8 On Information and the Regulation of Public Utilities

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Privately owned public utilities are perhaps the most heavily and often badly regulated sector in the U.S. economy. Against the current backdrop of regulation affecting utilities, this chapter looks at recent efforts to contain and control federal regulation while improving state regulation and private initiative. The inquiry considers:

The implications of recent efforts to improve the social efficiency of regulation through new analysis and oversight procedures at the federal level.

The provision and dissemination of better information that will make it possible for states to regulate in more socially efficient ways.

Improved decision rules that can strengthen private initiative and competition in the provision of public-utility services.

Federal Regulation: Improved Analysis and Oversight Procedures

On February 17, 1981, President Reagan signed an executive order on federal regulation.[1] Executive Order 12291 differs from previous orders in two significant ways. The order requires that executive agencies:

Establish regulations that will achieve the greatest net social benefit to the extent permitted by law. For major regulations agencies must prepare a regulatory impact analysis of the benefit and costs of the regulation and important alternatives.

Submit all regulations to the Office of Management and Budget for review, for a minimum of ten days (for nonmajor regulations) and up to sixty days prior to final promulgation of a major regulation.

[1] This chapter should not be interpreted as reflecting the official views of the Office of Management and Budget or any other government agency.

A major regulation is defined as one that could have an impact of at least $100 million or a substantial impact on particular sectors or geographic areas.

Despite much criticism, benefit-cost analysis can bring about improvements in federal regulatory performance. However, the social efficiency norms underlying benefit-cost analysis are often in direct conflict with decision-making rules and criteria used by legislators, regulators, and the courts. The problem of conflict between social-efficiency norms and the decision rules used by these bodies is illustrated by the following case study.

The Revised New Source Performance Standard (NSPS) for Electric Utilities

The process by which this major regulation evolved has become a classic case study in the ills of recent federal regulatory policy. Its evolution between 1970 and 1979 is the subject of a recent book by Bruce Ackerman and William Hassler at the Yale law school.[2] The book provides a penetrating study of how perhaps the biggest and most costly multibillion-dollar regulation in recent regulatory history was promulgated, the net effect of which is likely to be emissions increases in those areas in which the threat to human health is most severe.

The NSPS issue—involving requirements for the installation of scrubbers on new coal-fired boilers—illustrates the dominance of distributive considerations over those of social efficiency between the cradle and maturation of a major regulation. According to Ackerman and Hassler, the experience also demonstrates the myth of majority rule in its legislative evolution. In this instance, the Clean Air Act's NSPS requirement bore little resemblance to a high-level pursuit of environmental-policy objectives in the political arena guided by formal majoritarian decision rules. Much more important in explaining the actual outcome were the informal decision rules employed by congressional staffs and regulatory agencies constrained by considerations of distributive politics and prescriptive, means-oriented legislative mandates.

Ackerman and Hassler also point to the departures from social-efficiency norms that can arise when regulators are precluded from looking broadly at cost-minimizing policies at all stages of the production process. Environmental clean-up costs can obviously be imposed at different stages of this process—for example, to coal mining, oil refining, electric-power generation, or auto manufacturing. The wide range of policy choices about where to impose clean-up costs can motivate the formation of strategic coalitions—among, say, coal producers and environmental groups in the case of NSPS—which result in imposing costs on other production stages

(that is, electric-power generation) while increasing society's total clean-up burden.

To avoid such results in the future, better ways of understanding the distribution of benefits and costs as well as how to motivate alternative, more social efficient policies are needed. The NSPS experience illustrates the fact that even extensive analysis involving multimillion dollar modeling by Department of Energy (DOE) and Environmental Protection Agency (EPA) over several years could not remedy the kinds of problems that grew out of the politics of section three of the Clean Air Act. Of course EPA could have done a benefit-cost analysis of the scrubbing option, but it was argued by high-level EPA staff that since it was EPA's goal to require scrubbers in the first place, such analysis would have been counterproductive.

Although EPA has recently taken steps to remedy some of the problems with the revised NSPS, probably only an action by Congress to change section three of the Clean Air Act will permit EPA to deal with the more fundamental problems. Much credit for such a beneficial result will be owed to Ackerman and Hassler for a broad and penetrating analysis of institutional behavior and performance that demonstrated how narrow distributive considerations can often dominate the high-level pursuit of social efficiency.

That kind of analysis is admittedly rare in the formulation of a single major regulation since few such regulations exhibit the magnitude of impacts and choice of alternatives that characterized the NSPS experience. However, their analytical approach deserves far more attention in the analysis of complicated interactions among regulations and their cumulative effects, particularly in areas involving the environment, energy, and the economy.

Cumulative Effects of Regulations Affecting Public Utilities

The executive order takes an important step in this direction by encouraging Office of Management and Budget (OMB) and the agencies to look beyond individual regulations toward their cumulative impact on the national economy. OMB is authorized to make an annual compilation of the costs (and benefits) of regulation for purposes of a regulatory budget.[3] In turn, agencies are now undertaking to better analyze the cumulative impacts of regulation on particular sectors of the economy.

For example, OMB recently requested that the Energy Information Agency undertake a study of the cumulative impacts of energy and environmental regulations affecting the public-utilities sector.[4] One motivation for

the study had been the 1980 Report of the Council on Environmental Quality, which had shown a threefold increase in estimated incremental expenditures (those resulting from federal requirements) of public utilities for air-pollution control—from $2.8 billion in 1978 to $8.4 billion in 1979. Though in part the increase reflected a new procedure for measuring incremental expenditures, EPA had been placing a growing share of the national pollution-control cost burden on the utilities sector. It is important to understand better the possible impact of these compliance burdens in relation to other regulatory policies and conditions affecting the industry.

The results of the cumulative-impact study are not surprising, simply showing that when allowance is made for shifts in utility and consumer behavior, the likely impacts of increased environmental compliance costs are significant but not as great as might be normally expected. The reason is that under normal demand and supply conditions the cumulative effects and regulation can be subadditive. That is, the cost impacts of individual regulations taken together may not be as great when allowance is made for substitution between one input and another—for example, between high-sulphur and low-sulphur coal. However, the real effects of environmental regulations tend to be heavily dependent on the degree to which existing energy regulations would allow for substitution. Also, the cumulative impacts, particularly on electricity prices, could be much more significant—that is, superadditive—under a set of unfavorable energy-supply scenarios. Regulatory constraints on substitutions would also enhance the tendency for the cumulative impact to be greater than might be naively assumed.

Studies of this kind serve an important public-awareness function that can bring about profound changes in regulatory policy. For example, an earlier study by the Energy Information Agency (EIA) had demonstrated rather conclusively that a number of individual federal subsidy and regulatory programs aimed at single objectives relating to energy conservation or increasing supply had the cumulative effect of offsetting each other. Indeed, the EIA study estimated that the cumulative effect of these programs would result in no positive impact in terms of the relevant objectives—reduced foreign imports and domestic consumption or enhanced domestic-supply availability.[5] This kind of information has led to dismantlement of a large part of the unwieldly federal-energy-regulatory apparatus not mandated by law.

Many remaining energy programs and regulations, however, continue to be legally mandated. In particular the Energy Act of 1978 and other statutory authorities have created several dozen subsidy programs, involving nonresearch expenditures of approximately $3.7 billion in fiscal year 1982 that discriminate in favor of particular firms and industries. These are combined with numerous energy programs and regulations that discriminate against individual firms and industries.

More recently the Department of Energy has been evaluating these programs and regulations from the standpoint of their contribution to an effective supply-side economic policy. The department is looking in particular at the social-efficiency objectives of those programs—apart from distributive and other political considerations—from the standpoint of who possesses or has access to the relevant information. It is logical to argue that, judged by these criteria, many remaining programs would be found lacking simply because the government has access to less information than the private sector. The capacity of the federal bureaucracy to absorb information must be less than the combined capacity, for example, of millions of investors and investing institutions.[6]

Inefficient and discriminatory energy programs and regulations are, of course, only one piece of a much larger mosaic of federal and state regulations affecting the energy sector. Dissatisfaction with the federal energy program and regulations, however, is leading to a broader look at the actual as opposed to the intended effects of other federal regulations and programs, including their interaction with state regulation of public utilities.

Federal and State Regulation: Improved Information

Before turning to these issues of federal/state regulatory interaction, a key aspect of OMB's implementation of the new executive order has been built around the disclosure of information, particularly economic data and analysis. That disclosure alone can be a powerful tool for the reform of federal regulation. As instanced earlier, the recognition that energy regulation really generated no significant benefits, just a lot of costs, led to significant reforms in the very early days of the new administration.

The emphasis on information disclosure is also an outgrowth of new statutory oversight authorities, created by Congress in the Paperwork Reduction Act (PRA) of 1980.[7] In addition to the review requirements of the executive order—where OMB reviews all nonmajor regulations within ten days—it is necessary to review almost all requests for information that the federal government makes to more than nine nonfederal entities. These information requests include the submission of data to the federal government as well as the maintenance of records for review by the federal government.

The new responsibilities given to OMB in the PRA are significantly greater than those assigned to OMB in the 1942 Federal Reports Act, the precursor to the PRA. The new act, for example, restores OMB oversight of information requirements of independent regulatory agencies. Therefore, OMB is now reviewing information requirements associated with NRC licensing procedures in addition to those of the Energy Department and FERC.

The act also created, within OMB, a new Office of Information and Regulatory Affairs which exercises day-to-day responsibility for information management as well as implementation of E.O. 12291. The informational role of the office is not merely one of managing information within the government but rather one that is tied closely to the management of regulatory affairs that affect those outside the federal establishment. As a result, the use of information is being sought as an alternative to command and control regulation to bring about more efficient approaches to regulation. An example is an attempt to deal with the most significant emerging environmental regulation issue of the 1980s—protection of groundwater supplies. One alternative to a national-groundwater-regulatory program is to strengthen the states' role, in part through more effective provision of information.

Example: Using Information to Achieve More Efficient Regulation

The groundwater problem is probably unsurpassed in its complexity form both an informational and regulatory standpoint. Attempts to deal with the information problem are being made by broadly interpreting the social-efficiency role in matters affecting budgetary policy, information collection activities, and regulatory burdens on the private sector. To do so, one must begin by thinking carefully about the suitability of existing state and federal arrangements for various regulatory and informational functions.

To illustrate, the OMB begins with the view that proximity of decision-making centers to groundwater problems improves the ability of regulatory bodies to obtain accurate and unbiased information. It appears, for example, that grass-roots information—about constituent preferences or aquifer uses—is most efficiently collected at the state level. At the conclusion of this section, some novel techniques will be presented for eliciting accurate preference information at the state level that may be superior to traditional ways of trying to measure benefits at the federal level.[3]

For other kinds of more generic information, the federal government may do a better job of collecting and disseminating information. For example, it may be able to collect and codify certain data more efficiently than the states and may have a strong edge in the collection and analysis of research data on groundwater-contamination problems.

Efficient information provision is also essential to efficient groundwater regulation that requires differentiation among aquifer uses. This also requires recognition of the administrative costs of regulation and a sensitivity to the hierarchical distortions of information that can result from federal, in lieu of state, regulation. Consequently, in the exercise of its budget

and information oversight responsibilities, OMB must ensure that it does not reduce the opportunity for regulatory differentiation so as to lead to a socially inefficient level of regulation and industrial compliance costs.

The collection of information on groundwater problems as well as the development and implementation of regulatory programs often takes place within an often controversial and emotional political climate that can lead to a costly adoption of uniform standards. More specifically, there is danger in the groundwater area of repeating the history of the 1970s in air and water regulation—that is, pressures for regulation that require all groundwater to be maintained at a uniform quality level. Such pressures, surprisingly enough, often come from state officials and are usually supported by well-meaning attempts at the federal level to achieve greater consistency in federal regulations affecting groundwater.

Efforts to develop an effective federal/state groundwater protection strategy are illustrative of broader opportunities for relying on information as a means of reducing federal dominance in the regulatory arena. This kind of strategy, of course, can have mixed blessings for those who must comply with regulations. On the one hand, nonuniform state regulation can achieve reduced industrial-compliance burdens while improving social efficiency. On the other hand, the proliferation of differing state requirements can create uncertainty and confusion in the regulated community.

In the last several years, for example, there has been a remarkable shift from federal dominance to state initiative in the management of nuclear and hazardous wastes. Between 1976 and 1980, forty-one states passed laws banning, requiring state approval for, or regulating radioactive-waste transportation or disposal within their borders. This has been accompanied by a strong activist role by states in the regulation of hazardous wastes, particularly those activities affecting transportation and disposal of these wastes under the Resource Conservation and Recovery Act. The proliferation of different state requirements affecting interstate transporters has recently led the admininstration to consider the imposition of a uniform national-manifest system for the transport of hazardous wastes. In those cases where information on the movement of hazardous wastes must be collected, the federal government may be the most effective provider of the information.

These examples also illustrate a blurring of the traditionally dominant federal role in the environmental area, accompanied by federal intrusions into an economic regulatory role that had been primarily reserved for the states. In some respects the intrusions outside the purview of energy regulation were not widely foreseen. There is little doubt, however, that the strong new source bias of most environmental regulations in the 1970s has dominated the role of state public-utility commissions in regulating entry.

In other cases, federal preemption has been more direct. With the passage of the Public Utility Regulatory Policy Act (PURPA) in 1978, the

federal government became rather significantly involved in the rate-setting process of the state utility commissions. In addition to encouraging more efficient rate structures, PURPA also exempted small nonconventional power producers from state regulation while requiring that utilities purchase power from the new producers at a price equal to what it would have cost to provide it themselves.

At times the pressures for preemption seem to reflect the inexorable tendency toward increasing the span of regulatory control so as to enhance the effectiveness of federal regulation. In this case the growth of federal energy, environmental, and social controls has fueled pressures for federal interventions in the economic regulatory arena, traditionally the preserve of state regulatory bodies. The costs and burden of federal regulation may, of course, be only one of many contributors to the problem faced by public utilities in obtaining adequate rates of return. On the other hand, one can be sympathetic with the frustations of utility executives who have complained about the imposition of large and increasing compliance costs which cannot be adequately reflected in utility-rate structures as a result of delays in state public-utility rate proceedings.

Such problems might be addressed, however, not by illinformed federal interventions but rather by strategies that link improved information to improved decision rules in the regulatory arena. Decision rules means both the formal decision rules used by majoritarian legislatures and the informal rules used by regulators. This also includes competitive decision rules that guide behavior in the private marketplace.

The importance of decision rules in improving institutional performance at both the federal and state levels is clear. As instanced by the NSPS experience, federal agencies can be required to produce voluminous amounts of information and analysis that may, at times, have little or no relevance to decisions guided by distributional, in lieu of social-efficiency, considerations.

One means of dealing with the problem is to broaden the effective participation of those outside the Washington arena who are affected by decisions now made largely within that arena. Such a process would involve provision of more information about the cumulative effects of federal policies as well as the use by Federal decision makers of preference information revealed by those outside the federal establishment.

Going back to the problem of passthrough of regulatory costs, a simple thought experiment will illustrate such a process. What if the heads of twenty federal regulatory agencies had to justify each year the cumulative costs of their regulations before public-utility commissions in each of the fifty states? These costs would be determined on a nationwide basis by a federal agency. The federal regulatory agencies would then justify these costs in formal rate proceedings where they also bore the burden of proof

for justifying rate increases reflecting the passthrough of compliance costs. Clearly there would be an end to the alleged regulatory blank check on the national income (including electricity price increases) and to many federal regulations as well.

The thought experiment is intended to illustrate simply the possibility of changes in decision rules that fundamentally alter the nature of regulatory decisions outside the cozy confines of the Washington establishment. The Washington debate over regulatory reform is, in some respects, symptomatic of that problem. The effort has been aimed largely at changing the burden of proof within the Washington arena.

Currently there are numerous variants of congressional, presidential, and judicial veto of regulations advanced by a wide variety of regulatory reformers and interest groups. Some seemingly frivolous proposals would add a different wrinkle to the veto game. For example, the suggestion has been made to think about a governors' veto where no one is quite sure where to put the apostrophe. However, serious proposals to change the focus of decision making in many areas formerly dominated by the federal government could give state and local elected officials the opportunity to make the important trade-offs involving environment, energy, and the economy. And these changes could lead to more rational and efficient regulation of the public-utilities industry.

The discussion now will turn to the possibility of improved decision rules that differ from a simple panoply of veto mechanisms in that these decision rules are aimed at providing more than just simple checks and balances over the growth of federal regulation. In this context, the introduction of decision rules of a rather nontraditional kind is aimed at obtaining more accurate and unbiased preference information in a decentralized economy.

Example: Using Nontraditional Decision Rules to Obtain Accurate Preference Information

The nontraditional decision rules achieve the revelation of accurate information by giving any person in a social-decision process a basic choice. The person is given the choice of accepting a decision that would be made without his participation or changing the decision to what he wants upon payment of an amount of money equal to the net cost to all other persons of doing what he wants done instead of what would otherwise be done.

The motivation to reveal accurate preference information, which has been called demand revelation, results from the imposition of a penalty calculated separately for each individual that represents the social costs of each

individual's choices.[9] In choosing between two social alternatives the level of expected benefits or costs related by any individual may affect aggregate net benefits such that one social alternative is chosen over another. Without a particular individual's evaluation, a second alternative might have been preferred as indicated by the aggregate reports of the other individuals. The penalty imposed on any individual is equivalent to the losses incurred by others because of the inclusion of the individual's report and the resultant choice of the first alternative. The imposition of a penalty of this kind ensures that each individual will receive a lower level of actual net benefits if he misrepresents his expected benefits and costs. To preserve an incentive structure that avoids strategic behavior, however, the aggregate of the penalties collected cannot be returned to the individuals involved in the reporting procedures.

It has been observed that such a penalty structure is conceptually similar to an auction, where the highest bidder pays not the amount of his bid but rather the second highest bid. This, too, would motivate bidders to reveal an accurate willingness-to-pay for the desired object.

The scientific bodies of the federal government, such as the National Science Foundation, have begun sponsoring research on these nontraditional mechanisms and the OMB has begun thinking about their use in a variety of policy contexts. For example, OMB is exploring their use in more accurately determining state needs for hazardous waste clean-up and groundwater protection. The existing super-fund of $1.6 billion may be rapidly exhausted by clean-up requirements associated with 115 priority sites and many more that may be identified as a result of current efforts to detect and measure groundwater contamination.

More specifically, the government is examining alternative mechanisms for allocating super-fund appropriations that might be different from the current arrangement requiring the federal government to fund 90 percent of the clean-up cost of the site while the state makes up 10 percent of the remaining cost from general fund revenues. By certain interpretations of the law states are now prohibited from raising these dollars from those who are taxed for this purpose in the super-fund legislation. Dissatisfaction with the federal preemption provisions of the existing super-fund has fueled broader interest in the effectiveness of the current allocative mechanism as compared with some alternative mechanism.

One proposal under study would establish a variable matching arrangement—called the limited fund mechanism—that would base the allocation of super-fund dollars on the revealed willingness-to-pay of state recipients.[10] In contrast to the current fixed (ninety-ten) matching arrangement, state recipients would pay a share based upon the revealed preferences of potential recipients in other states whose projects cannot be funded during any given year. The process could lead to the accurate and unbiased expression

of a state's willingness-to-pay for funding of a clean-up project financed by super-fund. Such an approach might also better motivate states to find ways to determine preferences for clean-up and avoid some of the problems encountered in the attempt to apply traditional benefit-cost analysis to this area. It is common knowledge that the analyses conducted by federal agencies are frequently incomplete reflections of actual benefits and costs and rarely reflect subjective preferences or entrepreneurial opportunities foregone. The approaches OMB is studying would relate federal decisions more directly to the real opportunity costs, including subjective preferences expressed by decision makers who are closer to the problem conditions and the preferences of individuals.

The benefit information could not only improve the allocation of public funds but also regulatory decisions in the hazardous waste clean-up area. In particular, federal and state enforcement authorities would be better positioned to equate the scale of private clean-up efforts with those that reflect willingness-to-pay for publicly financed clean-up efforts.

In the water pollution area, this willingness-to-pay criterion has guided regulatory efforts for controlling conventional pollutants since the 1977 amendments to the Clean Water Act. For hazardous wastes it may also serve as an appropriate criterion for the level of private clean-up activity.

Thus far this chapter has dealt largely with issues of devolution between the federal government and the states, predominantly in the area of environmental regulation. The concluding section, will examine some of the more traditional issues of public-utility economics and will look in particular at some of the implications of the nontraditional decision rules.

Traditional Issues of Public-Utility Economics: Improved Decisions through Nontraditional Decision Rules

State public-utility regulation lies somewhere in the middle of a social-control continuum ranging from nationalizing public utilities to completely privatizing them. The federal government has traditionally had little direct interest in this area except to consider ways of putting the federal house in order and, more recently, to consider alternatives to preemption of state economic regulation.

In the view of some, federal regulation has already wrought a subtle kind of socialization in the economics of this sector. However, explicit policies going in the direction of nationalization are, for good reason, rarely discussed. In fact there is rather good data on the relative performance of federal entities in the production of hydroelectric power that suggest such policies would be very poor ones. A 1979 General Accounting Office (GAO) study, for example, showed that if federal government hydroelectric plants

were as efficient as comparable plants in the private sector, the annual savings would be more than $10 million. The cost of producing electricity in about fifty private electric-power plants was $2.72 per kilowatt-hour compared with $3.29 per kilowatt-hour in the approximately one hundred government plants that GAO studied.[11]

Similar comparisons are also often made of purely private unregulated, as opposed to publicly regulated utilities. A recent article "Two Utilities Are Better Than One," pointed to the comparative studies of Walter J. Primeaux at the University of Illinois who suggests that the cost-reducing effects of competition substantially outweigh economies-of-scale effects for small and medium-size firms up to an annual power output of 222 million kilowatt-hours. It also appears that even for large firms economies of scale have been substantially reduced because of technological changes and the cost conditions affecting generating capacity.[12]

In addition to these changes in technology and cost conditions, one needs also to take account of recent changes in economic theory. The natural-monopoly theory, which justified public-utility regulation because of economies of scale dates back to the mid-1800s writings of John Stuart Mill and Edwin Chadwick. It is closely related to public-goods theory which had been also used to justify so much of recent governmental activity over the last twenty-five years. However, the latter theory has been undergoing substantial revision in recent years and will be reflected in changing theories about how to deal with natural-monopoly problems.

In his 1958 formulation of the public-goods problem Paul Samuelson described the natural-monopoly problem as "analytically almost exactly like my model of public expenditure" and the problem of obtaining information in the case of indivisibilities and increasing returns arises for "the same game-theoretic reasons that compel rational men to hide their desires for public goods;" the problems presented by "almost all deviations from constant returns to scale and almost all externalities must inevitably involve some of the same analytic properties and dilemmas of my polar (public goods) case."[13]

The existence of demand-revealing solutions to the free-rider or public-goods problem thus naturally leads one to consider demand-revealing, natural-monopoly solutions to problems of indivisibilities that lie at the heart of the marginal-cost-pricing problem of public-utility economics. Indeed, the problem in theory is solved by a multipart tariff that recovers costs associated with increasing returns or indivisibilities in ways that would avoid the incentive for consumers to misrepresent their preferences for the provision of what amounts to a quasi-public good.

The solution to the marginal-cost-pricing problem has recently been carried further into the real-world problems of information provision. As with public goods, individual consumers of public-utility services may have little

or no knowledge of preferences that they would otherwise misrepresent. In the real world, in fact, suppliers may be able to more efficiently obtain and provide the relevant information. For example, General Motors (GM) or Toyota may know more about consumer demand for automobiles than consumers would be able to provide themselves. The situation may be the same for producers and consumers of electricity.

Indeed, recent developments linking demand revelation to a solution to the natural-monopoly problem show the conditions under which a discriminating monopolist will provide the socially optimum level of information. A demand-revealing, natural-monopoly solution could achieve these conditions and thus motivate suppliers to achieve a socially efficient level of services along with an efficient set of discriminatory prices that reflect marginal cost. The firms are also motivated to gather the relevant information about consumer preferences that would be used in making decisions about pricing.[14]

The new theory is an expansion of a previous theory of franchise monopoly in public-utility economics that dates back to Edwin Chadwick's notions about "competition for the field" as compared with "competition within the field of service."[15] That theory has shown how franchise-bidding schemes might result in monopoly provision of the optimum quantity at the lowest per unit price. Where the service is provided at decreasing cost, as in the case of public utilities, one can avoid certain traditional ex post monopoly problems through an ex ante bidding process involving a potential large number of franchises, one of which will become the supplier through competition for the field.

During the last decade, critics of the original franchise-bidding approach had observed that although it prevents the winning firm from obtaining a monopoly return, it gives no assurance that the output will be priced efficiently on marginal-cost terms. More fundamentally, the original approach ignored problems of how the relevant information about consumer valuations is to be obtained so as to determine both the optimum output and marginal-cost prices. Finally, it ignored the issue of how potentially complex contingent contracts are to be determined and enforced in a world of uncertainty, complex product-quality dimensions, and changing tastes and technologies.

The possible key to operationalizing the franchise monopoly approach, not only for public utilities but for public goods generally, is through a natural-monopoly approach that relies in part on nontraditional decision rules. Such an approach would permit potential competition to discipline the performance of an existing supplier because consumer groups can select a more efficient alternative supplier in a rather straightforward and unambiguous way. A crucial element in the process is the way in which the motivation to price at marginal cost also provides an incentive for the provision of

a socially efficient amount of information.[16] Such an approach does require some regulation—for example, to prevent collusion between providers and consumer groups and to provide rules for determining exchanges of assets between an existing provider and a new entrant. However, the regulatory apparatus bears little resemblance to traditional economic regulation of public utilities.

It is, of course, possible that recent solutions to the natural-monopoly problem, while interesting from the standpoint of public goods or public-utility pricing theory, may have less relevance than once thought to the practical economics of public utilities. In fact, the new approach was developed for its possible applicability to the provision of a broad range of public goods other than utility services, which are more clearly subject to indivisibilities and increasing returns to scale.

In the case of public utilities and absent natural-monopoly conditions of supply, simple deregulation could be a preferred alternative, at least when compared with the results of existing state public-utility rate-of-return regulation. In sum, it is possible that the best immediately practical decision rule for achieving both socially efficient results and the effective provision of information may in some cases be through simple competition. However, if deregulation is a socially desired remedy, recent experience with federal interventions in state economic regulation indicates that there are problems in getting from here to there.

Although all the lessons that will be learned from our recent experience with PURPA have yet to be learned, one basic conclusion is already clear. Just as the federal government has been a poor producer of hydroelectric power, the federal establishment can be a poor producer of competition as well as the means of regulating it. Society may need decision rules other than those presently used in Washington, D.C., for producing competitive decision rules that are workable and adequate for the needs of public utilities and the consumers they serve.

A small city in Texas has found a rather simple decision rule for, at a minimum, protecting competition. In Lubbock, Texas, two utilities—Lubbock Power and Light and Southwestern Public Service Company—each provide services at very low rates. The city charter states that any change in the competition between these two companies must be approved by three-fourths of the registered voters.

Notes

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