

The regulatory function goes beyond simply ensuring that a utility does not earn excessive profits. The Commission should be concerned about maintaining equity among customers. It should also be concerned with various dynamic f actors, such as trends in the level of costs, changes in technology and efficiency, And the like.

In keeping with this broad view of the role of regulation, there are several important reasons why a Commission may be concerned if a telephone utilities attempts to underprice their competitive services.

First, this will result in inequitable price discrimination against those customers who do not use the competitive products. Second, such underpricing can have the effect of extinguishing competition, along with the associated advantages which arise from competition. Third, such a pricing policy can result in larger or more frequent overall rate increases. Fourth, if the utility is in efficient or poorly managed, underpricing of competitive services will help hide this fact. Each of these reasons should be explained in greater detail.

In the first place, one of the basic goals of utility regulation is to prevent unfair price discrimination, and underpricing results in just such discrimination. While underpricing of competitive services may normally benefit those customers who.use the underpriced

services, it is unfair to those customers who use the noncompetitive services, since these services will tend to be overpriced in order to recoup the losses incurred by underpricing competitive items.

Since most of the competitive services are used primarily by large business subscribers, competitive underpricing tends to result in discrimination in favor of large business subscribers, and against residential and small business subscribers. Since the latter group does not generally need the sophisticated key systems and PBX's which are most subject to competition, underpricing of these items tends to result in discrimination in favor of large businesses which do use this type of equipment. There is no legitimate reason why small business and residential subscribers should be forced to subsidize large business subscribers. Secondly, underpricing of competitive services can ultimately have the effect of extinguishing the competitive forces which the FCC has attempted to encourage. If telephone utilities underprice their competitive items sufficiently, it will be impossible for independent firms to compete profitably, and they will leave the field. If the ranks of the independent competitive firms are sufficiently decimated, the advantages of competition will be lost, or severely diminished. The pressures for management efficiency and technological improvement will be reduced, customers will have fewer available sources of supply, and they will have a smaller variety of products from which to choose. Consequently, it is in the interest of all customers, including the users of underpriced services, to prevent underpricing of competitive services. While these latter subscribers may benefit ostensibly from such underpricing, in the long run they, too, will be harmed by the effects of such pricing on the utility's competitors.

For those residential and small business subscribers who must bear the immediate burden of underpricing competitive services, the damage is twofold. On the one hand, they must bear the immediate financial burden of subsidizing the competitive offerings. And, on the other hand, they will ultimately share the damage from reduced competitive forces. While they may not initially need or be able to afford the advanced equipment which is available competitively, this may not always be the case. In fact, if competitive underpricing is prevented, and competition flourishes, the resulting technological advances will eventually result in new products which residential and small business subscribers can use and afford.

In the third place, underpricing of competitive services can have the effect of increasing a utility's attrition problem, thereby increasing the number and magnitude of rate increases which the utility will need in the future. To illustrate this point, consider the effect of of fering a new type of equipment at a price which is below the utility's full cost. With such a low price, the new offering will presumably be attractive, resulting in numerous customers signing up for the new equipment. While this will increase revenues, it will also increase the utility's costs. Since the product was underpriced, the net result will be to reduce the utility's profitability, exacerbating attrition problems and increasing the need for an overall rate increase. If the new equipment can be substituted for existing equipment currently used by subscribers, the problem may be magnified further. Not only will the new equipment fail to be cost-justified of itself, but another likely result will be the displacement of older equipment which was being used in generating the utility's overall return. If this older equipment ends up stored, unused, in a warehouse, or if it is sold for less than its book value, the effect is to depress the utility's profitability still further.

From this illustration, it is apparent that the adverse impact of underpricing a competitive offering continues long past the initial redistribution of the revenue burden among the various customers. Over time, the adoption of a rate structure in which competitive products are underpriced can result in larger or more frequent rate increases to be borne by all of the customers, including those who benefit nominally from the underpriding. Fourth and last, underpricing of competitive services can have the effect of hiding inefficiency and poor management. By keeping prices too low in those areas where competition is present, the utility can avoid unfavorable comparisons with the competitive firms, and give the appearance of efficiency and low costs. In contrast, if the utility is required to recover its full cost of providing competitive services, the resulting prices can be compared with the prices charged by the independent competitive firms. If in the market the competitive firms are favored over the utility, the Commission will have an indication of the relative inefficiency of the utility. In short, within the context of the telecommunications industry, problems may arise when regulation and competition are mixed. By underpricing those services which are subject to competition, the benefits of both competition and regulation are reduced. Hence, in an economic environment in which competition and regulation are mixed, the role of the regulator is not easy. Developing the right policy, in which the interests of the utility's management and its stockholders are balanced with the interests of many diverse customer groups, as well as the interests of the utility's competitors, requires a thoughtful and cautious approach.

A Prudent Policy Approach

First, because of the incentives for utilities to engage in competitive underpricing, we are presented with a policy dilemma: How can the advantages of competition be introduced to the telecommunications industry without losing the benefits of regulation for those portions of the industry which are inherently monopolistic? Theoretically, one potential solution to this dilemma would be to segregate the monopolistic and competitive portions of the industry. Under this approach, regulated utilities would continue to provide the inherently monopolistic services, while unregulated competitive firms would operate in the remaining portions of the industry, such as the terminal equipment market. Under this approach, however, it wouln't be necessary to prohibit utilities, or their affiliates, from operating in the competitive portion of the industry. Unless this were done, the underpricing problem could still arise. Needless to say, while such a solution may be theoretically possible, it is not a likely solution to be adopted. A more realistic alternative would be for regulatory commissions specifically to seek out and prohibit utility underpricing of competitive services. As a first step, the burden of proof should be placed on utilities to demonstrate that they are not engaged in competitive underpricing. It is unrealistic to expect interconnect firms, commission staffs, or other interested parties to prove that underpricing is occurring. Most interconnect firms and other parties do not have the necessary financial interest or detailed information required to carry the burden of proof, while most regulatory commissions and their staffs are already overworked. Moreover for regulation and competition to coexist effectively, utilities should be required to support their proposed prices for competitive services with detailed cost analyses, showing the cost of providing those services which are subject to competition. Similarly, whenever a utility proposes to implement a new service which will be subject to competition, the utility should be required to support the proposal with a detailed.cost

study. In the absence of such a cost analysis, it may be difficult to determine whether and to what extent the proposal involves underpricing. of course, the cost studies which are provided should be subjected to close scrutiny and analysis. For instance, if the study does not contain a treatment of some or all of the overhead costs associated with the competitive service, the results and conclusions must be interpreted cautiously. In all instances, the rates which are established must be high enough to cover the direct costs involved, and make an adequate contribution toward the utility's general overhead, or common, costs.

Speaking more generally, when considering the proper policy to adopt in mixing competition with regulation, it should be kept in mind that traditional economic regulation of a utility implies the existence of monopolistic elements within that utility. Hence, it is seen that if the utility is not a monopoly, then there is less need for regulation. That is to say, if competitive alternatives exist in a particular segment of the market, then nontraditional regulation can be of benefit to the entire industry, and should be considered.