

Utility Regulation in Florida*

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Every citizen is affected by state regulation of public utilities and the transportation industry. Electricity, telephone, and gas bills are determined by how regulators analyze and alter the economic conditions facing firms and investors. In addition, to the extent that activity is within the state, the transportation industries are regulated by the state regulatory commission rather than the Interstate Commerce Commission. The economic importance of these regulated industries is partly seen in Table 1. The gross plant in service, which represents the capital investment still in use, was nearly \$14 billion for the three major utilities in 1978. Investments in trucking and airlines would not be of this same order of magnitude, yet these industries too are part of the Florida infrastructure -- basic industries which are necessary to serve other industries. The operating revenues (sales) of the two largest industries amounted to almost \$5.5 billion in 1978 and these services extend to virtually the entire population. Note that while municipally owned electric utilities are not included in the Table, they represent about fifteen per cent of statewide electricity output and are partially

*Executive Director, Public Utility Research Center, University of Florida. The views expressed here are solely those of the author and do not necessarily represent those of the sponsoring organizations. A presentation on this topic by Lewis Petteway at the PURC Conference (February 1979) was very useful in providing some historical perspective on these issues.

Table 1
 Utilities Under the Florida
 PSC Jurisdiction
 1978

Industry	Gross Plant in Service	Operating Revenues	Number of Customers
Electric*	\$7,209,038,970	\$3,035,149,226	3,260,932
Telephones	6,553,224,654	2,422,186,255	4,342,441
Natural Gas	197,461,453	152,843,325	305,736
Trucking**			
Airlines**			

*Excludes municipally owned electric utilities

**Not available

regulated at the state level.

Such capital intensive industries affect statewide investment cycles and represent a substantial source of property taxes. The growth of these industries is sensitive to population growth in the state; demands must be projected five to ten years in the future so that firms will have the capacity to service new demands (a regulation-imposed requirement). Thus, the economic health of these industries is an important factor in the state's economy.

The responsibility for regulation rests with the Florida Public Service Commission, which was organized in 1887, but did not acquire jurisdiction over gas and electric utilities until 1951. Regulation resembles a situation in which there is an open contract between consumers and producers, with a group of public officials serving as umpires who can alter the rules when it is deemed "in the public interest." Price (profitability), service quality, and exit/entry decisions are all dependent upon how regulators set the continually changing contract which binds together utility consumers and producers. In Florida, the Public Service Commission (PSC) monitors and changes the terms of the contract, allowing producers the opportunity to earn returns on investment similar to those available in comparable investments, and ensuring that the prices paid by consumers track the costs of serving them. The range for disagreement is substantial-- but it can be narrowed through the analysis and evaluation of technical information. Although regulation is not a simple task, and will not become easier in the future, Florida has a regulatory environment conducive to incorporating research results and new knowledge into PSC policies.

In this brief review of regulatory policies, the difficulty of the issues involved is self-evident. The task assigned the PSC is to simulate

competitive outcomes in markets where competition has been deemed inappropriate or inadequate. Telecommunications, energy, and transportation are examples of industries currently regulated by the PSC. In the case of a natural monopoly, the economies of scale are so substantial relative to the size of the market that a single producer can provide the output most efficiently. In the past, the local telephone exchange has illustrated the scale economy argument. To prevent monopoly profits, regulators traditionally set limits on rates of return. Maintaining incentives for efficient management and investment strategies in such an environment is a challenge. Competitive markets reward good decision-makers, innovators who develop new products, and managers who produce at minimum costs; such markets also penalize bad decision-makers. Regulation circumvents this penalty and reward structure, in order to avoid excess profits. The development of procedures which restore strong incentives is a key problem facing the PSC.

Two other market conditions which historically have caused regulation to be applied to industries are destructive competition and discriminatory pricing behavior. The first situation is where market entry may be easy, but over-entry results in quality reductions (sometimes reducing public safety), economic losses, bankruptcies, and delayed exit from the industry. The resulting cycle of high prices and high profits after exit is sometimes viewed as a market failure. Of course, the extent to which any particular industry, such as trucking, is susceptible to the destructive competition syndrome, is an empirical question. Similarly, some industry conditions allow producers to charge different prices to different consumer groups, even when the cost of service is the same for the two groups. Equity considerations have been invoked for regulation to limit the ability of firms to charge higher prices to customers who have few (or no) substitutes

for products or service. Such intervention is unnecessary where competition forces the price to reflect the cost of service.

Regulated industries are important factors in the Florida economy, providing the infrastructure for many economic activities. Over the next five years, utilities will invest ten billion dollars in Florida, which is nearly as much as has been invested in the past fifty years. These investments will be occurring during a period of continued general price level inflation and of a rising relative cost of energy. The energy crisis has led to the formation of a Federal Department of Energy and state energy offices. Also, telecommunications and transportation seem to have entered new eras as rapid technological changes have increased competitive pressures in both industries. Clearly, regulation must be responsive to these changes if Florida is to continue to have a strong economy.

Regulation has tended to focus either on operating ratios or rates of return to determine whether prices were appropriate. In trucking, the PSC uses the total operating expense divided by total revenues to gauge the economic health of the firm. A better index of profitability would be return on invested capital -- the item regulators tend to emphasize in electric and telecommunication utilities. That rate of return is determined by revenues minus operating expenses, all divided by the rate base (depreciable assets). In recent years, the PSC has adopted a number of rules for dealing with these components. Average investment rather than year-end rate base is used, while on the cost side, advertising expenditures are restricted, charitable contributions are not counted as expenses, and full normalization is

used in the accounting treatment of taxes. The PSC has also addressed a number of other economic and financial issues, including treatment of construction work in progress. Thus, the process by which revenue requirements are determined has evolved over time, in response to changing business conditions.

One Florida response to general public pressure for regulatory reform was the change from a three member elective commission to a five member appointive one, effective in 1979. Perhaps the Governor and Legislature viewed the expansion of the Commission as a way of incorporating a more diverse set of backgrounds into the regulatory process. Another argument for the change is that the regulatory problems of the 1980's will require technical skills which would most likely be secured under an appointive system. Nonetheless, the elective system has served Florida reasonably well. Outside evaluations of the PSC have given it high marks in the areas of accountability, financial decisions, and responsiveness to innovative rate designs. In 1972, Common Cause published a report on twenty key questions (out of 102) regarding the openness and accessibility of state regulatory commissions and precautions taken against conflicts of interest and lobbying pressures. Florida was among the twenty-nine states which "passed" the accountability test. These results are a credit to the laws and procedures under which the PSC operates. On the financial front, investment firms, such as Solomon Bros. have given the Florida PSC high marks in terms of accounting procedures and responsiveness to rate change requests (absence of regulatory lags).

National Economic Research Associates, Inc., conducted a 1977 survey of regulatory rate structure revision policies. The states showed a remarkable amount of activity in the area of rate design - reflecting interest in seasonal rates, time-of-day pricing, and electricity load management. In particular, Florida appeared to be a relatively innovative commission - discouraging master metering (to encourage conservation), and encouraging pricing experiments so that the cost-effectiveness of alternative rate designs can be determined. Other current pricing issues include conservation rates (approved for FP&L), the fuel adjustment clause, and the possible implementation of marginal cost pricing.

The 1978 Public Utility Regulatory Policies Act inserts the Federal Government more deeply into state regulation than has been the case in the past. Passed as part of the new Energy Program, these federal initiatives will require state agencies to adapt to a host of new regulations - including standards for rate-making, additional data collection, and forecasting. We can expect major institutional changes within the regulatory process as the PSC and two recent additions to the regulatory scene, the State Energy Office and the Public Counsel, jockey for position in this new world of regulation. For example, on the federal scene, fifty million dollars has been authorized (but not yet appropriated) for financial assistance to regulators, a new National Regulatory Research Institute has been established, grants to consumer advocates (and procedures for compensating intervenors) are being instituted, and millions of research dollars are going to utility pricing experiments. The next decade will find state regulators in the center of a policy battleground, with old weapons unavailable, and new weapons untried. Flexibility may well be the posture for the decade ahead in the area of energy policy.

Lest one see the battles as only involving prices and which customer groups pay certain categories of costs, other key issues should be briefly noted, including nuclear waste, environmental protection, and the estimation of a utility's cost of capital. As policies in these areas are established or further evolve, regulated firms will respond by altering investments, the quality (and reliability) of service, and proposed prices. Clearly, the regulatory process is not going to get any less complicated in the coming years, given the issues on the horizon. For example, the Grid Bill, passed several years ago, gave the PSC control over the price structure, but not the price level, of municipal utilities (which, along with the rural electrical cooperatives, generate about fifteen percent of the electricity in the state). This area has barely been touched by the PSC.

Recent technical studies have already had impacts on some aspects of the electric utility industry. In early 1976, the PSC asked for a general investigation to resolve problems between the Grid Bill, Florida Electric Power Plant Site Act and Commission rate-making. In 1977, the resulting Peninsular Florida Generation Expansion Planning Study was released. It examined several scenarios for plant siting under alternative assumptions about fuel prices and whether joint or independent planning occurred. Over this same period, at the behest of the Department of Environmental Regulation, the industry funded an independent two million dollar study to determine whether air quality standards for sulfur dioxide should be tightened. In both cases, very complicated issues were tackled by seeking new scientific and engineering information. It is likely that future issues will involve similar task force approaches, rather than adversary hearings - given the complexity and site-specificity of the problems. For example, a power pooling prototype experiment

has been under way for a year to determine the gains associated with an expansion of current contractual arrangements.

The areas of telecommunications, transportation, and natural gas raise similar complicated issues. In telecommunications, charging for information, usage sensitive pricing, system reliability, and attachments have all received attention in recent years. In addition, ICC initiatives to deregulate some sectors of transportation will impact Florida citizens and firms operating in the state. Florida could be in the forefront of this struggle, as reflected in Auditor General's performance audit of the state program for motor carrier regulation, distributed in November 1978. That report supported deregulation and proposed a number of changes in reporting practices. Finally, pipeline and gas distribution regulation will be affected by the 1978 Energy Acts. The right-of-way issues surrounding potential coal slurries further complicate regulatory decision-making in this area. It is too early to tell whether current issues will require major shifts in regulatory policies or a continued evolution of existing practices.

Although this brief overview provides only a partial catalogue of the types of issues addressed by Florida regulators, it illustrates the scope of the problems and the techniques used to resolve conflicts. More than ever before, the research community is participating in the regulatory process to assist in identifying complex interdependencies and in setting reasonable bounds on decisions which will be acceptable to both producers and consumers.