A CRITIQUE OF ADMINISTRATIVE REGULATION OF PUBLIC UTILITIES

MSU PUBLIC UTILITIES PAPERS

edited by Warren J. Samuels and Harry M. Trebing
A Critique of Administrative Regulation of Public Utilities
Contents

Preface ix

I. Reform of the Regulatory Agencies 2

Independent Regulatory Agencies: A Perspective on Their Reform
Marver H. Bernstein 3

Organization Reform of the Regulatory Agencies and
Alternatives to It—A Critique of the Ash Council Report
Andrew M. Rouse 25

Discussion
Richard A. Rosan 45

Discussion
Norman D. Schwartz 55

II. The State Commissions and the NARUC 137

Introduction
Francis X. Welch 67

The Effectiveness of State Commission Regulation
Charles F. Phillips, Jr. 71

The NARUC: Contributor to Effective Regulation?
A Retrospective and Prospective Critique
John C. Spyckalski 89

Discussion
David H. Armstrong 137
Preface

Most discussions of public utility questions deal with the prosaic yet complex and important issues of valuation, rate of return, and pricing structure. Throughout those discussions reverberate such important problems as adequacy of supply, operational performance, technological growth, information systems, and market structure and competition. Taken for granted in most of those discussions is the existing institution of the public utility and its embodiment in primarily privately owned but governmentally regulated utilities coupled with commission administrative regulation. These are substantially American approaches to the theory of the public utility institution. Whereas most controversy in the field deals with other issues, the deepest level of controversy and policy is on the level of institution making and remaking. The collection of papers in this volume examines what is probably the most important feature of the American public utility institution: administrative regulation by independent commission. The formation and solution of all other problems of public utilities are at least partially shaped and governed by the historical development and practice of commission regulation and the corpus of administrative law.

All discussions of the theory of public utility regulation concerning administrative regulation involve a host of difficult but strategic policy problems and issues, conflicts between economic interests and between technical and administrative considerations, and, consequently, awkward but critical policy tradeoffs. These include:
The situation is being acted upon: different identifications of deficiencies in the larger society. The concept of crisis has been given the most kaleidoscopic substance, depending upon whose definition of the crisis identification are not always successful.

Of the complex process of public policy making, and attempts at changing current issues and problems. Finally, from time to time different subgroups of the public have withheld approval, and have led to different perceptions of crisis and to different reform recommendations. The evocative establishment of a crisis is part of a history of the perception of deficiencies and of crises, and therefore a history of a succession of official and unofficial inquiries and reports directed at reform. This is not surprising for several reasons. Commission regulation, especially in the context of the public utility decision-making process, to the enormous barriers to real and conclusive independent and objective analysis of commission regulation and utility operation, to the abundance of vague claims of success and failure, and to the difficulties of attributing responsibility for success and failure. Those propositions are only broad frameworks within which the details of regulation are fought over and worked out, more indicative of the nature of problems than their solutions.

Much of the history of administrative regulation of utilities is a history of the perception of deficiencies and of crises, and therefore a history of a succession of official and unofficial inquiries and reports directed at reform. This is not surprising for several reasons. Commission regulation, especially in the context of the public utility institution as a whole, may be viewed from radically different perspectives and starting points as different economic interests and analytical considerations are brought into focus. The very fact of commission regulation reveals that ex post results—never easily and unequivocally evaluated—are often, if not typically, different from ex ante expectations and hopes. At stake, of course, is the continuous and adequate provision of utility services so important to the successful operation of a modern urbanized industrial economy.

Much of the history of administrative regulation of utilities is a history of the perception of deficiencies and of crises, and therefore a history of a succession of official and unofficial inquiries and reports directed at reform. This is not surprising for several reasons. Commission regulation, especially in the context of the public utility institution as a whole, may be viewed from radically different perspectives and starting points as different economic interests and analytical considerations are brought into focus. The very fact of commission regulation reveals that ex post results—never easily and unequivocally evaluated—are often, if not typically, different from ex ante expectations and hopes. At stake, of course, is the continuous and adequate provision of utility services so important to the successful operation of a modern urbanized industrial economy.

Much of the history of administrative regulation of utilities is a history of the perception of deficiencies and of crises, and therefore a history of a succession of official and unofficial inquiries and reports directed at reform. This is not surprising for several reasons. Commission regulation, especially in the context of the public utility institution as a whole, may be viewed from radically different perspectives and starting points as different economic interests and analytical considerations are brought into focus. The very fact of commission regulation reveals that ex post results—never easily and unequivocally evaluated—are often, if not typically, different from ex ante expectations and hopes. At stake, of course, is the continuous and adequate provision of utility services so important to the successful operation of a modern urbanized industrial economy.
or none or some combination thereof; estimates of how much regulation can accomplish even if ideal; the effect of proposed changes on commission and utility operation and performance; the relative viability and/or desirability of incremental versus systemic changes, including deregulation; and so on.

In addition, there not only are contradictory proposals, but also contradictory interpretations of basic facts and understandings, including contradictory definitions of problems requiring reform and of the critical issues or variables involved. These disagreements and contradictions—between representatives of different industries (utility and nonutility), between regulators and regulators, between academicians and industry representatives, between academicians and regulators, between academicians themselves, between regulators, and between members of the general public—are reflected amply in the following essays and discussions. Such controversy exists even among those who are substantially in favor of maintaining the basic set of institutional features, if not the details, largely unchanged.

It is no wonder that none of the authors in this collection are very sanguine about the prospects for major reform. The force of inertia and absence of consensus about the substance and direction of reform function to reinforce the status quo. In addition to a lack of consensus about the deficiencies of the status quo, the chorus of complaints being dissonant, there also are defenders of the status quo against major alteration—although even the defenders have varying reasons for opposing change.

Perhaps the most intractable yet interesting difficulty may be designated as the problem of structure versus results. The issue is whether we are more interested in the decisional structure of administrative regulation or in its specific decisional results or impact upon the utility industries. Most discussions of commission regulation and public utilities in general jump from considerations of structure to those of results and back again. But is administrative regulation to be designed to produce particular results? If so, what (whose) results? Or is administrative regulation to be designed in terms of principles or organizational design independent of specific results with the understanding that whatever results are produced by the designed structure are to be held presumptively optimal? If so, by which (whose) principles of design? Structured differently, but to the same effect, is administrative regulation to be evaluated by criteria of results or by structural-organizational criteria? Or are results to be evaluated by structural-organizational criteria of results?

The problem is analogous to this: since decisions are a function of the decision-making process and structure, are decisions to be evaluated in terms of criteria independent of decisional structure and process, or are decisional structure and process to be evaluated in terms of criteria independent of decisional results? Or is it a question of structure justifying results or results justifying structure? These dilemmas apply not only to evaluation but to design. Most discussions do jump from one aspect to another, suggesting that perhaps the actual design and evaluation process necessarily involves both sides of the issue however expressed and combined. Moreover, since much public utility discussion points to the public interest, it is important to point out that the public interest may be achieved either in terms of whatever results are generated by a given particular decision-making process, or in terms of criteria independent of the decision-making process specified in relation to particular goals of production, efficiency, equity, and so forth.

Any position on administrative regulation and its reform, to be analytically meaningful, must be clearly and consistently specified in terms of details of the structure–results problem. This does not mean that solutions will not have heterogeneous and contradictory elements, but only that they be expressed relative to the structure–results problem in a meaningful way.

Normally the operation of the market avoids deliberative consideration of structure–results issues. But from a design point of view the structure–results problem applies to the issue of competition (or market) versus regulation itself. Are the results of competition (aside from questions of its substance and structure) to be presumed optimal, or are the results of regulation (aside from similar questions as to substance, structure, and effectiveness) to be presumed optimal, in each case a priori? Or is each alternative to be evaluated in terms of specific decisional results? In all discussions, then, of regulation, deregulation, consumer participation in regulatory proceedings, particular structural arrangements, and so on, some assumption as to the resolution of the structure–results problem must be made. Typically, they are neither clearly nor consistently made.

Administrative regulation and all efforts to reform it thus are attempts to set up control systems. But are the control systems to be designed to effectuate certain particular goals, or are they
to be designed to themselves select the operative goals? The present
system is very much of the latter variety, which is evident from
Andrew M. Rouse’s juxtaposition of planning versus adjudicative
cultures. This view is reinforced by numerous other references to
the existing adjudicative system and is criticized, for example, by
Joseph J. Spengler.

One of the critical questions that arises in regard to reform is
the capacity of administrative regulation, and the public utility
institution as a whole, to respond and adjust to new factors. It
remains an open question as to how much regulation is, and, as
a different matter, should be, open to new technological and other
possibilities; to newly awakened interest groups and considerations;
to new views, that is, as to what is possible, desirable, and can
be expected from regulatory commissions; and, inter alia, to “new”
types of reasoning. This latter, for example, involves the roles of legal
and economic modes of reasoning and expertise, each
with its own distinctive (although not always mutually exclusive)
presumptive thrusts, or of legalisms and economisms—a subject
discussed by Andrew M. Rouse, Joseph J. Spengler, Ben W. Lewis,
and Warren J. Samuels, among others. Another example involves
the future significance of not so much (or not only) the adjudicatory
philosophy and practice of commissions per se as the self-disem-
bodiment or division of the regulatory structure through the com-
misson treatment of staff as another party at interest in the effort
to produce a record in an adversary context. Still another involves
the future burden of the legacy that commission regulation originated
with the railroads and their more or less unique problems, and
relatively little institutional innovation has been undertaken since.

The capacity of regulation to adjust to new patterns of interests
and to new patterns of issues will directly and subtly depend upon
the struggle for power that surrounds regulation and which both
works through regulation and conditions the operation and results
of regulation. Commission regulation is itself an instrument fought
over by several groups: those who have different approaches to
old and new issues, especially those either insensitive or sensitive
to new issues; those whose interests already are protected by the
institution and are at stake; and those whose interests are not yet
or not fully protected and are at stake. In this context it must be
seen that regulation is a social choice process. Through it decisions
are reached about continuity versus change, the making and remak-
ing of rights, the adjustment of established rights to new rights,
and the resolution of rights conflicts ensuing from the fact that
rights are relative not only to each other but also to market conditions.
The very existence of regulation involves its serving as a vehicle
for the continuing adjustment of rights. The functioning of regulation
to that end depends not only on the administrative wisdom of
regulators (including courts), but also upon the uses to which
regulation is put. It serves partially as a dependent variable in
the struggle for power over regulation and the place and profitability
of utilities in the economic system.

There is clearly a need for much more research and empirical
evidence on almost every aspect of commission regulation. Important
contributions are to be found in the papers by Charles F. Phillips,
Jr., and John C. Spychalski. The most important need is for research
into the performance possibilities of alternative institutional ar-
rangements and policies, research that will enlighten us about exactly
what kind of operating results may be expected from different
regulatory alternatives. Aside from the intractable nature of the
subject matter and objective, there is another major problem here:
the academic interpretive tradition with regard to the public utility
institution in general and to commission regulation in particular
differs from that of both regulators and regulatees. Not only are
their prescriptive modes of reasoning more than somewhat at odds,
but also their ranges of experiences and preoccupations often are
radically at variance. This presents very serious difficulties for
communication and analysis.

Although papers in this collection manifest many of these prob-
lems, they should be considered as an attempt, however incomplete,
to work toward improved handling of the problems. They also try
to further the analysis of reform, however much the contributors
disagree among themselves. Of distinctive importance is the fact
that the system of commission regulation is not taken for granted
here; rather, it is the object of study. The papers and discussions
in this volume, in their entirety, assume a broad rather than a
narrow view of what is involved in regulation. They envision
regulation as only one part of the total relevant decision-making,
risk-confirmation, and economizing process, and they contemplate
the limits to regulation. These studies illustrate that optimal results
depend upon the structure of rights given effect in the institution
as a whole, that regulation is equivalent to property rights in
structuring participation in the market, that economic analysis requires an antecedent determination of the rights structure, and that both economic and legal analysis require another antecedent determination of whose interests are to count (and therefore to be given protection in the rights structure). No single book can fully explore any or all of these topics, but this volume must be seen as being concerned with these fundamental questions of institutional design and evaluation. The critical question dealt with, then, is this: for whom is regulation to operate? The same question applies to the alternative to regulation, namely, competition, or the market.

Part I of this volume thus is directly concerned with reform of administrative regulation: reform in historical perspective and in the light of the recent Report of The President's Advisory Council on Executive Organization. Part II examines two components of the regulatory system, the state commissions and the NARUC. Part III attempts an overview of the historical development of the public utility "problem," concentrating upon the variables determining the course and status of regulation. Part IV considers the so-called energy crisis and its implications for the critique of regulation. Finally, Part V considers the consumer, particularly the so-called consumer movement, and the implications for the critique of commission regulation as we know it.

This collection originated with "A Critique of Administrative Regulation of Public Utilities," the November 1971 conference of the Institute of Public Utilities, Michigan State University. Virtually all papers and discussants' remarks were presented at the conference: several presentations subsequently were revised by their authors, and the comment by Samuels on the Spengler paper was prepared in advance but not presented due to a lack of time. It might be added that the considerable ferment at the sessions is indicated by the fact that several discussants commented upon the remarks of other discussants as well as upon the major papers, and many revised their written statements for publication to take account thereof.

The editors would like to express their warm appreciation to all those who participated in the conference, both those who comprised the panels and those who constituted a most receptive audience. We are particularly appreciative of the dedicated and capable efforts of Mrs. Virginia Michels and Professor Dole A. Anderson in handling the cumbersome details of arranging the conference and the publication of this volume, particularly in the absence of Professor Trebing, on leave at the U.S. Postal Rate Commission. Ms. Diane Bourke and Ms. Mary Lu Hough contributed their editorial skills and guidance throughout the production process.

Warren J. Samuels
Harry M. Trebing
East Lansing, Michigan
May 1972
I. Reform of the Regulatory Agencies
Independent Regulatory Agencies:  
A Perspective on Their Reform

M ARVER H. BERNE ST EIN  
Princeton University

The United States is nearing the end of a century of experience with state and federal regulation of economic life by independent regulatory commissions. Since the early experiments in the 1870s with state commissions to regulate railroads, regulation of economic life by independent commission has been an enduring feature of the American economy. Overpraised by many, severely criticized by some, and tolerated by most of those directly and indirectly affected by its policies and actions, the independent commission has been a chronic target of reform for reorganizers, legal practitioners, advocates of an expanding governmental responsibility for the state of the economy, and more recently, spokesmen for consumer protection. Because of the publication in January 1971 of the report of the President's Advisory Council on Executive Organization dealing with selected federal regulatory commissions,
Reform of the Regulatory Agencies

it is timely to review the record of reform efforts and to attempt to place them in the perspective of current trends and forces.

As an instrument of governmental regulation of economic life, the independent regulatory commission is a product of the post-Civil War period of American economic development. The Granger movement, which was formed to fight the political battles of discontented farmers, was able to secure the enactment of statutes prohibiting abusive practices by railroads in several midwestern states. These states created regulatory commissions with power to fix maximum rates for railroads, prevent discriminatory short-haul clauses, maintain competition on railroads, and outlaw free passes for public officials. The Interstate Commerce Act of 1887, the first significant effort of the national government to regulate economic affairs since the expiration of the charter of the second Bank of the United States in 1836, was the result of twenty years of political agitation during which more than 150 bills were introduced in Congress to regulate interstate railroads.

Several forces affected the evolution of the commission in the nineteenth century. First, as legislatures increasingly became unable to deal flexibly with novel and intricate problems of economic regulation and as courts demonstrated their inability to deal competently with difficult economic matters, attention centered on the possibility of creating a new administrative mechanism to take the place of legislative and judicial control. Second, the rather primitive development of federal executive departments scarcely offered a promising setting for the timely development of new regulatory techniques. Instead, reformers preferred a new type of agency that would be unhampered by operating precedents. Third, economic regulation seemed to require a higher degree of expertness and specialization than executive departments were able to provide. Staffed by experts, the commission, it was argued, would give continuing attention to regulatory problems, remain relatively free from the influence of partisan politics, and act more expeditiously and expertly than the courts. Fourth, disenchantment of agrarian and other protest groups with the courts and the bar spurred efforts to design a new administrative form. The courts were accused of extraordinary delays in handling regulatory cases, lack of support for statutory objectives, and a failure to promote the public interest because of their inability to initiate cases and to make independent investigations to discover relevant facts. Fifth, at the same time, the judicial pattern of procedure and the case-by-case consideration of regulatory matters that were instituted by the Interstate Commerce Commission under the leadership of its first chairman, Judge Thomas M. Cooley, appealed greatly to regulatory commissions and to their regulated clientele. Although regulation by commission was designed partly to overcome the deficiencies of legislatures and courts in regulating economic life, its acceptance by groups directly affected by regulation depended heavily on the extent to which the commission adhered to the judicial model in carrying out its operations.

The modern commission movement was strengthened heavily by the establishment of state public utility commissions in New York and Wisconsin in 1907 and the Federal Trade Commission in 1914. The Progressive reformers of the first decade of the new century had an abiding faith in expertness in administrative agencies, provided the experts remained free from partisan politics. Most of them believed that the key to effective regulation lay in the creation of a regulatory commission that remained aloof from political forces and untouched by regulated groups. Advocates of commissions would have rejected out of hand the subsequent comment of E. P. Herring that "the control of business remains too controversial and too vital a political issue to be entirely relegated to any commission independent of close control by the policy-formulating agencies of the government. Administrators cannot be given the responsibilities of statesmen without incurring likewise the tribulations of politicians."

Support among Progressive reformers was by no means unanimous. Indeed in 1909 the leading political thinker of the Progressive movement expressed a qualified dissenting opinion:

One may well hesitate wholly to condemn this government by commission, because it is the first emphatic recognition in American political and economic organization of a manifest public responsibility. In the past the public interests involved in the growth of an extensive and highly organized industrial system have been neither recognized nor promoted. They have not been promoted by the states, partly because the states neither wanted to do so, nor when they had the will, did they have the power. They have not been promoted by the central government because irresponsibility in relation to
Reform of the Regulatory Agencies

national economic interest was, the tariff apart, supposed to be an attribute of the central authority. Any legislation which seeks to promote this neglected public interest is consequently to be welcomed; but the welcome accorded to these commissions should not be very enthusiastic. It should not be any more enthusiastic than the welcome accorded by the citizens of a kingdom to the birth of a first child to the reigning monarchs, a child who turns out to be a girl, incapable under the law of inheriting the crown. A female heir is under such circumstances merely the promise of better things; and so these commissions are merely an evidence of good will and the promise of something better. As initial experiments in the attempt to redeem a neglected responsibility, they may be tolerated; but if they are tolerated too long, they may well work more harm than good. 2

II

The President's Committee on Administration Management—1937

Beginning in the 1930s, five major governmental studies have surveyed federal regulatory commissions, analyzed their strengths and weaknesses, and proposed changes to increase their effectiveness. First, the 1937 report of the President's Committee on Administrative Management, more generally known as the Brownlow Committee, was a major factor in President Franklin Delano Roosevelt's strategy to increase the capacity of the president to influence the operations and policies of the executive branch. The committee proposed to integrate all the programs of the executive branch, including those of regulatory commissions, into twelve cabinet departments in functionally related clusters. Departmentalization, coupled with the creation of a small number of presidential assistants in the White House and the development of a more powerful agency of budgetary planning and control in a new Executive Office of the President, constituted the core of the committee's proposals. Its charge that the commissions constituted a "headless fourth branch" of the Government became the basis for its recommendation that the commissions be abolished and their functions transferred to the executive departments. In the departments, these functions would be divided between an administrative section, under the direction of a single administrator who would be a career civil servant, and a judicial section, which would be serviced administratively by the department but would remain otherwise independent in making regulatory determinations.

The Brownlow Committee's report was severely criticized as somewhat hysterical in its condemnation of administrative regulation, lacking in factual documentation of findings of irresponsibility and partiality, and myopic in concentrating so heavily on the relationship of commissions to the president. Analytically, Merle Fainsod's criticism was the most impressive commentary. He proposed that the process of regulation could be understood provided the analysis focused on the interaction of three levels: the conditioning factors that make up the context of regulation, the parties in interest concerned with regulation, and the political instruments that provide the regulatory controls. Fainsod was skeptical about the Brownlow Committee proposals for reorganizing regulatory activities and insisted that the effectiveness of the independent commissions goes far deeper than the problem of their relationship to the president and their coordination with the policies of the executive branch. Instead a variety of factors influence the commission's effectiveness:

It involves personnel reforms, improved relations with Congress and the courts, as well as with the president; it requires changes in internal organization and procedure as difficulties are disclosed. In a more profound sense, however, it also involves the existence of a social and economic environment in which regulators can function without meeting frustration. Improvements in the instruments alone and readjustments of their relationships may be powerless to achieve the purposes which they are intended to serve in the absence of a milieu congenial to the realization of these purposes.

In the thirty years since the publication of Fainsod's essay it would be difficult to claim any considerable advance in our analysis of the regulatory process beyond the framework of analysis previously suggested by his essay. Subsequent governmental studies, defending or opposing regulatory commissions, have generally ignored Fainsod's suggestions or have accepted only those accommodated by the value judgments and policy preferences of the study group.
Reform of the Regulatory Agencies

THE FIRST HOOVER COMMISSION—1949

In 1949 the First Hoover Commission filed its report on federal regulatory commissions, along with the report of its Task Force. The Task Force found the regulatory commission to be "a useful and desirable agency where constant adaptation to changing conditions and delegation of wide discretion in administration are essential to effective regulation." The full commission, however, was content to record its belief that commissions "have a proper place in the machinery of our Government, a place very much like that originally conceived, but . . . the role of these commissions as originally established has not been adequately fulfilled." According to the commission, problems in commissions were caused mainly by the following conditions: (1) appointment of some inadequately qualified commissioners; (2) imposition of purely administrative duties on commissions; (3) insufficiency of promotional and planning functions; (4) insufficient delegation to staff; (5) lack of sufficient authority in commission chairmen to plan and guide commission activity; (6) lack of uniformity in statutory provisions governing tenure and removal of commissioners; and (7) unnecessary red tape causing useless delay and expense, and loose, casual, and sometimes nonexistent coordination between commissions and the general program of the executive departments.

To improve regulatory effectiveness the commission relied heavily on its proposal to vest administrative responsibility in the chairmen of commissions and to make commissioners of all agencies removable only for cause. Other proposals included increases in salaries for commissioners and staff members, delegation of minor matters to staff members, and the removal of specified "executive functions" from commissions. In addition, the commission urged that the Bureau of the Budget study ways to promote speedy disposition of regulatory matters. Today most commission chairmen are designated by the president and serve at his pleasure as chairmen and as officers primarily responsible for the administrative work of commissions and for supervision of their staffs. Taken as a whole, the recommendations were very modest compared to those of the Brownlow Committee. The gradual adoption of some of these proposals has produced limited improvements.

The Task Force restated the classic case for the independent commission. The main points are: its capacity for impartiality and the necessity that administrative regulation remain free from partisan politics, the possibility of obtaining better judgment and wisdom from a group than from a single-headed agency; the possibility of achieving a higher level of expertise from commissioners with long overlapping terms; and the desirability of continuity of policy, which an independent allegedly demonstrates better than a single-headed agency.

Perhaps because the scope of the recommendations of the First Hoover Commission was so limited, they attracted little critical comment or evaluation.

THE SECOND HOOVER COMMISSION—1955

The third governmental study was the Report of the Second Hoover Commission, together with the report of its Task Force on Legal Services and Procedure. Placing its emphasis almost entirely on improvement of internal procedures and separation of prosecuting functions from the functions of decision, the commission concluded that "wherever practicable there should be a complete separation of the judicial functions of administrative agencies from their other functions." Apart from its proposals to tighten the application of the Administrative Procedure Act to rule-making processes, the report is interesting because it proposed the creation of an administrative court with three specialized sections for taxes, trade, and labor. The commission's report contains remarkably little analysis and argument, especially since the proposal was not to establish a specialized appellate court to exercise broad powers of review over agency action but rather a court to decide at trial level cases now handled by administrative agencies.

The Task Force indicated that adjudication initially might be handled by an independent executive tribunal wholly separated from investigation and prosecution. Later, adjudication might be removed to a court of special jurisdiction and eventually to a court of general jurisdiction, depending on the stage of development of the regulatory process. Apparently the Task Force conceived of regulatory matters subject to adjudication to be relatively static with respect to policy development. According to the commission, as experience in adjudication evolved and commissions and regulatory policies and objectives "matured," a special court and
Reform of the Regulatory Agencies

later the general courts would be able to handle the adjudication of cases effectively.

In his review of the work of the Second Hoover Commission and its Task Force, Professor Louis L. Jaffe stated, "In their strong drive toward judicialization wherever possible, these reports manifest at a number of points a disregard for discretion as a continuing function of government. Discretion for a day is, as it were, the theme. Discretion will yield its harvest of rules and regulations and can then be put back in the box." 12

Some supporters of the views of the Task Force and the Second Hoover Commission regarded the proposal of an administrative court with skepticism. Professor Charles B. Nutting, for example, while holding most of the Task Force proposals as worthy of cordial support, was dubious about the separability of adjudication from other regulatory function.

If it is true that adjudication generally has no connection with the rest of the program, then it might be wise to establish complete independence. But I am not at all satisfied that this is the case. Adjudication may be so tied up with the whole regulatory process that to separate it would jeopardize the effectiveness of administration. This is particularly true in instances where the possibility of an adjudicative proceeding may produce a compromise of other adjustments satisfactory to the government and the parties. Such a possibility gives the administrative agency a means of carrying out its policies that would not be so clearly available if the adjudicative function were vested in a separate body.13

THE LANDIS REPORT—1960

The fourth governmental study of regulatory commissions is James M. Landis's Report on Regulatory Agencies to the President-Elect.14 It was submitted to President-elect Kennedy prior to his inauguration and was intended to guide the new president in staffing the White House and in making appointments to regulatory commissions. Landis focused attention on "certain fundamental problems" of regulatory commissions, including inordinate delays in the disposition of adjudicatory proceedings, high costs to the individual petitioner and the government, deterioration in the quality of regulatory personnel, unethical uses of ex parte approaches and arguments from the regulated industries, members of Congress, and the White House, weaknesses in regulatory procedures and administrative organization, failure to develop broad policies in areas subject to commission jurisdiction, lack of policy formulation for matters of concern to groups of agencies, and relationships of the agencies to the president and Congress.

While Landis repeated familiar proposals to strengthen the position of commission chairmen and to permit delegation of some decision-making powers to subordinate officials, he broke some new ground in stressing that the prime key to the improvement of the administrative process is the selection of qualified personnel. "Good men," he said, "can make poor laws workable; poor men will wreck havoc with good laws." 15 While salaries of commissioners and staff should be increased, the major attraction of able persons to the commissions is "the challenge inherent in the job." 16 A term of five or seven years for commissioners is too short, Landis asserted, to attract the best candidates and a ten-year term "is not too much to suggest." 17

Landis also proposed to stimulate policy formulation by the commissions and to gear it more effectively to the president by establishing within the Executive Office of the President coordinat­ ing officers for transportation, communications, and energy and an office for the oversight of regulatory agencies to "assist the President in discharging his responsibility of assuring the efficient execution of those laws that these agencies administer." 18 The latter office would prepare reorganization plans for regulatory agencies.

In addition to better personnel and more effective policy formulation under presidential guidance, Landis endeavored to overcome problems of ethical conduct by emphasizing the duty of government employees to reject ex parte presentations in pending matters before them for adjudication on the record. The report continues the long tradition of ignoring regulatory programs administered by departments. Perhaps because of his desire or instructions to avoid any proposal requiring legislation, Landis did not relate problems of regulatory agencies to the character of their legislative mandates, the inadequacies of congressional support, and the lack of effective sanctions for securing compliance with regulations. In his detailed commentary on the Landis report Carl McFarland suggested that the failure of regulatory agencies to formulate broad policies may be only a symptom of more basic deficiencies.19
Finally, the fifth governmental study is the report of the President's Advisory Council on Executive Organization. The starting point of the council's analysis is the ineffectiveness of independent regulatory commissions in responding to economic, technological, structural, and social change. Their failure to respond to current demands "and the unlikelihood of their responding to new ones" is attributed to three factors: "collegial organization, the judicial cast of agency activities, and the misalignment of certain functional responsibilities." Plural-headed administration, according to the Ash Council, leads to indecision and unaccountability, whereas single administrators "will enhance leadership, improve the management of operations, and insure accountability in the regulatory agencies. . . ." More specifically the council claimed that the single administrator would achieve the following results:

- Enable an agency to attract and retain highly qualified executives and staff because of better-defined, singular authority and responsibility;
- Encourage formulation of policy through informal procedures and rulemaking rather than case-by-case adjudication;
- Foster improved policy coordination among the agencies and with executive departments;
- Facilitate more immediate response to the needs of the public and to structural, economic, and technological changes in the regulated industries; and
- Promote more efficient allocations of agency resources by encouraging the use of modern management methods, including greater delegation of authority and more direct staff accountability.

Two exceptions to leadership by a single administrator were made. First, the Federal Communications Commission would continue but with five instead of the present seven members. In such a sensitive area as broadcasting, a single administrator, the council asserted, "could impair public trust." On balance the council concluded that here "more effective administration should give way to the need for broad-based deliberation and a nonpartisan environment."

Second, while the consumer protection functions of the Federal Trade Commission would be transferred to a single-headed Federal Trade Practices Agency, the antitrust activities of the FTC would be transferred to a new Federal Antitrust Board consisting of a chairman and two economic administrators. The chairman would be accountable by statute for direction and operation of the board and be responsible for all executive and administrative duties. One economic administrator would direct a bureau of economic analysis and the other, who would be selected from among the members of the Council of Economic Advisers, would provide economic advice to the chairman. By assigning policy roles only to the two economic administrators and providing for a strong chairman, the council hoped to combine the advantages of the single administrator and the collegial form.

In order to overcome the judicial cast of agency procedures and attitudes and "to assure comprehensive and anticipatory policymaking," the council proposed to limit in time and scope the administrator's review of decisions of hearing examiners. Under this provision the council expected that the agency would place more emphasis on rule making and informal disposition of matters, and initial decisions of examiners would in many cases become final agency decisions. Appeals from decisions of the new agencies for transportation, securities, and power would be heard by an administrative court, while decisions of the antitrust, trade practices, and communications agencies would continue to be reviewed in regular federal courts.

Certain functional responsibilities of commissions would be realigned. The regulatory functions of the ICC, CAB, and FMC would be transferred to a new Transportation Regulatory Agency. The promotional subsidy-granting functions of the CAB would be transferred to the Department of Transportation, and the regulatory responsibilities of the SEC under the Public Utility Holding Company Act would be transferred to the Federal Power Agency.

The overriding concern reflected in the Ash Council report is weakness of a plural-headed organization and the strength of the single administrator form. Its evaluation of organizational structure rests on four criteria, namely, "the effectiveness of policy formulation, the effectiveness of management, the extent to which agencies are accountable to Congress and the President, and the
Reform of the Regulatory Agencies

ability to attract and retain able personnel." Unfortunately its evaluation of the fundamental deficiencies of the collegial form is undocumented. There are only marginal references to the empirical experience of independent commissions and none at all concerning the experience of single-headed agencies in regulatory and nonregulatory programs. Thus, the assertions of commission failure are based mainly on undocumented judgments and on similar assertions made by others over the years.

Because the Ash Council's report highlights some of the persistent themes in the literature of regulatory administration in general and independent commissions in particular, it is appropriate to turn now to trends and problems which it overlooked or understated.

In his 1940 essay on the regulatory process, Fainsod called for a series of intensive case studies of regulatory experience. "The process of regulation," he concluded, "embraces more than the hierarchy of regulatory instruments, more than the pressure of particular interests, more than the institutional environment... its essential nature lies in the interaction among them all." In 1961 Mark Massel stressed the need for further empirical research and analysis to clarify how regulation works and how it fits into the complex of policy goals. In an essay that accompanied Massel's, I too underlined the need for overcoming the critical shortage of empirical studies of regulatory operations, policy issues, and results: "Without the knowledge and stimulation that empirical research might provide, we are likely to remain on dead center in our understanding of the regulatory process and in our prescriptions for reform."

More than a decade later our thinking about the regulatory process and the independent commissions remains impressionistic, and the need for empirical research is largely unfulfilled. As a consequence we fall back on our value preferences concerning the role of government in economic life, on the biases of our professional affiliations, and on assertions by others that support our personal conceptions and conclusions.

The judgments of the Ash Council on the regulatory commissions are marked by exaggerated expectations of structural change, the lack of empirical evidence to support charges of commission failure, and the total absence of analysis of the experience of single-headed regulatory agencies. And they are excessively optimistic about developing the functions of policy formulation and planning in the regulatory process. It must be emphasized, however, that the bibliography listed at the end of the council's report contains many items that reflect similar judgments and analytical deficiencies.

Getting off dead center in our thinking about the regulatory process and in prescribing reforms of administrative regulation may be stimulated by consideration of fundamental aspects of the regulatory process. Modest suggestions along this line may now be in order.

Structure. The literature of government reorganization is dominated by a belief in the universal validity of principles of organization as applied to all departments and agencies. In the preoccupation with structure, similarities of agencies are stressed far more than their differences. Proposals to reform the independent regulatory commissions usually have treated all or most commissions alike, despite significant differences among them in such key areas as the qualifying experience and tenure of commissioners, the political sensitivity of regulatory issues, the economic stakes involved, and the depth of presidential concern. More importantly, virtues and strengths of single-headed as opposed to plural leadership have been claimed without study of the experience of single-headed regulatory programs in executive departments.

The conventional wisdom of reorganization has created an exaggerated set of expectations regarding the performance of single-headed regulatory agencies. While structural change may create some opportunities for a president to intervene in regulatory matters, the time is overdue to recognize that structural change in itself is unlikely to overcome such defects as unsatisfactory presidential appointments of regulatory officials, inadequate staffing of agencies, overjudicialization, and weak responsiveness to technological and economic changes.

Statutory Objectives. In his important essay in 1954 on regulatory agencies, Jaffe concluded that "much of what the agencies do is the expectable consequence of their broad and ill-defined regulatory power. The fault, if fault there be, is at least as much
Reform of the Regulatory Agencies

in the statutory scheme as in the administration.** As Jaffe suggests, "muddy generalities in its statutory mandate may provide a regulatory agency valuable opportunities for policy development in the early stages of a regulatory program, but when the initial regulatory objectives are achieved, "statutory vagueness may no longer yield a sense of mandate."

The need for examination of the statutory framework of regulation is reinforced by recent studies by economists that cast severe doubts on the need to continue present forms of regulation. If, as these economic studies conclude, regulation may produce unfortunate consequences, perhaps we should examine closely the need for continuing regulation of a particular industry or economic process in its existing form.

Leadership and Executive Recruitment. In recent years, greater recognition has been given generally to processes and problems of recruiting political executives. A study of the appointment of assistant secretaries in federal departments in the period 1954-1961 reached the following conclusions:

1) The process is highly decentralized and personalized, revolving around the department head.
2) It is pluralistic, inconsistent, and haphazard.
3) It varies over time in a single administration and from department to department.
4) Appointees tend to mirror the secretary.
5) The president is relatively inactive in the search for second-level executives.
6) The president usually gives wide latitude to department heads in the selection of their top subordinates.
7) Rapid turnover compounds the problems of recruitment.
8) The president played a dominant role in the appointment of only eight out of 108 assistant secretaries; in twenty-four cases, the secretary cooperated with a presidential recruiting team; and in sixty cases, the secretary relied on his own circle of acquaintances, often with little knowledge of departmental operations and needs.

These data raise significant questions about the leadership of regulatory agencies, whether they remain plural-headed or single-headed. The appointment of secretaries and their top political subordinates does not necessarily provide a desirable model for the appointment of heads of regulatory agencies.

Professional Staffing. In his study of federal organization Harold Seidman notes: "Each profession seeks to mold and shape the decision-making process so that issues will be presented and resolved in accordance with its own professional standards." Lawyers have been the dominant professional group in the staffing of independent regulatory commissions, although engineers, economists, and accountants have played significant roles in certain commissions. In regulatory programs in departments and other agencies, the dominant positions in staffing regulatory programs are often held by nonlawyers. In the biologics standards program of the National Institutes of Health, the scientific researcher is the key figure; in the administration of the Perishable Agricultural Commodities Act, specially trained inspectors perform the principal day-to-day tasks; in regulating the exploration for gas and oil on public lands, field geologists of the Geological Survey perform the critical regulatory functions. While considerable impressionistic evidence exists about the effect of professional staffing on the character of agency regulation, we have not made any comparative analysis of the advantages and disadvantages of the characteristic styles of these groups. Since the capacity of an agency to respond to changes in technology, business structure, and public concern appears to be related to the characteristics of its professional personnel, more light must be shed on the professional staffing of regulatory agencies.

Influence of Regulated Groups on Agency Regulation. Perhaps the most familiar charge against independent commissions is that they develop an orientation toward the views and interests of their clientele and become ripe for capture. Controversy about clientelism has centered not on whether the regulated interests exert influence on regulatory policies and decisions but whether independent commissions have less ability than other types of agencies to resist these influences. Jaffe, for example, suggests that industry orientation "is much less a disease of certain administrations than a condition endemic in any agency or set of agencies which seek to perform such a task."

The thinness of our knowledge about the operations of bureaus
in the executive departments has helped to earmark the independent commissions as peculiarly susceptible to the influence of outside interests. Siedman, however, suggests that when "constituencies are narrowly based and united by a common interest in preserving tangible economic privileges granted to them by law, it is the independent agency or the bureau which is most likely to be seized upon as the vehicle for safeguarding and advancing those interests." The influence of constituencies on administrative policies and operations, therefore, is not confined to independent commissions and would not be eliminated by departmentalization or by transformation into a single-headed agency. Whether these influences would be counterbalanced more effectively in a different organizational context depends on a complex of factors that vary from one agency to another and over time in any agency. While organizational form is relevant to an institution's vitality, it is only one among many factors, including goals, ideas, leadership, financing, procedures, and public support.

**Decision-making Processes.** Weakness in planning and policy formulation has been a persistent characteristic of regulation by independent commissions. At least three former commissioners have concluded that regulatory programs cannot be invigorated unless commissioners are freed from case-by-case adjudication. The principal argument against the separation of policy making from adjudication is that policy decisions often cannot be made except in the context of particular cases. As the complexities of a case unfold in an adjudicatory proceeding, issues may become defined, alternatives clarified, and implications analyzed in ways that may not be available in a rule-making proceeding that precedes consideration of particular cases. Generally neither practitioners nor scholars have examined the separability of policy making and case-by-case decision making, nor have they analyzed regulatory statutes in terms of their impact on the feasibility of such separation. In this area, as in most aspects of regulatory administration, a close look at the experience of departmental programs of regulation might illuminate one of the least understood processes of regulation.

For at least three decades, procedural fairness has been the dominant concern of administrative regulation. Ironically, as federal regulatory agencies have modeled their procedures on the practices of courts and have separated internally the functions of prosecuting and deciding more strictly than the Administrative Procedure Act requires, in contrast courts have begun to deviate from conventional judicial procedures. Burdened with greatly increased numbers of cases, they have moved in several fields to develop informal adjudicative procedures in the effort to settle controversies before the trial stage is reached. Increasingly judges are becoming the active and knowledgeable supervisors of efforts by a specialized bar, a small group of expert witnesses, and sometimes a special third party interest to negotiate a settlement. Informal administrative processes are evolving noticeably in personal injury litigation, domestic relations cases, and the plea bargaining process in criminal justice. It seems clear that the courts would be overwhelmed even more than they are now without such developments.

Even though the experience of the courts is still insufficient to evaluate the advantages and disadvantages of informal methods of negotiation, their selective adaptation for use by regulatory agencies is an urgent need. In this general area, the administrative conference has demonstrated leadership, although more needs to be done to make available to all regulatory agencies information about innovations and revised practices that have proved to be useful in a particular agency. The proliferation of federal, state, and local programs of regulation in recent years and the prospect of greatly increased numbers of court cases makes progress in developing improved informal procedures vital to the survival of the regulatory process. Moreover, such progress, however, may be inhibited by further separation of policy making and adjudication.

In new regulatory programs, including those that relate to environmental quality, consumer protection, occupational safety, and cable television, the conventional devices of the public hearing and citizen or special interest advisory committees no longer seem to be adequate for making social choices of great consequence to tens of millions of citizens. Perhaps, as Edwin Haefele of Resources for the Future suggests, the assessment of the public interest by regulatory officials through public hearings or the deliberations of committees representing all interests "from housewives to steel mills" cannot be satisfactory. Such devices do "not aggregate individual preferences correctly into social choices." In the future, decision making by regulatory bodies...
operating in fields that arouse great popular interest may be subject increasingly to attack on the ground that they are nonrepresentative.

**Proliferation of New Regulatory Programs.** In the past few years several new programs of administrative regulation have been established at federal, state, and local levels. In the federal government new functions have been assigned to independent commissions, newly created single-headed agencies, and existing departments. Examples are the control of thermal pollution in the AEC, automobile safety in the Department of Transportation, revised coal mine safety regulation in the Bureau of Mines in the Department of the Interior, expanded regulation of drugs in the Food and Drug Administration in HEW, regulation of cable television in the FCC, and occupational safety in the Department of Labor. In addition, plans are going forward for more comprehensive regulation of hospitals and for regulation of medical devices and hospital equipment. While the jurisdiction of some commissions has been expanded, departments have assumed the lion’s share of new programs.

Several consequences of regulatory proliferation should be noted. Even if regulatory agencies succeed in developing more flexible ways of disposing of their business, the burdens on the courts will mount substantially. The tendency of public advocacy groups to resort more to judicial remedies will only increase the heavy responsibilities of the courts. The emphasis on protecting consumers—from defective automobiles, false claims for products, dangerous and useless drugs, unsatisfactory hospital service, unscrupulous insurance companies, and destruction of the environment—may add substantially to the operating costs of producers. In these vast new programs incentives need to be built into the regulatory framework in order to induce ready compliance with applicable regulations. Thus, the familiar dichotomy of promotion and regulation is likely to inhibit the development of effective regulatory programs. A premium, moreover, is placed on developing effective processes of negotiation to achieve public purposes in a timely way. And the complexities of regulatory programs affecting millions of persons may stimulate the search for ways to mobilize the resources of all levels of government in order to achieve acceptable results in the public interest. The contemporary revolution in the American intergovernmental system can scarcely leave untouched at least some important programs of administrative regulation.

In conclusion, the greatest need in administrative regulation today is to focus attention on strategies of regulation. The primary question that we must try to answer as systematically as possible is this: For a given set of objectives, what combination of statutory provisions; regulatory powers, processes, and techniques; incentives and sanctions; political leadership; and administrative resources is likely to achieve results that approximate the goals of a regulatory program? After nearly a century of regulatory experience in an industrial economy we are unable to identify, on the basis of rigorous analysis rather than impressionistic judgments, the requisites of acceptable administrative performance—given the objectives sought, the mix of parties in interest, the state of technology, the number of firms subject to regulation, the strength of consumer interests, and the degree of danger to individuals. The talent and energy we have devoted to designing regulatory programs to protect the regulated from unfair procedures and to minimize effects adverse to regulated clienteles must now be targeted on the modest problem of designing and improving systems of regulation that have a fighting chance of achieving some useful result.

**NOTES**


16. Ibid.

17. Ibid., p. 68.

18. Ibid., p. 86.


21. Ibid., p. 20.

22. Ibid., p. 21.

23. Ibid.

24. Ibid., p. 117.

25. Ibid., p. 6.


31. Ibid., p. 1106.


Organization Reform of the Regulatory Agencies
And Alternatives to It—A Critique of the Ash Council Report

ANDREW M. ROUSE
Arthur D. Little, Inc.

Introduction

Having never been employed in a regulated industry, I write as an outsider. As a lawyer, I did not practice regulatory law and as a management consultant, I rarely found regulatory problems to be of the essence for my clients. As a government official, I dealt with multiyear resources planning and in that I was not exposed to regulatory issues. Although as executive director of the Ash Council, I exercised supervisory control over that council's study of several regulatory agencies, the study was neither my area of expertise nor indeed a consuming interest. I am, in short, not an expert.

I approach the issue of the reform of the regulatory agencies

The assistance of Robert L. Gill, III, of Arthur D. Little's Washington, D.C., office is gratefully acknowledged.
Reform of the Regulatory Agencies

with limited inputs: the perspective of the Ash Council Report's conclusions, the knowledge gained from my supplemental reading, the dimming memory of my principals' debates as they wrestled with their recommendations, and my subsequent experience in trying to comprehend the responses to the White House request for public comment. It is on that background that I now draw.

Deficiencies and Why They Persist

The defects of the regulatory agencies and their processes have not become apparent just recently. Adverse comment, sounding all too similar a dirge, has been with us for at least thirty years. Summarizing, we have been told that agencies:

- fail to attract and retain highly qualified people;
- fail to efficiently use the resources committed to them;
- are insufficiently accountable to either Congress or the executive;
- become the captive of one or more of the industries which they regulate and conversely fail to represent the public interest;
- are uncoordinated with each other and with the executive branch;
- fail to integrate regulatory policy with national economic policy and goals;
- are dilatory to the point of exhaustion;
- fail to plan adequately in preparing to meet emerging problems and situations;
- use an excessively formal case approach which places restrictions on the available resources for improving administrative regulation procedures;
- stifle industry growth, productivity, and technological advance;
- fail to provide sufficient policy guidance through relatively informal procedures to allow regulated industries to plan adequately.

This list is a mixed bag of defects. Some are primarily defects of process, some of the existence of regulation itself, and others are the habits of long-settled organizations.

Periodic attempts to correct the thirty-year lament on these deficiencies have not stilled criticism of the regulatory agencies; for even though some of the reform proposals have come to fruition, the same deficiencies persist. The Ash proposals are one more attempt added to the now quite imposing list. It seems reasonable to ask why these deficiencies have persisted in the face of the criticism and efforts at reform. I suggest several reasons, and the remainder of this paper concentrates on the one which I believe is at the heart of the matter.

Lack of Evidence

Many commentators, especially in the academic community, have stated that little empirical evidence supports the various alternatives proposed over the years to correct the deficiencies of the agencies. Further, there is little evidence that relates industry problems, such as technological obsolescence, low profitability, and inability to compete, to regulation or its alleged deficiencies. Adherents of this view would assert that the absence of such data makes undertaking the more sweeping of the reform proposals hazardous.

Agency Inertia

The tendency of resting things to remain at rest is more than a law of physics—it is an often-observed phenomenon of organizations. It is not a unique criticism of the regulatory agencies to observe that they conform nicely.

Industry Resistance

Despite frequent company and industry criticism of the agencies, the attempts to alter regulatory procedures, organization, or authority are more often than not strongly resisted by the regulated
industries. Companies have learned, often at some cost, to live and work with agencies and regulation, even to find comfort in such regulation. There are instances of industries (and companies too) which have learned so well the failings of the regulatory agencies that they use some of these very defects to their advantage. There is nothing illegal about this, but it does provide a strong incentive for leaving the agencies alone.

**Congressional Resistance**

While no longer often cited by authorities, in the heat of discussion, the fact that the regulatory agencies carry out functions delegated to them by Congress frequently emerges. It is an impediment to reform not only because it evokes an image of separation of powers but also because many congressmen do, in fact, exercise considerable influence over appointments to commissions, keep informed on actions taken in cases involving constituents, and certainly watch over the regulatory fortunes of industries important to them. With these interests seemingly at stake, suggestions aimed at a redistribution of responsibility for agencies' operations generally evoke congressional displeasure. Thus, Congress too appears to have little incentive to overcome agency deficiencies; in fact it has an incentive to maintain the status quo.

**Protection of Rights**

Finally, there are the rights of individuals which the adversary process and the complex rules and procedures of the agencies are designed to protect. Many of the proposed changes (and this is certainly true of the Ash proposals) tend to aim for greater efficiency in agency process. To many, however, the corollary of this managerial goal is the subordination of individual rights. Even when goals more clearly beneficial to the nation are cited, the specter of lost or diminished individual rights materializes. Concern for such diminution contributes heavily to the intractability of the agency deficiencies and the ephemeral quality of reform movements. This last, I suggest, is the most substantial impediment and, unfortunately, the least amenable to resolution.

With time, will, and changes in political imperatives, industry, agencies, and Congress can be persuaded to accept the kinds of changes which may resolve many agency deficiencies. Moreover, better use of resources, coordination among agencies, more flexible procedures, anticipatory rule making, and avoidance of long delays can, with our present knowledge, be attained within the existing structure of the agencies. What we cannot do is integrate national economic and social goals and policies into the ongoing, primarily adjudicative, process of the regulatory activity. Apart from reasons of style, tradition, and skills, integration of national and regulatory policy runs into the wall of individual rights. And while both are critical, they imply almost irreconcilable modes of operation. It is not surprising then, that the agencies have not evolved a process that would bring about this integration.

Their failure is understandable. Integration is not a statutory requirement, and even if it were, the requirement would have scant effect. More to the point, the protection of the rights and interests of participating parties is a statutory requirement—always subject to the omnipresent consistency with the public interest.

The process of integration implies the consideration of issues not material to the actions which agencies are required to take. The process of reaching decisions on regulatory issues implies a balancing of the views presented by participants in regulatory action. The critical task of the commissions given their existing and necessary process is one which they are inherently unable to do; that is, to give effect to national economic and social consideration while preserving and protecting the rights and interests of the parties to regulatory action.

**National Economic Policy and Individual Rights**

One might envision nonstructural changes which would permit agencies in their deliberations to weigh national considerations along with the rights of parties. One set of changes, for example, might incorporate the following:

**Step 1**—Congress amends the various acts under which the agencies operate to require that agency decisions consider any relevant national, social, and economic policies if consideration is not otherwise required.

**Step 2**—A permanent committee is established consisting of
agency chairmen, the chairman of the CEA, the secretary of the treasury, the director of the OMB, and the secretaries of the interior and transportation, which meets to keep agencies informed, in depth, on national, economic, and social policies. A subcommittee, consisting of agency economists and their counterparts in the executive branch, is created at the same time. Each member and his staff works out national policy guidelines for his agency and these are reviewed and amended within the subcommittee.

Step 3—Each agency, where necessary, adds staff to help keep abreast of both national and industry trends and to make both the information and the national policy guidelines available to the commissions.

Step 4—Parties before commissions aggrieved by the application of some national policy to their case may raise that issue on appeal. Appellate review on this ground would require an amendment to the Administrative Procedures Act.

This list clearly creates a great many problems—not the least of which is that it further obfuscates the goals of regulation already hidden behind such phrases as "public convenience and necessity." However, it is one of many approaches which might be taken to accomplish the desired integration cum protection within the current structure of the regulatory agencies.

But would any such approach work? Is the goal attainable? It is my view that the adjudicative culture of the agencies and that culture required to accomplish the desired integration are difficult to reconcile while regulation is presided over by collegial bodies.

To illustrate my point, I pose two lists which, although vastly oversimplified, describe two different organizational settings. It is highly probable that depending on who you are, one or the other of these quite different lists will elicit a sympathetic nod. Few, I think, will resonate with both. The first list reads as follows:

- Personnel of the organization have a partial view of the operation characterized by fragmented organization, each part of which performs its functions incrementally and sequentially.
- The top management functions are split and often shared with persons outside the organization.
- Autonomy of each part is emphasized, but that autonomy is constrained by organizational fragmentation to the performance of administrative roles.
- Problem-solving techniques stress bargaining, negotiating and collaboration, and adversary process.
- The organization aims to satisfy its participants and constituents.
- The organization tends to react to pressures.
- The personnel complement of the organization is often dominated by one professional discipline.
- Long-range plans are small and little attempt is made to develop strategies for action.

The second list is as follows:

- Personnel tend to have a total view of operations characterized by an integrated organization, each part of which tries to function with the total operation in mind over the long run.
- Management functions are centralized and are infrequently shared with outsiders.
- Interdependence of parts is emphasized and the relatively strict use of management hierarchies permits a wide degree of delegation of operations.
- Rational techniques of problem solving are stressed.
- The organization aims to maximize some output of its effort.
- The organization values logical consistency and plans accordingly.
- The personnel complement of the organization is rarely dominated by a single professional discipline.
- The organization tends to plan ahead and adheres to that plan insularly as possible.

It is important to appreciate that all organizations represent a mix of the two modes. Few, if any, business enterprises or governmental organizations adhere entirely to one mode or the other. However, those who argue that a modern economy requires
that economic policy be made through the articulation of goals and the pursuit of planned strategies which follow from them, tend toward the latter list. The former list appeals to those who argue that economic regulation is best carried out in the context of a specific issue which, as resolved, will have limited future effect. The latter view, if I may dangerously generalize, represents that of managers of many enterprises, increasingly the view of public administrators, and probably the view of many economists. The former view represents that of lawyers and many accountants.

The different way of wanting to approach the formulation of economic policy is at least partially a product of the professional skills which have conditioned the cultures of the regulatory agencies, both executive and independent. And it is also partially a product of the goals sought: optimizing national policy or balancing fairly the positions of individuals in awarding a variety of economic benefits.

How significant a problem is that disparity of view? The National Goals Research Report asserts that despite America's impressive growth and material achievement, her people are now more conscious of the demands being made on their resources and of the scarcity of manpower and tools relative to the many social and private purposes to which these could be put. This consciousness has produced a striving for "balanced growth." Attendant to this process of balanced growth is the choice of the people as to which prospective advantages are to be relinquished to attain new goals and programs regarded as equal in social worth. The report states that: "The search for a policy of balanced growth has major implications for the allocation of economic resources and is crucially dependent upon economic growth... The setting of new goals for the Nation and the establishment of priorities among them are matters of social choice... The key choices are among competing ends. Economic analysis can contribute toward the meeting of these ends once they are chosen, and an economic policy of sustained growth can make it possible for more of these ends to be achieved." To resolve this issue, the Ash Council turned to single administered agencies and an administrative court which in its view would increase the probability of melding the adjudicative approach that now dominates the regulatory process with the planning approach that characterizes more "managed" systems. The Ash Council's view reflects at once:

- a conclusion that broad economic considerations are a necessary part of regulatory action;
- a belief that a bureaucratic process will generate at the staff level the balance of views necessary to insure that both individual rights and national economic consequences are routinely weighed; and
- a conviction that the planning and the case-by-case processes are not mutually exclusive in fact.

At the core of these judgments is the belief that economic regulation is an inseparable part of the governmental process and as a consequence must be integrated with all other aspects of governmental interposition in the economy. Such integration requires at a minimum the existence of overall social and economic goals and policies, the means for communicating these in appropriate forms at all levels of organization, and feedback on performance which permits policy and strategy modification. The accomplishment of these aims involves something more akin to the managerial mode of operation than is the case in the existing regulatory
改革的监管机构

结构。他们会认为，在管理系统的领导权通常在于一个人，而且只有单人领导的运营才能，例如，进行的任何变化，以及与其它机构的协调，才能完成。这些成就将使经济政策一体化成为现实。

对阿什报告的批评

阿什报告有它的反对者。一些人批评报告的根据主要是报告的编制方式。一些人对支持提案的各种论点的有效性表示怀疑；还有一些人认为，监管对经济是不健全的，它应该重新考虑。

对于报告本身，他们认为:
- 它太忽视了公众的利益，而太重视了行业的利益；
- 它没有处理到监管已经变得反竞争的问题；
- 它没有处理到国会和行政的干预，而这与阿什的发现相矛盾，即监管机构对国会和行政的独立性；
- 它没有处理到监管机构的全面范围，包括其它独立的机构，如劳工委员会和那些包含在行政部门之内的机构；
- 报告没有引用政治理论，认为更大的总统权力会使监管机构更关心公众利益；
- 报告没有引用或讨论这些机构的立法，尤其是没有对它们的使命或责任进行任何明确的定义；
- 报告虽然列出了并处理了几个单一管理者的替代方案，却没有处理到几个其他应该考虑的方案；
- 报告完全避免了这样的批评，即监管机构的目的与公共利益相矛盾。这种矛盾的根源是他们认为监管机构的目标是太多的维持现状。

几乎所有人都认为，美国的商业监管是无效的。但在专家之间，对单一监管者的替代方案没有一致的意见。阿什小组考虑了以下几种选择:

1) 保留独立的委员会，但减少委员的数量。较少的委员意味着达成多数的共识会更少，因此会减少延迟和依赖程序和个案的方法。但阿什委员会认为，这还不够；一个委员是理想的数目，而较大的数目意味着会显著降低效率。

2) 将所有行政职能，包括政策制定，置于委员会主席手中，并限制委员会的作用到审查个案。因为主席必须在政策制定上获得委员会的一致意见，以便保证个案决定的连贯性。这个方案没有消除政策制定上的少数意见。似乎没有办法提供一个“未受侵蚀的权威”来管理一个机构。

3) 将行政职能和案例审查放在主席手中，但政策制定留给委员会。阿什委员会认为，这有优点，因为管理员和委员会“对各自最合适的职能”有优点。不幸的是，从实际问题来看，委员会认为案例审查和机构管理（定义优先权和人员分配）不能与政策制定相隔离。有权决定案例的人，最终就是有权决定的人。
to make policy. Giving commissions authority for both policy formulation and case review, but giving the chairman sole responsibility for administration, is probably the only workable arrangement, according to the council. However, this alternative does not go far enough since it retains the long delays in policy formulation.

4) Create a commission to oversee appointees. Because commissioners tend not to be of first-rate quality, at least in the eyes of many observers, a commission could be created to guarantee upgrading the quality of appointments. However, the Ash Council sees this proposal as treating an effect rather than a cause and believes that the job of a commissioner cannot be performed well by anyone as long as there are the present organizational difficulties within the agency and in the entire federal establishment. This reduces the attractiveness of the job to first-rate people. The resulting mixed bag of commissioners and spotty performance of the regulatory agencies would be little affected by the super commission. Presumably, a job rewarding to an able man would end up being filled by an able man.

5) Establish a commission to resolve cases in which agency jurisdictions overlap. The proposal, while improving coordination of policies among agencies, further fragments regulatory responsibility and creates still another source of delay in reaching policy decisions. The Ash Council believes the disadvantages far outweigh the advantages.

Other alternatives that have been suggested over the years include:

1) An executive for regulation. There are several variants of this option; the two best known are those proposed by Rexford Tugwell and Dean Landis. Tugwell's proposal, a national regulator, would require a constitutional change. Landis made a similar proposal to create an office within the executive office of the president to oversee the regulatory agencies. Both proposals go further toward executive control than does the Ash proposal and both appear to do more of what Ash considers necessary. Neither proposal was well received; however, and congressional reaction was especially critical.

2) Legislative reform. The principal advocates of this option have been Judge Henry J. Friendly and Professor Theodore N. Lowi. In their view the clarification of regulatory authority and responsibility through statutory amendment is essential. One currently important variant of this option is the proposal to deregulate some aspects of business where regulation is now held to prevent workable competition. Where deregulation seems beneficial in promoting competition, the revised statutes would so provide, leaving the agencies with the task of consumer protection and the regulation of noncompetitive sectors. Another variant calls for the revision of the Administrative Procedures Act, amending it to eliminate some of its more onerous procedural requirements. The common element in each of these alternatives is the strong belief that the legal philosophy of existing laws impedes effective regulation. It is not organization per se, but the regulatory mandate that is faulty.

3) Presidential oversight. In this option, a new class of presidential orders would be created. Through these orders the president would make general rules and policies for regulation. They would be subject to a time-limited congressional veto. The proponents of this option believe such orders would be used sparingly and that agency independence would be maintained while the failure of agencies to make and integrate policy would be negated by moving the responsibility for these functions to the president's office.

4) Planning. In recent years several key studies, such as the FPC's National Power Survey, have demonstrated that agencies are capable of developing the data on which to base useful changes in regulatory policy. Judge Friendly and others would extend these efforts to require periodic studies of the areas of agency responsibility. In addition, the proponents of this option would require periodic re-examinations by Congress of the laws pertaining to regulation.

Each of these options has merit in relationship to the integration of national economic and social policy with regulatory policy. In one way or another, each contemplates evaluation, modification, and greater presidential involvement—all of which are means toward that end. The Ash proposal may indeed demand more than is necessary to accomplish the needed integration.

**PUBLIC COMMENT**

The experts are not alone in their misgivings about the Ash proposals. After the report was published, the White House solicited...
public comment. Approximately one hundred comments were received, almost one-half from industry or labor associations and a comparable number from private citizens or private companies where the writer expressed a corporate position. The remaining responses were from organized bar groups or nonfederal government bodies such as state public utilities commissions. Of those who commented on the subject, almost 90 percent did not favor the concept of a single administrator for transportation, securities, or power. These comments closely followed the objections of the more expert critics. Many offered views as to how the regulatory process might be improved. Once again, they have a familiar ring. A general summary would be as follows:

1) Improve the internal process of the agencies on an agency-by-agency basis. Most often suggested were to continue strengthening the power of each chairman; increase agency budgets; and increase the extent to which hearing examiners' decisions are considered final.

2) Improve the process by which commissioners and key career people are selected. More presidential attention to these appointments and standards for selection were the suggestions most often mentioned.

3) Re-examine and update the statutes under which the agencies operate. The thought here is that the statutes are not sufficiently clear as to purpose and not applicable in many respects to the conditions of the regulated industries today.

4) Consider the extent to which certain industries can be deregulated. Surface transportation was most often cited as the likely candidate.

Future Directions

In the foregoing discussion much has been said about the Ash proposals, the issues they addressed, and the alternatives to them. What remains is to identify the probable direction of action. There are two broad thrusts now impelling change in the regulatory agencies, one is ideological, the other is social. The latter is probably the more enduring trend.

With the criticism of the agencies a demand has once again been made for deregulation. At least in surface transportation, this seems to be the position of the current administration. Also, the movement toward consumer and environmental protection and real equal opportunity has gained momentum recently. These trends are not wisps; they are grounded in social phenomena that are outgrowths of a widely educated, more affluent, and less easily satisfied populace. Change, never really dormant, has already accelerated with the enactment of environmental legislation and the imminent enactment of new consumer legislation. The direction of change is indicated by these thrusts, but its extent is uncertain. Nevertheless, given our history with change in these agencies, some guesses are not likely to be too far off the mark.

It seems unlikely that deregulation efforts will succeed. Regulation of industry has been with us a long time, and despite criticism, it seems to be approved of by most people. Current political, economic, and social trends do not invalidate the classical bases for regulation; if anything they reinforce them. Over the years regulation has affected the structure of industries, the expectations and skills of management, the nature of the marketplace, and the ability of buyers to make rational choices between competing sellers. Resistance to deregulation both from many industries and from consumers is substantial. Finally, if assertions (or arguments proceeding from logical concepts depending on what side you are on) about the appropriate structural form regulation should take are suspect for lack of empirical evidence to support them, we should keep in mind that the assertions (or theories, or laws, once again depending on what side you are on) of economists are equally suspect. Normally, I would argue that deregulation might be tested to gather evidence on its effects on industry, on agencies, and on the economy in general. I am at a loss, however, to visualize how such a test might be structured so that it would remain truly that. The alternative, limited deregulation, has the defect of relative permanency regardless of its potentially bad effects.

No major structural changes of the Ash variety are likely to occur in the foreseeable future. Not only the absence of evidence to support such changes but the fact that structural change is by definition not enough, strongly militates against sweeping reorganization. What may occur are agency-by-agency re-examinations of internal organization and procedures motivated by the legislative changes cited above and technological, economic, and structural changes in industry. These will be undertaken skeptically
and will conclude cynically, but it is also likely that some formal internal changes will be made. These will not be of the essence because the prerequisites for internal change are unlikely to accompany them. For example, significant changes will not be made in the professional mix within agencies, nor will the procedures be established and skills acquired to implement useful planning or anticipatory rule making. To meet new legislative requirements, agencies may add staffs, but they will not acquire, indeed may not be permitted to acquire, the staffs needed for deep economic analysis, for planning and evaluation of their own performance and that of industry, for comprehension of technological trends in these industries, and for administration of the agency's internal affairs.

The pressure on the agencies will not subside. First, the need for data on agency and industry performance under regulation is both apparent and often cited. As these studies are funded by the agencies themselves, by academic and other institutions, or by groups such as Ralph Nader's, our increased knowledge, and more pertinently the political weight that might result from it, are likely to sustain pressure on the agencies. Also, the agencies have been all but ignored for many years in the internal and resource allocation deliberations of the executive branch. As the need to integrate regulatory and national policy becomes more critical, attention will focus on the function of regulation as practiced by both the independent and the executive regulatory agencies. In the absence of major restructuring, such attention will not succeed in accomplishing the needed integration, but the attempt to do so will most certainly focus added pressure on the agencies.

Finally, the continuing difficulties of segments of several regulated industries will focus criticism, in many cases unjustifiably, on the regulatory agencies. Time, technology, and economic trends have created problems for our railroads, for example, which imporuting the ICC to action will not correct. Nevertheless, these industries will ululate and their cries will not go unheard. I am afraid I have no answer. We are left with the questions. I would only assert that the answer to these questions has implication for the nation well beyond the field of regulation. Reconciling national and individual interests in the social and economic spheres appears to require organizational and procedural tools which, if invented, have not yet achieved acceptance, and institutional and industry incentives which have not yet been incorporated into our political behavior.

NOTES


14. Among the reforms are:
   2. Employment Act of 1946—a thrust of which was the coordination of economic policy of the regulatory commissions with the other executive departments.
   3. Congressional sanction of Reorganization Plan 8, 9, 10, and 13 of 1950 and of Reorganization Plan No. 1 of 1959, requesting presidential power to reorganize the regulatory agencies, and an increase in the power of these chairmen.
   4. Establishment by President Eisenhower of a temporary Administrative Conference of the United States, recalled by President Kennedy and permanently established by President Johnson.
   5. Establishment of a permanent Office of Administrative Procedure in the Justice Department, responsible for regulatory agencies.
17. See, for example, the current discussion of limited deregulation of the transportation agencies, "Transportation—Industry Critical of New Policy," *National Journal* 38 (16 September 1971): 1940–41.
20. To the extent that the Public Interest Foundation has not provided the data base on which to make the decisions, it is up to the individual states to determine the effects of the changes on their regulatory systems.
21. See, for example, Kohlmeier, The *Regulators*, pp. 268–69.
22. Courts have moved in the direction of requiring agencies to consider certain policies—i.e., if they are not otherwise represented. For example, the Calvert Cliffs case (Calvert Cliffs Coordinating Committee et al. v. U.S. Atomic Energy Commission et al.) applies requirements for environmental impact statements to power plant sitings, the High Mountain Sheep Case (358 F. 2d Reversed Subnom., Odall v. Federal Power Commission 387 U.S. 428, 1967) which requires the FPC to represent interests of the general public.
25. The proportionate and specific deficiencies of agencies are resolvable within the context of existing structures requires some exploration if only because the Ash Report places such great emphasis on structural change to correct defects. First, it seems obvious that structural change, by itself, accomplishes very little. Internal management processes, procedures, personnel systems, and internal reorganization are closely related to structure, and changes in them should accompany or shortly follow structural reorganization if the aims of the changes are to be achieved. Statutory goals and policies for regulation require greater clarity of statement than those statements which exist today. In the absence of more clearly defined goals, structural change, which is often a logical tool when management perceive deep policy shifts, seems premature.
26. Second, structural change in a class of government agencies should be approached cautiously and undertaken only if the desired goal seems reasonably attainable and, as important, probably unattainable in any other way.
27. Caution—once again obvious. There are many among the commentators on the Ash proposals who believe that change in organizational structure has been oversold as a reform remedy. (See Thomas, "Politics, Structure, and Personnel") in the Senate of government organization, most recently Harold Seidman, seem to concur. (Harold Seidman, *Politics, Position and Power—the Dynamics of Federal Organization* (New York: Oxford University Press, 1970)). The difficulties as Thomas has suggested are the costs incurred, the consequences of disappointed expectations and the disruption of existing institutions and processes. The need to proceed cautiously is compounded by the absence of much knowledge about achieving results through organizational change generally, and specifically about achieving change in the regulatory agencies.
28. To the lack of a data base on the effects of organizational change and styles of operation on performance makes the potential attainment of the goal of change unknown. And undoubtedly more data would reduce the uncertainty with which we approach these things. But we should be aware that we will never have enough data to satisfy those who oppose such changes. Their objection is not with goal attainability but with the goal itself. In the absence of relevant studies which might help relieve uncertainty, rational rather than empirical judgments must be made. As a consequence, more often than not changes in structure proceed on what many have called "a priori" grounds, which is another way of saying because the decision maker thinks it will help accomplish what he seeks. The criteria of caution and goal attainability imply their opposite—that the goal is not attainable otherwise.
29. Some of the actions (also having a priori justification) which might be taken in the current structural context and which would go, many think, a long way toward correcting the deficiencies of regulation are:
   • To vest all administrative responsibility in the chairman of the commission. (First Hoover Committee and Landis)
   • To grant permission to commissioners to expedite work by delegating decisions of lesser importance to staff. (Kennedy proposal based on recommendations of James M. Landis)
   • To create an executive office with a single administrator responsible for all regulatory policy. ([Landis proposal]
   • To rewrite the legislation establishing regulatory agencies so as to delineate clearly their responsibilities and authorities. (Henry J. Friendly, The Federal
Reform of the Regulatory Agencies


- To require regulatory agencies to make periodic, systematic studies of each of their major responsibilities. (Friendly)
- To evaluate periodically all the laws pertaining to a particular regulatory agency. (Friendly)

27. Promoting economic efficiency encompasses such objectives as promoting competition, keeping prices geared to costs, permitting cost-reducing or service-aiding change, and perfecting consumer knowledge.
29. Senator McClellan.
30. Friendly, Need for Better Definitions of Standard.
34. Ibid., pp. 92–93.
35. A summary of the public comments on the Ash Report relating to single-administered agencies is shown below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Proposal</th>
<th>Single Administrator</th>
<th>Percentage of</th>
<th>Single Administrator</th>
<th>Percentage of</th>
<th>Number of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Total Entries</td>
<td>11.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Trade Associations</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Bar Groups</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Companies</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Personnel</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Non federal Government</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>


Discussion

RICHARD A. ROSAN
Columbia Gas System

I recall the beginnings of the Institute of Public Utilities when Mark Burlingham and Dick Walker formed a group, myself included, to explore the possibilities of starting this type of institute at Michigan State University. Looking at the program and listening to the first two speakers at this conference certainly reinforces my belief in the worth and value of the Institute. Hopefully, it will gain increasing support from industry in order to continue its job and even expand on its efforts toward increasing communication between the academic and business community, as well as to encourage examination of the economic problems of the utilities.

I have little to quarrel with regarding Professor Marver Bernstein's comprehensive and exhaustive paper. His seven suggestions, which he termed modest, are worthy of study. If I were to choose any with which I do not wholly agree, it would be his discussion...
of ex-parte problems, which, of course, is one of the myths I will discuss later. My experience is that the failure to communicate between the industry, or the particular company being regulated, and the agency is contributing greatly to the delay and confusion, in addition to obtaining the wrong results. After finishing five days of hearings before the Federal Power Commission, I consider it one of the most frustrating periods of my life. The reason is that the FPC has established very rigid ex-parte communication rules. You cannot talk to anyone, and they will not talk to anyone.

In my opinion, the result is that the staff flounders in very complex problems. We were engaged in discussing a so-called gas reforming plant, a relatively new process, and they were floundering as to its technical feasibility. Whereas, if we had been able to meet with them to discuss this problem objectively (I am talking about the technical workings of the plant, not whether the economics of it are right or not) we could have saved two or three of those five days. It is unclear whether Professor Bernstein necessarily means that he is against the kind of thing that I am advocating, but this ex-parte discussion, which began with Judge Landis's report, is a greatly overrated problem of true administration in the protection of the public interest.

Andrew M. Rouse's paper is a very comprehensive document which raises several problems. As a practical day-to-day doer, I have difficulty understanding what is meant by integrating economic policy with regulatory policy. If economic policy were to be integrated with regulatory policy, however, we must face the fact that we are talking about a kind of socialism, not a free market economy. Professor Bernstein suggested there should be an exhaustive study made of a feedback of regulatory experience. For example, an interesting study could be made on how the regulatory process works in connection with the natural gas industry.

In 1938 the Natural Gas Act was passed to regulate the movement of gas from the field to the city gate. Gas at the city gate to the consumer had previously been regulated at the state level. Then World War II came and two things were happening: there was a surplus of gas in the Southwest, and it was being flared into the air in connection with oil production. It was a terrific economic waste, but the technology had not yet been developed of moving gas economically long distance to the point of consump-

46

tion to the mass markets of the Northeast, Northcentral, West, or Far West. But at that particular junction, the technology of long distance pipelining made it economical to put this vast reserve of uncommitted gas on the market. It was an economic windfall because gas could be purchased for 5¢ a thousand in the field and moved for maybe 20¢, while at the city gate it was 25¢. The companies in the north, where they were manufacturing gas from oil or coal, were almost being driven out of business because of the increasing cost of such raw materials. An economic phenomenon had occurred in the early 1940s and by 1947-1948, articles appeared in Fortune and other places talking about the "swoosh" of gas. This industry that in 1945 supplied 13 percent of the nation's energy is currently supplying 33 percent of an energy base two to three times higher than in 1940.

The question arises how this came about and why is it continuing? The answer seems to be that regulation of the gas industry has strained to keep the price of that product as low as possible. It was competing with oil and coal, and today, this premium fuel, and there is no question that gas is a premium fuel, is selling at about two-thirds of the price of oil for heating a home. Electric heat costs two and one-half to three times more to heat a home, and yet because of regulation this tremendous shift in the use of energy has been created. This country is faced with a gas deficit of major proportions; so when we talk about economic policy, bear in mind that we have had an economic policy which every administration and every Congress has supported, and it has led to a severe crisis in the case of gas.

In some certificate cases before the FPC in 1950, men in the chemical industry said, "You know putting gas in to heat a house is wasteful when you consider its prime function as a feedstock for fertilizer—its feedstock capabilities for many processes." But these ideas went unheard because of our type of society. It was much more attractive politically to say to every householder in the United States, and there are 40 million of them now, we can give you this gas and it is so cheap.

Therefore, I have problems with the idea of this economic integration. I do not understand how it is going to work unless we are prepared to go to a completely managed society, where not only gas, but coal, oil, and all other forms of energy are managed, and then we go from that step to the industries that
supply the basic equipment to those energy sources because that affects the prices also.

My opinion regarding administrative reform, and Professor Bernstein has touched on it, is that a large part of our problem stems from the fact that any analysis of the administrative process must recognize the total complex of forces that engulf the administrative process in this country. First, I would suggest there is a serious lack of rationality in much of our judicial and governmental activities. Many years ago, my law professor, Thurmond Arnold, wrote a book entitled Symbols of Government. His thesis was that as lawyers we could win any case, no matter what the merits of it were, if we knew which symbols of government, myths, and fictions to put forward and convince people that your cause was wrapped up with that symbol. Some people call it wrapping the American flag around things, but Professor Arnold said there were many symbols other than flags and if you knew how to manipulate these correctly, you can win almost any lawsuit.

One of these fictions that relates to the present subject is that utilities are large, powerful organizations which wield their vast economic power to take advantage of and exploit the consumer; that they use this great power to unduly influence elected officials; and that even members of the administrative body are influenced. We are buying these people—nobody buys these people. We urge as to their ability; I can disagree with them as to their conclusions, but one thing I would defend to the utmost is the integrity of government officials in the regulation of utilities is outstanding as far as I am concerned. I can disagree with them as to their ability; I can disagree with them as to their conclusions, but one thing I would defend to the utmost is the integrity of government officials in the regulation of utilities is outstanding as far as I am concerned. I can disagree with them as to their ability; I can disagree with them as to their conclusions, but one thing I would defend to the utmost is the integrity of government officials in the regulation of utilities is outstanding as far as I am concerned.

Don't think this isn't a myth here today. Simply listen to Senator Metcalf at a hearing on his present Bill S-607. This bill wants another federal agency to be the watchdog of all of the federal and state agencies. Senator Ribicoff is currently having hearings on the Consumer Protection Act. Section 204 of that bill as it passed the House creates an agency which can intervene in every regulatory hearing of a federal agency to represent the consumer.

And, yet, we have agencies such as the FPC whose primary function has been to protect the consumer, not industry. Its function has always been to protect the public interest. Yet, we will create another bureaucracy in Washington, and it will be a tremendous one, that will inject itself into every rate case of the FPC and probably every certificate matter, duplicating in large measure the work that the FPC staff is doing. If the bill is passed, it will compound the delays and the confusion of these regulatory agencies. Senator Ribicoff, of course, will fight for an amendment to the bill which would provide that this agency can go into the proceedings of each state agency. Currently, the bill that has passed the House only relates to going into federal agencies, but Senator Ribicoff and his followers support their position by saying that this federal agency must get into every state to protect the consumer. It is somewhat of a conceit that has grown up in the federal Congress that the only ones who can take care of the people of the United States are those who live in Washington, D.C.

There are many other fictions that affect political and administrative workings. Space limitations prohibit the discussion of them all, but they are there nevertheless. There is one fiction, for example, of the expertise of government bodies. However, no one has been willing in any of these reform movements to say, "Let's take a look at how the civil service works in these agencies." We have heard both Bernstein and Rouse talk about improving the quality of the people in the agency. While the civil service does not apply to these top jobs, it is important, and it is equally important to have a good staff under it. With the exception of a few top jobs most are civil service jobs, and the way in which
the civil service works frustrates the good men that come into
government; they leave their jobs and mediocrity compounds
itself in these staffs. This is not to say that every employee of
the FPC or any other agency is mediocre, there are some very
capable civil servants; there are also a vast number who are not.
They are protected by the civil service system, and the young
men who come in and want to do a job frequently find themselves
so frustrated by this layer of old mediocre civil servants that
they throw up their hands, quit, and get out. Administrative reform
will not begin to touch this problem until some of the root causes
of personnel problems are solved.

It is useless to condemn the FPC, or any other agency, for
the delays and problems if one is not honest enough to say,
“What gave them some of these problems?” In the case of the
FPC, Supreme Court action has done as much to compound the
regulatory problem in Washington today as any other single factor.
In 1954, the Supreme Court legislated an amendment to the Natural
Gas Act so as to have the jurisdiction of the commission relate
to the price at which producers sell gas in the fields. It legislated
an amendment because it is clear upon looking at the act it
was never intended to cover that particular activity, but the Supreme
Court said to the commission, “You have jurisdiction.” This judicial
legislation without the benefit of careful consideration of the
practical difficulties, if not impossibilities, has engulfed the FPC
in an administrative nightmare. The shortage of gas today can
be attributed in large measure to this decision. Seventeen years
after the Phillips decision, there is no satisfactory answer to the
regulation of the producer.

For example, less than a year ago, the commission fixed an
area rate of 32¢ for the Appalachian area. Today, sales not subject
to the FPC jurisdiction, the so-called intrastate sales, are being
made in this area, and it is openly being advertised that large
organizations have publicly posted that they will pay prices of
42¢, 44¢, and 48¢, depending on the volume. Our company, which
happens to be an interstate company, would like to buy this
gas, but obviously cannot compete at 32¢. To compound this
dilemma and show the irrationality of government, the Columbia
Gas System, in order to get additional gas supplies, is proposing
to build a plant in Ohio, to reform liquid feedstock into synthetic
gas, costing $1.11 a thousand. But while it cannot offer 42¢ or
48¢ for the same quality gas in the same area, it will probably
get approval to sell this gas at $1.11. Is there any rationality
in that? Mr. Rouse talks about economic planning, but how can
we get into such a situation of irrationality?

Another example of the problem caused by the Phillips decision
occurred recently. In 1968, the commission began a new rate
area proceedings for southern Louisiana, a most promising and
prolific area of gas production in the United States. There was
wholehearted cooperation from most segments of the natural gas
industry in this proceeding. Only a relatively few parties, not
representing any substantial segment of the public, were in
opposition. Yet the commission’s order on setting prices, based
on a settlement agreement and augmented by hearings to incorpo­
rate certain cost data, was not issued until 16 July 1971, well
over two years later at a time of national crisis. This order has
since been appealed to the courts. At a time when we need
certainty as to what price a producer will get for his gas so
he will go out and drill for it, we are still waiting to find out
what the answer is. We find ourselves with an administrative
process that cannot generate an economic answer in any workable
time frame.

There are other examples of judicial actions by the so-called
activist liberal courts which have deliberately reversed the effect
of the administrative process. The Scenic Hudson case is probably
a classic example. It is not only the delay of ten years in that
case, it is the fact that the court ruled that the FPC must consider
every possible alternative. This imposes a terrific burden on the
FPC. What is meant by “every possible alternative” to building
the pump storage plant on the Hudson River? The results have
been a ten-year delay and a 550-page decision by the examiner,
the second time that case went around, in order to consider all
these possible alternatives.

Finally, the courts pose a real problem to me as a lawyer because
they have limited knowledge and background in the context of
the totality of our highly complex society. To grasp from the
briefs the complete and difficult fabric of a whole industry, such
as the gas industry, to resolve a major issue affecting that industry,
and to do it rationally within the context of this whole framework
is practically impossible. And after listening to some of those
court appeals and reading some of the decisions affecting the
Reform of the Regulatory Agencies

gas industry, one realizes the complexities that we are getting into when these decisions are made by courts with such limited time and information.

Congress is equally to blame for administrative delay as it is also aware of this gas supply situation. The Murphy Bill is presently before Congress in an attempt to modify the regulation of the producer, and to put this in some kind of rational framework. Yet listening to the hearings before the House Subcommittee on that bill is appalling because the whole thrust of the congressmen at that hearing was wrapped up in the fiction mentioned earlier; the myth about big utilities. The congressmen suggested that this bill was a conspiracy to raise prices and gouge the consumer; there was really no shortage of gas in this country, and this is a man-made shortage so as to get higher prices. This is almost inconceivable to me in 1971 when there is hardly a responsible official in the federal government who has not made a speech saying there is an energy crisis. Still we have congressmen dealing with legislation who are not willing to face up to the facts because it is not politically attractive.

Congress has failed to consider fully the problem of administering new laws such as the National Environmental Protection Act. There is no question that we need some kind of protection of our environment, but this act is so structured that it is almost impossible to get anything through the federal government within a reasonable time framework. In fact, there is no location of responsibility. The FPC staff was worried concerning the previously mentioned plant in Ohio—"don't we have to find out whether it's going to effect the environment out there?" In the meantime, of course, Columbia Gas must go through a rezoning case in the area, as well as obtain permission from the Ohio Water Quality Control and the Ohio Air Quality Control to build this plant. The company has gone through all these steps, but now the FPC thinks it must consider these environmental problems also. The FPC cannot grant that approval until they circulate an environmental statement to fifteen other agencies in Washington. Now, the company is in an administrative snarl, and a large part of it stems from the failure of Congress to deal with the realities of the world.

In the case of my company the price of gas at the city gate between 1960 and 1970 went down 1/2 a cent. In terms of the price to the 1.8 million consumers, it went up at the burner tip 13 percent. If you measure this against the cost of living increases between 1960 and 1970, this is one of the most phenomeonal records of price control in keeping prices to the consumer down. Yet in Congress, Senator Ribicoff is presently conducting hearings structured solely on the theory that the consumer of utility services is being overcharged. This is what Senator Metcalf sincerely believes because he takes your earnings and applies it against a 6 percent rate of return in the year you are paying over 8 percent for interest on your money, and says if you are earning over 6 percent, you are gouging the consumer.

Finally, within this whole complex there is the news media, which has quite a bit to do with administrative delay. Jack Anderson wrote five articles several months ago in the papers concerning the area of price proceedings. That article, to be charitable about it, was misleading. His data were completely incorrect. A brief prepared by a member of the FPC staff demonstrated, at least to my satisfaction, that there is hardly a correct statement in those articles. The result was that the next day the FPC was called to explain why they were not protecting the American people. This was the thrust of Anderson's article. Senator Hart threatened to have an investigation until he was shown how false this thing was. The real result of that series of articles is that it has made the FPC absolutely gun shy; they are influenced by that kind of thing. Perhaps it is easy to say they shouldn't be, but they are on the political firing line, and this is why the news media, insofar as they distort and play on these fictions and myths concerning utilities, have a strong impact on the delays in the administrative process. I do not think the question is whether an agency has a single administrator at the top, or a five-man commission, and I do not think any of those things in the Ash Council Report came close to really coming to grips with what is wrong with the administrative process. 

We had better get on with this quickly; we had better find out what has to be done to create some resemblance of logic and rationality in the total process affecting the vital utility functions of this country.

RICHARD A. ROSAN
Discussion

NORMAN D. SCHWARTZ
U.S. Postal Rate Commission

I had not intended to react to our other discussant, but before I begin my comments regarding the papers of Mr. Rouse and Mr. Bernstein, I must discuss at least four areas raised by Mr. Rosen.

The first regards his comments on the civil servant. Let me add that I am not subject to civil service laws; I do not have the protection that civil servants get. While I do not speak from a self-interest point of view, I have spent a considerable number of years in the federal government. I have seen many dedicated civil servants at a time when civil servants were extremely underpaid. I have seen them put in hours of overtime work at a time when there was not pay for overtime. I have seen them approach industry problems with a depth of knowledge that far exceeded those on the other side of the conference table—the industry representatives. I have seen them willing to arrive at
understandings with industry to approach problems in a mutual way. On the other hand, naturally, there are those civil servants, as there are employees in any organization in the United States, that are not up to par. But that is no different when it occurs in a government agency than when it occurs in a business organization.

A recent book, The Peter Principle, applies to these situations in business organizations and governmental agencies. You take a competent professional and because the structure of the business organization or the structure of the governmental agency is such that you can only pay him up to a certain level as long as he is performing his professional job, in order to give him a raise that he deserves, you move him into a job for which he is not competent and there he sits. But that is not limited to government; that applies to business as well. I do not believe that generalized criticism of the civil service or the civil servant will be productive. If improvements are to be made they will come through responsible criticism, not broad generalizations.

The second area is the consumer protection agency. As far as I know, without exception, the federal regulatory commissions have commented favorably on the establishment of a consumer protection agency. They do not view it as an encroachment on their jurisdiction. As a matter of fact, because most agencies are so understaffed, and because they must divide their staffs between those that are separated from the commissioners and those who are able to talk to the commissioners during the decisional process, they really should be developing two separate staffs. Realistically, this cannot be done because of budgetary problems. Here is a bill that would create an agency of government which would provide impartial assistance to a commission from the consumer point of view. Consumers do need protection from government agencies. They do not have the funds of Columbia Gas or AT&T, and they do not have the personnel—the lawyers and witnesses that can appear before governmental agencies and argue their point of view. Previously, the staffs of federal agencies were supposed to do that job; however, they could never do it wholeheartedly because they had another obligation, and that was to produce a full and complete record. They were required to have a balanced judgment because they were to advise commissions with respect to the decision, therefore, they could not take strong adversary positions during the course of hearings. A consumer protection agency would provide a much needed balance in administrative proceedings.

The third area is with respect to the Supreme Court's legislating in the Phillips case. Congress can very easily react to a decision of the Supreme Court which it feels is not in the public interest, and, it has done so very swiftly. Years ago when the Supreme Court came out with its famous portal-to-portal decision under the Fair Labor Standards Act, which would have required industry to pay salaries of employees not from the time they actually started working, but from door-to-door, and industry faced tremendous back-pay assessments which would have bankrupted many large industries in this country, it did not take long for Congress to come up with an exception, and to grandfather in all of the past industry pay practices. They said, "we'll not look backwards, but from here on out its portal-to-portal pay." I once was employed by a very fine man in a governmental agency who, when he first arrived, asked the question, "How many cases are you winning in court?" The answer was, "We win all our cases." "Well," he said, "you're not doing your job. You should be winning only 75 percent of your cases." An agency that wins all its cases has not pushed the law to where it was intended to be pushed. The law must be tested and, in order to test the law and to perform its function, the agency will have to lose some cases. It is the function of the courts to tell an agency when it overstepped its bounds. If the courts are wrong, and courts, even the Supreme Court, can be wrong, Congress can correct it as they have in the past. I do not think criticism of the Supreme Court for "legislating" is helpful, even though it is in current vogue. Congress can correct misinterpretations of the law, and that is where you should direct your attention, Mr. Rosan.

The fourth area is with respect to environmental protection. Mr. Rosan states that Congress does not "deal with the realities of the world that we live in." What are those realities? The reality is that for years business organizations have been telling people about their products in glowing terms. As a matter of fact, many of the products did not deserve that kind of high praise. I am not being critical of business organizations; they have their function, and one of them is to sell their products. It is no secret, however, that with respect to automobiles, defective
ones were being produced in this country, and when the finger was pointed, the automobile companies said, "No, it's just not so." It is no secret that when utilities were criticized for polluting the environment their stock answer was, "No, you just don't have the facts correct." It is no secret now that "the realities of the world that we live in" are that the environment is in danger, and that it does need protection. The statutes referred to by Mr. Rosan may well be an overreaction to the situation. The fact is, however, that there was a necessary reaction, and the process of righting any overreaction set in the moment the statute was passed. I am confident that a rational approach will come out of it, but we cannot get over the central point, and that is that something had to be done to protect our environment.

I had not intended to discuss Mr. Rosan's remarks, but I felt it was necessary.

Both Professor Bernstein and Mr. Rouse did a very admirable job in presenting their positions. I gather from both of their papers that the Ash Council Report is another report that will sit on the shelf and gather dust, and that neither of them expects any concrete results from it.

Before I discuss their papers I would like to point out that in my view, there are three central needs of regulatory agencies, each of which interacts in such a way with the others that they are inseparable. Any federal agency, whether it be at the commissioner level or staff level, requires a core of dedicated public servants of high competence. I cannot help but agree with the quotation from Mr. Landis that "good men can make poor laws workable; poor men will wreak havoc with good laws" and that the major attraction to a governmental agency of competent people "is the challenge inherent in the job." It is a fact of governmental life that when an agency is on the move, so to speak, when it is doing things, new blood flows to it. People coming out of the schools seek this type of agency, whereas they shun an agency that has been doing nothing and that has a poor reputation. It is not always a question of money. Especially today, the young people have ideas different than many of us had when we came out of school. Money is not that important. "What am I doing? That is important. "What is it going to do for society? Is it going to move us further along?" Those are the questions young people ask. The agency that is on the move and doing its job will attract competent people.

The second point is the need for regulatory agencies to have information, not the empirical data on the activities of the agency itself, but information concerning the industries which they regulate, competing industries, and the industries which supply the regulated industries.

The third is with respect to the budgeting process of the regulatory agencies. Somehow a system must be devised to separate the budgeting process from the political process. I will touch on that again a little later.

With respect to the comments made by both Mr. Rouse and Professor Bernstein on the lack of empirical data, there are two aspects to this. One is the statistical data about the functioning of the agency. How many requests for action are filed; how fast do they decide whether to go to a hearing, or not to go to a hearing; how long does the hearing examiner take; and how long does the commission take to decide cases? There are abundant data in this area. As a matter of fact, almost all agencies in their annual reports to Congress overwhelm it with statistics of this sort; it was once called the numbers game.

The second aspect is an empirical evaluation of the statutory goals. I do not now how one can evaluate whether an agency has done its best with respect to statutory goals. It reminds me of the current preoccupation by the economics profession with marginal analysis. Once you have chosen your alternative you cannot go back and assess what would have happened under the other alternatives. It is the same way with a regulatory agency. How can you tell whether they have accomplished their goals? What could they have done differently that would have brought you to a different place? You do not know. I do not think it is beneficial to go back and try to reconstruct. The question is what has to be done now. What is the best way to get the job done? Mr. Rouse gave it away, in my view, when he listed five items: the better uses of resources, coordination among agencies, more flexible procedures, anticipatory rule making, avoidance of long delay; and then said with our present knowledge we can attain these goals within our existing structure of the agencies. Where did he find fault? I honestly do not understand his statements with respect to national economic and social goals. He could not be talking about the statutory goals of the agencies because,
Reform of the Regulatory Agencies

as I will point out shortly, he recommends a statutory amendment to state the national economic and social goals. The fact is that regulatory agencies can and do react. We have just had a new economic policy announced. At least three regulatory agencies reacted with a suspension of rate increases. How much faster would you want a reaction? The problem may be that the national goals have not been stated. One of our national goals is with respect to racial discrimination. Historically, this has not been an area for regulatory agencies, and there has been no national purpose with respect to racial discrimination. The National Labor Relations Board now considers racial discrimination when it goes into its cases with respect to unfair labor practices. The Federal Communications Commission has a complaint against American Telephone & Telegraph Company with the Office of Economic Opportunity as a participant, and is investigating the charge of racial discrimination in hiring practices. The FCC, with respect to its licensing of television, has taken this into consideration when a licensee comes up for license renewal. In the past, the only other such national goal that has been urged on federal regulatory agencies is the Full Employment Act, and I personally puzzled over this problem in one of the cases on which I was working. I came to the conclusion that it was not the responsibility of the regulatory agencies to enter into this area. In fact, an attempt to do so might thwart an overriding national purpose in this area, and until some governmental organization with a broader economic perspective specifically set out what goal a regulatory agency should have with respect to full employment in the industry which it was regulating, I felt that the agency should keep out of this particular area. Recently, environmental policy has been placed on the agenda and is a consideration in agency proceedings.

Now these are the areas where today we have an overriding economic and social purpose. If that is not what Mr. Rouse was referring to, I have no idea what he has in mind. He then recommends four things; I am not sure whether it was really a recommendation or a diversion. First, amend the statutes of the regulatory agencies to state the economic and social goals. I have no problem with that. If Congress wants regulatory agencies to take certain goals into account, it should put them in the statutes, and say "We want you to consider this the next time
Reform of the Regulatory Agencies

more knowledgeable on the subject than I, have apparently come to the conclusion that the recommendations will not be adopted. But let me discuss it in any event.

Mr. Rouse sets up a dichotomy with respect to the role of an agency. That dichotomy is: Should the agency establish broad policy guidelines to optimize national economic goals and other national interests (I take it this is accomplished through the rule making process), or should they be restricted to adjudicating on a case-by-case basis? I see no dichotomy here. A federal regulatory agency cannot do its job unless it does both. When most of the regulatory agencies were established, this country was in chaotic condition. These agencies came out of the depression era. Before they even were established, they were overwhelmed by serious economic problems. They were not broad policy problems. Individuals had problems, companies had problems, and the agencies had to resolve cases as they arose. This led to the case-by-case approach to finding solutions. By the end of the depression, we were in the middle of a war. There were different types of problems, but the agency role was not the broad policy role at that point in time. There were special wartime agencies of government which handled these problems. So, again, they kept on with the case-by-case approach. I see something different happening now. I am most familiar, of course, with the Federal Communications Commission. For several years the FCC has been taking a different approach. It has been approaching problems in a broad general way. My first brush with a broad approach to regulation of industry by the FCC was in a domestic telegraph industry investigation. It was not a case to decide whether to increase rates: it was a legislative type proceeding, much broader than what most people think of as a rule making proceeding. It was an investigation into the industry to get essential facts. Now different people will argue with the results of that investigation, but the FCC approached the industry in a broad way, and it did not restrict the inquiry to the telegraph industry. Out of that investigation came the first study of AT&T's total cost of service, broken down service-by-service. When the results became known, and there were indications of an anticompetitive effect on the telegraph industry, the FCC launched the first full-scale investigation of AT&T.

Well in advance of any problem confronting the industry, the FCC investigated the relationship between computers and communications. This was the result of a small case that came to the commission—a charge by a company that AT&T and Western Union were violating their tariffs. It could have gone through the normal case-by-case process to an ultimate decision, but that is not what happened. The problem was resolved informally. Immediately work was begun on a rule making inquiry into the relationship between computers and communications. This was a different approach, designed to establish broad policy guidelines well in advance of any overriding chaotic condition with respect to the impact of computers on communications.

One of the speakers said that CATV had been assigned to the FCC recently. Not so. CATV is a relatively new industry. It did not require a statutory amendment to direct the commission to look into CATV and its effect on broadcasting and on common carriers. The commission, on its own, under the statute passed in 1934, instituted its inquiry. The FCC took the broad overall approach to the problem and it came up with a set of rules which was to govern the industry as it grows. This same method has been used with respect to radio broadcast and TV station concentration.

The FCC established a five-man committee to review the procedures of the commission. I was privileged to serve on it until I left the agency. Sound proposals were emerging from this work.

The Federal Power Commission has deviated from the case-by-case approach. One step away was the Permian Basin Case. The FPC considered a geographical area, rather than an individual company, and established price guidelines for the area after a hearing.

The FPC has gone farther than that in the Appalachian area rate case. In that case, a rule making procedure was used. The proposed order and staff study supporting the order was announced and interested persons responded in writing. No hearings were held; the final order was based on the written presentations.

With respect to each of these matters, broad policy guidelines were set. The implementation and enforcement must take place in a case-by-case basis. Both functions are required and I see no reason to divide the expertise into two separate staffs when one can work as well.

With respect to deregulation, Mr. Rouse makes it an all or
Reform of the Regulatory Agencies

none choice. I do not think that is required. When the Federal Communications Commission granted a license for the first time to a new common carrier which would be in competition to the existing common carriers, that is, for a radio facility between Chicago and St. Louis, the FCC was flooded with over 1,700 applications by new entrants because they saw an opening to compete with AT&T. If the agency had to decide the merits of 1,700 applications on a case-by-case basis, it would have been overwhelmed. Instead, it started an inquiry into the entire specialized common carrier area which led to a policy statement that concluded that competition to existing carriers was in the public interest, and that in any licensing case that fact would be assumed. That policy determination is going to save a tremendous amount of case load at the FCC.

In sum, each agency must begin to redefine its goals, and it must set a list of priorities to accomplish these goals. It must create a balanced staff, that is, professionally; it has to have the right mix of professional capability. It must review and recommend different approaches to budgeting so as to be independent of the political process. The FCC, I understand, last year raised sufficient funds to cover its entire budget by charging fees for licenses. The money went into the treasury and was not applied to the agency's budget, however. Also, several state agencies received their budget by a percentage charge against the gross earnings of the entities they regulate. As the regulated entity grows, so does the agency. Reorganization should be approached on an agency by agency basis. To me, this whole idea of single administrator or multiheaded commission misses the point. I am in favor of reorganization because it can accomplish one thing. It can move people around, and sometimes people must be moved around in order to accomplish goals. In the final analysis, if it is determined that in a particular agency this is what is needed, then I am all for some sort of reorganization.

II. The State Commissions and the NARUC
Introduction

FRANCIS X. WELCH
Public Utilities Fortnightly

Regulation of public utilities in the United States has been so continually criticized since its very beginning that a casual observer might well wonder why we have not abolished it long ago and tried something else. Indeed, this has often been suggested. Instead, however, in the course of time we have consistently, if grudgingly, expanded and strengthened it as an institution. The answer to this paradox is, as Winston Churchill once said of democracy, with all its faults it still seems so much better than any of its alternatives that we just go on living with it and trying to improve it.

And we must concede that if the proof of the pudding were in the eating, we have not done too badly. Everyone is familiar with the oft-cited statistics that with only one-sixth of the world population and only one-seventh of the land area, we in the United States have nearly one-half of the telephones in the world,
over one-third of the electric generation, most of the gas pipeline mileage, and so on. But whether this is so because of institutional regulation, or in spite of it, is a hard question. It is one of those questions which by its very hypothetical nature cannot be conclusively answered. We will probably never know, or at least be sure of the answers, because there are no real hard fact alternatives by which to test it. It is like the henpecked husband who was asked how his wife was. He replied with another question, "Compared to what?"

This much we do know, however, and this can be used as a pragmatic basis or a point of departure for our critical discussion of public utility regulation. One, the American people, on the whole, seem content to have most of their utility services operated by private enterprise instead of the government operation which prevails so widely throughout the rest of the world. Two, at the same time, there is a firm consensus that, as long as these vital and essential services are operated as private business, there must be some form of government control. The American public will not permit, for very long at least, their utilities to be operated entirely without regulation.

So, this brings us to a somewhat narrower field of discussion, on which I expect that our speakers this afternoon will mainly dwell. In other words, the problem before us seems to be whether public utility regulation as presently practiced is as effective as it could be and, if not, what is wrong and how can it be improved. We must bear in mind, of course, that regulation is an evolutionary thing; something that must, if it is to do its job, change as constantly as the public utility industries it is supposed to regulate. And we all know how profound those changes have been just within the past decade.

Take the utility rate case, for example. For many years, essentially all that was required in a typical rate case was proof of the amount of the rate base and some determination of the amount of return allowed on that base. True, those two components alone were troublesome enough, involving as they did the various proofs of value, depreciation, comparative earnings, risk, and all the rest. But at least the regulators could stay on a fairly well-defined course and come to a clear-cut conclusion without too many distractions.

Today, see what a rate case involves: service problems, all the varieties of environmental and pollution problems, including the aesthetic, research and development, the energy crisis and multiple problems of fuel supply, minority employment, rate concessions for the old, the young, and the socially disadvantaged. These are not fanciful considerations; they arise everyday. Also, it used to be that a regulatory commission could confine its consideration and conclusions to the circumstances involving the particular public utility appearing before it. Today, as Treasury Secretary Connally recently reminded us, we live in an era of parameters and projections and economic stabilization involving the entire national economy. Even after a commission's regulatory determinations have been made for the particular company in a particular case, a whole new tier of comparative standards as to general earnings and prices and freezes and thaws may have to be taken into account. The once relatively simple rate case proceedings, based on fair return on fair value, seem to be turning into something more resembling a three-ring circus.

Since regulation appears to be more in need of headlights than taillights at this point, hopefully our speakers and especially our discussants this afternoon will look into some of these future problems as well as to past shortcomings. We certainly do not lack evidence that the traditional concepts of regulation are changing. In the telephone and other communication utilities, for example, competition rather than monopoly seems to be the new guiding principle. And this is coming to pass under the very auspices of regulation by the Federal Communications Commission. Regulation wears many faces these days, even deregulation and antitrust enforcement must be viewed as forms and phases of the regulatory process.
The Effectiveness of State Commission Regulation

CHARLES F. PHILLIPS, JR.
Washington and Lee University

The task of a utility regulator is one which requires the wisdom of Solomon, the patience of Job, the determination of a bulldog and the hide of a rhinoceros. JAMES A. LUNDY

Criticism of commission regulation is not new, although the emphasis of critics has changed over the years. The late 1920s and early 1930s, notes Francis Welch, represented a period in which the "storm and controversy tested the strength and stability of commission regulation as an institution. It survived because after each storm there was an evaluation of arguments and the adoption of reforms as needed. Invariably such reforms had the ultimate effect of strengthening the commissions, both state and federal." 1

The more recent controversy surrounding regulation has centered on the effectiveness of the regulatory process. 2 In general, criticism
The State Commissions and the NARUC

has been directed in three basic areas: (1) that the regulatory commissions lack the necessary resources to undertake a continuous and vigorous regulatory program; (2) that regulation results in a misallocation of resources; and (3) that regulation is no longer necessary. It is the purpose of this paper to review the literature in each of these three areas, as it relates to the state commissions; to make an evaluation of the effectiveness of state commission regulation; and to recommend several reforms for the future.

The Literature

In recent years there has been a significant revival of interest in public utility economics. Of particular importance has been the use of quantitative techniques in both research and regulatory proceedings. As a background, therefore, it may be useful to briefly summarize recent studies.

Resources

Martin G. Glaeser has argued that to achieve success in public utility regulation, there are three essentials: "adequate powers, adequate personnel, and an adequate purse." Of the three, "the most important one . . . is adequate financial support."

Powers. The state regulatory commissions generally operate under a broad grant of power from their respective legislative bodies. Their specific regulatory powers are not uniform. A majority have authority to issue licenses, franchises, or permits for the initiation of service, for construction or abandonment of facilities, and related matters. With respect to rates, state commissions generally have power to require prior authorization of rate changes, to suspend proposed rate changes, to prescribe interim rates, and to initiate rate investigations. Most state commissions have authority to control the quantity and quality of service, to prescribe uniform systems of accounts, to prescribe depreciation methods and rates, and to require annual reports. Over three-fourths of the commissions are authorized to regulate the issuance of securities and approximately one-half have authority over competitive bidding on security issues.

Most observers agree that these powers are sufficient to undertake the regulatory task. A few believe, however, that state statutes should be revised. After a review of state commission regulation, John Bauer concludes: "Every state system of regulation is outdated. It is too indefinite as to objectives, standards, and procedures. It is not well-suited either for the conservation and promotion of the public interest in the great public services entrusted to private organization, or for clear and consistent protection of the private interests. For the purpose of statutory revision, every state should conduct a comprehensive inquiry as to conditions and needs." It is Bauer's contention that while the state commissions may have adequate powers, they are under no statutory compulsion "to make regulation precise and effective."

Commissioners. The majority of the state commissions have three or five commissioners, but three agencies are composed of one commissioner and two states have seven-member commissions. Commissioners are appointed in thirty-four states and are elected by popular vote in fourteen states or by the legislature in two states. The most common legal qualifications are that commissioners must be qualified electors, citizens, and residents without financial interests in the industries they regulate. Other qualifications vary considerably. Thus, seventeen states have a minimum age requirement; three states require "competent persons"; one state requires "maturity"; and one state requires by law that one of the seven members "shall be a woman."

Most state commissioners have had professional training and practice or a business background. Only a few, however, have had previous experience with a regulatory commission prior to their appointment. Their understanding of the complex legal, economic, accounting, and engineering problems confronting them as commissioners increases with their tenure of service. The terms of commissioners fixed by law run from two years to indefinite appointments, with six-year terms being the most common. While some commissioners are re-appointed or re-elected, most of them serve a single term or less. Moreover, commissioners are sometimes appointed because of political considerations rather than their qualifications for the job. Yet, as Francis Welch has observed, "many of our most competent and dedicated regulators have come from a background of public life flavored by party politics."

State commission staffs, varying in size from three to 795, totaled...
5,889 full-time and 65 part-time employees at the end of 1967. According to a Senate subcommittee report, about half of the commissions had two or fewer attorneys, three or fewer engineers; three or fewer accountants; and two or fewer rate analysts. Four state commissions had no engineers; six had no rate analysts; seven had no accountants; eight had no full-time attorneys; and twenty-six had no security analysts. Only five commissions had economists on their staffs. Except for the larger commissions, therefore, many feel that both the size and the composition of the professional staffs are inadequate to undertake an extensive regulatory program, particularly during a period when rate cases are being filed at a rapid rate. The end result, of course, is either ineffective regulation or significant regulatory lag.

Financial Support. In 1970, twenty-four states (including the District of Columbia) paid their commissioners $20,000 or more. The median salary for full-time commissioners was $18,000. Although staff salaries varied widely, except for a few key positions, a majority of professional personnel were paid under $12,000 a year. These staff salaries often make it difficult for the state commissions to attract and retain trained people. As a consequence, the annual turnover in commission staffs has been quite high. Total expenditures of the state commissions (again including the District of Columbia) were nearly $65 million in fiscal 1967. But of this amount, about three-fourths was spent by seventeen agencies, leaving an average of approximately $403,000 for each of the remaining commissions. Limited financial resources, some maintain, inhibit effective state regulation.

MISALLOCATION OF RESOURCES

The allocation of scarce resources lies at the heart of economic analysis. Recent criticism has indicated that regulation results in a misallocation of resources by promoting the inefficient use of capital and by distorting the price mechanism.

Inefficient Use of Capital. The studies of Harvey Averch and Leland Johnson as well as Stanislaw Wellisz maintain that regulation has a tendency to result in overinvestment, or excessive rate base expansion, so that the general level of utility rates is higher than would be the case if returns were held in cost-of-capital levels. In the words of Averch and Johnson: "If the rate of return allowed by the regulatory agency is greater than the cost of capital but less than the rate of return that would be enjoyed by the firm were it free to maximize profit without regulatory constraint, then the firm will substitute capital for the other factor of production and operate at an output where cost is not minimized." The A-J (or A-J-W) effect has been the subject of considerable debate on both the theoretical and concrete levels. First, are the assumptions valid? (1) Do regulated firms earn rates of return that are in excess of cost-of-capital levels? If, for example, the incentive for rate base expansion is so strong, utilities could be expected to take advantage of the opportunity to undertake more rapid investment in underground transmission and distribution facilities and in air and water pollution control equipment. The fact that they have not taken full advantage of these opportunities suggests that there is a shortage of capital, that regulatory lag offsets the potential adverse effects, or that utilities are not earning returns in excess of cost-of-capital levels. (2) Do regulated firms seek to maximize total profits or do they seek other objectives, such as to maximize sales or output? Elizabeth Bailey and John Malone, for example, have concluded that a regulated firm, subject to a regulatory constraint of a fair rate of return on invested capital, has an incentive to overcapitalize if the firm seeks to maximize profits, but has an incentive to undercapitalize if the firm attempts to maximize sales or output.

Second, are there offsets to the negative aspects of the A-J effect? Sidney Weintraub noted that the Averch-Johnson analysis, on grounds of efficient resource allocation, "must be correct. . . . But do we want merely to improve resource allocation, or do we intend to advance production techniques? . . . The very incentives to use 'excess' equipment, which Averch and Johnson deplore, may well be forces of some importance in enhancing productivity in the public utility sector and the economy generally. . . . Some allocative inefficiency may be a cost of technological externalities." And Alfred Kahn has concluded that the A-J effect "could have its good side, as an offset to the restrictive influence of monopoly on output-expanding investment. The presence of unexploited monopoly power and the prospect of being permitted to exploit it more fully in the event risky
The State Commissions and the NARUC

investments do not pay out could also encourage expenditures on research and development that sluggish monopolists might not otherwise trouble to make." 25

Third, if the A-J effect does lead to overinvestment, how serious is the social loss? William Baumol and Alvin Klevorick have concluded that the effect on public welfare due to the misallocation of capital is probably not significant; "firms may have neither the extensive information nor the refined decision processes necessary to lead unerringly to the A-J input distortions." 26

Distortion of the Price Mechanism. A number of studies indicate that regulation has failed to encourage efficient pricing practices. Most of these studies have involved federal, rather than state, regulatory decisions, but they are appropriate to cite to the extent that state commissions tend to follow the criteria employed by the federal agencies.

The basic conflict in recent years has centered on the relevant costs for ratemaking purposes; specifically, fully allocated costs versus long-run incremental costs. For many years, fully allocated (or fully distributed) costs have been used to set the floor below which rates should not fall. But as competitive forces throughout the regulated sector have been strengthened, increased attention has been directed toward long-run incremental costs. In 1966 the Council of Economic Advisers said: "For maximum economic efficiency, rates should be related to costs, but not to an arbitrary allocation of costs. . . . 'Cost-oriented rates' in the true economic sense are related to the economist's concept of marginal cost—the increase in total expense as a result of carrying additional ton-miles of traffic. In order to ensure efficiency, marginal, rather than average, cost should be the principal regulatory criterion in applications for rate reductions. . . . [W]here competition and new technology dictate rate reductions, competitive rates could be lowered to the level of marginal cost." 27

In the Ingot Molds case, the railroads proposed a reduction in a joint all-rail rate from $11.86 to $5.11 per ton; a reduction that would have resulted in the loss of business from competing barges and trucks. 28 There was substantial agreement that the fully distributed and long-run marginal costs for the railroads were approximately $7.59 and $4.69 per ton, respectively, compared to the barge-truck service cost of $5.19 per ton (for both cost figures). The Interstate Commerce Commission refused to permit the reduction: "by reducing its rate below the level of the barge-truck full costs, the respondent railroads have impinged unlawfully upon the ability of the barge-truck mode competitively to assert its inherent cost advantage." 29 The end result is the preservation of a fair share of the business for the competing modes by maintaining unnecessarily high rates. 30

The pricing problem is not solely related to minimum rates. In a study of telephone regulation in Michigan, Emery Troxel expressed concern over the lack of attention to spatial differentiation of urban telephone prices:

"Only time can tell how much the Commission may try to tie urban telephone prices to increasing-cost relations in telephone-service supply. But not much change in this direction is to be expected right now, since regulators are biased against raising any prices, including relative prices to suburban users. Moreover, the regulators show a general inclination to equalize prices within a community group of consumers. Judged by their past treatment of pricing problems, they do not have much interest in constructing a systematic economic solution of price differences relative to cost differences. They still may surprise us some day with a study of urban telephone prices but, if they ever intend to follow up such questions, a good deal of groundwork will be needed in the form of studies of cost behavior and buyer demands." 31

The Necessity of Regulation

Richard Posner has concluded that "public utility regulation is probably not a useful exertion of governmental powers; that its benefits cannot be shown to outweigh its costs; and that even in markets where efficiency dictates monopoly we might do better to allow natural economic forces to determine business conduct and performance subject only to the constraints of antitrust policy." 32

Posner's contention that the costs of regulation outweigh the benefits has been supported by several cost-benefit studies, primarily dealing with federal regulation. To illustrate, Ann Friedlaender estimated that

the direct benefits to the users of transport services from a rationalization of the rate structure would probably be on the order of $500 million a year. Since the rate structure affects pricing relation-
The State Commissions and the NARUC

ships throughout the economy, its rationalization would generate benefits considerably in excess of this figure. Unfortunately, the benefits from increased innovation and technical change cannot be quantified; nor can the benefits from increased capacity utilization. Nevertheless, these benefits may well be greater than those arising from a rationalization of the rate structure. Thus $500 million must represent a minimum estimate of the social costs of the current regulatory policies. While unquantifiable, the total costs must be far in excess of this figure.  

Paul MacAvoy, in a study of the Federal Power Commission, concluded that the costs of natural gas field price regulation substantially exceeded the benefits and that the commission could reduce its operation to one-fifth of its present scale "by centering its factual inquiry on determining the competitiveness of markets and then approving all competitive market prices." 34 James Sloss has estimated that on the basis of an extension of his analysis of the Canadian for-hire motor truck industry, regulation of domestic motor freight charges may cost consumers $300 million per year in increased rates. 35 William Jordan, in a study comparing the performance of regulated airlines with those of nonregulated airlines (such as those airlines operating wholly within California), found that while "the certificated trunk carriers generally offered a higher quality of service," Civil Aeronautics Board regulation has effectively limited entry, promoted mergers and price discrimination, and authorized coach fares "substantially higher than the fare levels for comparable service within California." 36 At the same time, Boyd Nelson has calculated that the benefit-cost ratio for FCC common carrier regulation is 2.2, so that "the communications users are not doing too badly as far as federal regulation is concerned." 37 Yet, while cost-benefit analysis is undoubtedly an important tool, some feel that it is difficult, if not impossible, to measure the significant costs and benefits of regulation. Boyd Nelson, for example, can hardly claim that all reductions in long-distance communications rates between 1950 and 1970 were due solely to the FCC. 38 Moreover, Fred Westfield has recently concluded that "total dollar figures are unnecessary, beside the point, or worse. The real-world choices are generally not between regulation and no regulation, but between various methods of regulation and degrees of regulation. They are between alternative means of achieving objectives or marginal changes in objectives. Research on how alternative methods and degrees of regulation influence behavior of regulated industries and the economy, and on how they effect income distribution, can provide critical information for the public policy choices to be made." 39  

Posner's contention that regulation should be abandoned in the public utility sector rests upon the conviction that: "The benefits of regulation are dubious, not only because the evils of natural monopoly are exaggerated but also because the effectiveness of regulation in controlling them is highly questionable." 40 Three studies of state commission regulation of electric utilities lend some support to the ineffectiveness thesis, although a fourth study is at odds with the thesis. George Stigler and Claire Friedland have concluded that, at least through 1937, state regulatory commissions appeared to have no measurable effect on the average level of electric utility rates. 41 Raymond Jackson has concluded that while regulation "did not succeed in reducing residential rates in 1940 and 1950," it was "significant in 1960 .... The evidence also suggests that commercial and industrial users have been the main beneficiaries of state regulation." 42 John Pike, in a study of residential electric rates, has concluded that the regulatory treatment, as measured by the method of valuation of the rate base and by the rate of return variable, "has no appreciable effect on the final bill to the small residential consumer of electric power." 43 Regulation, he contends, "does not appear to be a significant factor influencing rates." 44 Thomas Moore, also in a study seeking to measure the effectiveness of regulation in reducing electric rates to residential users, has concluded that "we can safely say that it appears that regulation has not reduced prices more than 5 percent and probably less than that. Note that without regulation the firm would face competition from neighboring firms which might encroach on its territory. To the extent that this type of competition is possible, any removal of regulation would increase the elasticity of demand faced by a single firm above the elasticity for the market and so lead to lower prices." 45

An Evaluation

What can be said about the overall effectiveness of state commission regulation? Clearly the evidence is not conclusive. A majority
of the studies summarized above reached negative conclusions about regulation, that is, excessive rate base expansion, costs exceeding benefits, inability to control rates. And yet, few will deny that public utilities have achieved most of the benefits claimed for competition. Thus, the growth of public utilities in the postwar period has far exceeded that of unregulated industries; the productivity of public utilities during the last decade has increased faster than for any other industrial sector; and public utility rates have risen far less than prices generally throughout the economy. Moreover, the rate of return earned by public utilities has been considerably below that earned by other industries, while the public utility sector has accounted for a significant percentage of the nation's capital formation. The performance of public utilities, in short, is not so negative.

But have these results been achieved because of or in spite of regulation? Expert opinion differs as to the answer. During the postwar period, up until 1968, the price level was not rising at an accelerating annual rate, technology was changing rapidly, and demand was growing at a phenomenal pace. The public utility sector enjoyed all of the benefits of technological change and economies of scale. Under such conditions, rate decreases were common and rigorous rate of return determination was not undertaken by the regulatory commissions. Utility earnings, that is, may have been higher than the commissions would have permitted in rate increase decisions and thereby provided a positive incentive. Raymond Jackson argues: "Due to the nature of the regulatory process, commissions may be effective in refusing to increase rates, or granting only partial rate increases but ineffective in reducing rates further than the utilities desire when their price levels are falling due to technological advances or economies of scale." Regardless of one's opinion, we do know that the state (and federal) commissions have done an effective enough job to maintain private ownership, with certain exceptions, of the public utility industries.

It is when looking into the foreseeable future that several reforms seem desirable. The conditions under which the public utility industries must operate have changed. Inflation has proceeded at a rapid rate in the past three years and, even if President Nixon's recent actions to stabilize the economy are successful, the outlook is for a continued rate of inflation of between 2 and 3 percent. Environmental protection has resulted in higher costs; costs which seem certain to accelerate in the future. Technological advances and economies of scale, while still of significance, have been swamped by rising operating and capital costs. As a result, utilities have been forced to seek continuous rate relief. The consumerism movement has meant greater scrutiny of the utilities' efficiency of operations and has further compounded the difficulty of passing on cost increases. Rate proceedings have been prolonged as the commissions, especially at the state level, have allowed individuals and groups to intervene, often without legal counsel. And the growth of competitive pressures has forced utilities to re-evaluate their existing rate structures and has raised antitrust issues. If the state commissions are to meet the challenges of the future, improvements must be made in at least four areas.

1) The most obvious need is that the staffs and budgets of many of the state commissions must be increased. The commissions must also be adequately staffed with personnel from various disciplines. For example, the use of econometric models in regulatory proceedings is relatively new and to date has largely been confined to presentations before federal commissions. These commissions have economists on their staffs. As these models are introduced before the state commissions, a staff economist would be a valuable asset. Most of the state commissions, moreover, have little or no expertise in other areas of urgent concern, such as environmental planning.

In this respect, recent changes by the New York Public Service Commission are of interest. During 1970, the commission made a "major re-orientation in the focus of public utility regulation in New York State." For the first time, its attention was "centered on the basic long-range problems of utility supply," rather than on its traditional adjudicatory functions. To achieve this objective, the commission recruited systems planning specialists in all of its utility divisions and established an Office of Environmental Planning, staffed by professionals in such areas as landscape architecture, land use planning, water quality management, and radiation biology, among others.

2) Serious consideration must be given to the establishment of regional, as opposed to state, commissions. Many utilities are already multistate firms. Given limited staffs and budgets, the time and expense of duplicate investigative work by commission
The State Commissions and the NARUC

staffs, plus the necessity of presenting the same testimony before two or more commissions, seems unnecessary. Serious allocation problems could be avoided and a multistate utility could be treated as an entity rather than piecemeal.

Moreover, many of the newer problems confronting the utility industries, particularly the electric power industry, are regional in scope. Pooling and interconnections will increasingly make generation and transportation a regional matter, along with site selection.

The exact method of establishing regional commissions is admittedly complex. The scope of utility operations varies from one firm to another, and from one type of utility to another. Perhaps, as a starting point, regional commissions could be established as needed, comprised of two commissioners from each of the relevant states, with staff work also carried out on a sharing basis.

3) There must be a re-evaluation of traditional regulatory concepts, to be certain that those in use are up to date. Environmental protection provides one example. The state commissions are likely to face the necessity of granting rate relief due to the higher costs resulting from environmental protection for many years. Since such expenditures are nonrevenue producing, in that they cannot increase a utility’s revenues, the commissions might well give some weight to scheduled costs of environmental protection by reflecting all measurable expenditures for a period of three years, say, in current rate levels. Regional regulatory commissions, further, might be charged with the responsibility of stockpiling sites within their respective regions. Perhaps they should even buy these sites, thereby having them available for the utilities when they are needed. The important point is that the utilities must be relieved of the need to fight for sites and that a way must be found to break the present log jam.

Inflation provides a second example. Even if the rate of inflation is cut to between 2 and 3 percent, machinery must be developed to allow rate increases to be granted more rapidly. Several possibilities seem practical. Commissions should be granted the right to give at least part of a proposed rate increase (subject to refund provisions) before they hold hearings, if the request seems reasonable. (Many commissions already have this authority.)

Commission need to drop the “test year” approach and to substitute estimates for two or three years ahead. With both operating and capital costs rising, such an approach is necessary if utilities are to earn the rates of return found reasonable by the commissions. Finally, rate relief could be granted more rapidly if regional commissions were established, thereby making it unnecessary for a multistate utility to seek relief in two or more jurisdictions.

4) There is a need to continue the effort to develop methods and criteria for evaluating the performance of the regulatory process. The relevant question is whether regulation makes a difference in the behavior of an industry. The studies cited earlier indicate that regulation may produce negative results. In all honesty, I disagree, but admit that my disagreement stems from past experience of serving several utilities as a consultant and not from empirical studies. Both the rate level and the rate of return have been kept below what they would have been in the absence of regulation. The pattern of discrimination is also much different than it would have been if utilities were free to adopt their own rate structures. But how does one determine statistically what might have happened under different circumstances?

Despite recent attempts, we have only begun to scratch the surface. Further, in future research, emphasis must be placed upon dynamic performance rather than upon static criteria emphasizing efficiency. We must recognize that distortions occur in the real world and must set forth the explicit objectives of regulation. If regulation is to continue to serve as an adequate substitute for competition, positive incentives must be provided to increase productivity and encourage technological advance.

NOTES

2. Criticism also has centered on procedural problems, for example, regulatory delay, cumbersome procedures, and confusion resulting from inside and outside pressures. See James M. Landis, “Report on Regulatory Agencies to the President-Elect” (Washington, D.C.: U.S. Government Printing Office, 1960).
4. Ibid.
5. All data in this paragraph are from Federal Power Commission, “Federal


8. All data in this section are based on a questionnaire by the author to the state commissions.


10. These states are Alabama, New Hampshire, and Oregon.

11. Arizona requires a majority.

12. Massachusetts requires a majority and two-thirds.


38. "Consider the dramatic technological progress and progressive achievement of apparently immense economies of scale in long-distance communications that have, even during a period of inflation, made possible rate reductions which Nelson credits to regulation; and inflation itself, which has required increases in local telephone rates during the same period-increases that, by Nelson's calculus, would all have to be chalked up as demonstrating that consumers would be better off, dollar for dollar, had there been no regulation." Alfred E. Kahn, "Discussion," American Economic Review 61 (Papers and Proceedings, May 1971): 235.


44. Ibid., 52.


47. Productivity per unit of input has increased 7 percent annually for gas utilities, 6.5 percent for electric, and 6.3 percent for communications. See Clogg Almon, Jr., The American Economy to 1975-An Interindustry Forecast (New York: Harper & Row Publishers, 1966).


53. An alternative suggested to the author would be for the commissions of contiguous states to reach reciprocal arrangements when multistate utilities are involved. Under such arrangements, the commissions would "divide-up" multistate firms on the basis of where most of their operations are conducted.

The lineage of the National Association of Regulatory Utility Commissioners dates from 1889, when the then newly formed Interstate Commerce Commission invited state railroad commissioners to meet with it for the purpose of considering "subjects of common interest" in railway regulation. During the decade of the 1890s this activity was continued on an annual basis under the designation of the National Convention of Railroad Commissioners. As the decade wore on, the ICC’s initial pre-eminence in the convention declined, and the group began to evolve toward what constitutes its present general nature—a instrument for collective or cooperative action by state commissions. In 1901 the convention adopted a constitution and elected to title itself the National Association of Railway Commissioners. The relatively swift and widespread extension of state regulation to firms supplying energy and communications services, which began in the
period 1907–1910, caused the association to add the words "and Utilities" to its title in 1918. Another change came in 1923, when "Railway" became "Railroad." The association's name assumed its present form in 1967.

Formal Objectives and Operational Structure

The NARUC occupies a unique position amid regulation's institutional infrastructure. With a membership encompassing six federal regulatory and administrative bodies and fifty-eight commissions in each of the states, the District of Columbia, the Virgin Islands, and Puerto Rico, it may be characterized as an agency of agencies, constitutionally obligated to inspire and channel the efforts of its membership toward the following basic objectives:

The advancement of commission regulation through the study and discussion of subjects appertaining to the operation and supervision of railroads, other carriers and public utilities (using the term "carriers" and "public utilities" in the broadest sense),

the promotion of uniformity of regulation applicable thereto promulgated by the several commissions,

the promotion of coordinated action by the commissions of the several States... in the protection of common interests of the people of said states, relating to railroads, other carriers, and public utilities,

and the promotion of cooperation of the commissions of the several States with each other, and with federal regulatory agencies represented in this Association.

The NARUC's formally established modus operandi for pursuing these objectives consists of the following principal elements:

1) A president, first vice president, second vice president, and an executive committee.

2) The NARUC Washington office, led by the administrative director and general counsel and a secretary-treasurer and assistant general counsel. These executives seek to facilitate intercommission communication and cooperation, provide NARUC members with a continuum of information on legislation, litigation, and other matters pertinent to regulation, and, upon request, serve as advisers to both the association's member commissions and the various NARUC committees. The administrative director and general counsel, accompanied in some instances by commissioners and professional staff personnel of state commissions, represent the NARUC's interests in proceedings pending before the courts, the federal Congress, and federal regulatory agencies.

3) Committees and subcommittees, both standing and special, which perform studies of, and, in some instances, actively seek solutions to, regulatory problems. Findings and activities of these groups are published in reports delivered to the membership at the association's annual conventions. Recommendations produced by such committees are advisory to, rather than binding upon, the association's membership. Similar work is performed by two groups which are sponsored by the NARUC and composed of personnel drawn from NARUC member commissions, namely, the Conference of State Commission Transportation Specialists, and the Conference of State Utility Commission Engineers.

Taken at face, the NARUC's officially stated objectives and procedures portray an image of dedication to the exertion of positive influence upon regulation. A moment of reflection upon this, however, and the student of regulation's appetite for investigation is whetted: with the tide of adverse criticism toward commission regulation at what must indeed be an all-time peak, what role has the NARUC played in countering the plethora of deficiencies that have been ascribed to commission regulation? Or, could it be that the NARUC has related neutrally and/or negatively toward one or more aspects of regulatory performance?

It should be emphasized that at this point we are only acknowledging that individual NARUC policies and actions might, depending upon the presence or absence of various determining conditions, be either positive, neutral, or negative in terms of their intrinsic quality and/or impact upon regulatory performance. In the paragraphs that follow, evidence of the actual nature of these policies and actions will be reviewed, for this paper is a preview of results which the author has obtained to date in a partially completed larger study of the NARUC's past and prospective role as an auxiliary to regulatory agencies.

A second clarifying note is also in order; namely, that criticisms advanced at various points in the paper should not be construed as manifestations of an intrinsic hostility toward either the NARUC or the institution of commission regulation. To the contrary, the ultimate fundamental objective of this paper, and of the larger study upon which it is based, is a search for constructive criticism.
Despite an acute awareness of much faith-testing evidence, the author still holds to the conviction that commission regulation is, in principle, superior to the alternatives that have been alleged to represent preferable means for achieving socially acceptable performance in public utilities.

Before launching upon the preview, it would be appropriate to set forth methods and criteria employed in the study, and to describe the general lines upon which it has been conducted. The NARUC's level of performance, that is, whether and to what degree it has responded to public interest needs in regulation, obviously cannot be ascertained with quantitative precision. Rather, evidence pertaining to it must be discerned and assessed qualitatively via inspection of what the NARUC has and has not done in responding to problems and in anticipating changing conditions both internal and external but related to regulatory agencies and regulated industries. Accordingly, leading sources from which evidence has been sought include (1) committee reports, resolutions, and the various other types of material found in the proceedings of NARUC annual conventions; (2) NARUC-sponsored publications on various subjects; and (3) other activities carried on under the NARUC's aegis, such as testimony given before congressional groups concerned with regulation-related legislation.

This paper tends to focus primarily on NARUC events within approximately the last two decades which have pertained most directly to contemporary and possible future conditions in economic (as distinguished from safety) regulation. However, material from earlier decades of the NARUC's existence has been utilized where relevant.

Criteria which, a priori, appear meaningful for ascertaining the extent to which the NARUC has approached its objectives and thus served the public interest are:

1) The degree of perspective and penetration evinced by NARUC-sponsored analyses of, and prescriptions for overcoming and fulfilling, respectively, regulatory problems and requirements;
2) The extent to which courses of action prescribed by the NARUC coincide with what can be defined as (a) the regulatory needs of the public considered as a whole, rather than (b) the interest objectives of particular geographic regions, consuming or investing groups, and/or governmental officials and organizations in the legislative, executive, and/or regulatory categories;
3) The timeliness with which the NARUC has responded to problems which appear deserving of its scrutiny; and
4) The relative significance of topics or problems which have and have not received attention from the NARUC.

At first consideration, it appeared most logical to use these criteria as an outline around which examples of conforming and/or nonconforming NARUC policies, actions, omissions, and attributes could be arranged. Some experimentation with this organizational approach, however, indicated that the purposes of exposition would be best served, albeit perhaps at greater length, by presenting such examples as they have related, and relate, to each element of the following outline—concomitant, of course, with the maintenance of implicit if not explicitly specified links or references to the criteria:

I. Transportation regulation
II. Determinants of, and means for controlling, economic performance in energy and communications utilities
III. Determinants of commission performance:
   A. Personnel
   B. Budgetary adequacy
   C. Jurisdictional powers
IV. Conclusions and recommendations

The NARUC and Transport

In his presidential address before the 79th NARUC Annual Convention on 30 October 1967, Commissioner Frederick N. Allen (then chairman of the Maine Public Utilities Commission) charged, in effect, that the NARUC had accomplished little on matters concerning transportation regulation. The characteristics of NARUC efforts which have been directed toward the economic regulation of transport appear to confirm the general tenor of former Commissioner Allen's criticisms; they have occasioned virtually no discernable contributions to the performance of transport, and most of them, although not necessarily totally lacking in merit, exhibit one or more of the following basic deficiencies:

1) Ill-designed and executed attempts to analyze the economic content of topics selected for attention.
2) Attempts to probe problems without sufficient resources, for
example, requisite analytical personnel.

3) The selection and pursuit of topics which, while relevant to the NARUC membership's informational needs, are treated with equal or greater effectiveness by non-NARUC sources.

4) Inattention to problems which bear with immediate and fundamental importance upon various facets of transport's economic control at the state level.

Let us now examine several specimens of NARUC activities which manifest these shortcomings and which, in some instances, also exhibit virtuous qualities.

AN EFFORT TO COPE WITH THE RAILWAY PASSENGER SERVICE PROBLEM

In 1949 the NARUC attempted, with comparative foresight, to engage in a cooperative venture with representatives of the Interstate Commerce Commission, the railway operating unions, and the Association of American Railroads for the purpose of diagnosing and seeking remedies to alleviate the now well-known railway passenger service problem. Both the ICC and the unions declined to participate. Undaunted, the NARUC committee charged with the task attempted to proceed alone. It prepared a series of reports, delivered at each of the NARUC's annual conventions between 1950 and 1958.

The reports treated, with varying degrees of penetration, numerous points germane to the economic viability of passenger train service. Among the topics taken up were railway labor work rules and compensation methods, railway managerial policies and practices, regulatory policies, and the provision and use of relevant cost data to state commissions for the purpose of judging the financial performance of passenger service.

A key basic deficiency of the study series stemmed from the committee's failure to rigorously consider the question of what the optimum potential role of railway passenger service might be vis-à-vis the capabilities of other modes of passenger transport. The committee also virtually ignored the implications posed by local, state, and federal governmental decisions to provide facilities used by, and subsidize the operating losses of, other forms of passenger transport without attempting to comprehensively define and plan each mode's optimum role.

What the NARUC conceived as an instrument for directly achieving constructive change was thus relegated to the role of an information source. But, the possibility that this source might have occasioned benefit as a means for aiding individual state commissions in formulating policies toward passenger service regulation was largely foreclosed by passage of the Transportation Act of 1958, which, in effect, vested substantially all control over rail passenger services in the ICC.13 Ironically, the ICC itself did not attempt to undertake a relatively comprehensive investigation of the passenger problem until 1957,14 eight years after it had rejected the NARUC's proposal to both study the problem and attempt to take direct action in alleviating it. Although largely bereft of achievement, the NARUC could at least claim credit for its prescient initiative in this matter.

QUEST FOR A SOLUTION TO RAILWAY LABOR PROBLEMS

Apparently influenced by the labor-related problems which it had encountered while probing the passenger service question, and the controversy which erupted in 1959 when railway management launched its now well-known campaign to alter operating employees' work rules and eliminate so-called featherbedding, the NARUC's Committee on Railroad Problems perceived "the study and evaluation" of railway labor problems "by an impartial and cooperative group" to be "in the public interest." The committee therefore resolved to "investigate possible methods and procedures by which such an impartial study and evaluation may be had, to seek in such investigation the cooperation of railroad management and labor and to take such other steps as may in the Committee's judgment be calculated to reach a solution of these problems."15

But, the committee's efforts to pursue this goal, although well-intended, were naive in their design and barren of accomplishment, as the following excerpt from the committee's report to the 1960 NARUC Annual Convention reveals. The committee arranged a meeting with representatives of railway operating unions and management for the purpose of studying railroad operating rules and to determine the existence of and cost of unneeded or unproductive personnel in both labor and management.
The Stale Commissions and the NARUC jurisdictions and to report back to the parties and to the public and to this Association, hoping it might be useful. . . . but, despite earlier seemingly favorable reactions, we were shocked to find that neither party was ready to go forward. Both stated that they were irrevocably committed to the processing of the negotiations under the Railway Labor Act, and they felt any undertaking (of) a study with our group might in some way prejudice their relief under those negotiations. . . . It was very surprising that the two parties would engage in the public, name-calling spree which filled the newspapers and trade magazines for many months and then decline to resolve those controversies in the impartial forum offered by our proposed Committee investigation. 17

Confronted by this outcome, the committee terminated its scrutiny of the labor problem. The committee's chairman, reflecting on his group's failure while addressing a subsequent NARUC convention, made the following statement: "It didn't seem that the Committee was in a position to have any beneficial influence in that (i.e., the labor) sphere. Many of our members felt that it was a legislative matter that we should not get into." 18

Some measure and type of continued attention to the problems of railway labor in particular and transport labor in general, however, could have been justified, given the significance of labor as a resource input in transport and hence, its crucial role as a determinant of transport's economic performance. The committee therefore might well have been on more defensible grounds had it shifted its approach to an effort to identify and propagate knowledge of means whereby NARUC members, acting individually in the exercise of their jurisdictional powers and responsibilities, could conceivably spark efforts to increase labor-use efficiency in transport. Indeed, NARUC members were exposed to at least one scintilla of effort in this direction when Commissioner Edward R. Thornton of the New Hampshire Public Utilities Commission described his agency's efforts to influence crew consist size on services rendered within its jurisdiction by self-propelled passenger train equipment. 20

REVIEW OF NATIONAL TRANSPORTATION POLICY STUDIES In 1961 following the abandonment of its unsuccessful effort to contribute toward the amelioration of railway labor problems, the Committee on Railroad Problems set for itself the task of "exhaustively" reviewing the plethora of studies on transportation policy problems which had appeared since the early 1950s. 21 The committee sought to extract [from the studies] the varying views on the major aspects of the transportation problems, to sift from those varying views the most practicable and effective ideas and suggestions which are in harmony with the philosophy of our Association and to present to the membership a comprehensive analysis of all of the different views on the direct problems of the railroads, as well as on the problems of other modes of transportation the suggested solutions of which would have an effect on the operations of the railroads. The Committee is confident that it can complete this task in time to present a comprehensive report next year. 22 The committee's expectations greatly exceeded its performance in the pursuit of this task. The committee found itself unable to draw upon "the facilities of the already overworked staffs of the member Commissions" for the purpose of surveying and assessing the reports. It therefore "called upon its Industry Cooperating Panel for manpower assistance." 23 The Industry Cooperating Panel responded by suggesting that the Transportation Association of America be invited to perform the work envisaged by the committee. The invitation was subsequently extended and accepted, and staff personnel of the Transportation Association prepared concise, lucid summaries of reports issued by nine study groups on various so-called problem areas in transportation. 24 Neither the Transportation Association's personnel nor the NARUC Committee and its Industry Cooperating Panel attempted to evaluate any segment of these summaries.

It must be acknowledged that the Transportation Association-prepared summary contained in the committee's 1963 Annual Report provided the NARUC membership with a convenient albeit highly abridged reference source to selected portions of several noteworthy inquiries into contemporary transport conditions. But, one cannot leave the committee's report without reflecting on the implication raised by the fact that the Committee on Railroad Problems attempted to rely substantially upon representatives of regulated firms for the development of policy-oriented memoranda, and with the intention of using such memoranda to inform the NARUC membership. While this course of action did not, in the
instance cited, actually produce deleterious bias, the fact remains
that such a practice, in principle, patently contravenes regulation's
integrity. Consultations with regulated entities for the purpose
of obtaining required data and information are obviously defensible
(assuming proper evaluation of the information and data so
obtained), but regulatory personnel who seek to provide the whole
of their reports through industry cooperating panels, official or
otherwise, patently tread upon an untenable path.

CONDUIT FOR INFORMATION

Seemingly reeling from its second failure in attempting to treat
a relatively significant problem affecting the economic performance
of transport, the Committee on Railroad Problems reverted during
the mid-1960s, the final years of its existence, to a role which
its own chairman later characterized as "a mere keeper of statis­
tics." The committee's 1964, 1965, and 1967 reports consisted
of summary descriptive reviews of railway industry developments
in such topical areas as financial performance, operating problems,
competition, regulation, mergers, and safety. Unfortunately, these
reviews, with the possible exception of a section on developments
in the regulation of station agency abandonments and consoli­
dations by state commissions, presented no information of signifi­
cance which could not have been obtained on a more timely
and complete basis from other widely available sources (for
example, the Interstate Commerce Commission and various journals
carrying news of the regulated industries and regulatory agencies).

SEEKING MEANS FOR ALLEVIATING CAR SHORTAGES

The perennial subject of railway freight car shortages became
a subject for specific attention by the NARUC in 1955 when
the association's Executive Committee established a subcommittee
charged with providing recommendations for overcoming the
alleged problem. For more than a decade the subcommittee treated
NARUC annual conventions to reports containing selected data
and information concerning freight car ownership and usage, and
various suggestions for alleviating the car shortages which the
subcommittee perceived to exist.
commissions" and was created by the NARUC in 1958 "for the purpose of the promotion in the public interest, of effective and fair regulation of the rates, services, operations and practices of the various modes of transportation under the jurisdiction of the State Commissions." The NCSTS's actions have been directed primarily toward the improvement of various procedures at the applied level of regulation.

For example, in 1958, the conference initiated efforts to achieve uniformity in certain information and reporting procedures and devices used by state commissions in their exercise of authority over selected phases of interstate motor carriage. Conference members produced "model form" recommendations for these procedures and devices in 1959, but concern was expressed at the 1963 NARUC convention over "the relatively limited response of the states" in implementing the NCSTS's recommendations. This condition led to the enactment, as a result of efforts by various NARUC representatives, of an amendment to the Interstate Commerce Act providing (1) that the NARUC develop standards for these procedures and devices; (2) that the ICC "promulgate such standards into law"; and (3) that all states comply within five years with the standards thus developed and promulgated. This item of legislation thus placed state commissions in the position of having to comply by terms of federal law with a transport regulatory standard developed by the state commissions' own association—standards which the state commissions had theretofore been free to either adopt or ignore and which most had elected to ignore.

In another project, the NCSTS sought to simplify railway reporting requirements for the purpose of reducing companies' compliance costs without inhibiting the supply of information required for effective regulation. Approximately thirty-nine states indicated a willingness to adopt the NCSTS's proposals for such simplifications; some commissions claimed that the proposals served as a stimulus to evaluation of the whole of their existing reporting requirements.

In an effort to increase compliance with motor carrier entry controls (such as, the types of commodities and geographic points of service specified in certificates of operating authority), the NCSTS took steps to organize the holding of road checks on a regular basis by state commissions. Participation in the program grew from eighteen commissions in 1960 to forty-one in 1963.

Another NCSTS effort to increase the effectiveness with which existing regulatory statutes are applied was manifested in 1967, when, through efforts of the Conference's Enforcement Committee, a program of regional seminars for motor transport enforcement personnel of state commissions was initiated. The committee sought and obtained substantial assistance from the ICC in both launching and sustaining the operation of this venture.

NCSTS efforts in other directions have proved less fruitful. An attempt to develop separations procedures for intrastate costs of motor carriers with multistate systems was terminated with the explanation that circumstances differed too much between states to permit the development of a valid (that is, one capable of yielding meaningful results in all states) uniform motor carrier cost separations manual. An effort to seek uniform state air transport regulatory requirements concluded with the verdict that wide disparities between the characteristics of air transport services in individual states coupled with continuing and difficult-to-fore­cast changes in these characteristics precluded the immediate specification of uniform requirements. A framework for reciprocity agreements on bus safety standards was advanced, but its acceptance on a widespread basis was not indicated in subsequent NCSTS reports. Finally, a uniform procedure for the filing of bus schedule data, presented to the NARUC membership by the NCSTS in 1967, cannot yet be fully evaluated; a clear measure of its acceptance by state commissions remains to be taken.

NARUC Policy Expressions on Federal Transport Legislation

Between 1957 and 1967 NARUC representatives presented their association's views on transport-related federal legislation to congressional committees and subcommittees by means of approximately twenty-five personally delivered submissions and filed statements. Diversity marked the contents of much of this testimony; the particular position which recurred most frequently in these individual testimonies concerned the preservation and/or restoration of state commissions' jurisdiction (vis-à-vis federal regulatory authority) over various facets of transport. The relative importance of this legislation, viewed in terms of its potential impact on
transport's economic performance, ranged from moderate to insignificant with the exception of the Transportation Act of 1958 and several never-enacted measures introduced during the early 1960s for the purpose of curtailing ICC control over intermodal price competition in freight transport. The NARUC's influence on virtually all of this legislation could scarcely have been characterized as crucial, given the well-known predominance of shipper and carrier groups in determining the content and ultimate fate of measures affecting their interests.

Omissions

Absent from the annals of recent NARUC activity are penetrating treatments of a number of sometimes intensely debated questions which, axiomatically, rank among those of highest immediate importance to the economic regulation of transport at the state (and, in many instances, the federal) level. These issues include, inter alia, the following:

1) Whether existing policies and practices toward intrastate motor carrier route certification tend to inhibit the efficiency of transport resource usage and/or conflict in economically indefensible ways with shippers' motor freight service requirements.

2) Whether existing reporting systems provide commissions with data which are truly reflective of the economic performance of motor carriers, particularly those in the lower size ranges which often are members of interlocked, closely held corporate groups containing noncarrier corporate entities which lease rolling stock and/or land and terminal facilities to the motor carrier entity-member (or members) of the group.

3) Whether the application of a single operating ratio standard over a wide range of carriers (which very probably evince wide disparities in operating performance) within a given region is an appropriate means for achieving proper relationships between motor carrier rates, motor carrier costs (such as, the efficiency with which motor carrier firms are operated or managed), and shippers' service requirements, in the decision of general rate level cases.

4) Whether it would be feasible and desirable to coordinate intrastate motor carrier certification policies with the route and

pavement load capacity decisions of state highway administrators and legislative groups.

5) Determination of the extent to which the economic control of transport by a state commission can and should be synchronized with attempts by newly formed state departments of transportation to plan for, and work toward, greater degrees of coordination between the various transport media; and, related to this, exploration of the question of whether the public's transport needs could be most effectively served by the transfer of all state transport regulatory responsibilities to the administrative department responsible for state transport investment programs (a state department of transportation), or maintenance of currently prevailing (except for New York State) jurisdictional divisions.

The suggestion of these and other topics that could be listed poses the question of whether the NARUC can (given the availability of, and alternative demands upon, requisite analytical resources) and should (whether it might be best situated vis-à-vis another problem-solving group for achieving the adoption of recommended policy changes) attempt to sponsor and/or directly conduct studies of them. Some evidence relating to this question has already been seen, and further evidence and discussion pertaining to it will occur in subsequent sections of the paper.

Determinants and Means of Controlling Economic Performance in Energy, Communications, and Water Utilities

Let us now review examples of the NARUC's treatment of rates, accounting, finance, and similar subjects relating directly to determination of the economic performance of energy, communications, and other nontransport utilities.

Rate Theory and Practice and Allied Subjects

Numerous public utility pricing and pricing-related subjects of basic importance are potentially deserving of the NARUC's attention. They include, inter alia, the following:

1) state commissions' and utilities' policies toward rate structures and the effects thereof;

2) price-earnings control methods designed to provide greater incentive for efficient performance by utility firms;
3) price and volume-of-service consequences of the supply of gas and electricity by so-called combination companies;
4) the nature and consequences of price and nonprice competition between various types of utilities;
5) the effects which alternative methods for financing utility firms might have on utilities' revenue requirements; and
6) the economics of bulk power supply, including analyses of conditions that have prevailed in the negotiation of interconnection tariffs within the investor-owned sector of the electricity industry, within sectors of the industry under other forms of ownership, and between entities of disparate ownership. Related to this is the question of whether additions to generating and transmission facilities by systems of differing ownership presently are being planned and executed in a manner which results in service unreliability and/or unnecessary duplication of capacity and, if so, what legislative and administrative actions might be initiated to bring about more rational investment patterns.

Despite their crucial nature, these and similar topics have not been meaningfully scrutinized by the NARUC. The association's Committee on Rates of Public Utilities, which was terminated in 1967 as part of an extensive committee structure change, appeared, on the basis of its title relative to those of other then existent committees, to be most appropriately situated for treating such subjects. Instead, the committee, from the mid-1950s through the end of its existence, issued reports consisting largely of material classifiable under the following categories:

1) surveys of developments in the general level of economic activity; selected sectors of the economy; and markets for equity and debt capital and shorter term funds, accompanied by relatively brief commentaries on links between these developments and the financial performance and requirements of utility firms;
2) synopses of recent rate-related actions by state commissions and the courts, namely, summaries of changes in rates, reviews of commission and court treatments of rates of return and rate base components;
3) summaries of utilities' financial performance and position and technological developments in utility plant and equipment; and
4) commentaries on selected special developments in areas which might affect utility pricing and financing, such as corporate income tax law changes.

The committee's treatments of material within each of these categories were almost wholly descriptive and, like certain reports of various NARUC transport committees, represented in large measure a replay of material presented at earlier dates in the NARUC Bulletin, and in trade journals and federal regulatory publications readily accessible to state commission personnel.\(^\text{45}\) For example, the committee's discussions of technological and economic developments in the electric utility industry drew heavily on material reported in Electrical World and statistical releases by the Federal Power Commission. Tabular presentations of public utility rate revisions contained in the committee's reports are re-presentations of rate revision surveys undertaken and published by Ebasco Services, Inc. The committee's reviews of developments in general economic activity and the financial markets offered material that could be obtained sooner and more comprehensively from such publications as the Survey of Current Business, the Federal Reserve Bulletin, and Public Utilities Fortnightly, and from the releases of both general financial reporting services and investment banking and brokerage firms which give specialized attention to utility securities.

An indication of the intellectual jejuneness which caused this relatively unproductive format to persist for more than a decade is conveyed by the following excerpt from the committee's presentation to the 1966 NARUC Annual Convention: "A committee report, like a good speech, rarely introduces new material to the members of the organization, but rather, collates and presents familiar information in organized form and within the proper frame of reference. Presented thus, it can and should assume its proper perspective in terms of past and future."\(^\text{46}\)

The same torporific approach was manifested in the first report issued in 1968 by the newly created Committee on Electric and Nuclear Energy.\(^\text{47}\) In 1969 however, the new committee began to exhibit signs of incisiveness; it discarded the format of the old Committee on Rates and sought to devote its attention to power reliability legislation and environmental problems relating to electric utilities.\(^\text{48}\) Among other efforts, it drafted a set of proposed undergrounding rules for residential electric and telephone exten-
The State Commissions and the NARUC

The report gave the appearance of relative inactivity and consisted largely of a reprint of a report on the state of underground high voltage transmission technology which had been issued earlier by the Edison Electric Institute, and a resolution recommending that the member commissions of the NARUC encourage companies within their control to acquire assets required for complying with environmental quality standards and permit the companies to reflect the costs occasioned by such assets in their rates.49

In 1969–1970, the NARUC Staff Engineering Committee began the preparation of a proposed system for the allocation of electric utility costs,50 a measure which, if successfully executed, could obviously contribute measurably to the fulfillment of state jurisdictional responsibilities.

One may wonder, however, why efforts to produce such a cost allocation system were not initiated nearer to the point in time when multijurisdictional electricity operations became relatively commonplace. And hopefully, this effort will not ultimately confront difficulties roughly paralleling those of telephone separations.

ECONOMIC PERFORMANCE-RELATED TOPICS CONSIDERED BY THE COMMITTEE ON COMMUNICATIONS

Subjects concerning the regulation of communications utilities received little attention from the NARUC until the late 1930s, after the Federal Communications Commission had begun to exercise its newly created powers over interstate telephone services.51

TELEPHONE SEPARATIONS

The problem of separating revenue requirements between the interstate and intrastate segments of telephone system operations has—in terms of the length of time that it has been subjected to study (approximately thirty years) and the effort expended by committee members and their supportive personnel (as evinced by reports thereof)—commanded more attention from the NARUC than any other topic relating to communications and, indeed, more than most topics of all types which have elicited attention from the association. (The observations which follow in the remainder of this subsection should not be interpreted to imply that significant differences between inter- and intrastate telephone revenue requirements are undesirable per se regardless of the conditions that might prevail in particular service areas. It should also be noted that there is no intention here to imply a judgment regarding the economic merit of the NARUC's positions on separations principles. The primary purpose of this section is to provide a summary portrayal of what has taken place concerning the NARUC's role in separations principles development.)

But, despite this effort, a reading of the reports which have ensued indicates that the NARUC's efforts toward telephone separations have not produced notably successful results.52 Additional evidence in support of this verdict has been provided by Richard Gabel's chronologically comprehensive study of the evolution of telephone separations principles, which contains the following conclusions concerning the NARUC's role therein: (1) State commissions, working via the NARUC, "have been the goading force to separations changes—but one without direct power or authority"—for the purpose of attempting to reduce what they perceive to be inordinate jurisdictional rate and earnings disparities.53 (2) "Principles governing separations have been a series of compromises generated within the political framework.... The federal regulatory authorities have largely played the role of middlemen in the operation, furnishing tacit assent to separations changes which interstate business could 'afford' to forego.... The American Telephone and Telegraph Company has, for all practical purposes, exercised a firm veto power in separations matters, cultivating the fragmented regulatory authorities to assure itself that the timing and content of separations changes meet with its corporate interests."54

At the end of the 1960s the NARUC reached what might be termed a limit point in its struggle with the separations problem. When the FCC announced on 5 November 1969 that its negotiations with the Bell System had produced a $237 million interstate toll reduction, while, at the same time, Bell had requested intrastate toll and exchange rate increases totaling more than $1.5 billion pending before state commissions, the NARUC requested
and won introduction of S.1917, a bill providing for the creation of a seven-member board consisting of four FCC commissioners and three state commissioners, the latter to be nominated by the NARUC. The bill further provided that the board would have "sole administrative authority to prescribe uniform procedures for determining what part of the property and expenses of communications common carriers shall be considered interstate or foreign and what part shall be considered intrastate and exchange service."55

The bill did not travel far in legislative channels, but induced results sharply different from previous events in the history of telephone separations. When the Senate Commerce Committee and the House Subcommittee on Communications and Power held hearings on the bill at the NARUC's request, about fifty representatives from approximately thirty state commissions appeared, and an almost equal number of state agencies submitted statements favoring enactment of the measure.56 Following the hearings,

FCC Chairman Dean Burch requested the Committees to defer action on the legislation pending an effort to establish a Federal-State joint board, under Section 410 of the Communications Act, to consider revisions in separations procedures.

After discussions with the NARUC, the FCC established the FCC-NARUC Joint Board on Jurisdictional Separations, composed of three FCC commissioners and four State commissioners, to recommend to the FCC proposed changes in separations procedures. Moreover, the FCC agreed to permit the four State members of the Joint Board to participate in the FCC deliberations when considering the recommended decision of the Joint Board.

The functioning of this Joint Board has proven highly successful as evidenced by the FCC, upon recommendation of the Joint Board, approving on October 27, 1970, the "Ozark Plan" which will transfer, effective January 1, 1971, approximately 130 million dollars of revenue requirements from state to interstate operations of the Bell System.57

Even if the NARUC has at last achieved a measure of success in its enduring struggle with the separations problem, there remains the question of how the state commissions might utilize the ensuing jurisdictional shifts in revenue requirements. In instances where the Bell System has acquiesced to the transfer of some costs between state and federal operations, the resultant opportunities for effecting intrastate rate reductions have not always been pursued by the NARUC's member state commissions. For example, the so-called Modified Phoenix Plan for separation of interexchange toll lines plant, which took effect early in 1956, occasioned a reduction of approximately $40 million in intrastate revenue requirements. Yet, "no state reduced its toll or exchange rates"58 in the wake of the Phoenix Plan's imposition.

A similar pattern resulted when the Bell System's so-called Denver Plan of separations was adopted in the mid-1960s; although the Denver Plan provided for the transfer of $98 million in revenue requirements from intrastate to interstate services, its "immediate effect ... was to stay a further interstate rate reduction. About three-fourths of the transfer of revenue requirements was absorbed by the Intrastate earnings of the local Bell Companies, since most of the state commissions took no action after the intrastate revenue requirement had been reduced."59

It is, of course, conceivable that some portion of the aggregate potential for rate reductions occasioned by a justifiable separations charge could be nullified by the existence, within particular regulatory jurisdictions, of various other conditions affecting rate and revenue requirements. But, the degree to which such potential has gone unrealized in the instances cited by Gabel obviously suggests that various state commissions might not be serving the public interest as fully as they could. These situations also serve indirectly to highlight the fact that the NARUC, in instances where it might achieve results which make possible the realization of increased public benefit through regulation, can do little more than implore its members to pursue such possibilities.

Two other categories of activity conducted by the NARUC which bear upon the pricing and performance of communications deserve mention. The first is the Telephone Rates Subcommittee's periodic surveying of (1) local service telephone rates, (2) message toll telephone rates for two-point service, and (3) disparities between interstate and intrastate toll rates. It is sufficient to say that over time the subcommittee's efforts have exhibited relative thoroughness in terms of numbers of individual telephone markets covered, and appear to contribute toward the information needs of those concerned with telephone pricing.60

The second category of activity is the annual collection and publication, by the Subcommittee on Manufacturing and Service Affiliates, of data and information concerning transactions between
the operating entities and the manufacturing, supply, and service entities of both the Bell System and the General Telephone System. The subcommittee initiated efforts during 1967 to also provide similar information for the Continental Telephone and United Telephone systems.\textsuperscript{11} This information is supplied to the subcommittee by the companies to which it relates and is presented in the subcommittee's reports in considerable detail but without substantive evaluation. (In addition, at the subcommittee's request the Western Electric Company prepares and distributes annually to NARUC member commissions a so-called "Blue Book" containing selected data on the company's operations.)\textsuperscript{12}

An example of the subcommittee's generally nonanalytical efforts is contained in its report to the 1967 NARUC Annual Convention. In the report the subcommittee noted the aggregate results of an interim realignment of prices charged to Bell System operating companies by the Western Electric Company. The realignment was reported as follows.

\begin{table}[h]
\centering
\begin{tabular}{lrr}
\hline
Type of Item & Annual Dollar Effect  \\
\hline
Switching equipment & $13,700,000  \\
Transmission equipment & $1,600,000  \\
Other switchboards & $1,000,000  \\
Protection and outside plant & $(4,300,000)  \\
Exchange and toll cable & $(12,000,000)  \\
\hline
NET CHANGE & $-0-  \\
\hline
\end{tabular}
\caption{Realignment of Western Electric Company Prices Charged to AT&T Associated Operating Companies, Effective 1 June 1967}
\end{table}

\textsuperscript{Source: NARUC, Proceedings of the 79th Annual Convention, 1967, p. 61.}

The subcommittee's reaction to this change in pricing mix was confined to this observation: "The net result was that the increases offset the decreases, with no changes in the over-all price level to the Bell System on products of Western Electric manufacture."\textsuperscript{13} The subcommittee expressed no recognition of the significance which this realignment might have held for the previously discussed struggle over the division of revenue requirements between interstate toll services and local exchange and intrastate toll services. Nor did the subcommittee so much as mention the desirability of comparing such revenue aggregates on specific product categories with relevant cost information.

Of greater seriousness is the fact that the subcommittee has not rigorously evaluated the manner in which the data it receives from telephone manufacturing subsidiaries has been prepared. While the subcommittee has not expressed concern over this manner of information supply in recent years, it is relevant to note that the NARUC membership, at both the 1958 and 1959 annual conventions, approved a resolution in support of proposals made by the association's then existent Committee Cooperating with the Federal Communications Commission in Studies of Telephone Regulatory Problems to conduct "specific analyses of Western's accounting system, its cost apportionment procedures, pricing policies and the adequacy of the results produced thereby."\textsuperscript{14} The committee found itself unable to carry out these analyses, as its report to the 1960 annual convention reveals:

Although our staff membership includes experts in the accounting field, the pressure of regulatory duties and the specialization in other fields requisite to further specific analyses of Western's operations precluded the assumption of such a detailed study by the Staff. The Committee thereupon explored the advisability of engaging the services of competent independent firms, economists, and other outside professional or technical personnel qualified to undertake the study of the respective areas inherent therein. . . . The cost of undertaking such a detailed analyses [sic] made by other than staff personnel has been estimated to run into six figures. The Committee, after comprehensive inquiry concluded that the amount of funds necessary to implement such studies are [sic] not available at this time from regulatory or other like sources.\textsuperscript{15}

The committee also enumerated three conditions which, it intimated, would serve to achieve at least some of the ends for which its proposed study had been designed. The most salient of these conditions was the unqualified opinion of approval given annually by a national public accounting firm on Western Electric Company's cost accounting methods. The committee noted that the auditing firm found these methods to be in compliance with requirements established in the 1949 consent decree settlement of alleged Sherman Act violations stemming from various business practices of Western Electric, the American Telephone and Telegraph Company, and the latter's telephone operating subsidiaries.\textsuperscript{16} However, the consent decree's cost accounting requirements are expressed in the following general terms: "Western is ordered
and directed to maintain cost accounting methods that conform with such accounting principles as may be generally accepted and that afford a valid basis, taking into account the magnitude and complexity of the manufacturing operations involved, for determining the cost to Western of equipment sold to AT&T and Bell Operating Companies for use by them in furnishing common carrier communications services. It thus appears reasonable to conclude that this directive is incapable of substantially diminishing the need for a study like that which the committee proposed but was unable to carry out. Furthermore, the directive's provisions obviously will not suffice to vindicate the unquestioning acceptance of manufacturing companies' reports by the NARUC's Subcommittee on Manufacturing and Service Affiliates.

GAS UTILITY PROBLEMS

Economic problems of gas utilities have gone largely unnoticed within the NARUC. An exception occurred in 1959 when the NARUC's Executive Committee ordered the establishment of the Subcommittee Cooperating with the Federal Power Commission in the Study of Cost Allocations in the Gas Industry. After several years of effort the subcommittee produced a manual of procedures for allocating assets, revenues, and expenses of gas utilities operating under more than one regulatory jurisdiction. But, the following excerpt from the Committee on Gas's report to the 1965 NARUC Annual Convention suggests that benefits commensurate with the costs incurred in the manual's development were not being realized: "we find that apparently only some fifteen (15) utilities are significantly affected by this problem and that few of the member states have expressed an opinion [on the manual's contents] and none have reported results of application of the manual as requested by the former subcommittee at the 1964 annual meeting."

WATER AND SANITATION UTILITIES

Like the economics of gas production, transmission, and distribution, water and sanitation utilities received little attention from the NARUC. Unlike gas however, their problems were not specifically assigned to a particular NARUC committee until late 1967, when the Committee on Water and Sewerage began to function. In its first report the committee revealed that it had begun a compilation of "laws, rules and regulations of the various states pertaining to the regulation of water and sewerage utilities." It also defined, with reasonable perspicacity, a number of subjects centering on economic and service-quality considerations which it viewed as being potentially worthy of its scrutiny in subsequent work periods. As the future unfolded, however, it found itself able to do no more than prepare a recommended procedure for short form rate filings by small water utilities. Therefore, in 1970 it asked the NARUC Executive Committee "to appoint a staff technical advisory subcommittee to lend assistance to the future projects of the Committee."

STUDIES OF DEPRECIATION PRACTICES

Two well-known landmark contributions to the crucial subject of depreciation have been made by the NARUC since the 1940s. The first to be issued was contained in the 1943 Report of the Committee on Depreciation. The second emerged in 1968 when the association published a highly comprehensive manual on utility depreciation practices which had resulted from approximately six years of effort by the Depreciation Subcommittee of the Committee on Engineering, Depreciation and Valuation. The intensely debated topic of how to account for results produced by public utility companies' usage of so-called accelerated depreciation and/or of investment tax credit provisions in the computation of federal income tax liabilities has been subjected to scrutiny in various NARUC committees. Some of the conclusions produced have exhibited indecision over whether to advocate procedures which would require utilities to pass the income tax savings occasioned by these tax code provisions to their rate payers.

For example, the Committee on Accounts and Statistics and the Committee on Depreciation were asked by the NARUC president to report on the accelerated depreciation provisions of the 1954 Internal Revenue Code, "with particular reference to the regulatory problems involved."
After having demonstrated, inter alia, that accelerated depreciation methods do not (given the existence of certain annual growth rates in plant investment) necessarily cause higher depreciation charges taken in earlier years of an asset's depreciable life to be offset by lower charges in its later years, as advocates of so-called normalization commonly contend, the Committee on Depreciation concluded that it generally favored "the computation of depreciation expense for public utility accounting and rate purposes according to the straight line method and the recording of income taxes each year at the actual tax liability for that year." In contrast, the Committee on Accounts and Statistics suggested that commissions could choose from among three methods for handling accelerated depreciation's tax liability consequences: (1) record the entire amount of the annual accelerated depreciation charge as an expense allowable for rate purposes; (2) allow additional annual depreciation expense for rate purposes equal to the tax reduction caused by accelerated depreciation; and (3) the previously mentioned procedure favored by the Committee on Depreciation.

The Committee on Accounts again exhibited a divided front when it sought to define appropriate accounting methods for use in computing utility company earnings in situations involving investment tax credit provisions contained in the Internal Revenue Acts of 1962 and 1964. Eight members held that reductions in income tax liability occasioned by the investment credit should be fully reflected in the net income reported for the periods in which such reductions are obtained. One member took the view that so-called allocation or normalization would provide a more accurate measure of a company's earnings, and two members abstained from voting. While intimating that their respective choices would best serve regulation's financial information requirements, neither the majority of eight nor the member who took an opposing view attempted to present a fully developed explanation of how their respective methods would contribute to and/or inhibit the achievement of public interest objectives in regulation.

The most recent event in the annals of NARUC activity toward depreciation and its relationships with the control of utility earnings is an amicus curiae brief which the association filed during the summer of 1971 before the California Supreme Court. The brief reportedly supports a California commission order (which is being challenged by a consumers' group and the City and County of San Francisco) that the Pacific Telephone and Telegraph Company should use accelerated depreciation for certain assets and that it should also use allocation or normalization procedures in its calculations of income and investment base data. An examination of the relative merit of the NARUC's stance in this case might well have been in order here. However, full information pertaining to it was not available at the time of this writing.

ACCOUNTING AND REPORTING SYSTEMS

The NARUC's contributions to the development and implementation of uniform accounting and reporting systems rank among the more notable of the association's accomplishments. To place the origin of these contributions in historical perspective, it must be recalled that the Interstate Commerce Commission, between 1907 and 1914, developed uniform accounting and reporting systems for steam and electric railways and telephone companies. Many of the state commissions quickly adopted the ICC's systems (or similar versions thereof) for application to railway and telephone companies under their respective jurisdictions. However, considerable interstate heterogeneity continued to mark accounting requirements for other types of utilities which at that time were subject only to state regulation.

The NARUC responded to this condition in 1919 by directing its Committee on Statistics and Accounts to formulate uniform classifications of accounts for all public utilities other than railways. By 1922 the committee, with assistance from similar committees of the National Electric Light Association and the American Gas Association, had produced initial and revised uniform classifications for electric, manufactured gas, and water companies, and the NARUC had approved motions recommending that its member commissions adopt the classifications. In 1923 a standard annual report form for electric and gas utilities was presented and recommended for adoption. So-called simplified classifications of accounts for small electric and gas utilities followed in 1924 and 1925. A uniform classification for bus companies was presented in 1926; one for natural gas companies appeared in 1930.

During the early 1930s changes which had occurred in the
The State Commissions and the NARUC

corporate and technological structures of electric and gas utilities and in the stock of general accounting knowledge made it widely apparent that revisions were in order for the accounting systems of these utilities. Thus in 1934 the NARUC ordered its Committee on Statistics and Accounts to revise the classifications which it had presented in 1922. The results of the committee’s efforts were presented to the NARUC membership and accepted and recommended for use in 1936. In that same year the Federal Power Commission, which was establishing means for fulfilling the jurisdictional responsibilities conferred upon it by the Federal Power Act of 1935, chose to adopt a uniform system of accounts substantially identical with the NARUC’s newly presented system.

Another NARUC accounting project during this period involved participation with the ICC in the development of a uniform system of accounts for motor carriers. And in 1937 the Committee on Statistics and Accounts presented the NARUC membership with a uniform system of accounts for water utilities.

Subsequent NARUC-sponsored contributions to regulatory accounting practices have been evolutionary rather than epic, consisting primarily of refinements to the basic systems of accounts. While these refinements generally appear to have increased the effectiveness of accounting as a regulatory tool, it appears that the NARUC’s post-1960 accounting committee work has not kept pace with, let alone anticipated, various important new developments. Consider, for example, the computerization of accounting and reporting systems: when the Subcommittee of Staff Experts on Accounting commented on this subject in its 1970 Annual Report, it was able to state only that “a committee has been formed consisting of representation of the Federal Power Commission, Federal Communications Commission, and our Subcommittee to discuss the use, present and potential, of computers in processing data contained in reports filed by the utilities with Federal and State regulatory agencies.”

Also seemingly overdue for attention are the questions of (1) whether existing systems measure and communicate the performance of public utility companies in ways which adequately meet regulators’ information needs and, if not, (2) what changes might be made to make them do so. The closest allusions to these questions by NARUC accounting groups came in 1969 and 1970, when (1) note was made of efforts being taken by the Missouri, New Jersey, and Iowa Commissions to formulate cost analysis programs, and (2) it was reported that the NARUC Committee on Accounts had been asked to participate in studies concerning “the establishment of techniques which would make possible the development of the accounting, financial and statistical data required by the [proposed] Consumer Counsel Bill.”

NARUC Policies and Actions toward Intrinsic Determinants of Commission Performance

Deficiencies in the intrinsic determinants of commission performance, such as statutory powers, personnel, and funding, are clearly reflected by some of the imperfections portrayed in the foregoing review of selected NARUC activities concerning determinants of and means for controlling the performance of regulated industries. How, then, has the NARUC, given its stated obligations to work toward better regulation, contributed toward the correction of deficiencies in these intrinsic determinants?

Providing for Adequate Personnel

It has long been taken for granted that most regulatory agencies, particularly at the state level, have persistently suffered from substantial personnel deficiencies in terms of both numbers and qualitative attributes. A definitive estimate of the dimensions of these alleged shortcomings cannot be made within the limits of available information about basic determinants of the adequacy of commissioners and professional staff personnel; that is, (1) commissioners’ and staff members’ possession of those types of categories of knowledge which facilitate the conduct of regulation; and (2) conditions that govern commissioners’ and staff members’ willingness to effectively utilize, and increase, the stocks of regulation-related knowledge which they possess, for example, perception of, and dedication to, the achievement of regulatory objectives, opportunity for advancement based upon meritorious performance, and intellectual vigor and capacity. (Any attempt to ascertain the adequacy of the number of individuals employed by a commission vis-à-vis the number required should, ideally, also include evidence pertaining to actual and potential work performance levels—an obviously
The State Commissions and the NARUC

treacherous analytical area beset with many difficult if not insuperable barriers, particularly when professional work rather than routine clerical output is the object of determination.)

However, existing evidence does tend to support those allegations of inadequacy in regulatory personnel. For example, in 1967 approximately 180,596 energy, communications, transportation, and other types of utility firms were under the jurisdictions of fifty-seven state commissions and of the FCC, FPC, and ICC. These commissions, taken collectively, employed only about 5,200 professional staff members.

Insofar as qualitative characteristics are concerned, there is no need here to dwell on the oft-noted fact that relatively few commissioners possess noteworthy expertise in the philosophy and practice of regulation when they begin serving their appointments. It must be acknowledged that a commission appointee lacking in such expertise will not, ipso facto, be foreclosed from becoming an effective commissioner. But, the fact remains that criteria, which presently govern and historically have prevailed in the appointment process, tend to consist of elements unrelated to the public interest objectives of regulation.

State commissioners’ salaries generally lie below professional and executive salaries paid for work of comparable responsibility by other entities in both the public and private sectors. Under such conditions, relatively high turnover rates, often involving transitions to utilities, carriers, or law firms representing regulated firms, become inevitable.

Meaningful and comprehensive information about the processes and criteria which govern the selection of professional staff personnel is unavailable, but salary levels for accounting and engineering personnel employed by a majority of the state commissions have not differed substantially in recent years from the starting salaries of many recently graduated baccalaureate degree holders with majors in these professional areas. And, state commission attorneys’ salaries have not achieved levels markedly higher than those of their colleagues in engineering and accounting. As a result, lengths of time spent in regulatory service by such personnel are concentrated at and below a ten-year span.

The NARUC has not attempted to take an active role in countering these sobering conditions. It has confined itself to the gathering and presentation, in committee reports, of such data and information as commissioners’ and key staff members’ salaries and benefits, certain statutory conditions governing commissioners’ appointments in the various states, and the types and numbers of training programs employed by commissions.

The association has, however, taken direct action to provide commission personnel with a means for acquiring greater knowledge of regulation-related subjects. Since 1959 it has sponsored the so-called NARUC Short Course, a twelve-day study program for commissioners, commission staff members, and others concerned with the regulated industries and regulation. It resembles executive development programs offered by various university schools of business administration.

While the Short Course provides commissions with a vehicle for equipping their personnel with knowledge not readily obtainable via other means, it has been utilized by a relatively insignificant proportion of the total existing population of regulatory personnel eligible for enrollment in it. Approximately twenty-nine state commissioners, 326 administrative and professional staff personnel of state commissions, one federal commissioner, 130 federal regulatory staff members, and thirty-six persons in the employ of regulated companies and their trade organizations and public utility consulting firms attended the Short Course between 1959 and 1969. Comparison of these enrollment totals with regulatory commission employment data reveals that Short Course enrollment between 1959 and 1969 included the equivalent of approximately 15.8 percent of all state commissioners, 10.3 percent of state, and 10.5 percent of federal regulatory staff personnel, respectively.

To place these percentages and the time span to which they apply in proper perspective, however, two additional conditions should be observed. The first is the general tendency toward relatively high turnover of professional commission personnel and what it implies for the length of time which individuals who have completed the Short Course might, typically, remain in regulatory service. The second is the composition of Short Course usage, that is, the identities of commissions which have enrolled their personnel in the Short Course, and the number of enrollees contributed by each. These data vividly reveal the relative lightness with which the state commissions, taken collectively, have availed
The State Commissions and the NARUC

themselves of the Short Course: attendance rolls have been dominated by the personnel of the FPC, FCC, and the Wisconsin, Illinois, New York, Iowa, and Michigan commissions. Eight state commissions have sponsored no Short Course enrollees while another twenty-one can claim no more than token representation (between one and four enrollees). The aggregate ten-year contribution to Short Course enrollment made by these twenty-one commissions exceeds by but twelve individuals the total number of utility industry-affiliated personnel who participated in the Short Course between 1959 and 1969.

COMMISSION FUNDING

Budgetary inadequacy, like personnel inadequacy, has long been cited as a basic malady of regulatory agencies. Available evidence suggests it is highly probable that regulatory commissions, taken in the aggregate, have indeed suffered from financial malnutrition for at least four decades.

Yet, despite the clearly vital link which exists between the adequacy of commission financing and the effectiveness of regulation, the NARUC has largely ignored the topic of regulatory finance. Only once has it been the primary object of a comparatively extensive NARUC study committee report, and that report was delivered in 1937. Not surprisingly, the report contained the finding that "many commissions are forced to neglect not only 'long-run' problems involved in the regulation of public utilities but also specific statutory duties and responsibilities. Indeed, it can hardly be said that regulation has been given a fair trial in view of the fact that its financial backing is so inadequate."

However, this appraisal did not move the NARUC membership to take action directed toward alleviation of the problem. Indeed, commission financing has not been a formally designated subject for extended discussion at NARUC annual conventions, nor has it been the central focus of NARUC representations to legislative and/or other governmental groups.

STATUTORY POWERS

The NARUC's activities in what can be summarily characterized as the area of statutory powers may be viewed as consisting of two distinct but interrelated subcategories. The first consists of the formulation of model acts designed to bring about greater uniformity in state regulatory statutes and, in some instances, to provide model acts that are potentially applicable in situations where extension of state regulation to industries or selected categories thereof is being contemplated. The second consists of efforts to influence the manner in which state regulatory jurisdiction relates to the jurisdictional limits of regulation at other levels of government.

Two examples of recent projects which can be classified as lying primarily or wholly within the first category include a Model State Utility Environmental Protection Act and Model State Commission Rules and Regulations Governing Promotional Practices of Electric and Gas Public Utilities. An evaluation of these measures is not within the ambit of this paper, other than to note that the need for measures of their general nature seems obvious, and that the environmental act was formulated within a time period [1969–1970] which compares favorably with the introduction of many similar pieces of legislation oriented toward more general aspects of environmental protection. In the following subsection, a look will be taken at another NARUC-authored model act introduced at a date early enough to permit, inter alia, observations of how the NARUC's member commissions have responded to it.

CATV REGULATION

In April 1965, the Federal Communications Commission began exercising certain types of control over CATV systems receiving all or some of their signals via microwave relay carrier facilities and, in 1966, the commission extended such control to all other CATV systems. These actions apparently stimulated the NARUC to (among other things) approve a resolution at the 1965 annual convention requiring the association's General Counsel to draft a proposed model statute for the state regulation of CATV firms. A draft of the model was subsequently issued by the General Counsel in early 1966, and was placed "under study" by the two NARUC subcommittees and "distributed to member commissions for review and comment."
Despite these efforts, however, explicit statutory jurisdiction over the economic behavior of CATV firms remained comparatively rare through the later 1960s. In an address delivered at the 1968 NARUC Annual Convention, FCC Commissioner Kenneth A. Cox noted that CATV firms (at that time) were subject to state commission regulation in only two states, Connecticut and Nevada. Commissioner Cox went on to declare that, "Since the States generally have not moved into the CATV field and since local governing bodies are ill equipped to exercise real regulatory supervision over cable operations, there is some possibility that the FCC may have to expand its authority over other aspects of the industry."

After 1968, only three additional states—Rhode Island, Vermont, and Wyoming—reportedly brought CATV systems under the jurisdictions of their respective commissions. This condition obviously tends to lend support to Commissioner Cox's view that the states have virtually ignored an area that at least appears to merit scrutiny in terms of being potentially in need of economic regulation.

However, a different view has been expressed within the annals of the NARUC, where it has been categorically asserted that the almost complete absence of CATV regulation at the state level only indicates that "... local aspects [of the CATV business] are now being regulated at the local level in the remaining States where CATV operations exist" and that state control will be enacted, when it becomes necessary, in the same manner that state control of electric, gas, and other utilities occurred. But, it seems intuitively obvious that this assertion, given what is generally known about the resources of local governments, stands a higher probability of being in error than does Commissioner Cox's view of local-level regulatory ability. Given this, and given also that (1) CATV represents the sole source of video service in communities with poor or nonexistent reception, and (2) that the holding company is beginning to manifest itself in the CATV industry, one is led to question why virtually all of the NARUC's state commission members have exhibited relatively little visible attention toward the question of CATV regulation.

Before leaving this topic, it should be noted that the NARUC Model State Community Antenna Television System Act, originally issued in 1966, was revised and re-presented to the NARUC membership in 1970. And, in the same year, another, somewhat less stringent model statute for state CATV "surveillance," was presented by a NARUC ad hoc committee created in 1969 for the purpose of establishing "a working relationship with representatives of the National Cable Television Association in an effort to develop a mutually acceptable model State CATV statute and to seek the solution of other regulatory problems in this important field of public interest."

The rationale underlying this approach is not clearly ascertainable from information on public record. However, the industry trade association ultimately declined to endorse the model act and indicated a preference for "total ... preemption, by the FCC of all matters relating to CATV regulation."

The NARUC's positions on significant regulatory policy topics involving state-federal jurisdictional relations tend to be marked by relatively little application of economic and administrative or managerial criteria as means for attempting to define "optimum" boundary lines between state and federal regulatory jurisdictions. In some instances they also appear to subordinate economic and other public-interest-related criteria to the preservation, as an end unto itself, of state jurisdiction and/or prevention of jurisdictional extensions by regulatory agencies at other levels of government. A discussion of several events which ovince such characteristics follows.

**Efforts to Curtail FPC Jurisdiction**

The Federal Power Commission exercised its authority over interstate rates and services of electric utilities with relative quiescence until 1961, when Joseph C. Swidler became chairman of the commission. Swidler immediately embarked on a course designed to strengthen the commission's resources and intensify the agency's scope and pace of activity. One feature of this invigoration was the FPC's interpretation, later upheld by the courts, that its existing statutory power over the pricing of interstate wholesale electricity sales extended to utility firms possessing systems confined within a single state when such systems were interconnected with the properties of companies engaged in interstate electricity transmission. In the face of this development, bills providing for amendments
designed to more narrowly delimit the jurisdiction conferred upon
the FPC by the Federal Power Act were introduced in the 88th
(S.3038), 89th (S.218), and 90th (S.1365) Congresses by Senators
Spessard Holland and George A. Smathers of Florida. The
precise extent of this rollback in authority was not ascertainable
from the bills' texts and thus appeared to be ultimately determinable
only through interpretations rendered in commission and court
rulings, but there seemed to be little doubt that the rollback
would be anything less than relatively substantial.

When hearings were held on the bills, witnesses representing
the FPC, various municipal and rural cooperative electric systems,
and groups whose interests could be characterized as consumer-
or rate payer-oriented testified in opposition. They argued that
the reductions in FPC authority provided for by the bills would
serve to weaken federal control over wholesale electric rates without
providing for commensurate control by state commissions and
thus reduce the net effectiveness of regulation taken en tota. But
witnesses representing investor-owned electric utilities and state
commissions favored enactment. They contended that the FPC
had extended its jurisdiction over wholesale electricity rates into
areas which exceeded the limits of application intended by Congress
when it wrote the Federal Power Act.

On 28 January 1965, the NARUC Executive Committee adopted
a resolution supporting S.218 or any similar legislative measure
that would accomplish the same objective. Pursuant to this
resolution, representatives of the NARUC's Committee on Legisla-
tion resolved to take several actions designed to marshal expressions
of support to members of Congress on S.218, and the committee's
chairman, Commissioner Edward D. Storm (Maryland), reported
to the committee "that he was going to meet with Chairman
Mason of the Florida Public Utilities Commission and several
other interested persons in Miami immediately following the
meeting of the committee and he would report the results of
this conference." Among the "several other persons" with whom Commissioner
Storm subsequently met were Robert Fite and Benjamin Fuqua,
president and vice president, respectively, of the Florida Power
and Light Company, and Robert C. Dolan of the National Association
of Electric Companies. The meeting resulted in a basic outline
or plan for the content and presentation pattern of testimony
to be given on S.218 by five state commission witnesses. It was
also agreed that "since Mr. Dolan is working full time on this
legislation [S.218] at the present time and since he is familiar
with the procedures in the Senate and the House of Representatives
that he be the coordinator of the joint efforts of the State
commissions and all other interested parties."

This episode could scarcely be expected to comport with the
public's trust in regulation. While it is possible for circumstances
to arise under which pieces of proposed legislation can be favored
for enactment by both regulatory authorities and the firms to
which such legislation would apply, and with the regulatory
authorities' position being based on grounds clearly consistent
with the public interest objectives of regulation, such circumstances
do not appear to hold in the situation noted here.

State commission representatives testifying in support of S.218
contended that the bill was justified primarily because it would
prevent the imposition of federal authority over affairs which,
in the light of legislative history and "best" regulatory performance,
should be left in the hands of state regulatory agencies. In the
form in which it was presented, however, this contention appears
weak for two reasons. First, state commission witnesses based
their views that the utility transactions affected by S.218 could
be best controlled at the state level on little more than assertions
to the effect that predominately intrastate matters necessarily would
receive superior and more economical attention from regulatory
authorities geographically closest to such matters. None of the
witnesses presented substantive evidence of the results achieved
by physically proximate agencies, for example, wholesale electricity
rate reductions sought in proceedings initiated by state commis-
sions. Second, the state commission witnesses provided no expla-
nations of why their agencies had not launched efforts to cope
with the conditions at issue in the relatively large number of
wholesale electricity rate reduction and rate discrimination cases
initiated by the Federal Power Commission during that agency's
post-1960 "invigoration."

CATV-TELEPHONE COMPANY RELATIONSHIPS

At approximately the same time that it began to exercise
jurisdiction over CATV firms, the FCC initiated a proceeding for
the purpose of ascertaining whether (1) its jurisdiction included the issuance of certificates of public convenience and necessity for the construction or extension, by telephone companies, of channel service facilities to be used on lease-rental bases by CATV system firms; and (2) the Communications Act’s provision exempting independent telephone companies from FCC control would continue to apply in instances where such companies serve as connecting carriers for the transmittal of interstate television signals to CATV firms.\footnote{29}

Both the FCC’s staff and representatives of the CATV industry presented arguments in support of the extension of FCC authority in each of these situations, while the NARUC and members of the telephone industry filed briefs opposing “FCC intrusion into such local affairs which are subject to adequate state regulation.”\footnote{29}

However, there is reason to question whether “such local affairs” were in fact being adequately regulated by the state commissions. CATV firms had complained that telephone companies, in an effort to preserve their predominant position in wire communications, frequently sought to enter into cable leasing agreements (under which telephone companies construct CATV line facilities and then lease them to CATV firms) only under terms which placed relatively narrow limits upon the types of services to be offered by the CATV firm (local versus remote points of origin for television programs and various types of nonvideo communications services). Some CATV firms which desired to erect their own wire and allied distribution equipment using telephone company-owned line poles charged that telephone companies refused to enter into line pole use agreements. Complaints were also expressed by some CATV firms about discrimination in the lease-rental terms accorded different CATV service areas by telephone companies. In any event the FCC ultimately rejected the views of the NARUC and the telephone industry and required telephone companies, before initiating construction of CATV channel facilities for lease or rental to CATV firms, to (1) apply for a certificate of public convenience and necessity, and (2) submit a tariff containing the terms upon which channel facilities would be provided to the CATV firms.\footnote{31} The FCC also accepted a letter in which the American Telephone and Telegraph Company agreed to avoid the use of telephone company line poles and underground conduits and the types of video programming and other communications services that might be carried by CATV firms over channel facilities leased from Bell System companies.\footnote{32}

\section*{Gas Pipeline Safety Regulation}

Jurisdiction over safety standards for gas utilities’ facilities lay with the states until 1968, when Congress enacted legislation vesting the U.S. Department of Transportation with such authority.\footnote{133}

Impetus for the introduction of this measure resulted from several gas transmission line explosions. In 1967, during the course of hearings on the bill, Commissioner J. David Francis, chairman of the NARUC’s Committee on Gas, asserted that the past and future control of gas pipeline safety had been and would continue to be more effectively performed by state and local authorities rather than by a federal agency. He therefore urged Congress to postpone the enactment of “any gas safety legislation at this time”\footnote{134} and, instead, limit itself to the continuing observation of gas pipeline safety control practices of state and local authorities.

This view of the states’ past performance in gas pipeline safety control was contradicted by Commissioner Francis at a later point in his testimony when he acknowledged that only twenty-seven states had adopted safety controls for gas utilities as of 29 August 1966, but he indicated that he had, at that time, pledged that the NARUC would “launch a nation-wide campaign to have the remaining twenty-three states adopt safety codes.”\footnote{135} This campaign resulted in the enactment of gas safety statutes by nineteen additional states within approximately one year.\footnote{136}

The apparent fundamental cause of this rapid expansion in state gas safety control elicited the following critical observation from a state commission chairman during the 1967 NARUC Annual Convention. “Regardless of how good a performance anyone here may think this was or is, it is certainly vulnerable to the suggestion that at least half of the performance was the reaction to an impending Federal program. This is not the firmest way to suggest (that the states can do the job).”\footnote{137}

The commission chairman went on to remind the NARUC’s state members of their responsibility for the timely identification
of activities in need of regulation, and efforts to bring such activities under control as soon as possible after having perceived the need for regulation. He also suggested that the enactment of federal regulatory legislation should be actively sought by state commissioners in those instances where federal control would appear to be the most effective medium for fulfilling public interest goals.

Conclusions and Some Forward Observations

Most of the NARUC's policies and actions appear at least somewhat imperfect when viewed in comparison with one or more of the criteria which were specified in the introduction. This obviously does not mean that all have, ipso facto, failed to occasion at least some positive benefit for regulation and its public interest objectives. The reader should bear in mind the fact that other NARUC events, some of them quite noteworthy, have received attention in the larger study upon which this paper is based but have been excluded here because of space limitations. Nevertheless, much remains to be done before the NARUC can contribute more fully to both the effectiveness of regulatory agencies and the performance of industries under their respective jurisdictions. It must be acknowledged that the tempo of activity in both the Washington office and other segments of the NARUC have increased markedly (as reflected, for example, in the numbers of NARUC representations concerning, and proposals for, regulation-related legislation) during the tenure of the present administrative director and general counsel. But, it is the substance of the work pace, that is, the quality of effort brought to bear and the relative priority of matters selected for attention, rather than the pace of activity per se, which will determine the value of the association's service to its membership.

Various of the NARUC's efforts which have been scrutinized in this paper and in the larger project upon which it is based clearly reveal that the association has suffered from insufficient analytical talent. Such a verdict should not necessarily be taken to imply that committee members and/or members of the Washington office have contributed less than they should or could have given: one obviously cannot, for example, expect a commissioner to contribute intensive and extensive memoranda to a NARUC committee (or committees) on a continuing basis when confronted within his own agency by a full docket and a shortage of supportive professional staff members. And, one probably cannot expect highly profound contributions toward the solution of problems involving a particular category of knowledge to flow from individuals who received the bulk of their professional training in other areas.

The latter situation is acutely manifested by the dearth of economic analysis contained in both certain of the NARUC's policy positions and in the attempts made by some of its committees to treat problems which are crucially related to the economic aspects of regulated industries. It is of scant surprise when one considers that, in 1967, five state commissions employed two economists, and forty-four state commissions possessed no formally designated capacity for performing economic analysis on an "in-house" basis. The NARUC's creation in late 1970 of a subcommittee of staff experts on economics is a step in the right direction. The fact that members of the subcommittee also occupy full-time agency positions, however, raises a question about how fully the subcommittee can contribute toward the NARUC's needs for economic analysis on an ongoing basis. This leads, in turn, to the question of whether the NARUC should give serious consideration to the establishment of a centralized economic and financial research service. While the budgetary problems to be resolved in launching such a venture might well be difficult, the potential benefits appear, at face, to be of a nature which certainly warrants at least an initial exploration of its feasibility. It is conceivable that certain economic staff services could be provided at greater efficiency on a centralized, rather than on an individual commission basis, particularly for the smaller state commissions if the development of data banks and the usage of electronic data processing equipment will be incorporated into the research center. As Haskell P. Wald has pointed out, the need for establishment of such a collective research effort may be critical if commissions find themselves unable to match, via other means, the capabilities for performing econometric and quantitative based operational studies which a number of regulated firms already possess.

A host of other comparatively crucial problems are also potentially deserving of attention from the NARUC with due regard for the constraints which bear upon the association's capacity to actually do so, but space does not remain for their discussion.
Suffice it to say in conclusion that the three most significant among them are the regulatory agency (or its ownership) of the railroad industry, its personnel, and the manner in which some of the association’s activities have related to representatives of the regulated industries.

NOTES

1. Interstate Commerce Commission, transcript of proceedings entitled General Conference of Railroad Commissioners, March 1898. [Publisher not identified.]

2. Interstate Commerce Commission, Proceedings of the Second through Twelfth National (or its ownership) of Railroad Commissioners, 1900 through 1900, respectively. [Publisher not identified.]


4. NARUC, Proceedings of the 29th Annual Convention, 1918.

5. NARUC, Proceedings of the 35th Annual Convention, 1923.


8. Ibid., p. 778. These objectives are set forth as one paragraph in the NARUC Constitution but are separated here for purposes of clarity.

9. Ibid., pp. v-xiii; and 778-75.

10. There are presently ten standing committees serving the NARUC: Electricity and Nuclear Energy; Gas; Communications; Railroads; Motor and Air Transportation; Water and Sewerage; Administration and Personnel; Accounts; Engineering; Depreciation; and Valuation; and Public Relations.


13. Interstate Commerce Commission, transcript of proceedings entitled General Conference of Railroad Commissioners, March 1898. [Publisher not identified.]


16. Ibid.


18. Italic added for emphasis.


20. Unless diversions of the committee’s attention to another problem or problems would have held promise of yielding greater benefits.


23. Ibid.

24. The reports surveyed were: (1) Message from the President of the United States, U.S. House of Representatives. Doc. No. 384 (87th Cong., 2d sess., 5 April 1962); (2) National Transportation Policy, Report prepared for the Committee on Interstate and Foreign Commerce, U.S. Senate, by the Special Study Group on Transportation Policies in the United States (3 January 1961); (3) Report on Regulatory Agencies to the President-Elect, Senate Committee on the Judiciary

25. Section 24(c) of the Federal Power Act as amended by the Interstate Commerce Commission, Transcript of Proceedings entitled General Conference of Railroad Commissioners, March 1898. [Publisher not identified.]


28. NARUC, Proceedings of the 76th Annual Convention, 1965, pp. 266; and Proceedings, 66th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, and 80th Annual Conventions, pp. 374-81; 454-61; 312-16; 419-21; 181-84; 257-61; 495-98; 314-18; 399-41; 207-70; 158-61; and 573-77, respectively.

29. See for example, Proceedings, 74th through 79th Annual Conventions, pp. 272-90; 299-314; 212-42; 122-40; and 365-96, respectively.


31. Ibid.

32. For example, track cab data card forms, forms for registration of interstate operating authority, and insurance certification filing rules.


35. Proceedings, 73rd Annual Convention.

36. When first begun the program consisted of annual week-long twenty-four-hour road checks. Later, the procedure was changed to an annual series of discontinuous checks aggregating seventy-two hours.

37. Proceedings, 73rd Annual Convention; and Proceedings, 74th Annual Convention, p. 150.

38. Ibid., p. 152.


41. Proceedings, 76th through 79th Annual Conventions, pp. 30-31; 33-37; 56-57; 25; 38-40; 43-44; 109-12; 90-92; 374-76; and 342-44, respectively; and Congressional Index (Milwaukee, N.J.: Commerce Clearing House, Inc.), 85th-90th Congress, 1957-1968.


45. See, for example, NARUC, Proceedings 60th through 71st, and 73rd through 79th Annual Conventions, pp. 75-93; 96-118; 458-60; 235-46; 159-74; 243-61; 234-57; 383-411; 231-56; and 476-509, respectively. The committee submitted no report at the 72nd Annual Convention in 1965; see p. 533 of that convention's Proceedings.

46. Proceedings, 76th Annual Convention, p. 231.
49. Proceedings, 82nd Annual Convention, p. 545-57.
50. Proceedings, 82nd Annual Convention, p. 763.
52. See, for example, Proceedings, 50th through 75th Annual Conventions, pp. 287-310; 233-36; 387-433; 66-63: 265-66: 389-94; 443-44; 157-58; 427-55; 472-82; and 41-59, respectively.
54. Ibid., pp. 153-54.
55. Proceedings, 82nd Annual Convention, p. 176-77.
56. Ibid., p. 21. As reported to the NARUC membership by the association's administrative director and General Counsel.
57. Ibid., pp. 21-22.
59. Ibid., p. 163.
60. See, for example, Proceedings, 77th through 79th Annual Conventions, pp. 498-99; 516-27; and 91-95, respectively.
62. Ibid., p. 61.
63. Proceedings, 70th and 71st Annual Conventions, pp. 372; 234-35; and pp. 280: 389-91, respectively.
64. Proceedings, 72nd Annual Convention, p. 58.
65. Ibid., p. 59.
67. Proceedings, 71st Annual Convention, p. 163.
68. Proceedings, 77th Annual Convention, p. 207.
70. Ibid., p. 387-91.
71. Proceedings, 82nd Annual Convention, pp. 67-79.

75. Ibid., p. 9.
76. With the additional option of deducting depreciation in amounts accumulated under the accelerated rather than the straight-line method for purposes of rate base computation.
77. Ibid., Appendix A.
78. Proceedings, 75th and 76th Annual Conventions, pp. 235-42.
80. NARUC, Proceedings of the 51st Annual Convention, 1920, p. 201.
82. NARUC, Proceedings of the 34th Annual Convention, 1923, pp. 297-99; 302.
85. NARUC, Proceedings of the 41st Annual Convention, 1930, pp. 96-97.
86. Ibid., p. 95.
88. Ibid.
90. See, for example, Proceedings, 51st through 82nd Annual Conventions, reports submitted by the Committee on Accounts, the Subcommittee of Staff Experts on Accounting, and their predecessor groups.
91. Proceedings, 82nd Annual Convention, p. 725.
94. This total represents double counting in the sense that utility and transportation firms operating between and/or in two or more states are typically subject to the jurisdiction of both and/or two or more state commissions. However, such double counting does not affect the validity of the comparison being made since the term used at the jurisdictional responsibility of each commission tends to focus attention, rather than synonymous, segments of a regulated firm's activities.
96. See, for example, Joseph J. Ingles, The Missouri Public Service Commission: A Preliminary Survey (Aberdeen, Mich.: University Microfilms, facsimile of a doctoral dissertation submitted to the University of Missouri, 1966), pp. 73-74; 82-86; 91-93; 123-47; 124-79; and 221-25; Bernard Schwaert, The Professor and the Commission (New York: Alfred A. Knopf, 1958), chapters 5, 6, 7, and 8; and "The Regulators Can't Go On This Way," Business Week, 28 February 1976, p. 64-65.
98. Based on comparisons from information contained in: National Survey of
The State Commissions and the NARUC


97. Subcommittee on Intergovernmental Relations, State Utility Commissions, pp. 8–12.

98. See, for example, Proceedings, 76th through 81st Annual Conventions, pp. 37–57; 71–86; 421–37; 143–58; and 704–21, respectively.

99. That is, personnel of the FPC and FCC. The ICC, CAB, FMC have been omitted from this comparison because the Short Course no longer includes material directly related to transport regulation.


101. A 1967 survey, for example, revealed that more than one-half of the total number of state commissioners and state commission staff personnel had occupied their positions for less than ten years, and that a substantial number had been in regulatory employment for less than five years. Subcommittee on Intergovernmental Relations, State Utility Commissions.


109. 6 PURed 129; 23 PUR 3d 444; and Proceedings, 82nd Annual Convention, p. 47.

110. An argument in support of the view that CATV requires economic regulation was developed and presented to the 1965 NARUC Annual Convention by Ernest W. Gibson, III, chairman, Vermont Public Service Board (pp. 113–19).

111. Proceedings, 82nd Annual Convention. One can question whether regulation was extended to these earlier utilities at or after the points in time when it became necessary.

112. Ibid., pp. 110–17.

113. Ibid., p. 227.

114. Ibid., p. 228.


As a regulator, I represent the state point of view. I do so, in the words of Mr. Lundy, with the tenacity of a bulldog and the hide of a rhinoceros, but I make no claim to the wisdom of Solomon or the patience of Job. However critically my good friends of the academic world may view regulation, their barbs are nothing compared to the slings and arrows of outraged legislators or the complaints of unhappy utility customers. Although there is much food for thought in both of the excellent papers by Professor Phillips and Professor Spychalski, I would like to comment about the real world in which we, as regulators, must live and the problems that we must face.

My predecessors in the regulation field enjoyed great popularity in reducing rates and encountered very few problems of service. But today we share with the federal regulatory commissions the tremendous problems of the growth and changes of the last decade.
Conferences such as this one are of vital importance for those of us in regulation and for those of you in the industry. They are of vital importance because we must learn of the climate in which we live, and we must subject ourselves to external criticism and much internal soul-searching. Regulation is here to stay, despite what very erudite Dick Posner may think, but I do not believe that any of us think it will survive in exactly the same form and without imagination and innovation. No one could deny the observation of Charles Phillips about adequate financial support being absolutely essential to utility regulation. In the days where every state is taxed for funds, and competition for priorities from general revenues is so active, I believe it is absolutely essential again that the regulated bear the cost of regulation. This is done in Illinois by a tax on the gross income of regulated industry. Such a tax is not a direct burden to the public, and I, personally, can assure the legislators we are the only agency that can say, "there isn't a dime that is coming out of the general revenue." If it were, we would not have one-half our present staff and we would have big problems. We must have the money to do the job, and we are fortunate to be able to get it without general revenues. I understand that many states have such tax legislation, and I do not believe future regulation can exist without it. It is a difficult thing, but I think it is essential. The utilities have no control over the expenditures of the fund, but the cost of regulation, not to mention good regulation, does come from the utility industry itself. However, there is a pitfall in some states. Some statutes provide that any excess funds coming from such a tax be put into the general revenue. I believe this could be attacked as discriminatory taxation. The entire purpose could be defeated as legislators see that their pet project can be paid for from excess utility taxes placed back into general revenue. The governor, likewise, will want to balance the budget, and other people will have other priorities, all involving the use of these surplus funds. One of the things that has helped Illinois to effectively regulate has been this use of nongeneral revenue funds. The funds are used as effectively as possible because we do not want to give the money back to the utilities.

The make-up of the Illinois commission is both highly desirable and typical. There are five commissioners at least two of whom must be from each of the major political parties, so that we have a balance of three to two and with staggered terms; very shortly after a governor is elected he will have a majority of his party. It happens that every one of the Illinois commissioners has come from a background with some connection, to a greater or lesser degree, in the active arena of party politics. We are partisans when party politics are argued, however I have never seen a case on our commission when any dispute or differentiation could be traced to any sort of political philosophy. There are basic economic philosophies which I believe most of us on the commission share.

I also believe we have another advantage in Illinois when it comes to the staff. I have never been a great believer in the efficacy of the civil service staff system. The Illinois commission is one of the few in which I, as chairman, have the right to hire and fire the entire commission staff, with the exception of the general counsel and the secretary of the commission. Many people would worry about this power, but I have never changed the head of any section. The commission may accept the politics of one or two because they are vocal outside of regulatory matters, there is one requirement; Richard B. Ogilvie is governor of Illinois, and no one is expected to have an opposing bumper sticker when he drives into the parking lot. We have continuity; for example, we have had one member of the commission, the Honorable Cyrus Colder from Chicago, who calls himself a Dick Daley Democrat. He has been on the commission for the last two years, and has been appointed and reappointed by five governors of varying parties. If asked to describe his politics, I would say it would be that of a patriot and an avid supporter of the image and tradition of the commission. To me, this is part of the vital part of maintaining a tradition that will make regulation respected.

Returning to Dr. Phillips's paper, I found it most stimulating, and I was very interested in his excellent analysis of the so-called A-J effect. I agree that no one really knows the full impact of the A-J effect; however, there is a certain factor in our present economy that makes this effect a little less important or controversial. With our tremendous growth need for coping with environmental problems, our task is to encourage capital expenditures. The last time that we, in Illinois, granted a substantial rate increase to Illinois Bell, we realized the absolute needs of the increased demand for telecommunications. We placed in the order an absolute directive that they make expenditures of $350 million per year for the next five years which our staff felt were necessary in order to make...
sure that we do not suffer the lack of communications that has occurred in other parts of the country.

When I became chairman of the commission, I began espousing a theory that I believe is in the minds of many, but not always stated. That theory is the consideration of incentive regulation. I do not believe that it should be the sole duty of the commission to privately compute original costs or fair value and apply a fixed rate of return to such a figure. For regulation to be effective, and for the utility needs of tomorrow to be met, excellence in management must be rewarded. We must look hard at inefficiencies of performance and management and misuse of funds. This is the duty of the commission and something which we must constantly be aware of. We will never have a staff to exercise management judgment. But I think we do have the ability to judge certain criteria to see whether the rates are being maintained, and whether people receiving the quality of service they demand. Speaking not as a spokesman of industry, but as an observer from the regulator point of view, people realize that even during the inflation we have had recently, utilities service is one of the cheapest commodities, and its rate increases have been relatively modest. But woe to the utility that does not meet or anticipate the demands. Regulators or the utilities cannot sell the zero growth theory; people will not live with it. We are going to have some growth, but there must be some control over it. There must be more allocation of resources and more consideration of these problems. We are going to have to provide for these needs and the demand of the public is getting even greater. In the past we relied too many times on the manufacturer to solve problems in advance and we did not do a sufficient amount of research and development. From a technical point of view we must keep a constant surveillance on the allocation of resources. We must realize that there is a great need for management decision. Despite the varying backgrounds of the commission, we have experience in law and in business, and we have the sixth sense to know when a utility is doing a good job and the public is satisfied with its work.

When we get into the area of communications, I have heard complaints that the options to the public are a choice between a Cadillac or a Lincoln Continental. I don’t believe that, I think that is overstated. I do believe that the people do want good service. I think the telephone industry, however, must be alert to the need to provide a basic service that everyone can afford. Additionally, I could go into the problem of hotel communications and, of course, we have the old Vail theory as to the division of costs and cost pricing. Finally, there is the modern growth of competition in communications. But I do not have time to cover these.

Dr. Phillips mentioned Dr. Posner’s interesting and thought-provoking article, and as long as you are not shocked by some 130 pages, it is well worth reading. It was assumed that as a regulator, I would be angered by the article. I don’t believe Posner is correct in saying there is no place for regulation; we cannot live without some regulation. I don’t believe the people are going to allow the private investor-owned utilities to survive without some form of regulation. But we must constantly improve regulation. In regulation of the trucking industry, perhaps we have been too hard on entry, and there is much meat in what is suggested. Certainly, in the natural gas field, I strongly tend to think that there were serious mistakes in overregulation. There is also the question as to the easy entry which ought to be permitted. We were recently involved in a case where an airline had a serious crash and, consequently, its certification was taken away. Three days later I was approached by a group who wanted to start an airline to replace the other. If we let them all in, they would all no doubt go bankrupt, and competition would have an adverse effect. When the company starts to go bankrupt, the first thing that goes is the service and safety. All I do is pose the problem that when we deregulate, we must see that in the survival of the fittest and the natural benefits of competition we do not have bad service and poor safety.

In summary, Dr. Phillips had an excellent point on regional commissions. We have a serious matter in two forthcoming rate cases in each of which we regulate only 10–15 percent of the utility’s activities. We must decide those cases under the wage price freeze and before the other states act. It is pretty hard to be a statesman, when you provide about 10 percent of the company’s revenue, and to set rates that you believe are fair, when other states in an election year may cut their rate of return and leave us looking very foolish. This is a very serious problem; it is something that we have to face because we do have to live in the real world.

There are so many more very interesting things that I would like to get to and I would like to make some defense of NARUC. I haven’t been there very long and I would certainly like to say
The State Commissions and the NARUC

that I have never met a man who is working as hard as Paul Rodgers to preserve the image of regulation, to improve effective regulation, and for development and cooperation in a federal-state sphere. However, as a young lawyer walked into the courthouse the judge said, "This young man wants a lawyer, you're appointed." The young man said, "I would rather wait for F. Lee Bailey to defend me." Well, in that sense, I will leave NARUC to be defended by Paul Rodgers.

Discussion

FREDERIC P. MORRISSEY
University of California, Berkeley

Utility companies currently are faced with a variety of problems that were quite unanticipated a few years ago. The necessity of meeting strict pollution control standards, important environmental considerations of plant site location, the escalating costs of basic fuels, especially natural gas and low sulphur content fuel oil, and wage rate increases all have engendered increased operating costs and plant construction costs of considerable magnitude for the electric industry. At the same time demand for utility service continues to increase at exceptional rates despite the slowdown in the U.S. economy. The continuing growth in demand means unprecedented additions to generating and transmission plant must be made, while the stretched out lead times between initial planning and ultimate "on the line" service compound the problems and increase the need for immediate initiation of construction. For a capital intensive industry such acceleration of expansion means
unprecedented capital additions, capital in the sense of new long-term funds reflecting a construction program estimated at $55 billion for the electric in the 1971-1975 period. Moreover, for the past two years, or at least until the end of 1971, capital costs have been exceptionally high and these high interest rates in the market have accompanied the already swollen demands for capital for the new plant requirements. While the gas industry, pipeline and distribution, and the communications utilities have somewhat different problems from the electric industry, the resulting difference is more one of degree than of substance, and the end product is higher operating costs and greater capital requirements.

These adverse economic and financial circumstances have not been encountered in the absence of some offsetting favorable developments. Increases in labor productivity, the greater efficiency of the new equipment, particularly so in the very large generating plants, and the fact that a substantial proportion of increased demand occurs at off-peak periods and so adds little in the way of incremental costs all have served to dampen operating cost increases while revenues are augmented from the new demand. At the same time liberalized depreciation, new guideline lines for plant depreciation, and investment tax credits have served in greater or lesser degrees to reduce the utilities' effective corporate income tax rates. In some cases the difference between income reported for tax purposes and income per the books to holders has meant large portions of the cash dividend to stockholders have been tax free to the recipient. The net effect of these developments has been viewed by the utility industry as detrimental to profit levels and conventional standards of financial health, in fact some spokesmen for utility management on one side, witness an executive of the gas industry's blistering criticism this morning on the staff of the gas section of the Federal Power Commission, and on the other from consumers, for example, Professor Colston E. Warner's presentation at this conference on behalf of consumer groups.

With regard to the issue of deregulation, it seems clear that deregulation is not a viable alternative to the present situation. The major argument for this change in direction of public policy stems from the alleged failure of the Interstate Commerce Commission to correct or prevent the operating and financial difficulties of the railways, coupled with the alleged deficiencies of price control of natural gas at the producer level by the Federal Power Commission. That regulation as we know it has deficiencies is beyond dispute, but it seems inappropriate to argue that all utility regulation is bad and uneconomic because regulation (in the case of the ICC) was unable to make the transition from a situation with a considerable degree of monopoly power to one where a major degree of competition exists, as in the history of the railroads.

management has demonstrated a "knee-jerk" reaction, as evidenced by the releases emanating not only from utility management but from security analysts, utility consultants, and other spokesmen for the utility industry to the effect that "our costs are rising and as night follows day, we must have higher rates."

It is in this whirlpool of conflicting claims for needed rate relief, for corporate self-restraint, and for predicted and in some cases realized utility service deficiencies that regulatory agencies find themselves. As a former president of the NARUC has said, "This is a nice time not to be a Commissioner." But there are more than mere requests for rate increase applications "making the scene" in utility circles today. There is a concerted, sometimes very subtle, but often open, attack on regulation itself—not merely about the deficiencies of regulation and the need for speedier action on decisions (more of this later)—but a move for outright abolishment of regulatory agencies as being economically and socially unnecessary and wasteful. The tone and content of remarks of several utility representatives at this meeting support the deregulation concept and Professor Richard Posner's position as quoted by Professor Charles F. Phillips in his paper is typical of several academicians' views. Even if deregulation is not taken as a serious alternative, the regulatory agencies are under intensive fire from utility management on one side, witness an executive of the gas industry's blistering criticism this morning on the staff of the gas section of the Federal Power Commission, and on the other from consumers, for example, Professor Colston E. Warner's presentation at this conference on behalf of consumer groups.
Much of the electric, gas, water, telephone, and even transport services still are supplied under monopoly or near monopoly conditions and hence protection of both the consumer and supplier is relevant and necessary for continued efficient service. The role of regulation in such cases is essential and institutional rigidities such as those experienced by the ICC are insufficient reason for deregulation of the entire utility industry in its diverse segments. History should have some relevance for utility management wishing to eliminate regulation. The public power movement of the 1930s in this country, was, in my opinion, more a result of the uncontrolled excesses of the privately owned utility industry than of a burning national desire for public ownership. State and federal utility commissions, for all their shortcomings, in fact play a role in restraining utility management from excesses by requiring periodically public justification of their actions and decisions. In many states this examination of decisions and results is all too infrequent and superficial, but nonetheless the possibility that management must expose their actions, decisions, and practices before a public agency encourages and promotes decisions with a view to the public interest and not solely for the benefit to be provided a stockholder group. Regulatory agencies promote public responsibility by utility management and not merely responsibility to investors or management itself. The role of regulatory agencies for the utility monopolists is not dead. Quite the contrary; their role should be strengthened with a view to providing regulation appropriate to the dynamic situation facing utilities and at the same time providing protection to consumers and investors alike.

The task of rejuvenating or reforming regulatory agencies at the state level is not likely to be an easy or painless task. As Professor Phillips has pointed out, the staffs and budgets of many state commissions must be increased and recruitment must include personnel with capacity to understand and resolve, if not solve, the problems facing the utilities and the public. For example, just as the ICC was faced with a single supplier situation which turned into competitive suppliers for selected segments of the transport field, so too is this apparently happening in the communications industry. How far should a utility be permitted to alter prices to compete with new nonutility or nonregulated suppliers of a portion of the service or product supplied by the utility? The introduction of competition into segments of a previously monopolistic situation presents a whole new set of problems to regulators. Even if a regulator has a strong proclivity to competition, the consumer in the monopoly segment must be protected while the competitive areas rely on market forces to set prices. At the same time the question of how far an established utility with monopoly power should be permitted to use its financial and economic strength to compete with competitive segments of the economy is another side of the problem. Such a situation of monopoly with competitive segments being introduced for the first time requires intensive study and examination of the results of various policies before a decision should be made. Commissioners must rely on their staffs for guidance in these difficult decisions as well as in the routine administrative issues. There is little substitute for a professional cadre of qualified staff members for efficient and intelligent regulation in this complex area.

**Synopsis of Spychalski's Study**

It is in large part this deficiency in staff that is responsible for the shortcomings of the NARUC as reported by Professor John Spychalski. He has offered us (and as a former member of the NARUC I am included) severe criticism, an indictment of an organization that has achieved little, that has either addressed the wrong problems or has addressed the right ones in a sterile and purposeless manner. The paper circulated to the members of this panel is not an indictment prepared by a radical nor is it written in the style or manner of an attack by the New Left, but rather it is a rational, documented appraisal of an organization which the author feels has been in a position to influence greatly the regulation of America's transport and utility industry and has failed to do so. I emphasize this rational, fair, and objective approach because Professor Spychalski's paper is substantially a condemnation of the NARUC, carefully written, devoid of invective and exaggeration, and even though it includes a little praise for the current executive of the NARUC. Systematically looking at the activities of the NARUC over the years, initially in the transportation area, he catalogues their attempted study of problems relating to the railway passenger, railway labor, railway car shortage as well as rates, services, and operations. His appraisal of the NARUC activities is essentially
an adverse one but provides an exception in a contribution by the National Conference of State Transportation Specialists regarding standardization of procedures and enforcement. He concludes that the role of the NARUC in its Policy Expressions in Federal Transport Legislation essentially has been one of attempting to preserve the role of the state agency.

The activities of NARUC regarding energy, communications, and water utilities are examined and he finds that in the electric area numerous serious and relevant issues are omitted entirely and what the subcommittees did attempt is seriously criticized. The one big issue in communications is the separation problem and the NARUC has played a role of some importance here. It might be noted that this issue, sometimes referred to as "sharing the wealth," is fraught with hazards because not only do you have AT&T as the prime obstacle because it may be "separated" from some of its revenues, but AT&T also is able to play the state commission against another depending on which gains a larger share of "the pot" and which loses from revised separation proposals. Spychalski notes that the affiliated interest issue and Western Electric cost data have been accepted without appraisal and I gather he is not pleased with that result.

The gas, water, and sanitation segments he suggests have gone largely unnoticed by the NARUC. It is with regard to depreciation practices and the uniform accounting and reporting systems that a major contribution has been made—which Spychalski attributes to the NARUC. I was surprised to learn from the paper that the NARUC General Counsel filed an amicus curiae brief with the California State Supreme Court in 1971 supporting accelerated depreciation with normalization for rate-making purposes. I cannot help but recall that the same General Counsel at the direction of the Executive Committee aided me in an appearance before the House Ways and Means Committee in March 1969 in opposition to proposed legislation which was designed to require normalization for rate-making purposes. I could continue a review of the NARUC's action or inaction on commission staff salaries and budgets, on CATV, on gas pipeline safety, and so forth, but the tone has been well set and Professor Spychalski is critical of the NARUC's achievements.

Commentary on Spychalski

I share many of the conclusions reached by Spychalski, but if he is surprised and/or disappointed in the lack of achievement and contribution of the NARUC, it is perhaps because he has taken the declared objectives set forth in his paper too seriously, or else he has misunderstood or underestimated what it would require of the state participants in money, men, and time to achieve the results that would earn a high grade for the NARUC. Despite the fact that federal regulatory agencies can participate in the NARUC, it is nonetheless an organization comprised of state regulatory agencies and, in my opinion at least, reflects the views, opinions, biases, and judgments of the state organizations. Hence federal agencies have not played a major role in the NARUC activities and its successes and failures must rest with the state organizations.

It is in this context of an organization deriving its authority, resources, and personnel from state regulatory agencies that the NARUC must be judged. The Washington executive staff is small (and a substantial fraction of the manpower is at this table today), and its budget, primarily dependent on state contributions and the sale of various publications, has been woefully small. Thus it has been forced to rely upon the state agencies which it represents for any effective leadership and staff work. This reliance upon the state agencies for resources is not a major shortcoming in itself, if the states were in a position to make significant contributions, but most state agencies have been forced to exist by their legislatures on very meager rations in view of the magnitude of the regulatory job that they face, as detailed earlier.

For some reason or other, funds to support utility regulatory agencies have not received a very high priority in many states. Few states have been able to comprehend the fact that effective regulation of utilities is an expensive operation—not expensive on a cost-benefit basis because I firmly believe that Californians have had their regulatory appropriations returned to them in benefits many times over during the past several decades. An effective regulatory agency dealing with the complex problems of regulation involving law, accounting, economics, finance, engi-
neering, and an understanding of the problems of the economy and society in the state must have commissioners that are reasonably well paid, with specified terms of office to provide independence, with reasonable intelligence, good judgment, and a willingness to work extremely hard in the interests of society. It is not difficult to find a number of these dedicated people on our state commissions, but there are not enough of them.

Apart from the role of the commissioners, perhaps equally important in effective regulation, is the role of a permanent civil service staff. It has been often pointed out that the commissioners' tenure is often a very short one and they serve their apprenticeship on the job and require several years to appreciate the fundamentals of regulation and must rely heavily on the staff. Much of the continuing administrative work must be left to the staff to perform within a broad policy framework laid down by the commissioners. In practice I believe much of the staff work and their presentations should be independent of the commissioners' direction in order to provide an independent, expert appraisal of the utility's claims for the benefit of the commission that must ultimately decide. State commissions simply have not had adequate expert staff to do their own regulatory work let alone provide to the NARUC expert staff for study, research, and appraisal of the many utility problems that would benefit from a cooperative approach. Accordingly, the twelve or so committees of the NARUC, some of which I recall as the committee on legislation, rates, nuclear energy, communications, gas, and railroad problems, are dependent almost entirely on the very limited resources of the individual committee members—a membership which changes frequently and which seldom reflects the interest or expertise (if any) of the appointee to the specific committee.

This brings me to the role of the Executive Committee of the NARUC. I believe it is the real policy-making group in the association and as part of this function appoints the state commissioners to the various functional committees. The criteria it utilizes is unknown to me, but I do recall a request for an expression of the individual commissioner's preference. Again, the criteria for appointment to the Executive Committee are not readily apparent and I suggest to Professor Spychalski that any appraisal of the NARUC would be incomplete without serious inquiry into the

functions, source of authority, operations, and deliberations of the Executive Committee.

In conclusion, Spychalski's paper confirms my impression that the NARUC has not been a dynamic organization, that its contribution to effective utility regulation based on the published record has not been a major one, and that at times it may have shown more concern over the regulated industry's fortune than over the welfare of society. It has shown some muscle in combating federal incursions into state regulatory preserves, but even here it has been fighting a losing battle. Nevertheless, the NARUC has provided a forum for an exchange of views for commissioners and staff to learn from other states and for cross-fertilization of ideas which may not show up in the printed record. I suspect that a deficiency of Professor Spychalski's study may be his reliance on the published proceedings of the national association to the exclusion of any appraisal of actions or achievements that may result from personal contacts and which may never be formally recorded.

Comments on Professor Phillip's Paper

Having written some of my own views on the current status of utility regulation, I find that a reading of Professor Phillips's revised paper leaves me with fewer differences with him than I had at the conference. His useful summary of the recent literature in effect classifies regulation as (1) inadequate, hence more resources should be allocated; (2) excessive, because regulation has been ineffective or detrimental; or (3) misdirected, resulting in misallocation of resources, which perhaps is already included in (1) or (2). The proper emphasis I suspect is not only on the need for additional resources for regulators, but additional resources of the right kind. Both Professor Phillips and I have emphasized that environmental issues and the complex economic problems faced by commissions require staff with a different training and framework of reference, as well as more of the traditional accountants, engineers, and lawyers.

His suggestion for more regional or interstate regulatory agencies may sound reasonable in theory, but a closer look at the proposal would require states to give up authority to a regional rate-making organization. I suspect this is impractical without some residues
of veto power being retained by each participating state. The sad experience of the cooperative efforts of the NARUC related by Professor Spychalski does not augur well for interstate or regional commissions despite the fact that power pools, bulk sales of electricity, interconnections, and intercompany ownership of generating plants are lending regional characteristics to electric operations.

Two other recommendations of Professor Phillips require comment because I am in serious disagreement with them. The first proposes that scheduled outlays for environmental protection be included in rates up to three years in advance of their incurrence. Why these capital or operating costs should be treated differently in rate making from other capital or operating costs is not discussed. Not only would such treatment do violence to accepted rate-making concepts, it would give utilities as well an unnecessary windfall from a situation adverse to society which they may have created. Surely utilities are not so deficient in ability to attract capital that such subsidies at the expense of the ratepayer are indicated. The other recommendation, abandonment of a recorded or historical test year in favor of "estimates for two or three years ahead," is substantially without merit. There is no reasonable substitute for recorded data and any careful examination of utility company forecasts of operating revenue and expenses will demonstrate that utility management has no better crystal ball for forecasting than others, despite the inherent stability in the demand for utility service. If utilities can predict the future so well that reasonable rates of return can be forecasted accurately, utility managements have sold a bill of goods to regulatory agencies and investors about the risks involved in their operations. If such predictability is possible, risk is low and returns of 12-15 percent on equity are excessive.

I concede the necessity to expedite rate cases and recognize the concern of utilities in receiving timely rate relief. There is no easy way around this problem if the claims of the applicant are to be examined and tested and if the consumers are to be protected and "due process" afforded. Rate regulation is simply a very complex operation and efficient regulation requires resources; many regulatory agencies have operated on a skeletal budget for decades. Even the Federal Communications Commission has cried "uncle" and given up on the "affiliated interest" problem in phase II of the AT&T investigation (FCC Order 71-1283 in Docket No. 16258). Commissions are properly reluctant to give rate increases without proper hearings, particularly where it may have and often has been a decade or more since any examination of the activities and records of the utility has been undertaken. Some perspective on regulatory lag can be gained by recognizing that utilities have been earning rates of return far in excess of the last adjudicated rate of return for decades even in the face of severe inflation. Should commissions take at face value the cost and revenue records or estimates of utility companies for rate making without subjecting them to careful examination? The answer is clearly no, unless one is willing to join the camp of the "deregulators." Professor Phillips excludes himself from that camp, yet some of his recommendations would lead one to believe that he may be considering joining them.
We of NARUC’s Washington staff have noted with a great deal of chagrin that although the federal agencies and state commissions have been long criticized, no one ever has criticized the NARUC—with the exception of myself. (Laughter) The NARUC now has been elevated to a new level of prominence; we have been criticized as an institution, which in itself indicates our growth. We have a critic who is neither a left wing radical nor an uninformed consumer, but rather, Professor John C. Spychalski, an eminent academician.

My own criticisms of the NARUC began in 1965 when I competed for my present position as General Counsel and Administrative Director of the NARUC. At the time I was confronted with formidable competition. In preparation for my interview with the selection committee, I reviewed the NARUC very carefully and found many
shortcomings. I listed those shortcomings with the idea of instituting a program that would seek to revitalize the NARUC. After my hour-long presentation, I was awarded the position; it seems I was the only applicant who had criticized the NARUC. I would like to begin my discussion with a few comments about Commissioner Frederic P. Morrissey. I knew Professor Morrissey when he became a commissioner with the California Public Utilities Commission. At that time he was one of the finest regulators in the nation. He came from the academic community, his intelligence was far above average, he had prior knowledge of utility regulation, he had been active in utility regulation prior to appointment, and by all the objective standards of selection, his appointment was sound in every respect. After Professor Morrissey joined the commission, he served with distinction and was one of our best regulators. But he quit—he did not serve out his term. After a brief taste of regulation he decided to return to the academic world. The NARUC is weaker today because Professor Morrissey quit early, and because there are not more like him who are willing to enter regulation and take the fire.

He mentions the strange method of selecting commissioners to serve on our executive committee, when actually the criteria are quite simple. The first criterion is geographic dispersion; we seek to represent all areas of the nation. The second criterion is that the states of New York, Illinois, and California serve almost continuously on the executive committee. The reason Professor Morrissey’s colleague, Commissioner Symons, was appointed to the executive committee was because Symons was appointed chairman of the California commission, and the NARUC abides by these designations of chairmen. If Morrissey had been designated as chairman of the California commission, then Morrissey would have been on the NARUC Executive Committee.

Morrissey also refers to the amicus brief which the NARUC filed in the Supreme Court of California. He says that when he was a commissioner, he testified before the House Ways and Means Committee in opposition to that aspect of the Tax Reform Act which prohibited commissions from computing accelerated depreciation and flow-through in utility operations. At the suggestion of the California commission, the NARUC Executive Committee adopted a resolution in opposition to that aspect of the proposed Tax Reform Act, and Morrissey was selected to testify as the representative of the NARUC.

He uses the phrase in his remarks, “how things have changed.” I remember during that particular hearing Wilbur Mills was in all his glory. He had done his homework and read to Morrissey quotation after quotation from several articles that Morrissey had written before appointment to the California commission. Commissioner Morrissey then took exactly the opposite position. If we had known that our witness had such a conflict, we would never have used him. Unfortunately, Morrissey as a state commissioner lost before Congress, the NARUC lost before Congress, and the Tax Reform Act became reality. The federal commissions, including the FPC and the ICC, and the others all abided by the act; they discontinued the imputation of accelerated depreciation with flow-through, and the California commission, in an effort to follow the federal law, did exactly the same thing. California asked the NARUC to file the amicus brief, and we did. The reason we filed the brief was because the act had become a reality, and one had to abide by federal law.

Returning to Professor Spychalski’s comments, I think that he has done a scholarly job in researching our past. We agree there have been many defects in NARUC, and hopefully, these are being corrected. He points out that we did nothing about passenger train service, and that our studies were rather pale and weak. At the same time, the ICC has been able to do nothing about passenger train service, and finally, Congress has created Amtrak (and that is not doing very well now either). I do not see how he could expect the NARUC to take action when it is merely a voluntary organization with no governmental powers.

He also criticized the freight car shortage role that we played, and of course, this has also been a perennial problem with which Congress is still wrestling. The ICC has been unable to do anything, and now there is legislation before Congress, which we have testified in support of, which proposes setting up a new freight car corporation with a board of directors. The NARUC would be entitled to one member on the board. This is a good example of creative federalism, and we are urging that legislation.

There are also certain other things that I would like to bring to Spychalski’s attention. First, he referred to one of our witnesses who testified in opposition to the legislation which became the Natural Gas Pipeline Safety Act of 1968. We opposed that act, but at the same time we fought for a role for the states in the event of passage. I think that the Natural Gas Pipeline Safety Act is one
of the major breakthroughs in federal-state relations because in the past whenever Congress enacted federal legislation there was total pre-emption, there was no state role and the federal government did it all. However, in the case of the Natural Gas Pipeline Safety Act, we worked out a new formula for government interaction, and out of that formula the state commissions that were able to do the job certified their ability to the secretary of transportation. If he questioned that ability, the burden of proof was on the state commission. This is an annual certification and if the state can measure up, then it can carry out an enforcement program and must adopt the federal safety standards as its own. However, it may adopt tougher standards in case of intrastate pipelines.

This injects into federal law a discriminating device; the federal plan can employ the “good apples” of state regulation in a national program, and the remainder are out of the program until they can improve their resources to permit annual certification. Of course, in this case it would have been a catastrophe if there had been total federal pre-emption because, although this act has been in effect since 1968, the Office of Pipeline Safety has never been able to develop an adequate staff. At present it has only two field inspectors based in Houston.

Another significant aspect is that for the first time the NARUC was successful in writing matching grants-in-aid into federal law. Although we feel that the program has been underfunded so far (the first appropriation was $500,000, the second, $750,000), it is still growing. The maximum federal participation would be 50 percent, and while this has not been attained so far, the token federal money has stimulated greater state expenditures. This is completely voluntary on the part of the state; it does not have to accept this money unless it wishes to. But, if it does, then it can beef-up its enforcement staff and the federal government can get the job done for far less than it would otherwise cost.

Another major breakthrough by the NARUC has been the Federal Railroad Safety Act of 1970. The same formula was followed again even though we faced during the legislative process the very difficult and hostile opposition of the Federal Railroad Administration, which worked closely with the Association of American Railroads. Fortunately, that sizable lobby was defeated. We have the same kind of program of certification under the Federal Railroad Safety Act, and we have the same kind of grants-in-aid.

Congress is considering electric plant siting legislation, and we have a role there for the states, whereby if the state sets up a plant siting agency, or designates an existing agency as its plant siting agency, there would be no federal pre-emption.

We also are fighting for the inclusion of a provision in that legislation which would permit the state commissions to assess the electric utilities that they regulate under federal law and then use this money to carry out the purposes of the legislation. The advantage of a state assessment under federal law would mean that the money would come direct to the state commission earmarked for specific purposes. Hence, it would not have to deal with state legislators who might divert that money elsewhere. It also would give the state commission the necessary financing to carry out the kind of program they should. Again, this would be voluntary as to whether the state commission wishes to utilize a federal assessment statute.

Since 1969 we have launched a NARUC legislative program of approximately ten bills across the ambit of utility and transportation regulation. It covers what we believe Congress should be doing. It will be a long slow process, but the first of these bills, which concerns telephone separations and other matters of joint federal-state concern, has been enacted recently.

The state commissions have had more difficulty with the Federal Communications Commission than all the other federal agencies put together because since its creation the FCC consistently has been an instrument of economic oppression to the millions of local users across the nation. The FCC has control of the allocation of plant investment and expenses between the interstate and intrastate jurisdictions, although they regulate only three billion interstate calls a year and the state commissions regulate 166 billion. Nevertheless, they have control of this allocation and have never yet allocated to the interstate network anywhere near the large burden it should shoulder in supporting the national system. The interstate network primarily is used by big business and other affluent users.

In their efforts to further weaken the position of the states and the local users the FCC committed a blunder against the American consumer which brought national attention to this area. In late 1969, the FCC negotiated a rate reduction with the Bell system of approximately $237 million which would benefit the interstate users, the affluent users of the communications system. At that
time the Bell system had pending rate cases in thirteen states seeking increases totaling $599 million. These rate increases adversely affected the average consumer, the housewife, the pensioner, and the other people afflicted with economic worries. The cost of their intrastate toll calls would be increased in addition to their flat monthly service charge. When we asked the FCC to make a separations change so this $237 million of excess profits could be flowed through to the local users, they refused. This act repelled Congress. This congressional concern resulted in the FCC approving the Ozark Plan of telephone separations which transferred about $130 million of plant and expenses to the interstate side thereby easing the burden on the local users. We also got the Joint Board Bill, a major victory. The NARUC will no longer tolerate FCC neglect in the field of separations—the consumer interest is on our side. We are not going to hesitate to carry our story to Congress and the American people in an attempt to rectify what is still unfair separations.

Professor Spychalski also has criticized our role in CATV. He has omitted, however, our major victory in the TV-Pix Case (396 U.S.556). The CATV industry is a viable industry. It is apparently a great moneymaker; it is growing very fast; and it has tried to avoid all government regulation even though they use the streets to transport their signals as do the telephone and electric companies. They first tried to defeat the FCC and lost, and ever since then the CATV interests have been aiming for total federal pre-emption because they know the FCC will never be able to effectively regulate the rates charged to local users or the quality of the service. There was a test case made in Nevada whereby CATV interests contested the constitutionality of that state’s CATV regulatory statute, which was patterned after the NARUC Model Act. The NARUC intervened. The three-judge district court in Nevada upheld the constitutionality of the statute and the U.S. Supreme Court affirmed per curiam.

We also have received a grant from the Environmental Protection Agency for a year’s study on applying the public utility concept to solid waste management and disposal. The NARUC is in the forefront of that movement.

The NARUC also is currently working on a model state air carrier act. But the NARUC staff is very small, and tightly constrained by money and available office space (we still are housed in the Interstate Commerce Commission Building). The chief difficulty however, is finding talented people to carry on the work. We do have the funding, and we hope to get the office space. In the near future we also hope to employ an engineer, an accountant, and, in deference to the profession of Professor Spychalski, an economist. We are going to build up our staff with the hope of not only increasing the expertise of the NARUC Washington staff, but also of being able to provide expertise to state commissions that need such assistance.

Some take a dismal view of the future of state regulation, but I believe it is a role that is growing ever stronger. The state commissions today are better staffed and better funded than ever before in history. While there has been a growth in the federal role in regulation, there also has been a growth in the state role. In the past the federal and state commissions operated separately. The Gas Pipeline Safety Act and the Railroad Safety Act put forth a new formula for meshing federal and state efforts together. As a result of this legislation, the state commissions have increased their work in gas and railroad safety.

The state commissions operate in the ambit of the commerce clause. Everything the state commissions regulate is in interstate commerce and it can be pre-empted by Congress. The future of state regulation does not rest upon a doctrine of state’s rights; the future of state regulation rests upon its ability to serve the public interest. There is much wrong with the NARUC, and there is much wrong with regulation, both federal and state. We always are working with these problems and, thereby, we continually improve.
III. Historical Perspective
The Public Utility Problem Viewed Historically

JOSEPH J. SPENGLER
Duke University

Since the birth of the Republic, lawyers have played a role in American government and in our large institutions, including business, that has no parallel anywhere else in the world.∗

And so it is the economist, in our day and age, who is gradually emerging as the natural enemy of the bureaucrat.**

To these epigraphs one may add that much of the inappropriateness of public utility legislation in the United States is traceable to the dominant role played by legal, as distinguished from economic, modes of thought. In what follows I touch upon major trends in the economic and regulative state of the public

∗Peter Vanderwicken, Fortune, 15 June 1968, p. 125.
**Irving Kristol, Fortune, 15 June 1968, p. 125.
utility industry, indicate forces affecting utility legislation, point to actual and emerging problems awaiting resolution, and suggest the need for considerable deregulation.

In view of the powerful role still played by the legal profession in public utility regulation, its future could be adversely affected should current unenlightened activism and ideology inspire recourse to legal methods unfit to bear the regulatory burdens imposed upon them. For the capacity of the state to regulate economic activity at little social cost is limited by many factors, inter alia, disparity between legal preconceptions and human propensities and situations, the ineffectiveness of adjudication for "economic management" and governmental "participation in the allocation of economic resources," shortage of regulative facilities, costliness and discriminatory character of regulation, and inability to construct regulatory guidelines in keeping with economic fact and theory.

What constitutes a public utility in a mixed or free enterprise economy resembles the heterogeneous mixture forming at the confluence of at least four distinct streams flowing at fluctuating and seldom commensurate rates: a stream of change in the substantive character of industries and their interrelations, and streams of change in the models which economists, legislators and administrators, and the judiciary, respectively, seek to map upon the underlying substantive stream (essentially the prime mover) to changes in which economists, legislators, administrators, and judges must adjust their models. As a rule, however, legislators and judges are slower to modify their regulatory models than are economists to adjust their explanation-oriented models. Accordingly, because these four streams have tended to flow at different rates than at commensurate rates, actual resource use has tended to lag behind optimum resource use.

This last point may be illustrated in a general way, given that the purpose of regulation is to optimize the allocation of inputs and facilitate growth in keeping with criteria of optimization. Then the regulatory problem may be abstracted as follows: Let $R_e$ and $R_i$ designate the explicit and implicit principles guiding the formation and regulation of public utilities by legislative, administrative, and judicial agencies; $E_e$ and $E_i$, the explicit and implicit principles yielded by economic science. If $E_e$ and $E_i$ are already formulated, then $R_e$ and $R_i$ are likely to become ascendant. Even should $R_e$ and $R_i$ initially coincide with $E_e$ and $E_i$, the spread between the two sets will increase as conditions change in a dynamic world. Accordingly, $R_e$ and $R_i$ will lag increasingly behind $E_e$ and $E_i$, with the result that deviation from optimum resource use increases. Such, in effect, has been the experience of the nation's utility industry, above all in the field of transportation.

**Determinants of Public Utility Regulation**

The determinants of public utility regulation may be categorized along the four lines suggested in the second paragraph of this essay. (1) Of major importance is the character of the industries selected for regulation, increase in the number of these industries, relations between these and other industries, and changes in the character of these industries, mainly because of technological progress. (2) Of corresponding importance are the objectives of regulation, together with the instrumentalities devised by legislatures and administrative agencies to achieve these objectives—objectives either closely related to the pricing of services or to the stimulation of economic development along lines related to what amounts to a nation's social welfare function. (3) Of potentially great importance are the findings of economic analysis, itself subject to improvement, which bear both upon how prescribed objectives may be sought and upon the side effects, implications, and desirability of the objectives prescribed. (4) The judiciary may play an important role both because courts in their decisions may direct as well as interpret the means and/or ends of regulation, or because, even when in error, they may follow too closely Sir William Blackstone's prescription for what was an essentially static society and "abide by former precedents." Regulation may be influenced also by changes in socioeconomic phenomena. Representative are marked changes in financial conditions and/or the level of economic progress, or in the composition of regulatory and judicial bodies, together with redistribution of power among commission and others of diverse points of view associated with these bodies. Far more important are changes in underlying public opinion, together with their effect upon law, and in ideology, especially at legislative and judicial levels. The lawmaker has been aptly described as the creature of his time and culture. Judges too, as Finley Peter Dunne's "Mr. Dooley" was wont to...
remark, are sensitive to changes in regnant values and ideology. There is not, therefore, in the making and interpretation of law that combination of flexibility and stability associated with a progressing science such as economics.

Finally, public utility regulation, being a product of growth, is subject to a kind of constraint inherent in growth processes. Growth gives rise to form and in turn constraints and channels growth. Public utility regulation assumed a certain form and became imbedded in certain categories which in turn limited the questions asked of regulation and the answers admitted. While it is desirable that law not be too inconstant through time, the resulting deceleration of the rate of legal change is the source of little or no harm. What is harmful is the continuation in force of obsolete statutes directed against no longer existing dangers—"vast codes, understood only by a jealous priesthood which protects these swamps and thickets from prying eyes." Precedents sometimes were "made to compel where they were never intended to apply," a practice apparently not often challenged until after World War I when the dynamics of change produced more novel cases to which stare decisis was inapplicable.

Economists v. Lawyers

Although some economists had discussed transport and related public utility matters before 1860, economists in the United States exercised little or no influence on public utility regulation until late in the nineteenth century. Before the Civil War confidence in laissez faire was easily reconciled with protectionism and federal and state support of some public works, mainly transport. There was little contact between economics-oriented writers and lawyers even late in the century when, had "modern textbooks" been "written in Chinese," their "direct influence upon our courts" could have been no less than it actually was. Economics did not become a self-supporting profession until late in the century and economists were too few in number—in 1880 there probably were not more than ten full-time economists in the United States—to exert influence. Until around 1880, when some began to question the adequacy of competition in the public utility sector (then mainly transport), economists remained content to join with lawyers in championing laissez faire. Sidney Fine states that "the ideas of laissez faire propounded after the Civil War were dressed up in constitutional garb by bench and bar and made an integral part of the law." Bench and bar translated the "laissez faire views of academic and popular theorists and of practical businessmen" into constitutional doctrine and made the "courts the ultimate censors of virtually all forms of social and economic legislation." A positive affirmation of the benefits of laissez faire by Sir George Jessel "has had more influence in moulding the decisions of our Courts since it was uttered, in 1875, than all the volumes which our economists have written on the subject." Early in the following century Louis Dembitz Brandeis still found it necessary to condemn the legal profession and the judiciary for their neglect of economics and sociology and the consequent lag in the utilizability of law as a regulatory instrument in keeping with then important pragmatic philosophy.

Three circumstances contributed to the questioning of laissez faire: experience with transport and emerging trusts, a growing "reform" movement, and increasing recognition of the importance of fixed costs in such industries as transport, a condition played down by the pre-Mill classical school writers with their emphasis upon circulating capital and the overwhelming importance of variable costs. First, experience with the railroads after 1870 and the trusts after the late 1870s suggested the inadequacy of competition in some sectors of the economy, a view reflected both in the Sherman Act of 1890 and in attempts to secure competition in the public utility sector or replace private by public ownership of local utilities. Second, by the 1890s an Age of Reform had come into existence, assisted in some degree by American economists trained in Germany [where the economic role of the state and its economists was important] and carried along by the Progressive Reform Movement which lasted until World War I only to be succeeded by a period of so-called "normalcy" (the 1920s). Marver Bernstein describes this period as one during which "businessmen acquired a prestige and status in the American community at large which they may never again attain." This reform movement, out of sympathy with laissez faire, lent support to the belief that regulation of public utilities could be kept out of "politics" by "allocating major governmental
Historical Perspective

JOSEPH J. SPENGLER

responsibilities to regulatory commissions," 27 a belief that neglected the highly controversial and political character of "control of business." 28

Third, increasing notice was being taken of a rising ratio of fixed to total costs, together with economies of scale, phenomena observed already by J. S. Mill (who, however, inferred a need for public regulation or ownership only in transport, water, gas, and similar industries). 29 and Dionysius Lardner who stressed the subjection of transport to falling average costs, the importance of price-variable-cost relationships, and the need of the state to own or regulate the inevitable large system railway monopolies. 30

Alfred and Mary Marshall also noted the relatively large fixed expenses encountered in industries such as transport and shipping and the consequent advisability at times to price a service at less than its full cost. 31 The American case for regulation, based upon the tendency of the "law of increasing returns" to produce "natural monopolies," 32 was effectively stated by H. C. Adams. He emphasized the tendency to combination, consolidation, and monopoly in industries subject to increasing return as were those in the public utility sector. 33 The clearest statement of the case for intelligent regulation of the railroads was made by A. T. Hadley who feared that, given heavy overhead costs and excess capacity, together with resulting rate wars and price discrimination, government ownership of the railroads would result. 34

At this time, however, the economists had but limited counsel in the form of guidelines to offer regulators, since joint and other costs, meaning of commodity, price discrimination, optimal allocation, appropriate return on capital (given risk and "uncertainty"), and the value to be assigned the capital invested had not been carefully enough defined. 35 Not surprisingly, therefore, some of the issues involved had to be dealt with largely by the courts when ruling upon actions of the Interstate Commerce Commission — actions which, in a number of instances, were welcomed by the railroad industry because of the rate stability and other advantages resulting. 36 Indeed, in 1885, gas and electric companies in Massachusetts sought commission regulation as a means to limiting competition and the entry of new firms into these industries, 37 and in the 1930s some industries sought public utility status for similar reasons. 38 "The facades for the law often fall to reveal the basic motives, since the ostensible purpose is seldom the real purpose." 39

Implicit in much of the discussion of the economic character of public utilities is the supposition that an industry defined as a public utility exchanges its being subject to regulation for the security provided by its resulting guaranteed monopoly. Overlooked, despite the rapid demise of canals as profitable common carriers, was the possibility of the emergence of alternative sources of the service supplied, together with great change in the elasticity and location of the demand functions for the utilities' services. It was supposed also that a utility was essentially a producer of a single category of services, distinguishable mainly in respect of the buyers to whom this service was priced and marketed. Linear programming designed to discover an optimum product mix would hardly have been indicated. The simplicity of the conception of a public utility must have favored both confidence in the municipal operation of local utilities 40 and ease of regulation by commission of privately operated transport systems as well as other utilities deemed inadequately controlled under common law or charters. 41

Also implicit in the early views of the economic character of public utilities was the view that, while they supplied indispensable services, particularly in the field of transport (which enlarged markets, increased division of labor, and gave rise to increasing return), most utilities were not identified as sources of technological progress and hence as fomenters of growth. Nor were their forward and backward linkages noted, although later the dominance of economic history by transport in 1850-1900 was stressed. 42 Later on, with the development of the highly research-oriented telephone industry, the strategic and dynamic character of the communications industry was stressed.

Public Utility Defined

Whereas today the public utility sector is viewed as a particular component of that sector of the American economy subject to special working rules designed to modify the operation of market forces, 43 it was not always so defined. Initially, form was given to what amounted to a public utility concept by the legal or
jurisprudential mind; for the problems to which this concept supplied an answer had emerged long before economics had become a science and, of equal importance, won public respect. At one time a number of occupations were treated as "public" in common law, a status having its origin in the medieval doctrine of just price, together with the disesteem in which at least private "monopoly" was held. Occupations treated as "public" were reduced in number, however, until only innkeepers and common carriers remained obliged to serve all comers, adequately, impartially, and at reasonable prices.44

Of the businesses at some time considered common, transportation, "common carriage," regulated in England from time immemorial, was the most important in the early nineteenth century, and the one which, having been judicially declared affected with public interest, provided the courts with an analogical basis for declaring as similarly affected various businesses directly related to the transportation or distribution of passengers, goods, or intelligence.45 Initially in the United States public utilities consisted almost entirely of turnpikes, canals, bridges, ferries, and gas and water works, provisions for the regulation of which embodied germs of the methods and rules later put into effect as commissions replaced charters, franchises, statutes creating utilities, and ordinances.46

Of the characteristics of the services which public utilities supply, portability is both common to all and of strategic importance. This circumstance must account in considerable part for the tendency of regulators to suppose the public utility sector of the American economy to be more homogeneous than it is. The transportation industry conferred portability upon goods, personnel, messages, and information by carrying these, the products of other firms and individuals. The communications industry conferred portability upon information and messages produced by others for interchange at a distance. The electric utilities industry conferred portability upon energy convertible into light and power, outputs which it, unlike other carriers (who engage essentially in carrying the products of others), also produced at least in part. Limitations upon access to portability have thus played a major role in the development of public service industries. Indeed, had this industry, unlike the railroads, has rendered (many believe) little quid pro quo.47

Rail transport played a critical role in the development of public utility regulation in that it cut its eyeteeth on rail transportation and took its form from the pattern of railroad legislation emerging in 1870-1913. For before the late 1870s when the electric light and power and communications industries (other than the telegraphic dating from 1846) first came on the scene, steam railroads were presenting on a nationwide scale issues that theretofore had emerged only locally. By the late 1850s technologically superior rail transport was capturing most of the traffic developed by canals—largely government spearheaded—which had been responsible for the "initial decline in transportation costs across the Appalachian Mountains into the Ohio Valley";48 and by 1890 the nation's railways, still locally oriented and dominated by local interests as of 1861, had become integrated into a national railroad network, in response both to the spread of population facilitated by railway development and to the importance then attached to the stimulus that cheap transport would give to economic development.49

Public service undertakings were never entirely free of collective restraint, the nature of which, however, underwent change. Under common law, property could not be used by its owner "in a way injurious to the rights of others" or impairing of "public rights." Property rights "are but privileges relative to, and limited by, the common good."51 The power of the state to regulate the use of property was limited as well. Thus, under the Fifth Amendment, such regulation had to comply with "due process."

cease to be public utilities;52 we have evidence of this in the impact of multiplying transportation alternatives. There would, of course, still be grounds for regulating the portability-conferring activity of erstwhile public utility industries; for the conferring of portability entails use of surface, subsurface, or suprasurface channels in limited supply, and these therefore require to be rationed in ways deemed most conducive to optimization of resource use and to the attainment of such broad long-run objectives as optimal distribution of a nation's population and its activities. Neglect of the scarcity aspect of channels has led the federal government to make available virtually gratis to the radio and television industry the use of channels worth many billions, in exchange for which this industry, unlike the railroads, has rendered (many believe) little quid pro quo.48

Historical Perspective

Amendment, such regulation had to comply with "due process," property rights "are but privileges relative to, and limited by, the common good."51 The power of the state to regulate the use of property was limited as well. Thus, under the Fifth Amendment, such regulation had to comply with "due process."

cease to be public utilities;52 we have evidence of this in the impact of multiplying transportation alternatives. There would, of course, still be grounds for regulating the portability-conferring activity of erstwhile public utility industries; for the conferring of portability entails use of surface, subsurface, or suprasurface channels in limited supply, and these therefore require to be rationed in ways deemed most conducive to optimization of resource use and to the attainment of such broad long-run objectives as optimal distribution of a nation's population and its activities. Neglect of the scarcity aspect of channels has led the federal government to make available virtually gratis to the radio and television industry the use of channels worth many billions, in exchange for which this industry, unlike the railroads, has rendered (many believe) little quid pro quo.48

Rail transport played a critical role in the development of public utility regulation in that it cut its eyeteeth on rail transportation and took its form from the pattern of railroad legislation emerging in 1870-1913. For before the late 1870s when the electric light and power and communications industries (other than the telegraphic dating from 1846) first came on the scene, steam railroads were presenting on a nationwide scale issues that theretofore had emerged only locally. By the late 1850s technologically superior rail transport was capturing most of the traffic developed by canals—largely government spearheaded—which had been responsible for the "initial decline in transportation costs across the Appalachian Mountains into the Ohio Valley";48 and by 1890 the nation's railways, still locally oriented and dominated by local interests as of 1861, had become integrated into a national railroad network, in response both to the spread of population facilitated by railway development and to the importance then attached to the stimulus that cheap transport would give to economic development.

Public service undertakings were never entirely free of collective restraint, the nature of which, however, underwent change. Under common law, property could not be used by its owner "in a way injurious to the rights of others" or impairing of "public rights," property rights "are but privileges relative to, and limited by, the common good."51 The power of the state to regulate the use of property was limited as well. Thus, under the Fifth Amendment, such regulation had to comply with "due process."
with the requirement that, in the eyes of the court, procedure had been “reasonable” and “fair.” The court could not, however, determine if the legislation was wise. Beginning with a court dictum in 1877, “substantive due purpose” replaced “due process” in respect to the regulation of economic activities, with the result that the court could substitute its judgment for that of Congress or state legislatures.

In 1877 in Munz v. Illinois (94 U.S. 113) the court declared that the substantive character of a business—in this instance a warehouse storing grain—made it “affected with a public interest,” inasmuch as it rendered a service of vital interest to the public, the right to render which had been waived by the state. It was not, therefore, the monopolistic character (if any) of this business and its consequent pricing behavior that made it regulatable, but its being “affected with a public interest” that served as the basis for the regulation of the prices it charged.39 This principle remained in effect, even though the Supreme Court in 1886 (Wabash, etc. R.R. v. Illinois, 118 U.S. 557) restricted state control to intrastate traffic, then only one-fourth of all traffic, thereby making imperative the passage in 1887 of an Act to Regulate Commerce which established the Interstate Commerce Commission and forbade unreasonable or discriminatory railway rates.40

Sixty-seven years later the restriction implicit in the substantive definition was removed. In Nebbia v. New York (291 U.S. 502 [1934]) it was declared “that there is no closed class or category of businesses affected with a public interest. A state is free to adopt whatever policy may reasonably be deemed to promote public welfare” so long as “the laws passed are seen to have a reasonable relation to a proper legislative purpose and are neither arbitrary nor discriminatory, the requirements of due process are satisfied and judicial determination to that effect renders a court functus officio.” Nonarbitrary and nondiscriminatory curbing of “unrestrained and harmful competition” was therefore within a legislature’s power. By Wickard v. Filburn (317 U.S. 111 [1942]) the Congress was declared to have the power to “establish the working rules of economic activity under the Commerce Clause without fear of judicial intervention.” Whence H. H. Liebatsky concludes that “in the area of regulation of economic activities, the present period is thus one of legislative superiority, just as the period between the end of the Civil War and Nebbia in 1934 was one of judicial superiority.”48

One may perhaps say that Nebbia made of public utilities a species within a genus. For, though the fundamental basis of regulative power was redefined, businesses characterized as public utilities have continued to be distinguished as such. Thus, in 1943 (Davies Warehouse Co. v. Brown, 137 F. 2d 201) a public utility was defined in a dissenting opinion as “(1) affected with a public interest, . . . (2) bears an intimate connection with the process of transportation and distribution, . . . (3) is under an obligation to afford its facilities to the public generally upon demand, at fair and non-discriminatory rates, and (4) enjoys, in a large measure, an independence and freedom from business competition brought about either (a) by its acquisition of a monopolistic status, or (b) by the grant of a franchise or certificate from the State placing it in this position.” This may be a satisfactory legal definition; it is hardly a satisfactory operational definition of “public utility.”46

This definition is ambiguous on at least three grounds. First, it does not provide an economic definition of discrimination, a matter touched upon below. Second, it does not define competitive regulation in such manner as to facilitate removing an industry out of the legal category of public utility when it has become sufficiently competitive (for example, land transport) and regulation no longer augments economic “welfare” as originally intended (and as distinguished from those forms of “welfare” sought through so-called “social” rate making).47 Third, what constitutes fair overall earnings, realizable through charging “fair” rates, remains undefined. The constitutional requirement that the overall rate be reasonable was not made explicit until 1898; then such rate was declared to be a “fair return” on the “fair value” of the property in use (Smyth v. Ames [169 U.S. 466]). This interpretation was modified in 1944 in the Hope Natural Gas Case (320 U.S. 591), a case anticipated in 1942 (315 U.S. 575) and foreshadowed in 1909 (212 U.S. 19).

The Court, in the Hope case, reacting to nearly five decades of wrestling with ambiguities and circularity implicit in the formula “fair return on fair value,”48 shifted its emphasis. It turned from formulas to the “end result” of a rate order, to its “consequences,” to whether a utility’s earnings were comparable with those of other enterprises with comparable risks.49 This decision did not,
however, result in the abandonment by state commissions of dependence on a rate base $B$ when determining the adequacy of earnings $E = \frac{1}{2}RB$, though such base was occasionally redefined, often with $B$ being defined relatively more generously when $R$ was defined relatively less generously. Recourse by the Court in later cases to group and area pricing and rating, an arrangement not necessarily adjusted to the reasonableness of the resulting return to specific individual firms, amounts to a partial departure from both Smyth v. Ames and Hope criteria. Indeed, N. N. Bernstein infers, the Court's position, if no longer requiring that the return to an individual firm be reasonable, moves close to what had been its position in Munn v. Illinois.

It is virtually impossible to redefine as a nonpublic utility an industry that has previously been legally and judicially defined as a public utility. First, it becomes imbedded in a complex of legal, judicial, and regulatory institutions, each of which is supported by special interests deriving benefits from this complex—benefits concentrated in a few hands whereas the benefits that would flow from removal of public utility status are dispersed. Second, in every industry there are likely to be elements that would favor continuation of regulation because of advantages derived at the expense of the community at large. Finally, problems arising when an industry is describable as in seeming transit from public utility to competitive industry status reduce the likelihood that the transit can be completed.

The Emergence of Competition

In the past a firm tended to be assigned a public utility status when it was a monopolistic firm engaged in selling absolutely essential services to customers who lacked alternative sources of supply comparable in convenience, access, and warranted price. Such firm was the only one with easy access to the user's place of consumption, and it brought to him a service he could not otherwise obtain for the sake of reform and the unwillingness of Congress to make them do so. Both Congress and federal agencies are responsible for the current state of affairs, for "the difficulties of achieving the desirable goal of coordination with the existing institutional framework as well as the unwillingness of the existing agencies to surrender their jurisdiction for the sake of reform and the unwillingness of Congress to make them do so." The only practical solution consists in freeing rail and motor transport of all controls on pricing services, and so forth, since attempts to modify the existing morass of controls seem bound to fail. There would, of course, remain need for nonpublic utility

was produced was considered to be physically quite homogeneous, with the result that the firm could be supposed to consist of internally transferable resources and hence be selling its capacity to produce. In its early history, transport, electric, gas, and communications utilities answered fairly closely to the above description, water less so.

While there was always some competition between telephonic and telegraphic service, it was in the field of transportation that competition first became pronounced. It could develop because seekers after carriage could connect their places of use with intercity carriers, steam or electric railway or waterways at first, and later common or their own motor carriers as well as pipelines. In all instances, however, the route had to be constructed, with private (railways, pipelines) or public (highways, waterway development) funds. Rail carriers often fared badly before 1920. Their subsequent relative decline, however, is traceable to growth of motor and other forms of subsidized transport, to vulnerability to inflation and depression, and above all to featherbedding and lack of freedom to vary their prices and to integrate with complementary modes of transport. Even today short-run passenger carriage, a form especially subject to competition from subsidized transport, could be profitable in the absence of government-sanctioned featherbedding and price constraints. Moreover, given competitive pricing, rail carriers could greatly enlarge their volume of profitable traffic and the exploitable fraction of their capacity. The current unfavorable state of rail transport continues to be accentuated by substitution of other carriers, regulated and otherwise, through public investment in modes of transport competitive with rail transport. Whence it is expected that the absolute volume of intercity rail traffic will decline notably. Both Congress and federal agencies are responsible for the current state of affairs, for "the difficulties of achieving the desirable goal of coordination within the existing institutional framework as well as the unwillingness of the existing agencies to surrender their jurisdiction for the sake of reform and the unwillingness of Congress to make them do so."
controls designed to give the country a rational, integrated transport system suited to produce an optimal distribution of population and economic activities. It is essential also to abolish all direct and indirect subsidization of motor and other forms of transport competing with rail transport.66 Firms in the transport industry as in other utilities can function most effectively only if they are free to make all specific decisions.70 After a decade of experience with no regulation, corrective public utility type of legislation could be provided if and as necessary. The Surface Transportation Act of 1971 (S.2362; H.R. 10146), now under consideration, fails short of what is required.

Turning to air transportation, one finds very limited competition, with change in type probably causing increase in costs and making for greater population concentration. Here much more effective regulation is indicated.71 Dissatisfaction with the regulation of interstate transportation is matched only by that with fixation of the prices of natural gas, not a utility industry and not required to continue unprofitable operations. Here is an instance of overall ceiling prices being fixed too low, with the result that exploration is insufficiently encouraged and industrial users, free to pay more, are able to divert gas from households.72 Paul W. MacAvoy concluded that there was need for regulation of natural gas at the pipeline and local distribution levels but not at the production level.73 Suppliers of public power are destined to remain public utilities, subject mainly to state commission regulation, and experiencing competition only in respect of heat and stored power (for example, storage batteries, fuel cells) and potential competition from power users capable of supplying their own. As a rule only one company can have access to a consumer's premises. Since the industry remains a falling-cost one supplying a continually expanding market, prices of power do not normally tend to rise. The communications industry more than other members of the public utility sector is a multiproduct producer. While multiproduct activity tends to reduce risk and uncertainty in the private sector, given sufficient transferability of intrafirm resources, it cannot do this so effectively within the public utility sector unless a firm is free to vary the prices of a number of the services which it produces. At the same time, given production of a variety of services, a regulated industry can more readily engage in "taxation by regulation," the subsidization of relatively unremunerative services out of the profits from other services.76

Unresolved Issues

It may be worth recounting some of the issues that remain unresolved.

1) While the issue of public ownership is not currently alive, given alarm at the prospect of "discretionary controls" and lack of "accountable entrepreneurial planning,"74 departures from what may be called orthodox public utility regulation could come in the wake of growing concern respecting noninternalized externalities, pollutants, and the need to improve population distribution within and outside cities and over the country. Modification of population patterns entails change in transportation policy, avoidance of concentration of waste heat associated with nuclear power, and facilitation of communication arrangements conducive to the optimization of population distribution. Since these changes will be facilitated through public policy, together with financial measures, they could become a basis for social ratemaking. It is essential, therefore, that a clear distinction be maintained between the production and pricing of public utility services on one hand and governmental actions such as subsidization of these services.
services are well-adapted to discriminatory pricing. Being essentially intransfers from one market to another, utility revenue through discriminatory pricing. This implies greater freedom in respect to details of management, the development of new services, and the pricing of services. These objectives might be more easily furthered were there inserted between public utility status and nonpublic utility status an intermediate quasi-public utility status allowing for more freedom for management while retaining in state hands control over certain dimensions of the industry so classified.

3) Conceptions of commodity and discrimination implicit in public utility regulation need to be modernized. Prevention of discrimination was long a (perhaps the) major objective of railroad legislation, because under use of capacity was exaggerated, and it was overlooked that discriminatory pricing ("the secret of efficiency" when capacity is underutilized) would tap new strata of demand and develop new uses for excess capacity. Overlooked also was the misleading definition of product underlying the doctrine of discrimination. For, as A. P. Lerner wrote in 1934, "we have rejected the criterion of physical similarity as a basis for the . . . classification of commodities and have placed in its place the principle of substitutability at the margin." Accordingly, when defining and examining the substitutability of a commodity or service, one must take into account its relevant dimensions.

Even then, of course, a monopoly, with unused capacity or facing customers with varying intensity of demand, can increase its revenue through discriminatory pricing. Being essentially non-storable and nontransferable from one market to another, utility services are well-adapted to discriminatory pricing.

Price discrimination is described by G. J. Stigler "as the sale of two or more similar goods at prices which are in different ratios to marginal cost," and by Joan Robinson as "selling the same article, produced under a single control, at different prices to different buyers." Here the key word is same; it signifies not physical sameness but substitutability at the margin. In actual instances, therefore, it may be difficult to determine if discrimination exists, given that the cost side may be neglected. For example, let $S_p$ designate service $S$ available at time $t$ and place $p$; then if $t$ is divisible into $m$ periods (say 24 hours) and $p$ into $n$ (say 36) places, we have $mn (=864)$ distinct services, and more if determinable cost varies. It is not surprising, therefore, that while what appears to be discrimination frequently is economic, discrimination making for less rather than more optimal resource use often is sanctioned. This outcome probably is more likely when policy is biased in favor of marginal cost pricing even though the prices resulting generate less income than might be realized and too little to cover total cost, thus imposing the deficit in return on the state or nondiscretionary parties. Apparently marginal cost pricing is not very common in the electric utility field.

4) In the public utility sector as in the economy at large distortions in resource use probably are of relatively little significance. They need to be examined carefully, however, since they issue largely from the regulatory process and hence are subject to reduction. A case in point is the Averch-Johnson finding that a public utility, subject to a fair rate of return criterion, tends to increase its investment beyond the point compatible with the ratio of factor costs, or the finding that output is not optimal. Corrective measures, not easy of administration, have been put forward.

W. J. Baumol and A. K. Klevorick show, however, that overcapitalization, if it is allowed to occur, is a less important source of nonoptimality than other consequences of a rate-of-return ceiling. Undoubtedly, careful quantitative study would reveal that modification of production functions is a much more significant source of benefits than improvement of allocation, particularly if the growth resulting can be favorably financed.

5) Most of the attention given to effects of price regulation is focused upon the resulting malallocation of inputs; very little is devoted to effects upon the distribution of income. Presumably the image of the householder as main customer survives, with the result that regulatory agencies behave as if the householder remains the major consumer of public utility services whereas nearly all transport and electric utility services and over half of all communication services are purchased by business firms and other nonhouseholds. More information is needed, therefore, respecting the supposed welfare-augmenting effects of the changes
in income distribution produced by utility rate regulation. While the diffusion of the effects of rate regulation is difficult to trace, by no means all such regulation has increased welfare. Presumably, the pricing of transportation and natural gas has not been welfare augmentative, nor has the distribution of spectrum rents, largely absorbed by firms awarded communication channels gratis by the Federal Communications Commission, together with so-called television idols, and so forth. A rate reduction may result largely in a transfer of income from one profit account to another. For example, if a utility cuts its price per unit by 20 cents on a service largely consumed by a manufacturer, much of this 20 cents will become profit for the latter unless it is operating under conditions of perfect competition and constant or falling costs. In general, enforced rate cuts probably give rise in the main to redistribution of profits, perhaps with an adverse side effect upon the utility and its future capacity to serve residential consumers.

6) Regulatory agencies, by putting great emphasis upon the rate of return, may devote too little attention to conditions that can affect a utility’s performance in large measure. Let \( G \) designate a utility’s gross revenue, \( C \) its corresponding costs, \( B \) its hypothetical rate base, and \( R \) the resulting rate of return. Then, with \( R = (G - C)/B \), the relative cost to consumers of an increase in \( R \) varies inversely with the magnitude of \( G/B \). This ratio will be high if \( G/B \) is high, as it tends to be when most of the inputs utilized have alternative uses. In 1963 the ratio of net income of common stockholders to operating revenue approximated 0.14 in class A and B electric utilities and 0.16 in the telephone industry; in these two industries, therefore, an increase of about 2.0–2.25 percent in operating revenue would allow an increase of one-seventh in common stock dividends. Given reward of managerial incentive, economies reducing \( G \) or increasing \( G/B \) by about 4 percent would allow both a decrease in the price of utility services and an increase in \( R \). Regulatory lag—that is, lag in the downward adjustment of prices after a reduction in costs—probably yields too little return to prove an effective incentive to cost-reducing improvements. Comparison of the costs of regulation with the operating revenue required to finance a small rate increase raises questions respecting how much welfare is increased by investment of resources in regulation in comparison with alternative uses of these resources. Regulation tends to be drawn out, to absorb the time of top level utility personnel, and to increase uncertainty against which a utility cannot protect itself as can private firms by diversifying its output.

7) Given that increase in welfare flows largely from increase in output per overall unit of input, made possible by technological progress, it is likely that no issue is more important than the impact of regulative policy upon the development and/or adoption of input-economizing and quality-improving technological and related improvements. Technological progress may, however, turn out to be a double-edged sword. For, since the capital-output ratio is much higher in the public utility sector than in most other sectors, the adverse effect of a given relative amount of obsolescence of external origin tends to be correspondingly greater. Moreover, insofar as a public utility which initiates a potential innovation is not free to develop and exploit it, its capacity for defensive action in a dynamic world is restricted, since innovations are most economically promoted, as a rule, by their initiators. Regulation is not favorable on balance to technological progress, although it does at times stimulate what may be called a defensive technological response. W. M. Capron and his associates generally agreed “that the performance of regulated industries falls far short of the ideal and even of a reasonable target for public policy.”

8) Regulatory outcomes are shaped in part by the regulative process as such. Of this process, involving as it often does regulation by underlings instead of by supposedly responsible commissioners who may fail to read voluminous testimony, we need detailed study. It might be conducted within a game-theory context, although with the players (regulators v. regulated) aware that one side or the other may seek external aid. Such study might disclose the degree to which intrusion of the “adversary process,” fundamental to American legal practice though incompatible with regulatory activities. It would inquire closely into the advantages and disadvantages of the “constant surveillance” approach, a time and resource conserving approach which has the advantage, among others, of minimizing stare decisis and giving commission staffs something both useful to do and contributive to their understanding of the details of enterprise. Correction of the weaknesses within the present regulatory appara-
tus would improve results even though the social environment external to this apparatus remained unchanged.

Inquiry into the internal mechanisms—information flow, feedbacks, decision making, differential sensitivity to external stimuli—of the regulatory process needs to be accompanied by inquiry into the relations obtaining between regulative agencies and their parent legislative bodies (such as, Congress, state legislatures). For much of the insensitivity of regulative agencies to the economic use of resources and the stimulation of technical progress is traceable to legislatures upon which rests responsibility for providing criteria and for changing the regulative structure as conditions change, lest it persist as the law of the sea in an age calling for prevention of its pollution.

9) Persisting inflation is intensifying uncertainty, already appreciable in the world of public utilities, making more difficult the "fair" pricing of utility services, augmenting the regulative burden, and contributing to consumer ill will. Requests for inflation-offsetting rate increases become more frequent. The Consumer Price Index rose 72 percent in 1940-1950, 23 percent in 1950-1960, 7 percent in 1960-1965, and over 25 percent in 1965-1971. While irresponsible war finance accounts for a considerable fraction of this inflation, it is traceable also to the inflation-oriented structure of the American economy and the belief that inflationary fiscal policy can produce full employment even though much of it is traceable to the absence of competition in labor, industrial, and service markets, and to unemployability. The prospect of inflation is unfavorable to public utility finance. Inflation itself increases the nominal cost of new debt "capital" and may reduce the real return to equity "capital," given the financial structure of a utility and the indisposition of regulatory commissions to allow increases for replacement and related purposes. A regulated industry would benefit greatly, as indeed would all but speculative sectors of the economy, from pursuit of banking and fiscal policies which, together with enforcement of competition and suppression of cost-push inflation, would make either for price stability or for decline in prices as real-input costs fall.

NOTES
5. For example, see G. H. Robinson, "The Public Utility Concept in American Law," Harvard Law Review 41 (January 1928): 277-309, esp. 279-80; and note


60. On the almost complete failure of the federal government and the Federal Railroad Administration, see Eliot Jones, "The Interindustry Setting of Electric and Gas Utilities," American Economic Review 75 (1921): 177-97; also Cushman, "Dissolution of Utility Commissions in Massachusetts," Journal of Political Economy 29 (March 1921): 23-36; and Cushman, "Independent Regulatory Commissions and the Massachusetts Gas Commission in 1865 was soon followed by extension of its jurisdiction to electric light companies and by the creation of fourteen others.
61. On the Windom committee's recommendation that governments establish state enterprises to compete with privately operated ones and thus hold the latter in line, see Eliot Jones, Principles of Railway Transportation (New York: Macmillan, 1921), p. 212.
67. On the almost complete failure of the federal government, see the federal Communications Commission's efforts to give weight to economic and market considerations in the allocation and use of the radio spectrum, as seen in J. H. Levin, The Invisible Resource-Use and Regulation of the Radio Spectrum (Baltimore: Johns Hopkins Press, 1973).
68. See Roger L. Ransom, "Social Returns from Public Transport Investment-
66. Ibid., pp. 10, 53–59, 67–92. The Association of American Railroads reports that in fiscal 1971 governments spent about $25 billion on intercity transport systems of which only $25 million was devoted to high-speed ground transport including rail.
69. Capron, Technological Change, chap. 5, pp. 211–74.
72. For example, see Capron, Technological Change, chap. 3.
81. A. P. Lerner, "The Concept of Monopoly and the Measurement of Monopoly
of Regulation in an Averch-Johnson Model," ibid. 2 (Spring 1971): 278-90. M.
See also S. Weintraub, "Rate Making and an Incentive Rate of Return," American
Natural Perspective
JOSEPH J. SPENCER
85. For example, see Joan Robinson, The Economics of Imperfect Competition (London: Macmillan, 1933); and W. A. Lewis, Overhead Costs (New York: Rinehart, 1949).
Historical Perspective

Public Utilities, chaps. 15–16; and Phillips, Economics of Regulation.


105. Capron, Technological Change, p. 221.


Discussion

Ben W. Lewis
Oberlin College

I

Professor Spengler's whirlwind annotated historical and analytical survey of the pathology of regulation is full to the brim of the most alluring and prickliest set of propositions I have ever been privileged to discuss, all of them suggested or supported by the largest single flock of footnotes I have ever seen in a lifetime of footnote watching. A shortage of time and an abundance of indulgence have precluded me from gorging myself on the footnotes, but I am a sucker for lures, and this time I have paid a price. Time after time I have reached out avidly to grasp an enticing Spengler proposition—sometimes to savor but more often to pluck out and punish—and time after time I have pulled back with lacerated fingers. These propositions are equipped with thorns and thistles. Innocent looking, unadorned, apparently un-
guarded, they are tossed off hither and yon with diabolical
insouciance as self-evident truths, and the unsuspecting reader
rises to the bait; but lurking in the nearby shadows there is
always (repeat always) a saving qualification, a balancing consid­
eration, a diverting aside, or a frosty, snowing footnote. Ouch!

I have no disposition to replay my experience for the reader's
entertainment—a carefully considered cost-benefit calculus dictates
otherwise both for his sake and mine. I shall content myself
with one or two tentative, protected references to points in the
main paper, just to make sure we are swimming in the same
pool, but I shall be alert to withdraw on contact and shall direct
my efforts principally in the direction of creation (my style) rather
than criticism. For instance,

II

I am still not clear whether Professor Spengler has drawn carefully
enough the rather important distinction which, if “public callings”
are to be discussed at all in the context of this conference, should
be drawn between “public callings” and the “public utilities”—
transportation, electric power, gas, and telecommunications and other forms
of telecommunications—which are the principal concern here.
The public calling concept was dreamed up centuries ago as
a front for a judicially decreed common law right of aggrieved
persons to bring civil suits for damages against sellers who failed
to discharge a judicially imposed obligation to serve all comers
adequately and on reasonable and nondiscriminatory terms. The
sellers in question were those who offered their services under
conditions which found able buyers under pressure to buy, but
helpless to bargain. The concept waxed and waned and then
slumbered for centuries, only to be revived by attorneys seeking
to hook it onto the Fourteenth Amendment as a constitutional
bar to state regulation of grain elevators. Grain elevators are not
public callings; they said in Munn v. Illinois in 1876, and under
the Fourteenth Amendment fortified by Lord Hale, only public callings
may be regulated. The Supreme Court agreed, but only
in part. and not in the part that mattered to Munn. Munn was
right, said the Court—under the Constitution, only public callings
may be regulated; but grain elevators are public callings (in 1876,
if not two centuries earlier) because they stand “in the very gateway
of commerce and take toll from all who pass.” Parenthetically,
Professor Spengler, this is not the precise equivalent of monopoly,
but it has a strong monopoly scent. Munn touched off a foray
by the judiciary into the policy (as distinct from power) jurisdiction
of the legislative branch—a little side jaunt which did not come
to an end until the Nebbia case, nearly sixty years later—and
which saw the Court passing judgment on legislative enactments;
admitting banks, insurance companies, and rental property to the
select group of regulatable sellers, and denying admission to
packing companies, theater ticket and employment agencies, gasoline retailers, and makers of artificial ice. The former were public
callings, the latter were not. Why? Mr. Justice Holmes, dissenting,
had the answer: because the Court said so.

All of this throws light on the activist, policy-determining role
which the Court at one interesting stage in its history insisted
upon arrogating to itself. But, it is particularly worth noting here
that at no time—even during this period when the Court might
have been thought to be most receptive—has the legislative power
to regulate railroad, gas, electric power, and telephone companies
ever been raised as a constitutional issue before the Supreme
Court. These are the subjects of regulation not because the Supreme
Court has dubbed them public callings and declared that they
may be regulated, but because of their physical characteristics
and the physical conditions of their operation, as well as their
economic characteristics which combined to lead legislative bodies
at all levels to the conclusion that effective point-by-point competi­
tion was impossible in these industries, and to the undisputed
decision to regulate. I invite your attention not alone to high
fixed costs and inevitable surplus capacity in at least certain
portions of every system, but even more pointedly, since it is
not always explicitly recognized, to the facts: (1) that our
utilities (ex railroads) are necessarily connected physically by mains
or cables with the property of each of their individual customers
and that customers are not likely to be enchanted by the prospect
of multiple connections and multiple street excavations; and (2)
that to offer service these industries must occupy public streets
and highways, and must upon occasion make use of the govern­
ment power of eminent domain. They must do business with
the government before they do business with any customers, and
this sets the stage for government action which finds its rationale,
if not always its immediate precipitating cause, in the fact of inherently ineffective competition.

All of this may or may not add up to "natural monopoly"; personally I could not care less. The policy decision makes sense, irrespective of the nameplate on the door. Also, irrespective of the label, it offers to me a much more convincing explanation of the presence of regulation than the notion that utilities across the board have surrendered their economic freedom in voluntary exchange for the protection afforded by monopolistic franchises, or, to put it in reverse, that the public across the board has surrendered its right to the benefits of effective competition in free exchange for the ineffable delights of regulation.

Previously I "ex'd" railroads from the proposition that public utilities are necessarily connected physically with the properties of their customers, and hence from this much of the natural monopoly rationale for the regulation of telephones, gas, and electric power. Railroads have significant physical and economic peculiarities of their own. I grew up on Taussig's explanation of natural monopoly in the railroad industry—competition is slow to arise, it exists only at certain points, and where it exists it tends to be self-destructive—and I have lived with it (with a measure of uneasiness when the horse and buggy came to be displaced by the horseless carriage) most of my life. Recently my uneasiness has progressed to distress, albeit intermittent, not constant distress.

My agitation is occasioned not alone by the unholy spectacle of attempted government regulation in the presence of some vigorous, even if not wholly reliable, competition—rail versus waterways versus public motor carriers versus private motor carriers versus air transport; but also by the growing realization that neither I nor anyone else has the slightest notion of how to shut this spectacle down without creating another unholy spectacle or series of spectacles in its place. We cannot walk away from it in the daytime or dream it away at night, and that accounts for most of a twenty-four hour day. Spengler is correct that regulation creates its own institutional barriers to deregulation, but I do not believe that in this instance these institutional barriers are wholly controlling. With the removal of regulatory restraint, the resulting competition would be a massacre, and the competition to emerge from the massacre is not likely to be acceptable to us for long as the main economizing force in this area. The whole economy, not merely regulators and transporters, is shot through with reasonable expectations to which the tangled transportation network as it has evolved through the past century has given rise. Expectations can, of course, be changed, but expectations as widespread, deep, and sturdily based as these cannot be violated out of hand. I am clear that we must act, but I have no schedule or timetable, and no word of wisdom beyond caution against moving precipitously at great human cost just to reach another 'ole.

When the technology of telecommunications moved past the wall telephone, it passed beyond my understanding; but my more knowledgeable friends tell me that in at least part of the industry recent developments are eliminating the cables which have constituted the physical foundations for natural monopoly and regulation of telephones. The only way in which I can reciprocate is to warn my more knowledgeable friends that time is wasting and, if it is not already too late, to get busy on the arduous task of adapting existing regulation functionally to its new and more complex setting, or, conceivably, on the thankless task of spinning off regulation in whole or in part. And, good luck to them!

III

Back to the Supreme Court: the Court managed after sixty years to extricate itself from its ill-advised attempt to take over the legislative function in the determination of who in our economy ought not to be regulated. It was not so fortunate in another, shorter but much more damaging venture into the field of public policy. In Munn v. Illinois the Court said that if the legislative right to regulate prices were established constitutionally, the prices set by the legislature were beyond the reach of judicial power. The remedy for excessive exercise of the legislative power was to be found at the polls, not in the courts. The Court roughly fifteen minutes to begin to regret its magnificent gesture. The itch was on, and it spread slowly but surely for the next twenty years. It culminated in an insistence on a substantive as well as a procedural content for "due process," expressed in the "fair return on fair value" pronouncement in Smyth v. Ames in 1898. I will not regale the reader with a recital of
the ensuing parade of horrors; I will content myself with the relatively restrained statement that most of the horrendous costs, delays and lags, speculative uncertainties, and general malaise that have characterized too much of public utility regulation in this century have stemmed directly from Smyth v. Ames and the "clarifying" decisions which followed it nearly to the 1940s. And I will add: most of this need not have been; it was not inherent in the regulatory process.

There have been gratifying exceptions in some quarters, a few state and federal commissions and an occasional lower court have asserted independence and stood their ground. The Supreme Court has permitted itself an occasional inspired moment, notably in the matter of operating expenses and control of management, and going value; and Congress was permitted by the Court to lessen some of the jurisdical gaps in regulation, pointed up by Court decisions, growing out of our dual (state-federal) structure of government. Also, the Court placed the policy issue inherent in natural gas wellhead regulation squarely where it belonged, in its natural gas decision in the 1950s.

The Court began to evidence a desire to extricate itself from the morass of Smyth v. Ames in the early thirties, but it did not complete the long, taxing journey back to high ground until the Hope case in 1944. On its way out it could not, of course, roll up the morass behind it. The Court has long since arrived and has cleaned and polished its boots, but many state legislatures, commissions, and courts are still struggling, and pardon me if I add, without Hope.

IV

A great deal has been said and written over the years about the failure of regulation and its causes, and I have contributed more than my share to the voice of protest. But my quarrel with regulation is not that it has failed either in any absolute sense or by comparison with the performance of what we like to call the free, competitive market. My protest is simply that it has not been allowed to live up to its own potential. Regulation could, without strain, be made much more directly functional, less costly, and more effective in producing what we want it to produce. It will never be perfect (incidentally, who knows what we mean by "perfect economizing"?) but in the context of our total set of economizing processes, I submit that public utility regulation need not be a strikingly conspicuous example of imperfection. (Have you noticed any misallocations or maldistributions lately, not attributable directly to regulation?)

Regulation is not a matter of right or wrong, good or evil, and it must not be judged by these standards; it holds all the promises and all of the flaws inherent in the total mass-economizing adventure in which all of us, by the fact of being alive, are engulfed. And by the same token it requires and is entitled to all of the balancing and accommodation which we accept as a matter of course in the nonregulated sectors of our lives. I am moved by Professor Spengler's observations on fiscal policies and cost-price inflation to emphasize once more that regulation is only a part of the total economizing process; its operations and its performance are necessarily conditioned by forces to which it must adjust; and it cannot properly be held responsible for all of the effects of forces quite outside its reach. The inconveniences and costs of inflation and the growing-up of organized labor as they affect utility prices, revenues, and service are not peculiar to public utility regulation.

Finally, it must be borne in mind that regulation at its finest suffers from the inherent defect that it is basically a restrictive, not a promotive, instrument. Regulation can prevent blatantly inferior performance and excessive prices; it cannot compel superior performance at the lowest economic price consistent with such performance. It can exert mild pressures, and it can hold out incentives; it cannot compel incentives to be acted upon. The unreachable culprit under regulation is not the utility management which is incompetent or irresponsible; it is the competent, complacent management. Under our constitutional system, regulation (as promotive as it can be made) will have to be supplemented by socially alert utility managements or by some extra-regulatory, coercive force (the threat of public ownership?) if it is to be totally effective.

But we haven't really tried; we give up too easily, too willingly. For instance, it seems I have listened endlessly (and most of the time I have nodded my assent) to recitals of the merits followed by the defects of the adversary approach and the continuous surveillance approach arrayed against each other as absolutes.
Could they, conceivably, be dovetailed? Is it beyond the intellectual power of a select coalition of high legal and economic talent—experienced, inspired, dedicated—to bring about a wedding of these approaches that would produce a progeny (call it Con-Ad) combining most of the best and least of the worst of both parents, and that it might live and prosper and be a credit to us all? Is it just too naive to believe that a spot of imaginative grafting (pardon the expression) might move regulation, functionally, a little further along the road?

This brings me to several observations about law, lawyers, and legalisms and about economics, economists, and economisms touched off by Professor Spengler's remarks on these matters. I have been vocal plenty on the damage which lawyers, acting in their several capacities, have done to the cause of effective regulation; and I would be other than human if I failed to exploit this opportunity to insert a plug for economists. I shall not beat about the bush; consider the plug inserted.

But, I have some things to say to my fellow economists. Just as regulation is an inherent part of the utility industry, so law and lawyers are an inherent part, and not just a part of the mechanism, of regulation. Regulation (statutes, rules, interpretations, and the active application and use of these) is the lawyer's ballpark; this is where they perform. And when regulation hurts—and if it doesn't hurt at least once in a while it isn't regulation—in come the top legal performers (the performers of last resort), those who invoke and those who administer constitutional protections. It is the lawyers who will prescribe, or who by failure to prescribe, will prescribe the status quo.

In this game, we economists, along with purveyors of other disciplines, are cast mainly in the role of educators, not performers. A handful of economists bring their economics to bear upon regulation as expert witnesses, occasionally an economist finds his way to a seat on a regulatory commission and a few to positions on commission staffs; and Spengler's bibliography is testimony to the fact that many economists write and publish profusely (some even more than profusely) on regulatory matters. The impact of these writings on the practice of regulation is not susceptible to precise quantitative measurement, but it is safe to suggest that impact does not vary directly with volume. This is as close as we economists get to the playing field.

We're not only outnumbered, we're swamped. Let me suggest that as economists concerned to improve the regulatory process, we ought to be pushing not for fewer lawyers and more economists, but for lawyers in regulatory practice and on the commissions and courts who have a good, solid understanding of basic economics, economizing, and political economies. We shall have to reorder our priorities and devote more of our resources to purposive teaching and less to in-house discourse. Let us become subtle and work our ways on lawyers while they are still pre-lawyers when they are not looking. I have no ambition to make professional economists out of the lawyers or any others who are engaged professionally on the regulatory scene, nor do I want these lawyers regaled and disenchanted to the point of rejecting all economics by the kind of economics with which we professional economists seek to impress each other. I am as fearful of the effect on regulation (and on the quality of American life generally) of excessive economisms as I am of excessive legalisms. Let us clutch our higher, more esoteric mysteries, and, at the same time, drive home the simple basics of economics to those who need and can use it.

I would settle, and gladly, for economic understanding which encompasses the nature of the economic problem which eternally faces all mankind, the nature of the economizing process and of economic choice, and the nature and role of the whole range and spectrum of economizing instruments and arrangements available to us to carry out our economizing tasks.

To people with such understanding, public utility regulation will not appear as a frightening, impossible assignment or aberration, but as a fairly standard exercise to be performed acceptably (not perfectly and not with infinite precision) in a relatively important but also a relatively small sector of a vast and constantly changing total economy; an economy which employs more or less acceptably, but not with perfection and certainly not with infinite precision, singly and in varying combinations, our full armory of economizing devices and processes. (They may look askance, but they will not panic even at price freeze, Phase II or Phase XXII!)

It could be, although it is probably too chimerical even to be voiced, that someday fate might permit us to go about
the business of utility regulation (and even deregulation upon occasion) simply, directly, and with a genuine, workable sense of functional purpose—and that lawyers and economists might team up together on the job.

Discussion

WARREN J. SAMUELS
Michigan State University

Professor Joseph J. Spengler has given us another virtuoso performance with his characteristic command of the literature and the field. Coupled with his earlier essay, "Evolution of Public Utility Industry Regulation: Economists and Other Determinants," he has presented a panoramic view laden with insights into the public utility institution and regulation per se. Yet while this is in many ways a brilliant and valuable paper, it is also a dangerous one: as is often the case, the very strengths of an analysis are deeply and inextricably related to limitations that may become snares for the unwary. The problem is not Spengler's alone; it is characteristic of the profession of economists, and involves the limits of the fundamental paradigm of economic reasoning as well as what Kenneth Boulding has called economics imperialism.

I will concentrate upon my concerns in a moment; let me first underscore two points which Spengler has made. First, I think
that he rightly and accurately emphasizes that the public utility concept as it has come to be best known is a legal concept and as such reflects the constrained precedential and analogical character of legal reasoning. Thus he most perceptively remarks that "Public utility regulation took on a definite form and became imbedded in certain categories which in turn limited the questions asked of regulation and the answers admitted." This historically specific character of regulation is manifest in the crucial importance of legal as distinguished from economic modes of thought.

Indeed, the central theme of the paper, used to support his argument concerning the structure of legal rights, their origins, and the pattern of social power and the distribution of costs and benefits, is that “It is virtually impossible to redefine as such reflects the constrained precedential and analogical character of social power and the distribution of costs and benefits of legal rights, and that the law is an instrument for the attainment of social objectives and the economy is an object of legal control. Professor Spengler rightly points to some of the inadequacies of the legal paradigm in regard to economic problems. Yet the legal system functions primarily as a system of social control and while the economy is itself a system of social control, economic reasoning and the economic paradigm themselves are inadequate for the larger purposes of social control and the other problems, not solely economic, with which the legal system must deal. In its own way the law is concerned with resource allocation and allocative efficiency just as economics also is concerned with social control in its own way. This is to say that neither legal system nor economy is primary to the exclusion of the other; both are part of a larger general equilibrium system. Contrariwise, Spengler’s paper is part of and a contribution to a new and critical view of the law taken by some economists. The juxtaposition of economic and legal modes of reasoning increasingly will be manifest in a conflict with traditional lawyers as to how the law, the legal process, and particular legal institutions (for example, liability rules, courts, punishment, and so forth) are to be approached analytically and as a system of social control.

Law needs to be informed by economic analysis, but economic analysts need to be careful in their presumptions and conclusions concerning the structure of legal rights, their origins, and the pattern of principles by which to adjudicate conflicts, the formulation and enforcement of norms or rules with which to organize and stabilize society while at the same time enabling and adjusting to change, providing the framework of rights on the basis of which (inter alia) persons are able to participate in the market, determining whose preferences are to count when individual wills conflict, which is to say, with the structure of private power, and that no area of human behavior (especially conflict situations) be without a relevant law however much range is left for spontaneous individual and subgroup activity and discretion.
of freedom and of exposure to the freedom of others ultimately grounded in legal rights. Economic reasoning and the economic paradigm are not sufficient for the purposes to which Professor Spengler and many other economists would put them. I am not saying that the economist and his metaphysics and toolkit have nothing to offer. Rather I am urging that the economic analyst must start with some system of rights, either with the actual structure of legal rights that is worked out by and through the legal system or some other one to be given legal status. The economist cannot make substantive judgments on resource allocation without some prior definition and distribution of legal rights, say, property rights, for it is that definition and that distribution which governs whose preferences will count. 

"Every demand for a right by any person or group is, directly or indirectly, a demand for government," hence for the legal process and the legal paradigm and mode of thought as an alternative to force unchecked by law. There is very little in the economic paradigm, aside from the assumption of private decision making (namely, private property as an institution), that informs us of the desirable structure of private decision making, that is, of whose preferences are to count, and therefore the structure and distribution of legal rights. When the economist pronounces upon the legal structure and upon regulation of utilities, he is doing more than economics, he is ethicizing, he is judging who shall have power with which to participate in the market-something which many allege has long been the case, and which if true makes economics a blend of knowledge, values, and instrumental control. Yet to the extent that it is the case we have no assurance of anything like unanimity as to criteria or ends, although the performance of the priestly function does not require unanimity. 

In any system of private enterprise and any system of public utility regulation there will be a structure of legal rights. The real policy issue is that structure and therefore the structure of power within which and out of which market forces and equilibrium solutions are generated. The actual results, or what the economist refers to as the optimal solution, is a function of the structure of power, ultimately the pattern and distribution of legal rights (within a general equilibrium system). The result will be a partial function of whether the market is populated by giants, by pygmies, or by giants and pygmies. Also, change the structure of power and you change the optimal solution, for you thereby change the structure of whose preferences are to be given effect. The history of public utility regulation in this country is thus a history of different groups trying to use regulation to promote their particular interests. It is one thing to discuss the formal conditions of optimality, it is quite another to present a situation, arrangement, or change as optimal, for the latter requires some additional valuational premise as to the structure and distribution of rights and power, as to whose preferences should count. Economic analysis thus presumes the structure of power, the structure of rights, and the functioning of social control with respect to rights and power, and the legal process provides it. Economists are prone to support or reinforce certain arrangements or changes as optimal on the basis of selective, normative, or a priori identifications. But such identifications are not pure economic analysis. They involve making the type of choices in which the legal process and the legal mode of reasoning specialize; for economics to make such identifications is for economists to become social controllers with the object being either the existing system or some desired system.

Thus Professor Spengler presumptively argues that because the four streams "have tended to flow at different rather than at commensurate rates, actual resource use has tended to lag behind optimum resource use," as if one could specify what optimum resource use is without an independent legal assignment of rights to determine whose preferences are to count and as if one could conclusively say what was the optimum rate(s) of flow. No such exogenously determined specifications are possible, for the actual optimum will be a function of the operation of the system and the operation of the system will be a function of the dynamics of the power structure and legal system. He also speaks of "optimization of resource use and . . . optimal distribution of a nation's population and its activities," as if one could so specify independent of the power structure itself partially grounded in law. Optimal population distributions are ultimately a matter of taste, tastes to the trade offs people are willing to make, and not solely a matter of scientific determination. I repeat that Spengler is not alone in
this, for it is a behavioral tendency of economists to treat optimality presumptively, in each case making some implicit or explicit assumption as to rights and power structures and then, only after the fact, in the context of opportunity for preference realization. Perhaps Spengler's clearest statement of this type, where he locks horns with the legal system most directly, is that the adversary process is "fundamental to American legal practice though incompatible with optimal regulation." I urge, however, that not only do we have no independent substantive knowledge of what is optimal regulation, but the adversary process is both fundamental to our general system of civil and economic liberty and is the process wherein relative rights, relative freedom, and exposure to the freedom of others are developed, whether enshrouded in private property rights or regulatory statutes. Public utility regulation may be seen as the functional equivalent of property and other rights in that it structures the decision-making process; any holding of economic optimality must make some provision for the antecedent fact and determination of the decision-making process, namely through legal rights or regulatory statutes. There are many things about the adversary system and regulation which I do not like (and neither does Spengler; in fact I may be sounding more like a defender of the existing system of regulation than I really am), but that is different from saying that some rights-determining process is incompatible with optimality regulation or, for that matter, that regulation is not optimal. One may specify some rights structure as given or preferred but in the real world that structure is very much an object of conflict and jockeying for position, as are also resource allocation and income distribution. In saying this I am not denying that we can have more or less efficient regulation or court operation. I am arguing rather that the operation of the legal system in the formation of rights is antecedent to economic optimality conditions which are substantively constructed only on the basis of whatever rights different people have of market significance. Optimal conditions or solutions are specific to the power structure (legal rights structure) within which they arise.

Professor Spengler knows this; in fact, I have learned no small amount of it from him. His treatment of the problem of order in economic affairs is classic, and one should note that the legal-economic interrelations are more complex and extensive than are covered by the narrow optimality conditions of welfare and microeconomics.
of costs or of evidence of loss. And they are acting as moralists not as scientists, as statesmen not as technicians. There is nothing wrong with that, but we should not confuse the one with the other.

What I am saying, then, is that the noneconomist must be very wary of the economist's reasoning—just as the economist must be wary of the lawyer's reasoning. When the economist refers to "optimal," he makes several important assumptions about the nature of social (including legal) reality and values which, while they cannot be gone into here, operate to condition and make quite relative his policy implications and recommendations. When the economist makes judgments about the legal process and the resultant structure of rights it must be seen that he is adding certain particular additional value premises to the structure of his economic paradigm in order to lend recommendatory substance to his formal optimality conditions. Economic analysis can suggest that regulation is ineffective and that it only performs a cartel function, but it cannot tell us how to choose between one effective rights and exposure structure and another.

As one small example of the foregoing and more, let me refer to Spengler's dictum that the legal definition of a public utility is ambiguous on at least three grounds: it does not provide an economic definition of discrimination, it does not adequately define competition so as to yield policy guidance, and it does not define fair rates and fair earnings. I say this: neither does economics. In each of these cases there are typically, in both law and economics, additional and inconclusive identifications as to the presence or absence of the criteria of discrimination, competition, and fair rates. Economic analysis can suggest that regulation is ineffective and that it only performs a cartel function, but it cannot tell us how to choose between one effective rights and exposure structure and another.

Two other points. First, Professor Spengler writes of "obsolete statutes directed against no longer existing dangers." Is this the case? How do we know an obsolete statute when we see one, or is it a matter of values as to relative rights? In the absence of regulation would the dangers of the past not exist or would they recur? How do we know? Does regulation prevent their occurrence, so that deregulation would enable their recurrence? Is their present absence under regulation an impermissible or inconclusive basis on which to premise deregulation? Broadly speaking, we must balance the inadequacies and abuses of power with or without the existing system of regulation; we must balance the extant system with its deficiencies against a restructured and reformed system of regulation, if that is possible. I personally am quite pessimistic about making regulation work but my judgment is a matter of studied judgment and not economic science, although I readily confess that economics has made me a chilling skeptic, as Lord Balfour put it.

But on the substance of his suggestion I conclude with these thoughts. First, the adoption of such a quasi-public utility status would probably result in a substantial net increase in the totality of utility control, as many areas of business would likely be brought within its ambit, for good or bad. Second, orthodox or conventional public utility regulation is very difficult, among other reasons, because the regulated utility has to operate in a largely unregulated economy, and it is not possible to ascertain whether regulation in such quasi-public utility status would be easier or more difficult. Third, the result might be more effective regulation (always a judgmental matter) or wider opportunity for regulation to be captured for the purposes of the ostensibly regulated (always a judgmental question also). The interesting ideas about regulation of public utilities result from the fact that regulation is both a dependent and independent variable in working out solutions to the problem of order. Professor Spengler's paper has helped us very much to see that—no mean feat.


Regulation and the Energy Crisis

William R. Hughes
Charles River Associates, Inc.

Frances E. Francis
New England River Basins Commission

Introduction

For the past several years the energy sector has been experiencing an abnormal amount of upheaval characterized by shortages, brownouts, environmental conflicts, and major increases in costs and prices. One consequence of this period of stress has been increased attention to the development of a national energy policy. There is a sense of urgency about improving present policies and developing technologies better suited to cope with the present and future problems of the energy sector. Taken together, the current problems and the ferment over new policy development are widely referred to as an energy crisis.

We have been invited to discuss the following questions. How
well-equipped are existing regulatory institutions for dealing with the problems of the energy crisis? Should these institutions be modified and, if so, how? What is the role of commission regulation in an effective national energy policy? These questions, difficult in any event, are meaningful and answerable only when they are applied to well-defined problems that relate directly to the regulated portions of the energy sector. What has come in recent years to be labeled the energy crisis is in fact a very diverse set of problems. These problems differ greatly in origin, nature, and regulatory content.

For all their variety, energy problems are bound together by the interdependent character of the energy sector itself, which consists of interrelated markets in which different energy sources are variously co-products, raw materials for other energy forms, and substitutes for one another, directly and indirectly, in both intermediate uses and final consumption. As a result, the prices, supply, and demand of any one energy form affect, and are affected by, the other energy markets. Regulation of one energy market must be considered in the context of the energy economy as a whole and of the many, often conflicting forms of government intervention, of which regulation is but one element. At the same time, the energy sector is so complex that a comprehensive analysis of the role of regulatory commissions in coping with the energy crisis cannot effectively be undertaken in this paper. The approach taken here is to analyze the topic as it pertains to two problem areas: natural gas shortages and the problems of expansion in electric bulk power supply. Regulation is important to both and there are important parallels that arise from the nature of the regulatory process. But there are also fundamental differences in the two situations that have very dissimilar implications for regulatory policy. In the natural gas case, the key regulatory problem is one of prices. The structure of the gas industry at the field production stage is such that competition in the marketplace can be relied upon for an increased role either as supplement and support to, or as a substitute for, regulation of field prices. In the case of electric bulk power supply expansion, the key environmental questions have an important public dimension that cannot be left entirely to the marketplace. Moreover, the public utility character of electricity supply is such that realistic policy approaches to the power supply expansion problem with investor-owned firms should take the public utility status of electric companies as a given.

Both the natural gas and electric power problems are useful for illustrative purposes; they also deserve analysis in their own right. The discussion that follows is intended to serve both functions. The emphasis is on analysis of the structure of the problem rather than on an abundance of factual detail or discussion of specific policy solutions. Our purpose is to supply perspective and identify broad approaches to remedy within which workable solutions can be found.

The Natural Gas Shortage

It has been widely contended that the United States has had a shortage of natural gas reserves since the late 1960s. How serious is this shortage? Why is it a problem? How did the problem arise? How has regulation affected the problem? What changes in regulatory policy and institutions would best contribute to a remedy of the problem?

THE SHORTAGE AND ITS EFFECTS

Although the extent of the shortage is uncertain and subject to debate, there is ample evidence and widespread agreement that it is real. Not only producers, but also pipeline buyers, regulators, independent experts, and policy makers at the highest level acknowledge the shortage to be a serious national problem. Symptoms of shortage include the rationing of available supplies by some distributors because of their inability to obtain commitments of new supplies from their pipeline suppliers, the inability of pipelines to obtain reserves from producers, and diminished exploration activity. Another indication that the current supply falls short of demand is the willingness of distributors and pipelines to pay prices well above prices set by the Federal Power Commission. Distribution companies have contracted to purchase liquefied natural gas (LNG) at prices above $1 per Mcf; long-range LNG supplies are reportedly in the range of 55 to 85¢ /Mcf; intrastate gas transactions have been reported at prices 10¢ /Mcf above the FPC rate; and the FPC has authorized temporary sales to interstate
pipelines at prices approximately 10¢/Mcf above the area rate of ceiling price.11

Currently, producers are unhappy over what they consider low interstate natural gas prices; pipelines are dissatisfied over their inability to bid high enough to secure additional supplies to meet demand; potential customers are troubled by their inability to procure gas supplies at all and existing customers are worried about rising costs and adequate supply; and the courts and the regulators are distressed over the length and complexity of the procedures necessary to set the price of natural gas.

The shortage condition has burdened regulators with the politically difficult and administratively cumbersome task of allocating scarce supplies by administrative decision. There has been constant dispute over who should get scarce supplies and regulatory action to deal with the problem has led to a bewildering mixture of administrative allocations, priorities, restrictions, and special exceptions to price ceilings.

The shortage is only the most dramatic symptom of the serious misallocation of a valuable natural resource that has resulted, in part, from the distortions in gas prices induced by regulation. Low prices in the regulated sector have encouraged demand, discouraged exploration and development of new reserves, and encouraged the flow of existing supplies into a rapidly growing unregulated sector. Uniform area ceilings have contributed to geographical misallocations in gas exploration, development, and production. The price incentive for private firms to develop substitute technologies, such as coal gasification and improved methods of producing gas from feedstock, has been weakened.12

In short, prices have not performed their allocative role.

Of course, the supply and demand for gas are just one aspect of resource allocation in the energy sector, and it is dangerous to generalize about the overall resource allocation impact of the price of only one energy form. Nevertheless, the general direction and seriousness of the misallocation is clear. In view of the "clean" burning characteristic of gas, which makes it an ideal fuel for mitigating air pollution, it is particularly unfortunate that price regulation has prevented residential and industrial customers from competing effectively for scarce gas with the unregulated intrastate market, where the gas is largely used as feedstock for petrochemicals and has reduced the long-run supply.13

Essentially, the FPC backed into its regulatory jurisdiction over the field price of natural gas through the pipeline jurisdiction it obtained under the Natural Gas Act of 1938.14 Like similar regulatory legislation passed for electric power and communications during the 1930s, the Natural Gas Act was aimed at establishing workable public utility regulation of pipeline rates, accounting, and financing. There was a clear backlog of needed reform of financial and accounting practices by pipelines, as indicated by the voluminous testimony gathered by the Federal Trade Commission in its report to the natural gas industry. Thus, the early history of pipeline regulation is of a piece with the general reform of the utility sectors through federal regulation that occurred in the 1930s.

Whether general regulation of natural gas prices in the field was contemplated at that time is at least a moot point. In any event, by degrees the FPC found itself increasingly involved in issues relating to the price of gas in the field as a subsidiary question to its regulation of pipeline rates.15

Low Prices Before 1945

In the early administration of the Natural Gas Act there was no pressing need for regulators to concern themselves about the adequacy of natural gas supply. The average national price of natural gas in the field had declined from the 11¢/Mcf level of the 1920s to a low of about 4.3¢/Mcf in 1940.16 This low price was essentially the result of very large gas reserves which had been built up as a result of the prior search for oil.17 Two additional factors tended to keep the price down at that time. Under the rule of capture producers had a strong incentive to exploit their reserves rapidly to avoid drainage,18 and most producers had to sell to only one or a few buyers.19 Under those circumstances, regulators were more concerned that the prices might be excessively low than that they were too high. Pricing problems centered about the pipelines' capacity to exercise monopoly power to depress the field prices received by small independent producers and to use its position as a producer to rig contracts on terms that were extremely favorable to its production subsidiaries.20

The by-product nature of early gas discoveries lent substance
to the opinion that gas supply was relatively independent of field prices of gas within the experienced range. The price elasticity of supply, a question around which much later debate was to center, thus was not at issue in the early years of natural gas regulation.  

The Postwar Increase in Prices

After World War II the picture changed very quickly. Advances in pipeline technology made during and after the war encouraged the development of a substantial national pipeline network. Between 1945 and 1955 the mileage of interstate gas pipelines nearly doubled. As new markets were opened up, the doubling of pipeline mileage was accompanied by a tripling of the residential demand for natural gas and growth of a large industrial market for gas. Field prices of gas also increased very rapidly. In 1945 the Minerals Yearbook reported an average wellhead price per Mcf of 4.9¢; by 1955 the price had risen to 10.4¢/Mcf; and by 1960 the price was 14.0¢/Mcf. In the Permian Basin prices rose from 10¢/Mcf in 1953 (the last year in which El Paso enjoyed a monopsony position) to contractual prices of 22¢/Mcf in 1959 when Transwestern entered the Permian Basin and began to service the California market.  

A rapid increase in price is a natural, expected occurrence in a market experiencing a radical increase in demand from an original position of ample supply at depressed prices. Whether a market is competitive, monopolistic, or of some intermediate market structure, the main factor leading to large price increases under such circumstances is the added pressure of demand on supply, which in most cases cannot be economically expanded as quickly as the demand increase occurred. In the case of gas, the economics of ultimate recovery and state conservation regulations for oil and gas limited the rate at which current supplies could be expanded from existing wells, and the period from exploration and discovery to actual production from new wells is long. The pressure of demand on natural gas prices was aggravated by the FPC’s deliverability requirement for pipeline certificates; each pipeline applying for a certificate was required to have contracted reserves equivalent to twenty times its current annual sales.  

Other factors that may have contributed to the price increases were a reduction of the pipelines’ monopsony power as new and established pipelines competed for new reserves to serve a greatly expanding demand and the use of “favored nation” and escalation clauses that automatically increased all prices in an entire field to the highest price yet realized for any sale in that field.  

Regulation in the 1950s

The price increases raised serious questions for public policy. Large windfall gains were accruing to producers from what had previously been considered a by-product of low value. Both consumers and distributors had made capital investments in gas-operated equipment and distribution plant on the assumption that low gas prices would continue, and consumers relied on state utility regulation as protection against abrupt increases. The price increases led consumers to question whether the pipelines had sufficient incentives to bargain vigorously for low natural gas prices in the field if the full cost of natural gas were normally allowed as an expense in pipeline rate calculations. Moreover, the fact that some pipelines owned major production resources indicated that they had incentives to raise field prices. Because the state commissions could not regulate beyond their borders, they naturally turned to the federal agency most likely to be a candidate for assuming such responsibilities. As noted earlier, the FPC had already become involved in field prices through its decision to treat pipeline production properties as rate base within its jurisdiction.

Although these policy issues deserved serious consideration by regulators, the traditional concerns and approaches of public utility regulation left regulators and law makers ill-prepared for understanding the causes of the price increase, for appreciating the economic function performed by unregulated field prices, or for devising workable approaches to price regulation for an extractive commodity with thousands of producers. Thus, many regulators saw the problem almost exclusively in terms of economic justice or income distribution rather than in terms of the role of competitive prices in allocating a scarce natural resource. The very large windfall gains to producers that resulted from the price increases were seen as excessive and monopolistic in origin. In the rough and sometimes dirty political battles that followed it seemed,
from this perspective, almost immoral to acknowledge that the
gas producers might be right in arguing that the unregulated
marketplace, for all its imperfections, might be a more workable
instrument of social control than rate regulation. The tendency
was to believe that price regulation should somehow be made
to work and that it was defeatist to heed the amply stated warnings
that the structure of the gas production industry would raise
awesome difficulties for conventional rate regulation.

Against this background the Wisconsin Public Service Commis-
sion, joined by several municipalities and state commissions,
appealed a decision by the FPC that it (the FPC) had no jurisdiction
over independent natural gas producers. Although the FPC contin-
ued to argue against such jurisdiction in the courts, the Supreme
Court decided that the FPC had authority to regulate the field
prices of natural gas. Thus, the FPC was handed the unwanted
and unsought regulatory task of setting prices for natural gas.

The FPC's staff expertise in rate regulation, like that of other
utility commissions, rested solely on the cost of service approach
applied to pipelines. Not surprisingly, the FPC's first attempts
to regulate field prices employed the cost of service approach
on a producer by producer basis. The results were disastrous.
With thousands of competing producers, each with its own costs,
and even more thousands of rate schedules, the commission was
literally unable to cope with the situation. By 1960 FPC field
price regulation of gas was described as the "outstanding example
in the federal government of the breakdown of the administrative
process."31

During the same period, various parties, including gas producers
and members of the FPC, tried and failed to have legislation
enacted that would divest the commission of whatever duty it
had to regulate field prices. Although Congress voted twice to
divest the FPC of this regulation, two presidents rejected the
bills.32 By 1960 the legislative attempt had been abandoned and
the area rate approach was adopted by the FPC, largely for reasons
of administrative simplicity.

Area Rate Proceedings in the 1960s

The area rate proceedings were extremely time consuming. In
the first area rate proceeding for the Permian Basin seven years
elapsed between the time the FPC hearing began in 1961 and
the final decision by the Supreme Court. This initial decision
and the FPC's Southern Louisiana decisions33 which followed
effectively stabilized the price at the level toward which the market
had been moving in the early 1960s.34

While the parties in Permian and Southern Louisiana argued
over a reasonable rate keyed mainly to cost data gathered in
the late 1950s, important new developments in the demand for
gas were taking place. Natural gas became a premium product
as a feedstock for the petrochemical complex that developed in
the natural gas producing areas. This created a large intrastate
non-jurisdictional market that could compete with the interstate
market. Moreover, gas became a highly desirable fuel because
of the air quality standards that became mandatory in the 1960s.35

Thus, the demand for natural gas grew at an annual average
rate of approximately 7 percent in the 1960s compared to an
overall annual growth rate for total energy demand of 3 percent.36

During the same period uncertainty over the outcome of FPC
rate regulation added to the riskiness of new exploration, and
the emphasis of the FPC staff on cost of service evidence contributed
to the general belief that the FPC would tend to hold prices
down. In this context the shortage and its attendant misallocations
developed in the late 1960s.

The changing circumstance of the late 1960s led to the Fifth
Circuit's decision in the Southern Louisiana Area Rate Cases, which
appealed the FPC's area prices in south Louisiana.37 The court
affirmed the commission's decision, but "without prejudice . . .
to the commission's power to stay its own order or to take any
other appropriate action affecting this case." The unusual language
was obviously the painful result of much distress on the court's
part. For the court, "the most serious problem" was "that of
possible supply deficiencies, together with the relative failure of
the Commission to consider supply and demand." Taking its cue,
the FPC delivered a second Southern Louisiana decision in 1971
that considerably revised the prices, that is, from 18.5¢/Mcf to
26¢/Mcf.38 Ironically, the amount of the increase and the price
itself exceeded the amounts at issue in an earlier proceeding,
frequently referred to as the CATCO case, in which the Supreme
Court admonished the FPC to hold the line in southern Louisiana,
"where prices have now vaulted from $.17 to $.23/Mcf."39

In its Southern Louisiana II decision the FPC provided for incentive
programs in addition to higher prices to encourage new exploration and development. Group incentives appeared in the form of retroactive upward revisions in area rates in the event that the producers as a group exceeded area quotas for new reserves dedicated to the interstate market by 1977. Offshore and onshore distinctions were eliminated, thus automatically providing an incentive in the amount of the state severance tax for federal offshore production. Although refunds are to be provided, any producer can reduce its refund obligation by one cent for each Mcf of new gas reserves committed to the jurisdictional market in southern Louisiana. A moratorium of 1976 was set for contracts dated prior to 1968 and of 1977 for those dated after 1968.

Currently the FPC has established area rates for all the major continental gas-producing areas. In 1970 the FPC issued an order initiating Round II of Permian and subsequently orders were issued that expanded the scope of the rule-making proceeding to include nationwide sales. Hearings were held in various cities and the parties are currently in litigation. Thus, by a variety of methods—settlements, full-blown hearings, rule making, and combinations of the aforesaid—the FPC finally has accomplished procedurally what it was ordered by the courts to do over a decade ago.

REGULATORY INSTITUTIONS AND THE GAS EXPERIENCE

Is the tragic history of regulation of natural gas field prices a unique historical episode? Or is there something in the nature of the regulatory process that invited the tragedy? The full explanation is undoubtedly a complex mixture of the two but if similar misfortunes are to be avoided in the future it makes sense to focus on the weaknesses inherent in the regulatory process that are dramatized by the gas experience.

In retrospect, two particularly disturbing weaknesses are evident. First, experience in traditional public utility regulation and dedication to the goals of cost of service regulation appear to have been handicaps in coping with the issues related to the price of a commodity with a very different industry structure. Thus, the Wisconsin commission and the other regulators who supported the movement to compel FPC regulation of field prices in the 1950s tended to interpret the public interest narrowly, that is, solely in terms of keeping prices down and preventing high returns to producers. The argument for FPC jurisdiction was often posed in a highly political, moralistic way, with helpless consumers pitted against greedy producers profiting from price increases. The same public utility background, mix of expertise, and lack of familiarity with alternative approaches to regulation led the FPC staff to cling to a cost of service approach to field price regulation in the 1950s even though the unworkability of this approach had long been clear to all concerned.

Second, regulation proved unable to act expeditiously and flexibly even when there was a clear desire by the FPC to do so. The customary methods of observing due process in a regulatory proceeding were inherently time consuming. The nature of the process rendered futile the efforts at speed by able examiners and two successive chairmen noted for their administrative abilities. By the time the area rate cases were begun, the problems of field price regulation were well-known, and there was a reasonably good understanding of the issues by dispassionate observers and by many of the experts who testified in the area rate cases. But by then positions had hardened and the area rate proceedings took on an adversary flavor with a large number of interested parties demanding to be heard. All of the parties were locked into a procedure that allowed little opportunity to respond to the changing events in the market.

Unfortunately, any argument by the producers that changing circumstances, such as the growth of the intrastate market, would create a shortage of natural gas for the interstate pipeline market at the FPC-set prices could be interpreted as moves to influence the area rate proceedings. The pipelines, on the other hand, were satisfied with the status quo in the 1960s because the inventory of past gas reserves and the opening of new fields in southern Louisiana, the Delaware basin, and Canada were adequate to meet their demands. The relaxation of the FPC's contractual reserve requirement also relaxed the pressure on the pipelines to add to their inventory. In 1966 a New York Times article reported an opinion by an FPC examiner in which he predicted shortages of natural gas at the present rate of consumption and production. However, the article also quoted the president of a major natural gas transmission company, who assured his stockholders that
"we're not going to run out of gas . . . that's not what we are worrying about." From the consumers' point of view the stabilization in natural gas prices plus the possibility of large refunds from the producers once the FPC set the area rate offered little incentive to short-circuit the area rate proceedings. For the FPC and the courts, the proceedings were time consuming but gave evidence that something was being done in an orderly, equitable fashion (that is, all producers and consumers were being processed at the same time); the interim regulatory procedures that held the final price of gas in abeyance at least had the advantage of permitting transactions to be made.

In addition to the role played by the FPC staff as a party in the area rate proceedings, the commission, too, became an advocate once the first area rate case went to court. Between 1965 and 1968 the Permian decision journeyed from the FPC to the Supreme Court. The desire to have Permian upheld undoubtedly restricted the FPC's policy. Despite statements by the commission that the first case was experimental rather than definitive about the commission's price-setting procedures, there was a tendency to refrain from major departures from the position taken in Permian. Other proceedings then in progress and other commission policies were probably influenced also by the FPC's desire to have the Supreme Court endorse the Permian decision. Hence, the "experiment" became a fixed policy and the results of tentative inquiry became a definitive position. There is nothing surprising about this pattern; it is common in regulatory agencies dominated by the requirements of legal proceedings.

Resource allocation problems are especially political in the regulatory process under shortage condition because regulators must find some way to allocate supplies in the absence of a market mechanism. If the regulators use price increases as the rationing device the windfall to oil producers is obviously a politically controversial choice.

In summary, the record suggests that during the 1950s the gas producers were unable to muster the political force necessary to halt the desire of the consumer interest groups to have the FPC regulate natural gas field prices. Once the proceedings began, none of the parties other than the producers had any incentive to terminate the area rate proceedings. The legal nature of the proceedings and their long duration required all parties to take relatively inflexible positions and to adopt policies that would be consistent with their positions in the proceedings. Influences outside of the FPC's control operated to make the price set by the commission unrealistic for market clearing purposes in the short or the long run. The consequence is a natural gas shortage. Attempts to "reset" the price are complicated by the political nature of the choices the FPC will have to make.

**Policy Approaches for the Future**

Given the existing problem, what changes in regulatory policy and institutions would best contribute to a solution? It is not constructive for economists to confine their analyses to retrospective explanations of why regulation has failed and why the free market would have done a better job. The gas shortage and the FPC's regulation of field prices are current facts of life that are not immediately changeable. Furthermore, gas markets are critically affected by other government policies in the energy field. These other policies should not be viewed a priori as any less changeable than the fact of FPC jurisdiction, especially at a time when national energy policy is undergoing a serious and much needed re-estimation. These facts all condition the choice of effective approaches to bring gas prices to equilibrium and prevent a recurrence of future shortages.

**Deregulation Prospects and Problems**

An immediate end to regulation is neither feasible nor desirable. Until new legislation is actually passed, the FPC must exercise its present jurisdiction, and the prospects for legislative reform are especially dim in view of the political history of past attempts to legislate deregulation of gas field prices. The speediest plausible scenario would take years to enact because it requires a yet-to-be-started legislative initiative and the mustering of broad political support.
Abrupt deregulation is undesirable because the problem of market transition is a difficult one. The extent of the current shortages and the future path of prices over time that would keep supply and demand in reasonable balance over the long run are unknown to the buyers and sellers in the market. Abrupt removal of price controls could well encourage a temporary surge of prices to a level well above the appropriate long-run equilibrium trend and to a subsequent period of price instability. Such a development would be confusing to the marketplace and would create large windfall gains and losses to buyers and sellers without contributing much to a long-term balance between supply and demand.

The long-term nature of the important supply and demand adjustment indicates not only that the problem requires time to solve, but also that time is available to bring supply and demand into balance. Existing reserves provide a temporary cushion against denial of supplies to retail customers dependent on gas, and the year by year impact on consumers of the higher prices paid for new natural gas contracts, LNG, and gas produced from feedstocks is relatively modest at the retail burner tip. The reason is that the cost of newly committed gas reserves has a low weight in the retail price, which reflects the embedded costs of earlier gas purchases as well as the costs of transmission and distribution; the latter two cost elements exceed the cost of purchased gas.

Although the practical problem for the next few years is how to effect an orderly transition in gas markets that remain under FPC jurisdiction, this fact should not be an excuse for policy makers and the concerned public to abandon all thought of deregulation as a practical goal. Like the majority of professional economists who have studied the problem, we believe that the best long-term approach to natural gas field prices should be deregulation of all arms-length transactions. As long as the FPC retains its present jurisdiction, it will be vulnerable to the same political pressures and institutional rigidities that contributed heavily to the present problem. In this context it is important to remember that regulation can be used to protect and reward suppliers as well as to limit their prices: there is a danger that the next era of regulatory error could be in the direction of sustained overreaction to present shortages.

Approaches with Existing FPC Jurisdiction

Deregulation should be the ultimate target, but much can be done within the FPC's present jurisdiction to substitute market competition for administrative judgment. Although any substantial move in this direction is likely to be challenged in the courts, a reasonable legal argument can now be made for the FPC's freedom to approve field prices determined by arms-length bargaining under reasonably competitive conditions. First, the Hope decision did not tie the FPC to any single method of rate making for natural gas production, but simply required a reasonable result. Second, the area rate method was considered by the courts as an experiment—flawed but permissible until the FPC improved it. In its Southern Louisiana decision, the court suggested that the area method was so flawed in its execution that the court was perilously close to overruling the FPC, except for the practical fact that nothing would be accomplished to alleviate the gas shortage if it did. Another recent decision suggests that the courts will give the commission wide latitude to resolve gas shortage problems and that hitherto unorthodox procedures will be permitted for the present.

Moreover, whatever their flaws, the first round of area rate proceedings established the proposition that the initial area rate prices reflect a reasonable and certainly not exorbitant basis. What regulation can now do is scrutinize the extent of the increases from the base price and judge their reasonableness in policy terms quite apart from the original considerations establishing the benchmark. For example, increases may properly be viewed from the allocational issue of whether they are the long-term market clearing prices that will bring forth adequate future supplies.

FPC policy recently has made substantial movements in the direction of market clearing prices by expediting its procedures and generally communicating its sympathy by increasing prices to the industry. However, it will take a fundamental departure from the established area case procedure to achieve the necessary flexibility and freedom for markets to seek a reasonable supply-demand balance. As long as the case procedure is used, it will continue to divert the attention of the industry and policy makers to the battles over who gets what that are intensified by the regulatory process itself. Ironically, administering price increases
to ease shortages is, in effect, an attempt to simulate what the markets would do without regulation. To the extent that this policy succeeds, regulation resolves the central distributional issue in natural gas pricing—that of who should receive the economic rents—in essentially the same fashion as the unregulated market.

Under the present system of providing the producers with administered price relief after long hearings on an area by area basis, their expectations are compounded by guesswork concerning what prices the FPC will allow, when the decision will become effective, and whether the criteria applied in the next case will be consistently followed in later cases which may be heard by other examiners and a new mix of commissioners.

One of the worst features of the present system is that it has led to credibility problems with respect to the very market information that is essential if regulators, buyers, and sellers are to have an accurate grasp of the actual state of reserves and other elements of the supply-demand balance. Buyers and sellers have an incentive to distort or withhold information for tactical reasons. This fact leads to actual distortion and a tendency to disbelieve much available information, whatever its actual quality. Presently, producers have a good chance of administered rate relief in a series of discrete steps, but they must fight for each increase and it is to their advantage to paint the shortage in the most drastic possible terms, especially since other parties will accuse them of doing so in any event. Furthermore, there is an incentive to withhold new supplies from commitment until the new area ceiling is in effect.

The difficulties of the current approach could be avoided by a simpler one that makes use of the reasonably competitive nature of most arms-length sales of gas in the field. FPC approval of any filed transaction would be automatic unless the FPC challenged the cost filing within a specified period, say ninety days. Challenges would be reserved for rare instances and based on a prima facie showing that the terms were too far out of line with comparable transactions to be considered reasonably competitive.

During the period of market transition from the current disequilibrium, it may be desirable to limit the maximum rate at which prices are allowed to rise until the increases taper off. Setting the ceiling in each area annually at, say, 20 percent above the previous year's new contract price should block extreme short-term price fluctuations while providing a strong supply incentive. The prices could be permitted to rise for a sustained period until reaching equilibrium. Once the rate of increase in transaction prices begins to taper off, the 20 percent upper limit would be unnecessary and the approval procedure previously outlined could become effective.

Market Information

Both the efficient functioning of gas markets and the development of solidly based national energy policies depend on accurate information concerning factors affecting natural gas supply and demand, especially accurate and well-organized data on prices, consumption, and reserves, as well as a good perspective on technological trends and other factors affecting the future course of supply and demand. Such information, desirable in the absence of regulation, is a sine qua non for informed regulation.

Regulation can be, and in some instances has been, a positive force in promoting the assembly, organization, and dissemination of high quality industry statistics. The information activities of the FPC in the electric power field are a notable example. Although the Natural Gas Act and Federal Power Act have virtually identical provisions that give the commission comprehensive information-gathering powers, the FPC has made little progress in developing information programs appropriate to its responsibilities for regulating field prices. This is in part because problems involved in collecting and processing information on gas in the field differ substantially from those connected with routine reporting by franchised monopolies subject to comprehensive utility regulation. The problems associated with these differences have been sufficient to stymie the FPC's sporadic attempts at developing an effective market information and statistical program. The information gap is particularly noticeable in the key area of reserves. Almost two decades after the FPC was given the authority to regulate producers, it is still in a state of ignorance about the particulars of the industry's reserves data.

The FPC staff report that heralded the natural gas shortage in 1969 had to introduce its report with the following caveat:

Much of the factual base for this report is industry supplied data, including particularly the American Gas Association (AGA) proven reserve estimates and production information. The gas supply statistics
of the American Gas Association are compiled from the confidential records of individual independent producers and pipeline companies. Neither the confidential reserve data of these companies nor the exact method by which this data is summarized for the American Gas Association reports have ever been divulged to the Federal Power Commission. For purposes of this report we have accepted at face value all industry-furnished supply data. Our conclusions must therefore be weighed against the assumed accuracy of our data base.

The lack of open data has been the researcher’s nemesis as well, and probably has prevented the much needed analysis of the industry by outside commentators.

Nearly three decades after the Olds-Draper original suggestion, the FPC currently has begun a national gas survey to help close the information gap. Whether the survey will in fact succeed in developing an adequate reserve information base for public policy remains to be seen. Unless the FPC can demonstrate its capability for making an informed, independent appraisal of industry reserve figures, it is difficult to see how regulation of field prices can perform any positive function.

Relation of Gas Regulation to Energy Policy
Letting the market determine natural gas field prices would resolve the worst immediate problems associated with the shortage, and in most visible respects it is a step in the right direction for resource allocation in the energy sector as a whole. But other areas of energy policy—most notably federal policies toward offshore leasing, oil import policy, and public support of research and development—also will be important to the supply and demand for gas. Although proper consideration of these policy areas is beyond the scope of this paper, this discussion of regulatory policy should be read with the context of the energy sector in mind. It is as wrong for policy discussions concerning the supply and demand for gas to neglect the full range of potential policy tools outside of regulation as it is to make ill-considered recommendations for policy in other energy areas to mitigate the gas problem.

Power Supply Expansion Problems

Nature of the Crisis
This is a turbulent period for electric utilities and those who regulate them. Caught in the middle between their service commit-
The Crisis in Energy

PROPOSALS FOR REFORM

Clearly, the present pattern of chaos and conflict is not an acceptable modus operandi for the long term. A return to the way of doing business before the crisis is neither feasible nor consistent with the deep and lasting concern of the great majority of citizens. The body politic may be confused, uncertain, and divided over the extent and nature of the environmental problem, ill-informed about all the sacrifices that may have to be made to achieve its stated goals, unsure about what should be done, and inconsistent in the pressures and demands it places on regulators, but increasingly widespread concern for the environment is deeply rooted in changing values and a growing public awareness of environmental issues.

Informed observers from all perspectives agree that a more workable mechanism of public review and approval is needed. Utility executives, craving relief from intervention and the demands of multiple licensing procedures at every level of government have argued for a mechanism of public review that gives guidance and legitimization to the decisions they have to make and enables them to provide for additional supply within reasonably predictable time periods. Environmentalists, frustrated by their current position as comparative outsiders in the planning process hope for a strong public authority that will enforce a high standard of protection against damage to the environment and that will listen attentively and responsively to individual views of concerned environmentalists.

This focus on public approval authority and procedural steps as a means to resolve both the environmentalists' and the utilities' problems is reflected in the many bills now pending before Congress and state legislatures. Most of the proposed bills and recently enacted state statutes provide for licensing and public hearings regarding all proposed bulk power facilities and for early disclosure of the utility's construction plans. Most of the federal bills also propose regional councils that would encompass several states and establishment of state siting authorities with cooperative state-federal relationships. In other important respects, the bills differ considerably. The main features of the competing federal bills are illustrative of the patterns found at the state level.

The principal differences among the bills involve the timing and number of public hearings, the type of agency given licensing authority, the nature of participation by environmentally oriented public bodies, and the scope of public authority and responsibility, particularly with respect to planning activities.

Need for Analytical Perspective

The problems and the need for a solution seem obvious. Yet a major obstacle to real solution is lack of understanding of the structure of the problem as a whole and the characteristic requirements of an effective solution. Without such a perspective and the understanding it provides, there is a real danger that the pressure for speedy enactment of reform legislation will result in replacing one unworkable system with another. In particular, the focus on legal tribunals and administrative licensing procedures may lead to approaches that are at variance with the realities of an effective planning process, invite costly litigation and lengthy regulatory review, and weaken the effectiveness of utility regulation or divert its attention in other areas.

The purpose of this discussion is to focus on the structure of the problem in an attempt to contribute to the development of needed perspective. The discussion is organized in four parts: (1) an elaboration of the requirements of an effective planning system; (2) a discussion of the nature of planning as it relates to these requirements; (3) an appraisal, respectively, of existing industry and regulatory institutions from the same standpoint; and (4) a consideration of alternative approaches to developing a workable system of mixed public-private planning for electricity supply.

REQUIREMENTS OF AN EFFECTIVE PLANNING SYSTEM

What are the requirements of an effective system of planning and capacity expansion for the electric utility industry? First, such a system should feature a decision-making process that will generate plans that can be implemented without much disruption and delay. Second, the system must take account of the concerns of the body politic. This clearly implies public participation in the decision process to assure that decision makers are exposed to these concerns. Third, the decision-making process for planning...
and capacity planning should be well-integrated with other governmental programs and policies, namely, overall energy policy; extant regulation of rates, mergers, and the like; and with rationalization of the industry's organization. Whether these requirements can be achieved will depend, to a great extent, on the effectiveness of existing regulatory commissions in their existing areas of authority, especially from the standpoint of integration with the development of a high performance power supply system and on regulation's capability to deal with added responsibilities.

Making decisions in the public interest expeditiously requires that the decisional process be in harmony with both the nature of planning and with political and legal reality. Both of these considerations argue for primary emphasis on the entire process of planning and decision making rather than on static regulatory actions or formal procedural steps. Licenses, approvals, and hearings are not central ingredients in the process. They should be considered the changeable variables instead of the lodestars of regulation.

The difficult issues are not "one stop" regulation versus many stops or "public" versus "private" planning. The need to reduce the administrative confusion and complexity of the present "many stop" process and the necessity of a strong public interest voice in planning decisions are widely recognized. Rather we must ask: how can a mixed private-public planning process be most effectively conducted? To answer this question, it is useful to examine the nature of planning.

**NATURE OF PLANNING**

Effective planning involves continual filtering, defining, comparing, and choosing among changing sets of alternatives. These include not only such gross alternatives as power plants of differing mode or basic design but also much more refined variations within each basic alternative. Flexibility, timing, the quality of the planners, and their freedom to conduct planning in orderly fashion are all crucial to the process.

**Flexibility**
The number of options is large, especially in the initial selection of alternatives for closer analysis. Even when the goals of planning are simple and closely defined (for example, to minimize cost), the process must be very flexible to cope with the flow of new information and changing parameters, such as increased equipment prices or availability of new techniques. Environmental considerations imply complex goals as well as a very high degree of change in parameters and a large flow of new information. Flexibility is thus especially important in the present context.

**Timing**

New ideas and criteria should be injected into the process as early as possible, before commitments are made or planning resources are expended in a detailed study of alternatives rendered obsolete or less desirable by the new criteria or ideas. The time to make judgments on new suggestions is also critical and extremely dependent on the state of pertinent information and the degree of freedom decision makers have (for example, available lead times before critical shortages will occur). Forcing decisions or injecting new ideas without opportunity for considered investigation can be as costly as delay in considering new alternatives. Both types of poor timing can occur when new alternatives are injected in a formal adversary context because tactics are likely to prevail over the necessary, impartial consideration of those alternatives.

**Qualities of the Planners**
The quality of the planners is also important, not only in terms of experience and expertise in power and environmental areas, but also in terms of the planners' qualities of mind. This is particularly true in the areas of creativity and the kind of receptiveness to others' ideas that make for effective coordination among planners with differing technical expertise. These qualities are of the essence in the present context because of the imperfect state of pertinent scientific and technical knowledge regarding the environmental effects of power supply, the immature state of much relevant technology, and the correlation between implicit differences in values and technical discipline: fish probably rank as more important indicators of environmental integrity to marine biologists than to power engineers.

**Freedom to Plan in an Orderly Fashion**

An informal environment is probably the most likely to insure the expeditious and flexible atmosphere conducive to good com-
communications among participants in the process. The creative, receptive, studious types who make the best planners tend to prefer such an atmosphere to the hearing room or public debate. Mistakes can be discussed openly without fear of disastrous consequences to the entire case and ideas can be spun out and elaborated without requiring mountains of depositions and formal cross-examination. Moreover, given the wide scope that exists for differences in expert judgment on environmental questions, the atmosphere of a public adversary forum tends to invite disagreement and confusion between subjective policy values and expert judgment. This tendency is exaggerated by contending parties’ propensity to select the experts especially favorable to their views. Thus, the result is polarization of views and a climate in which it is costly and embarrassing for participants to change positions or admit error.

Forums of public investigation or debate, such as regulatory proceedings, can be effective means of giving vent to otherwise neglected viewpoints and occasionally of discovering new ideas. They are necessary as a means of enforcing prior informal communication and as a last resort—a corrective device when the informal process fails. But the planning process will be expeditious and effective only when the main conflicts have been largely resolved informally before the proceeding.

If the worst features of adversary proceedings are to be avoided, there must be effective sharing of information, dialogue, and negotiation throughout the gestation and development of plans. Expertise in power supply planning must be integrated with other expertise and perspectives in such a way that a broad spectrum of policy concerns are reflected in the development of plans and commitments.

THE POWER INDUSTRY AS A PLANNING ENTITY

Most of the planning that goes into new generating plants and transmission lines is performed by the power industry itself. The planning behind a particular facility might in various ways reflect the well-integrated plans of a large utility system or “tight” multisystem power pool or might reflect the somewhat more fragmented planning of a loosely coordinated group of power systems. In each case plans may or may not reflect thorough consideration of relevant alternatives from an environmental standpoint. Typically, the planning decisions that led to commitments on facilities now under construction or on order have been effectively an internal matter to the utility or coordinating group of utilities involved, although there usually has been some sharing of planning information with regulatory agencies. Under the prevailing ground rules of, say, a decade ago, utilities refrained from disclosure of planning information until absolutely necessary. This practice was followed to keep down the purchase price of land and to prevent opposition from forming to block or delay construction. In response to the conditions of the 1960s, comparatively few utilities have experimented with various forms of “open planning,” in which residents, conservation groups, and other members of the concerned public are invited to contribute their reactions and ideas to the planning process. In general, open planning is still an experiment, but its more successful applications are probably indicative of the future.

Two aspects of the industry’s effectiveness as a planning entity are especially germane in the present context. The first is intr industry coordination of plants, a problem that arises from the structure of the industry, and the second concerns the motivation and viewpoints guiding industry planning.

Intrindustry Coordination

Students of the electric power industry have long recognized that there are important economies of integrated planning over substantial geographical areas, and that interregional coordination is also important, especially for economizing on reserve capacity and taking advantage of load diversity between regions. Although the exact size of an efficient planning unit is open to question, few would contend that the logical planning unit should be smaller than, say, New England or the state of New York, and some knowledgeable students of the industry contend that it should be as large as the two combined. It is also widely recognized that most of the nation’s generating capacity is owned by utility systems substantially smaller than planning units in the efficient scale range and that planning in most power pools falls significantly short of the “one-system” planning that would be optimal.

Without slighting or minimizing the many institutional obstacles to effective integration and coordination, the present power industry
The Crisis in Energy

organization (ownership pattern, coordinating institutions, and the like) may be characterized as capable of generally good performance in the narrow terms of planning, building, and operating reliable bulk power networks at low commercial cost. Important pockets of inefficiency remain, resource savings from rationalization would be substantial in dollar terms, and important issues of economic justice within the industry remain unresolved. But the existing organization of the industry has demonstrated its capability for producing and transmitting power at a commercially incurred cost within a few percentage points of the rationalized level (in narrow terms of power costs as traditionally defined to include only those items paid for by the utilities in the marketplace).76

The environmental crisis has made the coordination problem more difficult and has modified the structure of the problem. No longer can a power pool obtain the main benefits of coordinated planning by making sure that generating units are "big enough" and that transmission capacity within the pool is sufficient to avoid economic bottlenecks. Now the specific location of plants, the routing of lines, and very specific features of plant design have become much more important. Consequently, specific agreement is needed on a much more detailed level than before.

Pressures for disagreement on location and design are greater than otherwise because of the interjection of the environmental factor and its associated politics. A minimum-cost optimum loses some of its usefulness as a target for environmentalists' criticism and resentment when the burdens among pool members assumed increased weight. Whichever utility incurs the wrath of local opposition by accepting a facility in its own territory is assuming responsibilities for the entire pool. The same is true of the utility responsible for obtaining licenses and fighting legal battles in connection with the project. Members of a pool usually have divergent views on the degree to which current, legally required environmental standards should be exceeded (at a cost to all who share in the costs and benefits of the new capacity). Pool solidarity is under special stress when new capacity is delayed or obstructed, as pool members must share the burdens of high-cost expedients, brownouts, and public criticism.

Structural reform of the industry, in the form of fewer and tighter planning units, is the only long-term remedy to the intraindustry coordination problem in its present and future environmentally connected context. Even if a near-term initiative for such reform were a likely political event, the task of designing and implementing such reform would take many years—too long to have much actual impact on most planning decisions to be made during the 1970s.74 What, then, are regulators to do in the meantime?

Motivation and Viewpoint

Problems of motivation and viewpoint are endemic to any organization, and power systems are no exception. For investor-owned utilities, strong commercial motivation is to be expected and, properly channeled, is to be desired from the standpoints of promoting entrepreneurial vigor and keeping costs down. For the staff of any electric utility, a strong belief in the importance of reliable power supply at low cost is also to be desired. It is natural, if not so desirable, that this motivation and viewpoint should encourage planning decisions that ignore or conflict with environmental values.

The problem of viewpoint is compounded by natural adjustment strains. Most utility managers and technical personnel received their training and experience under the old ground rules, in which cost minimization was both a public and a private goal that could be pursued by the utility planner without outside intervention. No one should be surprised if utility engineers react defensively to the environmentalists' criticism and resent having their business interfered with by outsiders whose most visible attribute, from the utility man's perspective, is their lack of knowledge of the power business.

If, however, the utility management knows it is to be held publicly responsible for attainable and reasonably defined environmental goals, the commercial incentive is reasonably well channeled. Delays, brownouts, and enforced changes of plans are commercially costly and make utility management an unpleasant occupation.

If the utility management knows what it must do to meet publicly imposed environmental responsibilities, the financial resources, flexibility, and managerial skill of utility corporations are of great advantage in putting its appropriate resources to work. Utilities are freer than most public agencies to hire and fire, to reorganize, and to purchase the services of outside consultants—radiation
The Crisis in Energy

experts, marine biologists, landscape architects, or whatever. Of course, the utility's motivation is not likely to be coterminous with the public interest, and these resources are usable for public relations window-dressing and adversary use as well as the unequivocably productive use of effective planning. How the resources are used depends on the ground rules imposed by public control.

REGULATORY COMMISSIONS AS PLANNING ENTITIES

The involvement of regulators in power planning has taken various forms, all of them peripheral to the main processes of power planning and commission regulation. The most obvious and direct involvement of regulators in bulk power planning has been that of the FPC in various ways through its responsibilities under Section 202 of the Federal Power Act. The most conspicuous example of the use of this authority is the National Power Survey completed in 1964. The committee structure and updating of power survey work has continued through the present. The FPC's Section 202 involvement is augmented by the many less visible informal relationships regulators, state and federal, have with power planners in the course of their work. Informal regulatory involvement ranges from surveillance, continuing dialogue, and moral suasion to indirect involvement in planning decisions as an aspect of licensing or rate case determinations.

There are good reasons why regulatory planning tends to be a weak and minor adjunct to the main planning carried out by the industry. Planning experience, skill, and resources naturally accumulate among those who have actual operational responsibility for formulating plans that will have to be adopted. Consequently, there is inherently a great discrepancy between the level of planning sophistication within the industry and within the regulatory agencies. The staffs of regulatory agencies are thin on in-depth power system planning experience and expertise, and the nature of the regulatory workload tends to preserve that state of affairs.

Furthermore, commission members necessarily concern themselves with the issues on which they must make decisions under their legislative mandate. That is, they focus on rate cases, merger proceedings, accounting determinations, licensing, and the like. The traditional execution of regulatory responsibilities associated with those sections of law requires specific attention to a special set of particulars in the context of a particular case. The concerns and level of understanding of power problems that led to the legislation of the 1930s still heavily influence the way commissions look at rates, mergers, financing, and licensing problems. These existing areas of regulation cumulatively have considerable impact on the planning and development of bulk power networks.

Handling the normal regulatory workload according to traditional criteria has had the effect of generating inconsistencies between regulatory policy in established regulatory areas and the focal concerns of effective power supply.

For instance, questions relating to the cost of capital and the rate base occupy central attention in the rate case, and too little attention has been given to rate structure questions such as the impact of promotional rates—which under current conditions are frequently much lower than the pertinent long-run incremental costs—in contributing to prospective capacity shortages and pressure of power supply on the environment.

A merger proceeding focuses on questions affecting the parties in the proceeding: for instance, the rights and privileges of security owners or outside groups protesting the actions. In this context it takes a special effort to perceive, and attend to, questions involving the overall effectiveness of bulk power planning, the emerging structure of the industry and their implications for the public and unrepresented segments of the public.

APPROACHES TO PUBLIC CONTROL OVER CAPACITY ADDITIONS

The phrase "one-stop" regulation is something of a misnomer. Frequently it reflects an unrealistic dream of an "objective" authority who will settle things once and for all in expeditious acts of licensing or preliminary approval. More usually it has come to be a catchall label for extant proposals for simplifying and consolidating the licensing process to make it more workable. What is critical is not the number of stops for approval, but rather how the process of approval is coordinated throughout
The Crisis in Energy

the planning process. In short, who controls the stop?

At state or federal levels “one-stop” regulation could take the
form either of creating special agencies which are delegated explicit
licensing power or of taking some existing authority such as
the state public service commission or environmental commission
and giving it broader powers of approval. There is also the possibility
of regional agencies of either type, based on interstate compacts
formed by state initiative under federal encouragement.

CONSOLIDATING AUTHORITY IN
EXISTING UTILITY COMMISSIONS

The course preferred by many utility regulators and industry
executives is to centralize licensing authority in the state public
utility commissions or in similarly constituted regional agencies.
The idea is to replace the present confusion by letting the utility
commission, which knows the industry and its problems, hear
the views of all concerned parties and make its own balanced
decision. Such commissions would have the benefit of advice
from their own environmental experts, from other public agen­
cies—such as environmental or health authorities—and from inter­
ested outside parties such as the Sierra Club or consumer groups.

The idea that consolidating all final authority in utility commis­
sions will solve the problem can be a dangerous illusion, especially
if that is the only or principal step taken. It is fairly predictable
that environmentalist groups and public utilities will question
the objectivity and quality of utility commission decisions and
would make every effort possible within due process to delay,
obstruct, and reverse its decisions—depending on the outcome
of individual decisions and the pattern of individual decisions
of the commissions.

Although the reasonableness of the utility commission’s orienta­
tion may be questioned by various parties, the basic problem
is not one of the regulator’s judicial attitude, honest intent, and
competence in his chosen work. The more fundamental problem
concerns important differences in values, sensitivities, and knowl­
dge in very different fields. Just as the power man’s knowledge
of what goes into power system planning is vastly greater than
a layman’s knowledge, there is a similar imbalance of knowledge

and sensitivity in other relevant directions.

It is unrealistic to expect or seek fundamental changes in the
attitudes of executives and regulators who have spent their careers
dealing with utility problems from the perspectives of traditional
regulation, utility management, and a narrow engineering-economic
approach to power system expansion.

The way in which a government agency customarily deals with
the problem of adding a new dimension of sensitivity or expertise
to its staff is to add new staff, usually segregated in new sections
of the agency. The outlook, modus operandi, and positions of the
established groups usually are not very much affected by
the new group. At most, older groups must take new competition
into account, and an alternative set of staff recommendations may
be available to commissioners.

Having environmental expertise and viewpoints available on
utility commission staffs is a desideratum, but it is only in those
cases in which the majority of the commission members are
receptive to suggestions by the “new” staff members that such
a staff will be very strong or that its recommendations will be
implemented. Generally, the role of the environmental staff expert
is likely to be difficult to define, and he may have difficulty
in overcoming his lack of familiarity with industry and regulatory
matters vis-a-vis the industry and established staff. Relevant
environmental expertise spans such a variety of conventional,
professional, and scientific specialties that men with a well­
balanced grasp of the pertinent knowledge are rare, and the
“environmental expert” is an ill-defined professional category.
In this context, there is a tendency, already manifest in some
utilities and commissions, to create environmental positions for
what is essentially a publicity role. The result is largely
rationalization for decisions and plans developed by others.

Cognizance of staffing considerations is taken for granted in
most discussions of regulatory reform, but it is obviously a critical
factor when the kinds of decisions that will be made rely on
values and past professional training. Difficulties in defining
environmental expertise make staffing for “one-stop” agencies even
more important, and as such, makes their overall performance
even more unpredictable. Thus, results in certain cases will be
good; in others it will be far from good. In short, the effectiveness
of giving complete licensing authority to public service commis­
The Crisis in Energy

sions will be subject to all the vagaries and cycles of current regulatory performance.

Creating a New Licensing Agency

Disillusionment with utility commissions and awareness of the difficulties of removing their biases or increasing their capabilities have led some to look for the solution in a new “objective” licensing authority. The idea behind this approach is to obtain a fresh start with new staff having appropriate expertise and a mandate that focuses directly on the problem of reconciling environmental and power supply considerations.

This approach has serious drawbacks. Putting review and licensing authority for power supply expansion in such a new agency would weaken the effectiveness of utility commission regulation in traditional areas. Even more than at present, planning and control over the development of power supply would be isolated from commission regulation in such traditional areas as rates, financing, and mergers. The public’s interest in maintaining service standards, currently vested in the public service commissions, would be weakened because control over the provision of adequate capacity to meet those standards would rest in another agency.

The effectiveness of a new agency would depend on its ability to preserve some kind of honest balance. One might expect control within such an agency to be a rather delicate matter; a few appointments would tend to tip the balance either in favor of electricity supply oriented people or a particular environmental orientation. Objectivity in the form of commissioners without axes to grind is likely to be an occasion to fill the commission slots with men who know little about the problems and are therefore somewhat vulnerable to uncritical acceptance of suggestions from staff and industry.

Over the long term the fresh start advantages of the new agency would be lost; another entrenched regulatory agency, with its peculiar orientation and dreary life cycle, would be added to the existing clutter of regulatory institutions.

Coordination of Public Agencies

A more promising solution is suggested by procedures for coordination between governmental centers, each of which can honestly and qualitatively represent the public in a well-defined area such as air or water quality, public health or electric power supply. General coordinating, review, and final licensing responsibility can be consolidated in a single agency at both the federal and the state or regional level, without giving such an agency the power to indulge in its peculiar biases or fall victim to its particular brand of ignorance. The single agency can be an existing agency or a new one. What is necessary is to give other agencies a contributing role with sufficient power so that the coordinating agency must listen to them, give weight to their recommendations, and in some specialized areas, accept the judgment of the other agency as overriding its own.

Integration of Licensing and Public Utility Responsibility

The efficient locus of responsibility for coordinating the review and approval of plans is with the agency that has regulatory responsibility for public utility service obligations and for the effective performance of the utility enterprises that provide service. Without this responsibility, the licensing authority has insufficient incentive to avoid delay and is vulnerable to forces that encourage delay: procrastination in the face of politically difficult decisions, time-consuming paperwork, and lengthy hearing of testimony to create the image of being concerned with all sides. The escalation of AEC paperwork that has accompanied third generation nuclear units is a striking case in point.

Furthermore, it makes no sense to segregate public responsibility for service commitment from other utility regulation. It is logical that plans and capacity additions be reviewed and approved by the agency that must regulate financing and implementation of these plans, must review the rate structures and revenue requirements of the enterprise that has to carry out these plans, and must be concerned with power supply planning as part of its ongoing regulatory responsibilities. The agency with this responsibility and experience acquires the best industry knowledge. Although it is necessary to be realistic about the limitations of such agencies and their ability to have a far-sighted planning role, they nevertheless are much better situated than other agencies in this respect. Although changes in perspectives in the short run cannot be expected, there are positive benefits over the long run in improved competence and better integrated utility regulation from increasing the planning involvement of utility commissions.
Incorporation of Other Perspectives

If utility commissions or regional facsimiles thereof are given broad licensing responsibilities, how can the commission obtain a better planning orientation? How can they be encouraged to integrate the concerns of long-range planning with regulation in traditional areas, and how can perspectives, knowledge, and concerns of other public groups be incorporated in the planning process?

In the short run, the answer must be that not much can be done in the way of integrating the traditional and the new. Over the long term, the prospects for integration are better. It will be necessary to subject the licensing process to more calculated risks of some delay and conflict by having specialized powers of decision in the hands of agencies other than the utility commission. Selective and specialized forms of veto power have to be placed in the hands of the agencies charged with public responsibility for such specific areas as public health, air quality, water quality, and radiation control. In other instances, the utility commission's power to override the recommendation of the other agency would require an unusual but clearly defined set of conditions for which the utility commission would bear the burden of proof. At the same time, specialized agencies should be required to act in a proposed facility within time limits, either statutory or set by the coordinating agency, or lose its power to stop the facility or require changes. The purpose of such an arrangement is twofold: first, to force utility commissions, utilities, and outside agencies to negotiate from the beginning and, second, to move the process along by keeping actual licensing authority in the hands of an agency responsible for resolving the matter expeditiously.

This approach is susceptible to more consistent treatment of utilities and other industries in the administration of environmental policy. There is no reason to make a special case of utilities or to isolate licensing decisions from environmental policy in particular areas. Radiation standards are best considered in the context of all sources of radiation. Control over use of scarce shorefront necessarily involves all alternative uses of the land. Water quality, air quality, public health, and safety standards all apply to economic activity generally. Each of these areas requires special expertise and perspective, and it is logical that the agency having primary public responsibility in each area will be best equipped to contribute its dimension of public policy to power plant licensing decisions. Perhaps for this reason, the division of labor we are suggesting here involves less reshuffling and duplication of existing agency functions than either of the first two "one-stop" approaches discussed. In an effective mechanism of the kind recommended here, much of the operational coordination between agencies, industry, and concerned citizen groups is likely to take place informally in multiple consultations, reviews, and agreements as the continuum of planning unfolds. In the initial gathering of alternatives for consideration, suggestions are likely to come from several sources, and the screening criteria applied to select candidates for close inspection will certainly reflect many perspectives. Review and advice continue as broad plans become more specific and as designs are priced out more closely. In such a process, there should be few surprises when approval is needed for actual commitments to order equipment and begin construction. As a result, later modifications can be held to a minimum.

Decision processes of this kind will probably not be as novel or painful a process for utilities as some may fear. Utilities have long been subject to public involvement in many of their decisions because their quasi-public legal status has made them dependent on regulatory approval and vulnerable to public pressure. The law and jurisprudence of regulation have always emphasized this dimension of the rationale of utility regulation, particularly as it relates to the use of public property (such as rights-of-way or navigable streams) and the provision of quasi-public services. 

Utilities are much more accustomed to public intervention in their decisions than most firms, and the kind of decision-making process under discussion here has been conducted in a more or less informal way for a long time. What has occurred in recent years is an escalation in the degree to which outside concerns have become pertinent to utility planning: there has been a rise in the status of some of these concerns to the form of legal rights. For all their limitations, regulators have perhaps been much more effective at working out solutions for capacity additions when the public interest is involved than they have been given credit.

It is instructive to compare the record of electric utilities in
coping with new environmental criteria over the past five years with that of unregulated industries, such as chemicals, paper, and smelting where serious environmental problems also exist. In the unregulated cases the public vulnerability of the firms involved have been considerably less, and ready legal forums have not previously existed to question the industry's plans. Indeed, remedies are still limited in many environmental areas to action only after the polluting plant has been built. The process of bringing environmental problems in these industries under control has had to be legislated. The general pressure of public opinion has been through the media, informally through governmental channels, and through the courts.

The utilities are subject to these channels and in addition have been living in a glass house for a long time. They often have been exposed to strong public pressures for reform. Their memories go back to the experience of the holding companies, the circumstances surrounding the formation of TVA, and other events in the long history of public intervention in their industry. There is considerable recollection of just how severe and sharp reform can be and how disinclined the public is at times of reform to pass out awards and kind words of appreciation for good performance or to exempt the good guys from general criticism. Utilities appreciate the tendency of the public to see events in ethical terms and to lay the blame, deserved or otherwise, on the industry. Furthermore, the utilities are vulnerable by virtue of the number of decisions which they must clear through public agencies and the number of forums in which interested groups in opposition to utility plans can participate. Opponents can come into rate cases, licensing proceedings, merger proceedings, or any other public hearing of the utility commission, and they can subject publicly appointed officials in the commissions to severe public criticism.

In short, the avenues of public influence which operate on utilities and the necessary receptiveness of utilities to such influence is greater than in the unregulated industries by a considerable degree.

It is true that when utility commissions are considering matters of environment and public safety they tend to be very sensitive to the point of view of the industries they regulate. But it is also true that the process of negotiating conflicting views in the public interest is familiar to regulators and utilities alike.

This elementary point is of fundamental importance to the subject at hand because it suggests that utilities and commissions can be made to respond positively to new legal and political pressures without changing their fundamental makeup.

Any regulator, utility executive, or other concerned individual who retrospectively examines the evolution of his knowledge and views on environmental questions will discover, if he is at all honest and open-minded, that he has been learning rapidly and undergoing considerable evolution of attitude in the process. This learning process is frequently accelerated in situations of duress where one is forced to contend and negotiate with other points of view.

If new licensing legislation and the authorities who implement it succeed in establishing an atmosphere of creative pressure, in which utility commissions and utilities are compelled to incorporate other perspectives in the alternatives they adopt, then the mechanism of public review will be an effective one, whatever its procedural trappings may be.

Conclusions

Both of the problem areas discussed in this paper are extreme rather than representative examples for analyzing the effectiveness of regulatory institutions because both involve serious malfunctioning of existing methods of public regulation. Nevertheless, the examination of the regulatory process in instances of breakdown or obvious malfunctions calls attention to characteristics of regulatory institutions that affect their performance in areas where the problems are less visible.

Each of the problem areas has a unique history and structure and must be analyzed in the context of the energy sector as a whole and of other public policies relating to it. Because the problems are different, they involve different aspects of regulation and the directions of possible reform are varied.

Price regulation is central to the gas shortage problems, and the solution lies in the direction of greater use of competitive markets as an alternative or supplement to regulation. The case for the superiority of competition over the FPC regulation of field prices is based on two strong grounds. First, competition is an available, workable alternative in that the structure of gas markets
makes them no less (and probably more) competitive than the
great majority of unregulated industries, for which prolonged
shortages and other gross maladjustments tend to be rare, transitory,
and self-correcting. Second, because of its special structural charac-
teristics, gas in the field is very difficult to regulate, especially
using traditional regulatory approaches and criteria. Nevertheless,
FPC jurisdiction is a well-entrenched fact of life, and there is
a need for constructive suggestions. We have included some sugges-
tions to stimulate more thinking along these lines.

The power expansion problem is different because no free market
alternatives exist. In this case, the breakdown of the process of
public approval reflects several factors. The main factor is that
values traditionally conceived to be in the public interest are
in a state of flux and there is great conflict and uncertainty as
to how these values are to be reflected in public policy. The
problem is compounded by the fragmented and incomplete jurisdic-
tion of utility commissions and other licensing bodies. Finally,
because of the lack of certainty and public direction, the courts
have become involved in the process of public review, but this
has not led to resolutions.

In this context, regulatory bodies are inevitably involved and
their role in the decision process for planning and adding new
capacity will increase appropriately. The relevant question is thus
how to structure the emerging decision process to make it effective;
that is, to provide for expeditious decision making based on
competent planning, to strengthen the planning and integrate it
with traditional areas of public utility regulation, and to take
advantage of the characteristics of the regulatory process as a
political instrument for public accountability.

Our analysis suggests that existing public utility commissions,
for all their limitations, are the appropriate place to locate the
main coordinating and licensing authority for new bulk power
facilities. However, we stress the importance of reserving special-
ized approval powers with other agencies and forcing utility
commissions to come to terms with the dimensions of the public
interest these agencies represent. We also emphasize the importance
of sharing of information and negotiating informally throughout
the planning process so as to confine the main content of adversary
proceedings to questions where genuinely non-negotiable dif-
ferences exist. The pattern of public–private decision making
recommended builds very directly on one of the main strengths
of public utility regulation at its best: as a political mechanism
for giving voice to concerned members of the public and for
bringing a measure of accountability to private enterprise deci-
sions.

Our analysis of the two problems, different though they are,
reveals that both must take into account very similar characteristics
of regulatory institutions. In each case, regulatory commissions
geared to deal with one set of problems were forced to adapt
to an unfamiliar situation. In the gas case, the regulators were
particularly unprepared: the knowledge, perspectives, and expertise
built up from regulatory experience were a contributing force
to the mistakes that were made rather than a safeguard against
them. Cases in point may be found in the background of the
Phillips decision and the FPC's attempts to apply cost of service
to individual gas producers in the 1950s. In the case of the power
expansion problem, the time-honored and still important values
of low rates and reliable service now have to be reconciled with
environmental values. This is a difficult adjustment for regulatory
institutions to make, especially when the public itself is widely
divided over the appropriate trade-offs. Yet the political sensitivity
of commissions and legislators, which probably worsened the
problem in gas, can be a positive force in developing a workable
public–private decision process in power supply expansion.

However, the optimism just expressed is justified only if the
paralyzing and perverse tendencies of legal proceedings are held
in check. Long delays, hardening of positions, and the reluctance
of commissions to make changes for fear of affecting decisions
in the courts are all evident from the history of Permian,
and the same problems are evident in power plant licensing decisions
today.

Both cases illustrate, in slightly different ways, the importance
of foresight and planning for effective regulation and the ways
in which the regulatory process can distract the regulators from
obtaining a well-integrated, long-term perspective.

Finally, both problem areas are messy, and many existing
institutions are well entrenched. If economists are to be helpful
in contributing to solutions, they must not limit their suggestions
to social optima based on a tabula rasa, involving sweeping
legislative reform or a ready supply of able public servants to
Run newly created agencies that are somehow expected to avoid the financial or other constraints that mar the performance of older ones. There is a need for agencies that relate to specified levels of reform, would be of great help to policy makers who have to cope with severe political and institutional constraints.

### Appendix I
#### NATURAL GAS PRICE TRENDS 1950-1965 (Prices in $ per Mcf)

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Industry Wellhead Price</th>
<th>Average Price at Point of Consumption</th>
<th>Average Residential Price</th>
<th>Wellhead Price as Percentage of Residential Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>6.5</td>
<td>26.6</td>
<td>69.0</td>
<td>24.5</td>
</tr>
<tr>
<td>1951</td>
<td>7.3</td>
<td>29.8</td>
<td>76.0</td>
<td>24.5</td>
</tr>
<tr>
<td>1952</td>
<td>7.8</td>
<td>33.2</td>
<td>83.1</td>
<td>23.5</td>
</tr>
<tr>
<td>1953</td>
<td>9.2</td>
<td>35.5</td>
<td>86.5</td>
<td>25.9</td>
</tr>
<tr>
<td>1954</td>
<td>10.1</td>
<td>38.0</td>
<td>89.3</td>
<td>26.6</td>
</tr>
<tr>
<td>1955</td>
<td>10.4</td>
<td>40.0</td>
<td>88.7</td>
<td>26.0</td>
</tr>
<tr>
<td>1956</td>
<td>10.8</td>
<td>41.5</td>
<td>91.3</td>
<td>26.0</td>
</tr>
<tr>
<td>1957</td>
<td>11.3</td>
<td>43.1</td>
<td>93.0</td>
<td>26.2</td>
</tr>
<tr>
<td>1958</td>
<td>11.9</td>
<td>46.2</td>
<td>98.2</td>
<td>25.8</td>
</tr>
<tr>
<td>1959</td>
<td>12.9</td>
<td>47.4</td>
<td>101.1</td>
<td>27.0</td>
</tr>
<tr>
<td>1960</td>
<td>14.0</td>
<td>50.1</td>
<td>103.4</td>
<td>27.9</td>
</tr>
<tr>
<td>1961</td>
<td>15.1</td>
<td>51.0</td>
<td>107.0</td>
<td>29.6</td>
</tr>
<tr>
<td>1962</td>
<td>15.5</td>
<td>51.4</td>
<td>104.3</td>
<td>30.1</td>
</tr>
<tr>
<td>1963</td>
<td>15.8</td>
<td>51.2</td>
<td>104.5</td>
<td>30.8</td>
</tr>
<tr>
<td>1964</td>
<td>15.4</td>
<td>51.9</td>
<td>105.9</td>
<td>29.8</td>
</tr>
<tr>
<td>1965</td>
<td>15.6</td>
<td>52.2</td>
<td>104.8</td>
<td>29.9</td>
</tr>
</tbody>
</table>

Maine: Construction of major transmission lines and electric generating facilities are prohibited without the approval of the state Environmental Improvement Commission and the Public Utilities Commission [Maine, Public Laws (1971), ch. 476].

Maryland: Certificate required for construction of generating station or transmission facilities by electric utilities. A public hearing is required two years prior to construction. The Public Utilities Commission (PUC) is responsible for assessing and evaluating annually the utilities' long-range plans. A surcharge is established on generation to finance environmental studies and acquire future sites (Maryland, Annotated Code, art. 78, 2254A, 54B).

New Hampshire: The statute establishes a site evaluation committee, an interagency group which holds joint hearings with the PUC on certificate applications for power plant and major transmission facilities. The committee's report is binding on the PUC. A counsel for the public is appointed for the hearing. The utilities are required to file annual, long-range plans with the PUC (New Hampshire, Annotated Revised Statutes, ch. 162-F).

New York: Certificate of environmental compatibility and public need required for major utility transmission facilities; the certificate is issued by the Public Service Commission [New York, Laws (1870), ch. 476].

Oregon: Certificates for major transmission and power plant facilities required from the Nuclear and Thermal Energy Council, for electricity expansion and facilities. In addition to usual service requirements, the board must find that the proposal "will not have an undue adverse effect on esthetics, historic sites, air and water purity, the natural environment and the public health and safety" [Vermont, Public Acts (1969), No. 69].

Washington: Statute establishes an interagency council that adopts guidelines and conducts hearings for site applications. The council makes recommendations to the governor, who has veto power. Counsel for environment is appointed for hearings to represent the public and its interest in the quality of the environment. A certificate signed by the governor is binding on the state and all its agencies (Washington, Review Code, S 80.50).

NOTES

1. The term crisis can be misleading. The applicable meaning here is that of a crucial time that features an association of problems, policy reassessment, and change in direction from past trends. In current controversy over regulatory issues in energy, the term is also used, and often abused, in another sense—that of impending disaster. There is a tendency for parties in policy disputes to predict disastrous outcomes if their policies or positions are rejected. The use of crisis talk as a polemic or tactical device is a connotation not intended in the present paper.


3. Petroleum and gas are coproducts in the extraction stage, and both petroleum and coal can be used as feedstock for gas production. All three fossil fuels compete directly with one another, with nuclear fission, and with water power as primary energy sources for electricity generation. There is additional competition among fossil fuels and electricity in many final use markets.

4. The prevailing view that the "natural monopoly" character of electricity...
distribution is a clear justification for utility regulation has been called into question in recent years, by economists and by new governmental agencies. Thus, the ability of regulators to exert effective control and have begun to analyze the potential side effects of the incentives implied by conventional rate regulation criteria. Nevertheless, there is a radical structure difference between electricity supply and field production of natural gas, and most expert opinion agrees that the rationale for utility regulation is much stronger for the former than for the latter. For a balanced summary of issues and citations of the relevant professional literature, see Alfred E. Kahn, The Economics of Regulation (New York: John Wiley & Sons, 1970), particularly vol. 2, chapter 2, 4, and 7.

5. In September 1969 the Federal Power Commission's Bureau of Natural Gas issued A Staff Report on National Gas Supply and Demand, that began as follows: "Evidence is mounting that the supply of natural gas is diminishing to critical levels in relation to demand... On the basis of current trends, only a few years remain before demand will outrun supply." (p. 1).

6. The president's Energy Message of 4 June 1971 commented as follows: "Evidence is mounting that the supply of natural gas is diminishing to critical levels in relation to demand. . . . On the basis of current trends, only a few years remain before demand will outrun supply." (p. 1).

7. Prices paid by distribution companies reflect two components: the field price higher than they were had field prices been high enough to clear the market during the 1960s.

6. The Federal Power Commission, in its Southern Louisiana Area Rate Proceeding decision, (hereinafter cited as So. La.-II) issued 30 July 1971 (CCG Fed. Util. Law Rep., p. 12,799, para. 11,224), noted that "curtailment in service to customers by a pipeline and distribution companies are before us in a number of proceedings." See also the article on p. 1 of the Washington Post, 10 November 1971, noting the local natural gas distribution company's decision to restrict new sales to single-family residences. The article states that "the FPC's decision that "the same or similar contracts have been imposed by utilities in Pennsylvania, Ohio, New Jersey, Michigan and Illinois, some firms have waiting lists for all new customers. In New York state, the Public Service Commission recently ordered utilities to give residential customers first claim." 7. Prices paid by distribution companies reflect two components: the field price that they were. The field prices were high enough to clear the market during the 1960s.

8. Although direct price comparisons can be misleading because of the small quantities of LNG involved and the variance in storage and processing between pipeline gas and LNG, the following transactions are noted: (1) Boston Gas Co. was authorized to import approximately 1,000,000 Mcf of Algerian LNG at a price of $1.70 per Mcf in FPC Docket No. CP 70-291, 44 FPC 64 (1970); (2) Lowell Gas Co. was authorized to import approximately 460,000 Mcf of Canadian LNG at an average price of $1.58 per Mcf in FPC Docket No. CP 70-19, 44 FPC 660 (1970).


10. Interstate rates in southern Louisiana ranged between 18-20¢/Mcf prior to the 1971 price decisions, by economists and by new governmental agencies. Thus, the ability of regulators to exert effective control and have begun to analyze the potential side effects of the incentives implied by conventional rate regulation criteria. Nevertheless, there is a radical structure difference between electricity supply and field production of natural gas, and most expert opinion agrees that the rationale for utility regulation is much stronger for the former than for the latter. For a balanced summary of issues and citations of the relevant professional literature, see Alfred E. Kahn, The Economics of Regulation (New York: John Wiley & Sons, 1970), particularly vol. 2, chapters 2, 4, and 7.

11. In September 1969 the Federal Power Commission's Bureau of Natural Gas issued A Staff Report on National Gas Supply and Demand, that began as follows: "Evidence is mounting that the supply of natural gas is diminishing to critical levels in relation to demand. . . . On the basis of current trends, only a few years remain before demand will outrun supply." (p. 1).

12. The president's Energy Message of 4 June 1971 commented as follows: "Evidence is mounting that the supply of natural gas is diminishing to critical levels in relation to demand. . . . On the basis of current trends, only a few years remain before demand will outrun supply." (p. 1).


14. In September 1969 the Federal Power Commission's Bureau of Natural Gas issued A Staff Report on National Gas Supply and Demand, that began as follows: "Evidence is mounting that the supply of natural gas is diminishing to critical levels in relation to demand. . . . On the basis of current trends, only a few years remain before demand will outrun supply." (p. 1).

15. In 1969, Illinois; some firms have waiting lists for all new customers. In New York state, the Public Service Commission recently ordered utilities to give residential customers first claim. 7. Prices paid by distribution companies reflect two components: the field price higher than they were had field prices been high enough to clear the market during the 1960s.


18. Stated in its simplest form, the rule enables the producer to keep everything he produces from his well. Hence, a number of producers tapping the same field would attempt to maximize their individual production by drilling additional wells and exercising no constraint on production. State conservation laws mitigated the effects of this rule.

19. In a separate statement, the FPC Permian Basin opinion, 24FPC159, Commissioner O'Connor stated that twenty producers in the Permian were producing 80 percent of the gas (361 producers were named in the initial order), but until 1970, El Paso was the sole interstate pipeline buyer. By 1966 five pipelines were contracting in the Permian.

20. See the discussion in the Olde-Draper Report, pp. 133-37, esp. at p. 137 in which the report declares that the real price objective of "the big oil and
pipeline interests" will mean "tremendous unearned profits to the big interests controlling the major reserves and will put a premium on the buying out of the little interests in new fields at the lowest possible prices in order to skim the cream...."

21. In the 1944 FPC Natural Gas Investigation the producers argued that supplies were responsive to price increases over the long run. However, the Ohl-Draper Report concluded that "It is...clear that exploration for new reserves is not to a major extent geared to the field price for new reserves..." (p. 130). The issue arose again in the Permian Basin Area Rate Proceeding, in which the FPC staff argued that gas supply was not responsive to price and no additional incentives were needed to encourage new gas supplies. The FPC examiner in the Permian proceeding found the staff's position "not in consonance with the weight of the evidence," and the commission and the Supreme Court eventually upheld him on this point (Permian Basin Area Rate Cases, 390 U.S. 747 (1968), at p. 817, upholding 34 FPC 159).

22. The relationships between gas field prices, exploration effort, and discovery of new reserves are still not very well understood and there is no expert consensus on the magnitude of the long-run price elasticity of gas supply within the range of the field price. No one, however, ever reached the point that gas field prices were responsive to price increases over the long run. The actual discoveries that occur in response to any given set of price expectations tend to vary substantially in timing and quantity because of the stochastic nature of response; a few big strikes or an unusual run of dry holes can have a major impact on reserve additions for a period of several years.

23. A major difficulty in predicting future discoveries on the basis of past patterns (as in econometric research) is that the relevant probabilities and costs of discovery differ according to factors which undergo substantial change over time: the population and characteristics of known and potentially attractive fields, the current state of development of these fields, and the level of development of technology. The unexplored areas of potential gas supply in the United States are fewer and more attractive areas than in established producing areas, an important contributor to reserves in the 1940s and 1950s, may not be a good prediction of reserves forthcoming from current exploration activities, especially if the exploration is in fields that were relatively unattractive prospects for exploration at the time the older fields were being explored.


30. Also see Permian Basin Area Rate Proceeding, 34 FPC 159, p. 236.


1977. for escalation increases in contracts dated between 1961-1968. According to the
rule-making proceeding based essentially on a staff report, the FPC set new area
prices that range from $0.16/Mcf to $0.21/Mcf for extremely diverse areas.
Minimum rates were established. The commission also adopted a deeper horizons
policy that permits companies drilling below 8,000 feet to file for above-area
rates, with decisions on the ultimate rate to be made on an ad hoc basis.
2) Hugoton-Anadarko [Texas, Oklahoma, Kansas], 44 FPC 761, 1159, 1318
(September 1970). The order accepted a settlement offer that raised prices for
gas changes after November 1967 to $0.17/Mcf to $0.20/Mcf. Minimum rates were established, notwithstanding existing contracts. Price adjust-
ments upwards were promised for substantial offshore gathering and a decrease with
sliding refunds provision, that decrease with increases in committed reserves, was included. The moratorium was set until
July 1977.
Louisiana-ll
conference was being set; also FPC News Release No. 17,992, 14 January 1972.
Rep., Par. 11,222, p. 12,781. The new ceiling rates range from $0.225 to $0.24/Mcf
without refund liabilities. The FPC noted that the weighted average intrastates
rates during 1960-1970 had risen from $0.151 to $0.186/Mcf.
5) Other-Southwest (Arkansas, Missouri, and parts of Texas, Alabama, Oklahoma,
Util. Rep. par. 11,254, p. 13,020. Prices were raised about $0.05/Mcf so that
prices for contracts after 1968 now range from $0.23 to $0.25/Mcf. Interestingly,
the commission initially ordered refunds in this case because the FPC "... had
fulfilled its obligation to the public by the good faith, timely, and effective
recognition of the value of new reserves in its new ceiling rates. To factor in
those values and then to ignore them in calculating a new ceiling rate would be
irrational and unjustified."
decision to change its policy and value pipeline production after 1969 at the
area rate although its decision was based on evidence not in the record.
7) For the seven years 1963-1969 but interstate production remained constant.
9) Southern Louisiana Area Rate Cases, 428 F. 2d 407 (5th Cir. 1970).
Rep., par. 11,259, p. 13,059, in which the court upheld an FPC decision to change its
policy and value pipeline production after 1969 at the area rate although its decision was based on evidence not in the record.
11) See Appendixes I and II.
12) The transfer price pipelines should be allowed because captive production
invariably requires regulatory approval as long as pipelines are regulated. For
this purpose, the standard that makes best economic sense is fair market value,
which can be estimated using the information provided by transaction prices
in the unregulated marketplace that meet the test of being determined under
reasonably competitive conditions. The FPC already has instituted the area rate
for pipeline production, thereby reverting its previous policy, and its decision
has been upheld in City of Chicago, Ill. et al. v. FPC et al. (D.C. Cir., 2 December
1971).
Some proposals require or make optional a public hearing by which a governmental body decides whether a proposed site meets a standard that will place it in an approved site inventory. Other proposals skip this step and proceed directly to licensing proceedings.

A bill reported out of the House Subcommittee on Communications and Power of the Interstate and Foreign Commerce Committee in October 1971 would permit public utilities and environmentalists to convene panels for consideration of issues relating to power or the environment. These special panels could use either formal or informal procedures.

Planning authority. Most proposals are vague about the content of the licensing agency's planning responsibilities. Some proposals require the licensing agency to develop its own master plan.

Type of licensing agency. These are various new and existing agencies: the latter include both utility commissions and environmentally oriented agencies.

Participation by environmental groups is based on the National Environmental Policy Act of 1969 and four other federal environmental statutes enacted between 1967 and 1970 as indicative of the trend toward control, other than radiation and safety would only lead to delay without benefit to the environment. The AEC argued that retroactive changes in design for plants already under construction would be prohibitively expensive in any event. The court indicated that while such costs and the importance of avoiding delay might be grounds for approval of a plant, the AEC refused to investigate was a violation of the act.

An important part of the Calvert Cliffs decision is that this concern has become manifest in a strong legal commitment. In the words of Judge Wright, "These cases are only the beginning of what promises to become a flood of new litigation—litigation seeking judicial assistance in protecting our natural environment. Several recently enacted statutes attest to the commitment to control, at long last, the destructive engine of material progress." Judge Wright then cites the National Environmental Policy Act of 1969 and four other federal environmental statutes enacted under the aegis of the trend (pp. 2-3 of slip opinion).

In my judgment the lesson of the recent power shortages and of the continuing disputed over-power plant siting and transmission lines is that the existing institutions for making decisions in the area are not adequate for the job (Richard M. Nixon, President's Energy Message of 4 June 1971, reprinted in AEC Licensing Procedure and Related Legislation, p. 526).

The following bills relating to power plant siting were introduced in the 92d Cong., 1st sess., H.R. 5275, 7055, 1273, and 1448 (see: U.S. House, "Bills Relating to Powerplant Siting and Environmental Protection," Staff document. Prepared for the use of the Subcommittee on Communications and Power of the Committee on Interstate and Foreign Commerce, 92d Cong., 1st sess., P. 1971).

The main patterns of difference may be summarized as follows:
Technology and growth, rather than increase coordination per se, account for much of the closure.

71. There are of course many policy considerations that enter into such reform but cannot be discussed in this paper.

72. Under Part I of the Federal Power Act relating to private hydroelectric development, the FPC is more fully a participant in the planning process through its river basin appraisals, licensing procedures, and rule-making authority.

73. The division of function and authority between federal, state, and regional agencies raises complex policy issues largely not taken up here. Significantly, most proposed federal licensing legislation provides for a mixture of federal and state coordination, shared jurisdiction, or federal deference to state procedures that meet federal standards.

74. The AEC’s Division of Compliance instituted a new set of criteria and approval procedures in 1969. Although these changes have had some positive effects in tighter quality control, other side effects have been more striking. The escalation of paperwork and literal interpretation of specifications have extended to routine construction matters previously resolved efficiently in the field. At one large nuclear plant, engineering and supervision staffing for the second unit is three times the level for the initial unit of identical design, in spite of the fact that much engineering formerly done in the field must now be performed elsewhere because of the delay and cost of correcting errors in original specifications under current AEC procedures. Even so, a large nuclear construction project ordinarily involves about fifty design changes per day that required AEC approval. Meeting schedules, complying with AEC requests, and making a detailed paper record have become overriding concerns at the expense of marked slackening of cost control. Engineers and supervisors whose construction experience and training has given them a strong orientation toward cost control have had great difficulty functioning under the post-1969 AEC procedures. The adverse effect of these procedures on the morale and productivity of construction personnel may well be a major factor in the recent cost escalation of nuclear plants.
Discussion

JOHN A. CARVER, JR.
Federal Power Commission

The discussion at the conference as well as the subsequent paper focused on the role of regulation and the broad policy approaches as it affects two specific energy sectors: natural gas supply and reliable electric bulk power supply. The authors push in opposite directions in coping with the resolution of the difficulties in these two energy areas. They suggest that greater reliance on the market mechanism and ultimate deregulation is the answer to gas shortage, and they underpin a rationale for relaxation of regulatory involvement in natural gas. To the contrary, they would expand and entrench the regulatory role to cope with the crisis associated with adequate electric power and environmental impact. While the nature of the regulatory process seems adequately understood, the authors have not taken the trouble to identify, define, or otherwise articulate what they think the
objective or the purpose of regulation to be. What is it supposed to accomplish?

If I read the bare terms of what Congress has prescribed in the Natural Gas Act, I come up with a single charter—protect the consumer against unwarranted charges. But the El Paso and Great Lakes cases tell me that I have a primary duty to enforce the antitrust policies of the nation. Scenic Hudson, on the electric side, says that I am, above all, an environmental protector and the Civil Rights Commission says regulation must use its sanctions to guarantee equal employment opportunity. From the earliest days of economic regulation, the courts have outlawed confiscatory rate structures, so that the economic health of the regulated industry is also in my charge. Finally, five presidents since 1946 have made full employment and economic growth a dominant objective to guide every governmental act.

There are as many critics of regulation as there are interests to be served by any of the foregoing objectives. The defendant regulator suffers the disadvantage of having to demonstrate some central thread of consistency among the myriad of choices facing him. His critics are free to grind a single-bitted axe. The regulator knows that he cannot give full weight to each and every one of the contesting elements. The critic could not care less.

So I am not particularly disturbed by the discussion today in which, among other things, Mr. Hughes posits the ideal of free play of the marketplace for natural gas while placing rigidly controlled central planning over the electric utility industry. In this, however, he is much less guilty of the inconsistency that flows from oversimplification than some of our institutionalized sources of economic wisdom. Less than a year ago, the president’s economic advisers told him—and the world—that natural gas prices should be allowed to reach the “market clearing level.” That vague standard has prompted half a dozen government officials to make speeches in which the regulated price is the sole source of gas shortage—the regulatory tragedy of today’s discussion. But today, presumably on the strength of advice from the same source, we have moved into an era of “new economic policy.” The Cost of Living Council treats natural gas supply with the same sense of urgency and complexity as it does bubble gum.

If pricing for a “market clearing level” and recognition of a “regulatory tragedy” has substantial deregulation in contemplation, how does this comport with the monolith of a totally controlled economy? National price and wage control may or may not be a short new way of life. But it has taken us a decade and a half to reach a fair degree of unanimity about production incentives for natural gas. Economic master planning on a generalized and formulaic basis provides no useful solutions to that problem.

Economists are not guilty of all the sins and inconsistencies in this area. One more example will do: air quality officialdom and environmentally concerned people generally demand that industrial and utility boilers be converted to pollution-free natural gas without delay. For New York City, this move alone would increase demand by one-third. But the same interests (not the same people) intervene to oppose outright or counsel extended delay in further development of our continental shelf reserves—the only possible sources of the needed supply in the immediate future. Any form of energy production is certain to have some environmental impact. Here the choice is clear: cleaner air for the cities or the calculated risk of some disruption of local marine ecology. You can’t have it both ways—any more than you can provide a price incentive for increased gas supplies in the context of rigid price stability.

One aspect of the free market approach to gas production that has intrigued me for some time has not been discussed here. That has to do with the impact of substantially increased prices on demand. Is price a realistic tool to discourage the continual demand increase of about 7 percent each year? I am glad to see that one of the respected and articulate contributors in this field, Bruce Netchert, recently has turned to this question. Netchert concludes that demand response to a higher price structure is highly inelastic, especially under present conditions. In his view, consumers would tend to absorb price increases rather than curb gas use until the increases exceeded a level of 50 percent or more at the burner tip. If charges of this magnitude were allowed in an ordinary rate proceeding, albeit as a device to influence demand, someone along the line—producer, pipeline, or distributor—is going to profit handsomely and with little reference to cost, market factors, or any other standard which is relevant to just and reasonable rate determinations. To the public and responsive political leadership, this would mean but one thing—a
windfall. Whatever the economics of the proposition might be, it is politically unthinkable and we had better become acclimated to that fact of life.

I think “deregulation” proposals fall in the same category of pipedreaming and largely for the same reasons. Obviously, in a period of acute shortage, the “market play” would work only one way. Competition being minimal among sellers, the prevailing standard would become whatever the traffic would bear. I do not see the American public as being in the mood to tolerate any such windfall, so much of which would go to the major oil companies, already a target of populist unrest.

To talk seriously of “free market” operations at a time like this is to take leave of reality. We need sounder advice from your profession!

Our objective should be to stimulate production by all elements and at all stages of the natural gas industrial process. To date, the price incentive element has been concentrated almost exclusively on exploration and development of new sources of supply. In comparative terms, at least, we have tended a premium for the commitment of “new gas” to the national market, while holding to rigid cost criteria for older reserves. This concept of “vintaging” represents one of the contributions of your profession to our regulatory technique—and one whose attractiveness now has acquired tarnish.

Whatever justification there may have been for such a policy in periods of rising reserves, it will most certainly have a negative effect as some of our most prolific gas fields begin to decline in productivity. A wellhead price structure that does not recognize marginality of increasing recovery costs can only promote premature abandonment. We can’t afford to have all our eggs in the E&D basket as “old gas” begins to make up a larger and larger segment of the known supply.

There is a crude parallel between this situation and the longer record of experience we have had with crude oil production. One of the common criticisms made of the market demand paritioning system is that it protects the competitive position of uneconomic or barely marginal stripper wells by allocating a larger production quota. The consumer would be better served, this argument goes, by abandoning these wells and relying on the lower cost, more efficient producing areas. But as we now pass into a period of national crude shortage, we may offer a few words of thanks that the marginal producer continues to function.

In the rarified atmosphere of economic theory, this may have the appearance of a poor practice. It may well be bad economics if we care nothing for the resource; but it is most assuredly good conservation, and I consider conservation one of the fundamental purposes to be served by our particular regulatory function. Moreover, in the present condition of our natural gas reserves, this is an age of mandatory conservation; we must provide incentive to get the last Mcf out of a reservoir as well as reward discovery of the first.

With respect to the framework for providing the necessary capacity for bulk power supply, the authors unduly emphasize the structural (or public administration) aspects for resolving questions of reliable service and environmental protection. The path detailed for a transition from costly delays, breakdown of the decision-making process, brownouts, and confusion as to the appropriate environmental controls to some better system supposes that a new mechanism will accomplish wonders. I disagree. Sitting, reliable service, and administrative feasibility depend upon something more than an effective planning system, or vaguely improved decision-making processes.

It may be that from a theoretical public administration standpoint the most viable context for resolving bulk power needs (reliable service) and environmental protection is an integration of licensing and public utility responsibility. Such a formula might minimize delay, permit timely planning for additions of new capacity, adequate financing, and rate and revenue requirement determination, and in the long run fulfill the benefits of integrated planning.

But in the one place where their discussion takes up structural reform, the true nature of the known issue is revealed. Who, in this political world, is now willing to fight for vertical integration in the fashion Donald Cook suggested years ago as the solution to the intraindustry coordination and problems of the environment?
The natural gas industry had its beginning in America in the early 1930s and in the short span of years since it has become the sixth largest industry, directly affecting the health, safety, and comfort of over 150 million consumers in every state of the union. We in America, however, have been accustomed to the idea that this inexpensive and abundant energy is assured through eternity. As a consequence, we have been using this basic resource at a prodigious rate. In fact from 1950 to 1970, our energy consumption doubled as the gross national product increased 350 percent.

The reason for this growth is that the quality of life in the United States is inextricably tied up with the use of energy. We have had both a tremendous growth in population and a great upsurge in efforts to improve the general standard of living. In order to serve these dual developments, we have had to consume...
huge volumes of fuel. In recent years we also have been confronted with vast additional demands for clean energy to curb pollution. Requirements for energy have been increasing so rapidly that the production of supplies could not keep pace. One of the first to call nationwide attention to this problem was Hollis Dole, assistant secretary, Department of the Interior for Mineral Resources. Speaking before a congressional subcommittee he declared: "The United States is facing an energy gap of portentous proportions that is now opening between its needs for energy and its capacity to supply them."

Dole stated that the United States presently is supplying only 85 percent of its domestic demand and by the end of this century we will be meeting only 48 percent. Urging adoption of a long-range national energy policy, he added: "This policy must reconcile the requirement for environmental protection with the equally important and urgent requirements for adequate and secure supplies of energy. Most important, it must provide timely, consistent and stable guidelines to enable private investors to make long-term decisions to commit their resources with confidence."

His statement applies in particular to the natural gas industry. Because natural gas is the cleanest, most economical, and most efficient fuel available, it has been experiencing a demand growth of astonishing and indeed unbelievable proportions. Since World War II gas has provided two-thirds of all the additional energy required by this country during the period of its greatest economic development. Those of us in the gas industry were able to serve this expansion by increasing gas production sevenfold and book value assets ninefold. Today natural gas supplies one-third of the total energy being consumed in the United States.

Decline in Exploration

While demands for gas have been rising at an annual rate of about 7 percent, exploration for gas and oil has started to fall off sharply in the last few years. The number of exploratory wells drilled in the United States in 1970 was down one-fourth from the 1950 level. As a result, since 1968 more gas has been consumed each year than was discovered. In 1968 the nation used two and one-half times as much gas as was found. In 1970 this was reversed due to inclusion of twenty-six trillion at Prudhoe Bay; however, it will probably take five to seven years to get this gas to market. Many pipeline and distribution companies are already rationing gas and this will become more stringent before it improves.

Despite the present tight supply situation, the gas industry has a tremendous future and our attitude should be one of confidence and optimism. Of course, the gas industry has problems; any progressive, dynamic industry has problems. But the problems of today are merely the challenges, goals, and opportunities of tomorrow.

My involvement with the gas industry has extended over twenty-five years. During that period the industry has gone through a number of phases, each of which involved its own set of problems. Immediately after World War II we were faced with gas shortage and allocation problems not unlike those with which we are presently confronted. This was followed by an era of expansion and competition between pipelines, and sometimes between distribution companies, over service to new territories. Next we entered into a period of vigorous competition with coal and fuel oil, followed by a period during which competition with electric utilities appeared to be the major problem. Now we have come back full circle to gas shortages and allocations.

This brief history merely indicates that circumstances can and do change rapidly and that we must not let the problems of today obscure our vision of a continually growing, expanding, healthy industry. The gas industry also has a tendency to overreact to the problems of the moment. By that I am not in any way minimizing the gas supply problem that now confronts us. What I am saying is that those who are writing off the future of the gas industry are premature by at least several hundred years, and when the twenty-first century arrives the gas industry will be alive and still providing service in every section of the United States.

There are also some advantages which our industry enjoys. For example, the gas industry sells a product that is in great demand, it has a solidly based reputation for reliable service to 150 million Americans, and its product is delivered underground, causing relatively few ecological problems. In addition, its service
is essential to the economy and the welfare of the nation and it is recognized as making a positive contribution toward improving the environment.

These assets could be dissipated if we were unable to overcome the current trend in the discovery and production of new gas supplies. But let me cite a few salient facts in that regard.

First, recognition of the fact that the industry faces a shortage of supply is quite recent. Less than five years ago, when the American Natural Gas System and our partner, Trans Canada Pipe Line Limited were attempting to construct a new pipeline to import Canadian gas into the United States (now completed and expanded) other interests opposed the project on the grounds that U.S. gas supplies were more than adequate and that introduction of Canadian gas would adversely affect the competitive position of the domestic gas and coal industry. Similarly, during the mid-1960s the Federal Power Commission rolled back producer prices without, in hindsight, adequate evaluation of the effect of that action upon the exploration for future gas supplies (I should add in candor that many members of the gas industry and several state commissions urged the FPC to take this action).

I want to emphasize, therefore, that the gas shortage problem is one to which the industry is only beginning to address its tremendous resources of skill and ingenuity. Furthermore, we are fortunate that it is a problem that is susceptible to technological solutions—an area where our nation's greatest strengths lie. In addition to 270 trillion cubic feet of proven reserves, we have an estimated 1,200 to 2,100 trillion cubic feet of potential reserves. But we must find and develop this tremendous potential. I am confident that the resources of industry and government that are now being marshaled will successfully meet the challenge of providing adequate supplies to meet the energy requirements for which gas is best suited and necessary. Indeed, in some respects the gas shortage has served a useful purpose in that it has required us to reconsider from a new perspective the proper role and the economic value of gas in the total energy picture. It is inevitable that some constraints will rest upon natural gas usage to preserve the supply for the most important uses.

Conservation—Upgrading Use

The time has come when gas companies have both the duty and opportunity to reshape the markets they serve—to upgrade their product both in terms of the uses for which it is employed and the value of the commodity they deliver. Because of a combination of historical factors, gas is now and has for a number of years been significantly underpriced in relation to other forms of energy. In view of the present shortage of gas and the new awareness of its value in combating air pollution, it seems clear that uneconomic and wasteful uses of gas can no longer be tolerated.

An example of the changed thinking that is increasingly evident today among the public and the regulatory commissions is seen in the study on gas supplies recently released by Chairman Joseph Swidler of the New York Public Service Commission. The study not only calls for incentives to develop potential gas reserves but also recommends end-use controls. It urges that domestic supplies of natural gas be directed to "high-priority, firm markets," and endorses federal government regulation so that all fuels be directed to their most efficient uses. Although further controls are not to be desired, they may be the price we will be required to pay during the current period of gas shortage and pending the development of our great gas supply potential.

Control of Gas Service

How can the regulatory authorities help? I might state that our system's largest distribution company, Michigan Consolidated Gas Company, has already adopted, with the approval of the Michigan Public Service Commission, a Controlled Service Program which establishes priorities for new gas service based upon the end-use of the gas. Under this plan, domestic and commercial uses, including space heating, are given highest priority. Industrial plants with access to alternate fuels are in a lower category, while those who need gas to comply with air pollution control regulations are assigned higher priority. The lowest priority, as
might be suspected, is for straight boiler fuel. The company has the responsibility to make the determination, within the guidelines, as to whether or not a load can be supplied.

The necessity of upgrading the end-use of gas is essential for another very practical reason, namely, the cost of new gas supplies is going to increase very significantly over the next decade. Prices of new natural gas discovered in the United States have already been increased by the FPC to provide additional incentive for increased exploration and development. Imported LNG, natural gas from the Arctic, and gas produced from coal are estimated to cost approximately double the present city-gate price of natural gas. While the cost impact of these new supplies is ameliorated to some extent by the fact that they can be rolled in with the older, lower-cost supplies, the price effect will nevertheless be substantial. For that reason alone, it behooves the gas distribution companies to reshape their marketing policies to place more emphasis on the efficient and high end-use of gas.

Fortunately, because gas is presently underpriced, so adaptable, and efficient, and because of its great value in combating pollution, the market for higher-priced gas appears to be more than adequate to assimilate all of the new supplies in prospect.

Changing Financing Patterns

Another significant recent development in the industry, and of great portent for the future and one where the regulatory bodies can be helpful, is the change in the traditional method of financing the acquisition and development of natural gas reserves. In the past the great petroleum companies have found the gas reserves and have done the necessary development work. They stripped the gas and brought it to a central delivery point where it was purchased by the pipeline for interstate transportation. Under this procedure the oil companies themselves provided the vast amount of capital necessary to find and develop the reserves. Now, however, some of this financing burden is being shifted to the natural gas industry. The pipelines and the distribution companies are being requested to advance the money required to develop the reserves and, in many cases, to contribute toward financing the exploration programs as well. Thus, in addition to providing the massive amounts of capital necessary to build the transmission and distribution facilities to bring the gas to market, the gas industry is now facing the necessity of putting up tremendous sums to help finance the exploration and development activities. This extra burden will involve hundreds of millions of dollars annually. But if we can feasibly handle this added burden and reach the point where we are not so dependent upon others, we will have achieved the real benefit of having gained greater control of our future. Our industry, of course, will require adequate earnings to support this vast capital raising. The regulatory agencies can serve the public interest by granting essential rate increases and thus secure the expansion in supply needed to relieve the present energy crisis.

The Industry Program—More Gas Supplies

The major goals of the industry remain as before, namely, to increase gas supply and conserve energy resources, to speed technological progress through research, to develop more profitable markets, and to communicate more effectively with all the publics. In the supply area, which remains the overriding concern, the American Gas Association has aggressively and articulately presented the gas industry's case for unlocking more natural gas supplies. The major parts of this program have been to promote development of all supplemental sources of supply; to support higher wellhead prices as a means of getting increased production; to promote more frequent lease sales in the federal domain and particularly in offshore Louisiana, and to improve the leasing procedure for federal lands so as to develop more gas reserves more quickly; and to endorse legislation to ensure contract price sanctity as an inducement to increase supplies. It is our purpose to continue to advance this program throughout the year. At the same time, AGA is committed to an active research program to develop new synthetic gases and supplementary supplies.

Research

Of major importance is the accelerating coal gasification research program and the important new agreement with the U.S. Department of the Interior. Under this agreement $30 million a year
The Crisis in Energy

will be provided over a four-year period, $20 million from government and $10 million from the gas industry, to speed up pilot plant development. With this program the level of research in which the gas association is directly involved will have tripled over the present effort.

The impact of today’s national priorities and the unfolding energy shortage are plainly evident in our research program. Current plans call for more than 50 percent of the regular AGA 1972 research budget to be devoted to the area of gas supply, distribution, and storage, up from about one-third of the funds devoted to this effort in 1971.

Government Relations

The last decade has seen a sharply growing trend in the involvement of the federal government—and, indeed, all government—in areas which at one time were held to be the exclusive domain of business. A part of this has resulted from the failure of industry to recognize the development of various problems and to act promptly or adequately to meet them. Government involvement has progressed to the point where any party, administration or Congress is likely to advocate measures involving consumer protection, the environment, the energy shortage, product safety, or any of a host of other issues without any real consideration of the economic burden which would be imposed or the real need for additional legislation.

This trend has made it imperative for the gas industry, and all industry, to become increasingly vigilant and active in the legislative arena and to see that the facts are presented and understood. This is particularly true in proceedings before the regulatory bodies. We must give them a clear and convincing record to support the action the public interest requires to be taken.

Consumerism

The field of consumerism will continue to occupy a great deal of time and effort both on Capitol Hill and with the appropriate agencies. Pending before this Congress are matters concerning product safety, manufacturing product standards, consumer class action, independent consumer agencies, and consumer representation by the federal government. New, stricter, and more costly standards of construction recently have been imposed. Excessive and unreasonable contentions and demands of environmental extremists have seriously delayed needed energy supplies and added materially to their cost.

It is axiomatic that the major efforts of our industry must be directed to the continuing assessment of the nation’s energy crisis and a search for solutions consistent with national economical and environmental goals. Here the regulatory bodies can be of the greatest help. We must overcome extremists in the interest of all.

On the basic problem of gas supply, the FPC has undertaken a National Gas Survey to establish the magnitude of our gas reserves, competitive and price factors, capital requirements, technological needs, and other matters. An authoritative and objective study would appear to be a necessary prelude to the establishment of a sound national energy policy. I request support from all for this project and full cooperation from those affected in supplying necessary data as the study progresses.

Price Freeze

The most serious problem immediately confronting our industry is the president’s ninety-day price freeze and the policies to be followed by the federal government after its scheduled expiration on 13 November. Under this freeze the rates of regulated utility companies were frozen at currently effective levels just as in the case of unregulated businesses. Whatever the practical necessities of the president’s across-the-board action, the fact is that it created particular hardships for regulated utilities, many of which had had rate increase applications pending before regulatory commissions for many months and were already absorbing the cost increases which necessitated the rate relief requested.

If the industry is to fulfill its vital public service responsibilities, it is essential that after 13 November 1971, regulation of utility rates be returned to the state and federal agencies already established for that specific purpose. This was done on the two previous occasions when we had national price control—World War II
and Korea. It is a fundamental tenet of utility regulation that rates must be fixed at levels which will permit the utility to attract capital and maintain its credit. This simply reflects the fact that utilities are obligated to meet the demand for additional service and must provide that service safely and efficiently, all of which requires continuing capital investment. There are no extra, excessive, or windfall profits under the effective regulation which has been an inseparable incident of the utility business for many decades. Only if utility rate regulation is conducted under established principles by the agencies who are expert in the field can the gas industry carry out the vast gas supply programs required to maintain adequate service to the public and to fight inflation by bringing needed fuel supplies to our vast productive machine. At the same time, the utilities should make sure that any increases in rates they may seek are fully justified and are no more than necessary to permit them to obtain additional gas supplies and render adequate service to their markets.

Discussion

WILLIAM G. SHEPHERD
University of Michigan

The Hughes-Francis discussion is not only by two minds, it is also of two minds about both items in its title—regulation and the energy "crisis"—and how they relate. In some passages, we are said to be in a "tragic," severe crisis, caused by a "failure" of regulation. In other passages, the way out requires only modest revisions in regulation and a few price adjustments. Both views are tenable, but they cannot both be correct.

The issues mix economics, politics and administrative procedure, and sociology, and they are matters largely of degree. I agree with the Hughes-Francis appraisals by degree and in part, but my own analysis is divergent enough to compare at some length in this discussion. My theme will be that this crisis is transient and relatively easy to solve; the main remedies probably lie in pricing. Regulation is only a secondary cause of the crisis. It needs revision on grounds more basic than those which Hughes-
FRANCIS examine. I will follow the Hughes-Francis format, treating first gas and then electricity. Hughes-Francis regard the gas shortage as a "serious national problem." The severity of the shortage is not known, and indeed it may be deliberately exaggerated, they note. Yet rationing has arisen in certain states, and there are other pricing signs of disequilibrium. Hughes-Francis offer no new data on the extent of the shortage, but they treat it as if it were of major proportions.

They accept the view of Paul MacAvoy and others that the shortage has been induced by regulation and the regulatory experience has been "misfortune," and a "failure." Hughes-Francis favor deregulation of field prices, but point out that it will take a long time to arrange such a change. Their interim proposal for price adjustments needs more discussion of the criteria for evaluating price changes and equilibrium levels. Still the proposal is logical and feasible, and the implication is that the crisis can be resolved easily.

Like many other economic crises, this one probably will yield to certain orderly changes in relative prices, or to other modest, direct economic incentives. Moreover, these changes can easily occur via regulation, not in place of it. Of course the FPC will need to act promptly and flexibly, in partial contrast to its past form in field price regulation. But the main framework and content of regulation need not to be changed. In fact, Hughes-Francis propose tighter regulation in order to obtain reliable information on reserves. If the resulting interim treatment works as well as Hughes-Francis (and this author) expect, there would be no need to abolish regulation for this purpose.

In short, the crisis is probably a Viennese one; calamitous but not serious. The "failure" of regulation can be easily remedied. And this failure is caused partly by regulation's incomplete data on reserves. The real Hughes-Francis preference in light of both theory and reality seems to be to alter and improve regulation in certain specific ways, not to abolish it outright. I think this interpretation is correct, despite their abolitionist statements at several points and the sense of crisis in the first part of their paper.

All of this suggests a broader lesson about regulatory reform. Conventional regulation (which field price regulation is not) is currently drawing deserved criticism for several defects. But the revaluation has lent itself to overstatement, and even the more careful critics have often been vague about the post-regulatory treatment. In most sectors, certain constraints in the public interest would still need to be applied by someone after regulation is gone; rate structure is an obvious example. To pretend otherwise is doctrinaire, or perhaps just wishful.

Hughes-Francis regard the problems in electricity capacity and planning as more intractable; indeed, so intractable that a major consolidation of the supply side of the industry into "fewer and tighter planning units" is needed. They further suggest closer coordination and integration of public controls, to avoid the hitches which the present system has encountered on environmental issues. They do, however, stop short of proposing a single national agency capable of unified energy planning and controls. Taking the regulatory bodies as given, they would have them shift resources and attention toward ecological issues and away from the older narrow questions; and also, somehow, coordinate their procedures of review.

On the whole, these changes are desirable and likely to come about, especially if the present capacity problems persist. Old-style regulation is not well-suited to allow for environmental questions. Yet Hughes-Francis hardly mention certain economic lessons which, if followed, might ease the short-run crisis and also improve long-run allocation. The lessons, as in gas, have to do mainly with pricing. The first lesson is that peak load pricing is needed to reflect the high real costs of peak use. It seems clear that it makes no sense to keep a promotional rate structure when brownouts at peak times are imminent. Yet that is what almost all electricity rate provisions—residential, commercial, industrial, and so forth—do. To be sure, there are some experiments with off-peak pricing, as I have shown elsewhere, so that marginal cost pricing is not an unfamiliar concept or practice in this country. What is needed is a root and branch retesting and restructuring of electricity tariffs throughout the industry. The key objective, long appreciated technically and easy to understand, is to set prices for use at simultaneous system peak at no less than real marginal cost. If this is a large multiple of off-peak cost, as it probably will be where brownouts are impending, then the case for adequate metering and precise peak load pricing is very strong. At the least,
promotional features which set peak load prices effectively below 
off-peak rates should be avoided.

In the short run, peak demand may be inelastic, so that only 
marginally reductions in peak loads are achieved. But elasticity 
likely is to be much higher in the long run, and the long run 
begins now. Therefore the case for full peak load pricing—even 
if the data only permit approximations—appears to be over-
whelming as part of the solution of capacity shortages.

The second lesson (partly related) is that physical rationing, 
where necessary, should allow for all relevant opportunity costs. Gas rationing is an 
current example; some state commissions recently 
have proscribed gas supply to new residences. If this causes any 
significant part of demand to shift to electricity for peak load 
uses (especially space heating), the net effect may be a significant 
misallocation in the form of extra strain on peak load electricity 
capacity. Such matters are complex and require sophisticated 
economic analysis, and access to more utility data than the private 
firms have or are willing to provide.

On these grounds, I endorse the Hughes-Francis call for better 
talent in the commissions to deal with these economic and social 
issues. I would go further, to Charles Donahue's proposal that 
economists be given the decision-making role in utility regulation. ¹ 
It is partly because of the adversary, legalistic format of present 
regulation that it has become congested in handling nuclear and 
other siting issues. Hughes-Francis reject certain draconian proposals to restructure 
regulation and licensing authority, preferring instead to rely on 
improved commissions with augmented licensing roles. I am less 
hopeful that most state commissions are up to this task; their 
resources are thin and their expertise is often deficient. At best, 
many of them merely negotiate or arbitrate. At worst, they are 
defective, weak, and too limited geographically to cope with 
regional power problems.

These limits will be more apparent if the Hughes-Francis proposal 
for utility consolidation is carried through. The main practical 
effect of doing so appears to be that the consolidated utilities 
would have more scope for planning plant locations and overcom-
ing local resistances on ecological and amenity grounds. While 
I see some advantages in this, it should be clear that it comes 
down to giving utilities more power to have their way, by using 

eminent domain, political persuasion, and so forth. Unless utilities 
develop a new sensitivity to social interests—and Hughes-Francis do not 
doubt that they will—I would expect the results to diverge more, 
not less, from social optimum configurations than do the outcomes 
of the present system.

Not all ecological and community resistance is persuasive, but 
much of it has real economic and social content. “Smoothing” 
or spending the review process toward compromise is not necessarily 
the proper objective. Rather, in many cases, the utilities should 
be made to develop entirely different proposals, even if doing 
so is time consuming. This is all the more true if the added 
capacity is needed to meet uneconomic peak load demand which 
is stimulated by irrationally low prices. To this extent, local 
objections to destruction of amenity and ecology, so that limited 
groups in other distant localities can benefit, should not be settled 
primarily by compromise or greater utility power, but rather by 
compensation. If system plans will not provide adequate compen-
sation for genuine damages, then they are presumptively 
nonoptimal and should be revised.

The regulatory task is to strike the correct balance of these 
factors, based on full information. The Hughes-Francis proposal 
does not inspire fresh confidence, since it seems likely to de-
emphasize and submerge the external effects of utility growth, 
without providing for optimal pricing or for compensation. Of 
course, no other proposal for handling these issues is foolproof, 
but the treatment should at least provide for the known economic 
lessons to be applied. Neither the present system nor the Hughes-
Francis revisions seem adequate, but the present congestion does 
have the virtue of forcing the new issues rather than, as in the 
past, letting them be brushed aside. The “crisis,” or whatever, 
may eventually lead to better regulatory treatments. At this point, 
I believe we need a wider array of alternatives than those considered 
by Hughes-Francis.

NOTES

2. See Peter D. Steiner, “Peak Load Pricing Revisited,” in Essays on Public 
Utility Pricing and Regulation, ed. Harry M. Trebing (East Lansing: Division of 
WILLIAM G. SHEPHERD


V. Regulation and Consumerism
The Muted Voice of the Consumer in Regulatory Agencies

COLSTON E. WARNE
Consumers Union

I

For thirty-five years the Consumers Union has given advice and counsel on consumer goods and services and has alerted consumers to national issues pending before regulatory bodies and legislative committees concerning such diverse matters as consumer credit, trade restraints, weights and measures, automobile insurance, and toy safety. Our monthly publication, Consumer Reports, which now goes to more than two million families each month, has become an important participant in the expanding consumerism of our day.

It is perhaps indicative of the nation's changing climate of opinion that I speak today—to my knowledge, the first invitation in thirty-five years to be extended to a representative of the
Consumers Union to speak in the public utilities field; I am most happy to accept.

Our organization, as you may know, receives no income whatsoever from advertising or from commercial sources. It is governed by an unpaid board of twenty-one elected by competitive balloting. Once predominantly academic, the board now includes such dissimilar persons as John Banzhaf, Persia Campbell, Betty Furness, Jerome Hellerstein, Bronson LaFollette, Bess Myerson, Helen Nelson, and Ralph Nader. Our headquarters are in Mount Vernon, New York.

The last decade has brought not only an expansion in consumer testing; it also has brought the rapid development of consumer action organizations on the local, state, and national level. Coordinating and spearheading this activity is the Consumer Federation of America, Washington, D.C., which has been pressing for a national consumer program adopted by its affiliates early in 1971. This program, as I shall note later, is attuned to the problems of consumers in the regulated industries.

The growing recognition of the consumer interest by government has by no means been of recent origin. Consumer representation was embedded in the NRA and the AAA of the mid-thirties. Consumer representation dotted the wartime price control and rationing agencies. Consumers continued on advisory bodies of the Council of Economic Advisers and the Food and Drug Administration of the 1950s and 1960s. Yet its greatest growth, supported by presidential consumer messages and White House recognition, emerged with John F. Kennedy and has been amplified markedly during the Johnson and Nixon administrations.

The advent of the Office of Consumer Affairs, headed by Virginia Knauer in the White House, and the recent consumer legislative gains hopefully suggest the emergence of a permanent consumer representation in Washington—one which may parallel the late nineteenth century acceptance of industry, agriculture, and labor in the councils of state.

The organizational pattern of today's consumer movement is by no means well-defined. Cooperatives, credit unions, rural electrification groups, union committees, women's organizations, consumer action groups, consumer testing agencies, state and local consumer groups, and other consumer-oriented efforts all are joined in affiliation with the Consumer Federation of America. The strength from state to state is most uneven. (I should mention parenthetically that the Consumers Union does no lobbying and appears before Washington agencies only upon invitation.) Yet the political dynamism of the consumer movement as a whole is well evident: state consumer councils are being established; consumer action is being added to the programs of existing organizations; eager groups of young lawyers have emerged to assist new alphabetical groups; and national consumer organizations steadily have gained strength. In 1969 an International Organization of Consumers Unions (IOCU) was established in The Hague to assist in the international spread of the consumer movement, and it now has affiliates in thirty-seven countries. Also, consultative status has been given to the IOCU by the agencies of the United Nations.

II

It is not surprising that the new consumerism has now arrived on the doorstep of the utility industry. While it has been a bit nettlesome for General Motors to be reminded of the social responsibility of the corporation, as evidenced in such fields as safety, pollution, and pricing practices, utility groups have long been more accustomed to a fishbowl existence.

Yet even their fishbowl, Senator Metcalf reminds us, has sometimes been featured by low visibility:

They do not divulge basic information in key areas unless required to do so under cumbersome administrative procedures. Some commissions do not press for such information. Others refuse to share what information they obtain with the public, including members of the state legislature. Even the Department of Defense, the largest utility consumer in the nation, as well as the most powerful agency in the federal government, finds that its most difficult job in a utility case is obtaining information.

It is manifestly clear to American consumer groups that the long-established procedures of most utility commissions fit more snugly in a pattern of resolving the conflicts between competing business interests than of balancing the equities between producers and consumers. It has always seemed elementary that any commission, as a public body, be charged with the task of establishing social policy through the weighing of the evidence placed before
it by the adversaries. On the one hand it faces a battery of lawyers who have been known to overstate the financial needs of the regulated utility. They employ all of the arts drawn from long experience and close association with the industry to convince the regulators of the reasonableness of their plea—this is their right.

Yet the voice of the consumer has long been muted, or even unheard, in such hearings. A year ago Consumer Reports commented:

Whether through indifference, corruption or financial starvation, the state agencies at best usually do little more than sit as neutral judges when private utilities apply for higher rates. The consumer is seldom represented at the hearings, except, in theory, by the state agency itself. Under such circumstances, information presented by the utilities is seldom challenged. The consumer winds up paying three ways. Through his electric bill, he pays the higher rates thus imposed. Through it too he pays the fancy fees of the attorneys and other experts hired by the utility companies to prepare and argue their rate increase cases. And through his taxes, he pays the expenses of maintaining a public utilities commission for not representing him.

Put succinctly, a distinct imbalance long has existed in large segments of the regulatory process—an imbalance vividly pointed out by Senator Metcalf in his 1969 hearings on the Utility Consumers Counsel Act (S. 607). Witness after witness noted the absence of more than a perfunctory consumer case. To be sure, some states such as Massachusetts or Maryland have inadequately funded the idea of direct consumer representation and in others, appearances have been entered by a corporation counsel or member of the commission’s staff. Moreover, an occasional ex-commissioner or other public spirited citizen will appear on his own initiative. Yet the total picture is one of imbalance.

First, the state commissions themselves have not generally commanded the professional personnel essential to effective regulation. As the Consumers Union has stated:

It is at the state level that the regulatory structure needs the closest examination. Most state commissions lack sufficient staff, especially professional personnel to regulate effectively. A review release in 1967 by the Senate Committee on Government Operations showed more than half of the state commissions to be understaffed; half had no more than two lawyers and some states had no lawyers at all. Half the commissions had, at most, two rate analysts, some
in investigations made by it, or cases or proceedings pending before it, whether at the Commission’s own instance or upon complaint . . . and the expenses of such employment shall be paid out of the appropriation of the Commission” (49 U.S.C. 16 12). I received the following reply:

Dear Mr. Warne:

Thank you for your letter of August 27, 1971, inquiring as to specific steps taken by the Commission to afford representation to the consumer in Commission proceedings.

The Commission has been engaged in consumer protection activities since it was established in 1887, and we consider consumer interest in our proceedings. It is generally true that the ultimate consumer deals directly with regulated carriers only in purchasing passenger transportation and in movement of household goods. Nevertheless, transportation costs are an element in all prices paid by consumers and consumers are the victims of unreasonable or discriminatory rates and inadequate service.

We recognize that most freight service is performed for farmers, manufacturers, and wholesalers as distinguished from ultimate consumers of goods. It is not surprising, therefore, that ultimate consumers as such do not appear in most proceedings before the Commission.

It does not follow, however, that in Commission proceedings such consumers have interests separate from those of active participants, such as commercial shippers. These shippers are organized into a large number of trade associations which appear before us regularly, through experienced counsel. Moreover, large shippers have specialized traffic departments qualified to evaluate proposals submitted to the Commission. We believe these shipper interests have the same interest as ultimate consumers in adequate transportation service at reasonable rates.

Public bodies also play an active role in Commission proceedings involving important issues of transportation prices and service. The Department of Agriculture, Department of Defense, and the General Services Administration frequently appear. The Department of Transportation often appears to present views on broad transportation issues. The public service commissions and other agencies of the various states, together with representatives of local governments and chambers of commerce, frequently appear in proceedings affecting local people and industries. Only recently, an Ad Hoc Committee on Consumer Protection appeared in protest of a proposed rate adjustment. This may have been the first appearance so formalized in name, but it likely points the way to the future and does indicate that consumer groups themselves can and are being heard. In various types of cases where the Commission has reason to believe that consumer or other public interests may not be adequately represented, it has not hesitated to instruct counsel from its Bureau of Enforcement to participate in the proceedings and insure the making of an adequate record.

Recently, there has been a flood of legislation, such as H.R. 18214, to establish an independent consumer agency to provide representation of consumer interest before Federal agencies. Although the Commission does not see any particular necessity for an independent agency in this area, we advised Congress that whether such legislation should be enacted is a question of policy only the Congress can determine.

In sum, existing law now permits any interested person to participate in Commission proceedings and, if aggrieved by an order of the Commission, to seek judicial review (28 U.S.C. 2323). The Commission has and will continue to solicit and encourage participation by consumers in an effort to achieve the most complete record on which to reach a decision. We believe that consumer interests are being presented in Commission proceedings, and I wish to assure you that their interests are being considered. When it can be demonstrated that consumer representation is not adequate, the Commission will consider the promulgation of further procedural mechanisms to achieve that goal.

We appreciate your comments and interest in this matter. If the occasion should arise, we would welcome your participation as a consumer in any of our proceedings.

Stafford’s letter is quite significant in the attitude it reveals. It first states that shippers have the same interest as ultimate consumers in adequate transportation at reasonable rates. (Do they really?) It then adds that in any event, government departments put in an appearance on transportation prices and services. (This is reassuring.) It affirms that the Bureau of Enforcement of the ICC is instructed to have counsel appear where the commission has reason to believe consumers are not adequately represented. Finally, it sees no particular necessity for an independent utility consumers agency but leaves that problem discretion to the doorstep of the Congress.

For those who have noted the ICC’s traditional vigilance in maintaining fixed, noncompeting prices and its lack of concern over the service rendered by the carriers under its supervision, this response speaks loudly for the intervention into the proceedings by a new uninhibited agency. For example, in 1963 and again in 1968 the Consumers Union surveyed consumer attitudes toward moving companies. One out of four found the service received no better than fair or poor. After accumulating its own evidence concerning the woeful malpractices of the moving industry for over a decade, the ICC itself finally moved last year to give
consumers some assistance in improving the accuracy of estimates, lessening dishonest practices, and making delivery days more certain. The Consumers Union still has been unsuccessfully urging that the ICC provide a small claims arbitration service and that they make public the service records of movers.

Sometimes, in moments of reflection, one may wonder whether, as Ralph Nader casts it, the ICC is "a shield . . . protecting and preserving economic groups from the discipline of the marketplace." It is abundantly clear that the advent of new forms of transportation, and especially the appearance of small competitors in the trucking field, have created a changed situation in which the ICC's mission is more that of preventing rate competition than it is one of moderating the rate demands of carriers. Perhaps Richard Olney, Cleveland's attorney general, was right when back in the 1890s he said with respect to the ICC: " . . . the older such a commission gets to be, the more inclined it will be found to take the business and railroad view of things. It thus becomes sort of a barrier between the railroad corporations and the people and the protection against crude and hasty legislation hostile to railroad interests."

III

Another and quite different thrust of consumers recently has been voiced by some consumer activists of our time, a thrust which is embodied in such questions as these: Is there a conflict between clean air and water and electric power generation? What of the gap between what consumers pay for utilities and actual social cost? Do we really need urban sites for power stations? Or the question raised recently by the Union of Concerned Scientists, headed by M.I.T. nuclear physicist Harry W. Kendall: Can the AEC function effectively as the supporter and initiator of a major national program to nuclearize the country and at the same time have total responsibility for the most critical aspects of reactors—safety? His answer is a resounding no.

An answer that comes quickly to mind is that any power company proposing a giant generating plant of whatever type should at the inception of the project assume the cost of a comprehensive survey by a competent and completely independent body, so that a metropolitan area of the future will not find itself confronted with the Con Ed dilemma. If, for example, a regional power agency is the answer for New England power generation, fine. But let the decision as to site be based on environmental considerations as well as cost factors. One does not have to be an alarmist to affirm that in the past some utilities have been less than careful in accenting ecological considerations and thereby have helped to give force to present concern.

Of one thing we can be certain: No small segment of the regulatory hearings of the future will feature arguments related to social costs—underground cables, transmission lines, pipelines, smog, atomic waste, thermal pollution, and a hundred other such issues. And consumer viewpoints will be heard.

IV

The consumer quest for adequate representation before regulatory agencies extends far beyond utilities and today encompasses being consulted in the grading procedures of the U.S. Department of Agriculture and being represented on committees concerned with product safety, consumer credit, the wage-price freeze, and television advertising. The day has passed in which business groups only are thought of as proper consultants in formulating policies, whether these refer to agriculture, protective tariffs, or drug standards. Illustrative of the enlarged stance taken by the consumer movement in the United States in recent years are the fields in which the Consumer Federation of America (CFA) has issued policy statements.

Specifically, CFA opposes any attempt to curtail consumer freedom to choose subscription television. It backs educational television and favors the Public Broadcasting Financing Act of 1970. It calls for the regulation of cable television directed at guaranteeing increased benefits to the consumer. It supports the creation of a citizens review board to evaluate the public service performance of licensees and to serve as a public service advocate before Congress and the FCC. It requests more prime time for consumer organizations and public interest groups and proposes the expansion of children's programming under quality standards promulgated by the FCC, including standards sensitive to the
effects of advertising upon children. It favors comprehensive regulation by the FCC of all telephone rates, whether intrastate or interstate in nature.

In the field of energy and natural resources, CFA stresses its belief that "Consumers of all utilities, public, private and cooperative, are entitled to low cost, abundant and reliable energy, consistent with proper use of natural resources. We believe these goals can be met effectively through active competition, effective regulation, proper attention to land use, and environmental protection, research into more efficient means of providing energy without detriment to the environment, and the initiative of utilities, especially consumer-owned utilities."

CFA expresses concern over the utility crisis and the pyramiding costs of fuel. It feels it is essential to continue the effective yardstick principle of competition by comparison in the electric utility industry. It contends that consolidation of large private power companies and increasing use of large generation and transmission facilities threaten the present pluralistic form of the electric industry, which is composed of private, cooperative, and public power systems. To protect the consumer, CFA urges the federal government to initiate federal development of fuels on federal land, having due regard for environmental considerations, that the Justice Department undertake an immediate investigation of oil company acquisition of competing fuels, that the federal government impose emergency price controls on oil and coal to prevent further rapid price increases while these fuels are in short supply and that the present oil import quota program be revoked, allowing the unrestricted importation of oil for consumer needs. It also asks that the Federal Power Commission investigate gas reserves with public disclosure of company reserve data.

To maintain competition in the public utilities system a host of other proposals have been put forward to insure the nondiscriminatory use of facilities for production and transmission of electricity and to inject into the competitive pattern new consumer-owned utilities wherever utility rates or services are far out of line. CFA calls for the use of the antitrust division of the federal government to insure equal rights to participate in joint ventures, including consumer and publicly owned contingents.

On the regulatory front the program is equally comprehensive. More adequate staffing of state commissions and more vigorous action by such commissions is called for. Congress is asked to investigate past power shortages and to recommend legislation to prevent such developments in the future, including the improvement of utility regulation. Consumer-oriented individuals are recommended for membership on the federal agencies. Adequate funds for personnel are proposed. The Metcalf proposal for Utility Consumer Counsels is endorsed, applicable to all levels. An automated data bank is favored to make available to the public and regulatory agencies the information on the activities of power companies. Greater care on the issue of air and water pollution is advocated.

CFA also calls for the severance of the AEC from the promotion of the commercial development of atomic reactors, while being responsible for licensing. A greater concern for location planning is urged. Finally, CFA asks that research be initiated in the protection of the environment in the generation and transmission of electrical energy.

In the area of transportation the CFA calls for a balanced system, "based on the community design concept embodying land use studies, housing developments, community facilities, work opportunities and other relevant aspects of planning." The concept of a state transit authority is also approved.

A decade ago a consumer goal was to secure the establishment of a department of consumer affairs which would group many of the consumer protective agencies together, giving consumers a cabinet post. The expectation was that such action would improve the posture toward consumers of the Food and Drug Administration, the FTC, and other candidates for absorption and would result in more effective law enforcement. In recent years, consumer attitudes toward effective representation have taken another direction—that of pressing for a consumer protection agency, an independent agency which would have four basic functions: to represent consumers in federal agency proceedings, to handle and follow up on consumer complaints, to develop and disseminate information of interest and value to consumers, and to protect and advance consumer interest on a broad front. There would be a permanent office of consumer affairs in the Executive Office of the President, a consumer advisory committee, and an office of consumer advocacy. This landmark bill was very nearly passed in the last Congress.
(It had cleared the Senate but lacked a single vote in the House Rules Committee to go to the floor.) Introduced by Representative Chet Holifield of California (H.R. 10835) it was again passed by the House on 14 October 1971 and will in all probability receive Senate approval, especially because of its endorsement by the president and many Democratic party leaders. It may not, however, emerge from the Senate in the same form as enacted by the House due to sharp disagreements concerning the powers to be accorded to the new office of consumer advocacy.

The central purpose of the measure is described by its sponsor, Representative Holifield:

This bill is designed to ensure that the consumer's voice will be heard and his interests protected in proceedings before the existing regulatory agencies. Many of us know from long experience and exposure to Government bureaucracies that the old line agencies often are more concerned about the industries they are supposed to regulate than about the ultimate buyer of goods and services.

The new Consumer Protection Agency will be able to act as a matter of right, to represent consumers in proceedings before Federal agencies...you will note that both rule making and adjudicatory proceedings are covered...The Consumer Protection Agency may request a Federal agency to initiate a proceeding if the Administrator of the Consumer Protection agency believes that it is necessary for the protection of the consumer interests. The regulatory agency would be hard put to refuse...

The limited legal powers of the new agency were brought under challenge in the House by a group headed by Representatives Moorhead and Rosenthal who proposed an amendment to give the agency a "greater clout" by "authorizing the Consumer Protection Agency to participate in all aspects of a case except in those parts of the proceedings relating directly to the decision to impose any criminal fine, penalty or forfeiture."

The House of Representatives, however, rejected the Rosenthal-Moorhead amendment, which may again emerge in the Senate. The advocates of this amendment feel that under the Holifield Bill the agency could not enter those cases in which proceedings were being undertaken "seeking primarily to impose a fine, penalty or forfeiture." Accordingly, the phrasing of the Rosenthal-Moorhead amendment was changed to prevent the proposed agency from taking part only in those aspects of a hearing that are "related directly to the decision to impose fines, penalties or forfeitures."

Moreover, under the Rosenthal-Moorhead amendment, the agency would be empowered to review any agency's policies to determine the adequacy of the representation accorded to consumers. As Representative Boland stated: "Everyone, even the most mulishly stubborn opponents of consumer protection, knows what I am talking about here. The American consumer needs an advocate—a coordinated agency that can champion his interests in court, in a federal agency, in a factory, before a council, even within the White House itself."

In the Moorhead version, the consumer protection agency has not been accorded the power of existing governmental agencies to adjudicate or to engage in rule making; instead it would be given the right to conduct the same type of investigative proceedings, ending in a report to Congress.

Representative Stokes commented:

We as consumers, are largely unrepresented. Most of the other factions which have an interest in agency proceedings have advocates in the form of a powerful, well-financed lobby. Each of the lobbies claim to have the public interest at heart. Administrative proceedings are carefully supervised by trade associations, industry representatives, scientists, and other experts. These special interest advocates interact on a continuing basis with the agencies which affect their clients. If the Moorhead amendment is adopted, CPA will become a noteworthy adversary for the special interest advocates. It will assert the interests of all of us who consume products and services, in opposition to the interests of the producers. It will fight vigorously for the rights of consumers to safe products and to delivery at full value for our money.

Extended discussion ensued in the House concerning the scope of coverage and the adequacy of the competing proposals. To some, the Holifield bill appeared weak—a fraud for the consumer. To others it seemed an important step toward the development of administrative agencies responsive to the consumer, toward the establishment of a permanent office for consumers in the White House and toward the development of consumer educational and research activities.

The fate of the Moorhead amendment in the House by no means spells the end of the aspirations of its sponsors. In the Senate the Ribicoff hearings have just begun, and the various forces that operated in the House will have a replay in the Senate. Perhaps a greater possibility for broadening the powers of the
new agency exists there. One aspect that will not be neglected is the attempt to weld the Metcalf proposals for consumer representation at federal, state, and local utility hearings into the broader bill. This effort, if accepted, would allow the new agency to reach back to the state and local levels where consumer representation has been most notably absent.

With an election year approaching and political consciousness in evidence, the setting is timely for the enactment of such legislation. It is now abundantly clear that requests for rate increases are piling up before the various regulatory commissions. The amounts of such pending requests have not been compiled, but one researcher in this field has estimated that the total would, if approved, add some $3 or $4 billion to utility bills.

The record of consumer involvement in administrative agencies would not be complete without mention of the 13 August 1971 wage and price freeze, an action which received general, but qualified, approval from consumer groups. This action was, in my estimate, advisedly taken without notice. It does add, however, an element of great significance to consumers by rolling back rate increases slated to go into effect during the freeze period. The real question will come in the months ahead: In Phase II, will the Federal Price Board have the power to override the state utility commission decisions or to modify them within guidelines? Will the Price Board, in its own right, seek to establish a regular review of utility rates and establish its own inflation-curbing guidelines?

I do not know the answer to these questions. I do know that the consumer movement expects to participate in advisory bodies charged with the development and enforcement of Phase II, just as we were consulted by the president prior to the adoption of the post-freeze program. We feel that such consumer participation is essential for effective enforcement.

Of one thing we may be sure. The inflationary pressures of our time have quickened the development of consumer consciousness. In the utility field, higher interest rates on bond issues, rising prices of fuel and power, and mounting wages and salaries have resulted in requests for substantial utility rate increases, which in turn impel a new attentiveness, a new restlessness which will find political consumer expression at both federal and state levels. We can be certain that the consumer will not stand mute. As one who has watched government agencies for some years, I certainly have no feeling that any changes in the law, either along the lines of Senator Metcalf or Representative Holifield’s proposals, will bring, in themselves, a panacea to the problem of government regulation. As I noted earlier, the field of consumer representation has now attracted environmentalists and economists, as well as those concerned with moral and aesthetic considerations. The complexity of our problems has grown with the changes in technology as well as the changing attitudes of the consuming public. As a starting point we need to solve these problems between the pressures of consumer groups and those of the utility industry if we are to grope toward any satisfactory solutions.
Discussion

RONALD H. COASE
University of Chicago

Professor Colston E. Warne said that in the public discussion of economic policy, and, in particular, in the proceedings of the regulatory agencies, the consumer will not stand mute in the future. Professor Warne does not say in what ways things are likely to be different when the consumer's voice is heard, although it would appear to be self-evident to him that the changes will be beneficial.

What does it mean that the consumer will not stand mute? Professor Warne is not, of course, to be taken literally. Every man, woman, and child in the country is a consumer, and it is not to be supposed that all, or even a sizeable fraction of them, will take part in the public discussion of economic issues or attend the proceedings of the various commissions. What is meant is that consumer groups (as they call themselves) will speak for and act on behalf of the consumer. What are these
consumer groups? Professor Warne tells us: "Cooperatives, credit unions, rural electrification groups, union committees, women's organizations, consumer action groups and state and local consumer groups . . . ." all assisted, of course, by "eager groups of young lawyers." I do not know whether these groups will be more active in the future than in the past; I hope not. But let us suppose that they are. Professor Warne assumes that these groups will advocate, and be successful in obtaining, changes which will improve the general lot of people in the country. However, he gives us no reason for believing that this will happen.

One problem is that it is not easy to identify a general consumer interest. It is clear that consumers of electricity in rural areas will want lower prices (all consumers would like to pay less for the goods and services they buy), and presumably this is what a rural electrification group will attempt to obtain. There are some obvious ways to achieve this end. If it would involve a supply below cost, the money to do this may come through a cross-subsidization of rural consumption as a result of charging higher prices to other (commercial, industrial, or residential) consumers, thus bringing a gain to some consumers and harm to others. Another way of reaching their goal would be for the government to subsidize the service out of taxes, thus harming others (but in their role as taxpayers). Professor Warne seems to assume that the return allowed on capital invested in regulated industries is always above the level needed to attract it to that industry. But it is doubtful whether this will be the case and, in fact, in current conditions as described by Professor Warne, in which inflationary pressures have led to higher interest rates, higher prices of fuel, and higher wage rates, the likelihood is that the return allowed will be too small. The result would be that the utility will be less inclined to expand its system and some consumers will be denied service or will suffer from a lower quality service, through blackouts or in other ways. In any case, whether the return allowed on capital is too high or not is largely irrelevant to the question we are considering since there is no reason why any particular consumer group should limit itself in its demands to those which can only be attained without harm to other consumers.

Professor Warne seems to be unaware of the conflicts of interest involved in these policy questions. He says that consumer activists have urged (and apparently he agrees with them) that environmental factors such as pollution should be taken into account more than they have in the past. And he concludes, "... consumer viewpoints will be heard." But which consumers' viewpoints will be heard? Let us see what the pollution problem really involves. To an economist the question is, of course, how much pollution should we have? It is impossible to tell merely by observing the level of pollution whether we should have more pollution or less (except in the most extreme cases). Like other economic problems, whether it is concerned with the supply of potatoes or houses or education, the supply of clean air or clean rivers or lakes is simply one of deciding what amount ought to be supplied, and this turns ultimately on whether what has to be given up to secure the additional supply is worth more or less than the additional supply of the commodity under discussion which it will procure. It is a matter of calculation, and it is quite possible that when the calculations are made, in general, they will show that it is better to have air, rivers, and lakes which are dirtier rather than cleaner. The consumer groups do their best to obscure the nature of the choice with which we are confronted and with shrill argument and exaggerated claims they attempt (and I think with some success) to persuade the populace that every reduction in pollution is always a gain. They also conceal something else which is equally important, namely, that the gains from a reduction in pollution will often be enjoyed by the richer members of the community (better facilities for fishing, sailing, and water-skiing) while the cost will be borne in large part by the poorer members of the community as a result of higher prices for electricity, oil and gas, steel, chemicals, and so forth. Even when the gains which come from a reduction in pollution are enjoyed by all sections of the community, it is quite likely that the reduction in other goods and services which accompany it may offset the benefits so far as the poorer members of society are concerned and at the same time be a price which those more abundantly endowed with the world's goods may be quite willing to pay. Which consumers' viewpoint will be heard? I think the answer is clear. It will be that of the educated middle classes, whose members bulk so largely in activist consumers' groups. By implicitly
assuming a general consumer interest, Professor Warne fails to see the very real, and important, divergencies of interest of different categories of consumers.

The fact is that consumer groups are pressure groups and they will act with the same disregard for the interests of others as all pressure groups do. Professor Warne welcomes "the emergence of a permanent consumer representation in Washington—one which may parallel the late nineteenth century acceptance of industry, agriculture and labor in the councils of state." When one thinks of the distortion of our economic system which has resulted from "the acceptance of industry, agriculture and labor in the councils of state," it is difficult to feel much enthusiasm upon learning that other special interest groups are also to exert influence within the political organization. Oddly enough, Professor Warne recognizes some of the unfortunate consequences of this new development. He says that in proceedings before regulatory agencies "not a few of these new consumer advocates will overstress the elasticity of demand at low rates, will understate the true costs of capital and will...employ dubious data to nudge the decision toward their point of view. Yet does not the employment of this procedure encourage a better balance of adversaries?" I do not share his optimism; the attainment of truth is not made easier by the multiplication of lies.

It is strange that in Professor Warne's paper no mention is made of the one general interest which all members of society do share, namely, in the maintenance of a competitive, private enterprise system. The merits of a competitive system are so well known that it is unnecessary to catalogue them here. If prices exceed costs in an industry, that is, if consumers prefer that their money should be spent on its products rather than on those of some other industry, resources move into that industry. In the reverse situation, resources move out. There is a constant search on the part of producers for products which consumers prefer to those that they are now consuming, which are, of course, products in which receipts will cover costs. This applies generally and all categories of consumers benefit from its operation. It is through its working that the standard of living of the consumer has increased so greatly in recent times. Some have described its basic character as "consumers' sovereignty"—a system in which the consumer is king. It is surely better than a system in which the consumer group is king, and I wish Professor Warne's voice had not been so muted on this subject.

I should perhaps make clear that I have no objection to such activities of the Consumer Union as the publication of Consumer Reports; indeed I commend them. People who find this information useful buy Consumer Reports; those who do not, abstain. It is not so easy to be sure that the activities of the Federal Trade Commission, which also claims to protect the consumer, are equally beneficent. Professor Richard Posner recently summarized opinion on the FTC as expressed in reports from 1924 to the present time, the most recent being the Nader Report of 1969 and the report of the American Bar Association's commission to study the FTC. The diagnosis has always been the same: "The Commission is rudderless; poorly managed and poorly staffed; obsessed with trivia; politicized; all in all, inefficient and incompetent. And—the persistence of these criticisms would seem to indicate—largely impervious to criticism." But what is more important for our purpose is that so much of the work of the FTC, whether in its antitrust work, through its enforcement of the Robinson-Patman Act, or in its work against consumer fraud, through, for example, its control of advertising, is essentially anticompetitive and therefore anticonsumer. It is therefore not surprising to learn that most of the complaints with which the FTC deals apparently originate not with consumers but with competitors of the business complained of.

This brings me to another aspect of Professor Warne's paper which I found puzzling, and that is his attitude toward the damage inflicted on consumers by government regulation, a subject which is one of the few on which most economists agree. It is true that Professor Warne mentions this subject, but it is also true that his voice is strangely muted. Indeed, the net effect of Professor Warne's program would be to greatly increase regulation. The question that needs answering is why he did not propose that government regulation be abolished or, at any rate, curtailed? Why was he so hard on the commissioner from Florida—was his name Adam Smith?—who said that "the best regulation is little or no regulation"? One reason might be prudence; consumer groups need regulation in the same way that doctors need disease. Another is that members of consumer groups do not wish to disassociate themselves from the progressive forces of the world,
and these very much favor government control of economic activities. Thus, in a discussion of the regulation of milk marketing—one of the more vicious attacks on the consumer, since it greatly raises the price of milk for human consumption—the following phrase is inserted in Consumer Reports: "Maintaining some sort of price level for the farmer is probably a good thing; it recognizes the nation's dairy herd as a vital natural resource and preserves it intact against the superior bargaining power of giant dairy-food companies." If one adopts this position, it is impossible to defend the consumer.

But I do not think prudence and political sympathies are enough to explain this reluctance to abandon regulation. I think there is a more fundamental reason why Professor Warne is willing to wound but afraid to kill. I think he sees businessmen as evil, who, left to themselves would indulge in all sorts of monopolistic practices and commit fraud on the consumer. Regulation is seen as necessary to prevent this. Unfortunately, these evil men are also smart and have succeeded in controlling the agencies which were supposed to control them. What is wanted is some way of neutralizing the influence of the businessmen so that regulation can really do its work. The way in which this can be done is for consumer groups to take part in the proceedings of the agencies. I do not think consumer groups would, in fact, play this part, but that, at any rate, seems to be the view.

My own view is different. I agree that businessmen are evil (although not more evil than the rest of us). I agree that, left to themselves, they would indulge in monopolistic practices and commit fraud against the consumer, but I would expect these practices to be held in check by competition. It is instructive to see how businessmen use regulation. They use the governmental powers inherent in regulation to prevent competition, thus making clear the role it plays in lowering prices and raising the quality of products. Regulation is the principal means by which competition is prevented from carrying out its beneficent function. There may be some regulation which is beneficial, but this is not true of most of the activities of the regulatory agencies.

As I see it, if Professor Warne's view is correct, the situation is hopeless. If my view is correct, there is a way out. I invite Professor Warne, and others who share his view, to explore it.

Discussion

Asher H. Ende

Federal Communications Commission

I think it is fair to note initially that the consumer voice in regulation of utilities and common carriers is not muted, but rather being heard with ever increasing frequency and in ever greater volume. The key, however, is not the volume with which the consumer or his representatives speak, but rather the quality of substance of what they say. Shrilled denunciations of "predatory" utilities may give some soul satisfaction but are not of major assistance in resolving the ever more complex problems relating to types and quality of service and levels of charges, as well as the effects of such increasing demands on environment.

There is no doubt that the consumer, that is, the individuals who collectively are the customers of the utilities, need some organized and formal means to evaluate both services and charges and to make presentations with respect to both to the regulatory agencies. There are no exact and eternal truths or fine calibers
that can measure charges to the nearest decimal point; most decisions involve reasonable measures of subjective judgment. Without in any way at this point attributing insidious or evil motives to the regulated utilities, it must be understood that they tend generally to resolve doubts in favor of making resources more readily available, usually through higher charges. There must be some device for assuring that the offsetting arguments, considerations, and theories will be presented to the decision makers so that a reasonable approximation of actual requirements can be determined. In other words, consumer representation is essential to insure that the proper balance will be struck by reasonably intelligent and fair-minded regulators who have the basic responsibility for reaching conclusions and making decisions on the basis of claims presented to them.

There is no doubt that the present situation is not conducive to the presentation of both sides of the issue in a balanced manner. Representatives of regulated entities continuously appear at the offices of the regulators to discuss existing and foreseeable problems and to press for the solutions which they deem appropriate. Again, assuming for the moment that motivations are of the highest and the integrity of all involved is impeccable, the commissions, both commissioners and staff, continuously are presented with a one-sided view. It is true that the regulated entities may have studied the matter in detail; however, once a conclusion has been reached all efforts are bent to make a presentation which will support that conclusion most effectively and convincingly. With input primarily from one side it is difficult, if not impossible, for the regulator at all times to raise all of the questions needed to test the validity of the arguments presented or to explore possible alternatives which might resolve the particular problem more effectively, efficiently, or economically. This is particularly true if, in general, the regulated entity is competent, forthright, and striving to do an effective job in meeting its service obligations. It is these very qualities that tend to allay skepticism and deter the regulator from probing as deeply as he otherwise might and definitely should. The fact that entities are honest and normally efficient should not prevent them from facing detailed, searching questions designed to test the merits of the proposal even if, in general, the regulated entity is competent, forthright, and striving to do an effective job in meeting its service obligations. In sum, then, regulatory entities, historically understaffed, with inadequate technical support and necessarily charged with working with the regulated, are not in a position to do the optimum job in defending the interests of the consumer or user of services and facilities.

In recent years large numbers of volunteer consumer defense groups have been organized. This represents a step forward in making a diversity of views available to regulatory commissions. Unfortunately, however, the interest and initiative of these groups has not been matched by their expertise or by the necessary funding. Most issues before regulatory agencies in both the service and rate fields are becoming increasingly complex and require detailed professional skills in the field of engineering, accounting, and economics. In-depth studies must be made and intelligent evaluation or critiques prepared of the presentations made by the regulated utilities. Unfortunately, if the experience of the FCC is to be considered any guide, the volunteer consumer groups have been woefully inadequate at best and counterproductive at other times in that attacks unsupported by substantive facts have had the effect of lending a credibility to the regulated utilities case that it might not intrinsically possess. In this connection it is relevant to note that Ralph Nader, who wrote a letter (released to the press) seeking intervention in the last major rate proceeding before the FCC and having been granted the right to participate, never appeared during the hearings.

Although the most adequate and effective solution to the problem would be insuring that regulatory agencies have before them the full spectrum of considerations, carefully prepared and intelligently argued. To do this it is necessary to establish an independent agency concerned with seeing that the consumer viewpoint is adequately presented. Such an agency should not be part of any of the existing government departments which in themselves often have vested interests which do not necessarily parallel, and sometimes diametrically oppose, the interests of small users or consumers.

In my opinion the most adequate and effective solution to the problem would be insuring that regulatory agencies have before them the full spectrum of considerations, carefully prepared and intelligently argued. To do this it is necessary to establish an independent agency concerned with seeing that the consumer viewpoint is adequately presented. Such an agency should not be part of any of the existing government departments which in themselves often have vested interests which do not necessarily parallel, and sometimes diametrically oppose, the interests of small users or consumers. Nor should the consumer agency be part of or affiliated with the regulatory agencies. The regulatory agencies must discharge their adjudicatory and many other regulatory functions in as neutral a manner as possible. Affiliation between the consumer representative and the agency would be improper if we were to assume the highest motivation on the part of the proposer. In sum, then, regulatory entities, historically understaffed, with inadequate technical support and necessarily charged with working with the regulated, are not in a position to do the optimum job in defending the interests of the consumer or user of services and facilities.
would be subscribed and the temptation to "pull punches" would be suspected. Second, the close association of consumer representatives with decision-making personnel could have adverse effects and subtly influence decisions to the consumer viewpoint not necessarily fully in accord with the evidence of record. Thus the first prerequisite then is completely independent from other governmental bodies.

The head of the consumer agency should be insulated insofar as possible from political pressure. To insure this, the job must be given stature, and precedents established for having the president appoint consumer-oriented people with the advice and consent of the Senate for reasonably long periods, such as seven to ten years with no reappointment permitted. While there is no way of insuring that the president, in fact, will appoint the most competent individuals available, or that once appointed such individuals will live up to the promise of their previous records, nevertheless the combination of prestige, precedent, long tenure, and no hope of reappointment should lay the foundation for the service of qualified, aggressive, and competent individuals.

In order to be effective the consumer agency will have to be funded adequately and independently. There is no surer way of dissipating the effectiveness of an agency of this type than to deprive it of adequate funding on a continuing basis. The creation of an agency without adequate funding would be a hoax on consumers giving them the form without the substance of effective representation. Almost as bad is a system of feast or famine whereby the agency is sporadically given substantial funds when issues which catch the public imagination arise and later is left to wither until the next "glamour issue" arises. Adequate staff of reasonable competence cannot be maintained under such conditions. In fact, in the writer's opinion it would be far better not to create any consumer agency than to establish one without assurance of adequate funding on a continuing basis.

One may very well ask the question, what is adequate funding? Certainly it is not giving all of the money the agency thinks it needs to do all of the jobs it would like to undertake. The funding must relate to the volume of essential work involved. Perhaps one way of insuring this would be to fix some very small percentage of the regulated entity's gross revenues as the amount with a requirement that that entity pay such sums into a fund available to the agency and treat them as a separate expense to be recovered from the consumer. Certainly, if consumers can be required, as they are now, to pay for the cost undertaken by a regulated utility to support applications for rate increases, it is only fair that this method also be used to protect the consumer against unwarranted rate increases and permit him to test the validity underlying any application for a rate increase.

Another method of insuring or measuring adequate financing might be to require the utility to pay into the fund for the support of the agency a sum approximately equal to all costs to the regulated entity in prosecuting its claims or positions before the regulatory agency. This has the advantage of assuring that the consumer has the same resources available to him to test claims of the utility as the utility devotes to prosecuting its claims. Here again, of course, the sums so paid would be fully chargeable as operating expenses.

It is to be noted that the two proposals involve means other than congressional appropriation for the support of the consumer agency. The appropriations route unfortunately has not proved the optimum means of insuring that regulatory agencies have the resources necessary to discharge their statutory functions.

In order to operate effectively and efficiently it would be necessary for the consumer agency to have at least the following statutory powers:

* The right to have access to regulatory agencies to the same extent as the regulated utilities. Accordingly, the consumer agency should have standing to intervene as a matter of right in all proceedings, formal or informal, affecting the type, quality, or cost of services available or sought to be made available.
* Standing, on its own initiative, to prepare, file, and prosecute complaints.
* Standing, on its own initiative, to formulate and support by appropriate pleadings requests for rule making.
* Standing to seek judicial review as a party in interest with respect to any action or decision of a regulatory agency where the regulated utility may seek judicial review.

It must be recognized that in a large measure regulatory activity is conducted at the state rather than the federal level, that is local telephone bills, as well as gas and electric bills, urban transportation, and so forth. A federal consumer agency can be...
of considerable assistance to state regulatory agencies in the performance of their tasks. For example, the agency should be authorized to: (1) make personnel available upon request to advise and cooperate with state agencies; (2) develop recommended guidelines and criteria for regulatory action for the proper budgeting and staffing of regulatory agencies and for adequate training of personnel; (3) have standing to intervene before state agencies either on the invitation of such agencies or upon reaching a conclusion to be set forth in an appropriate document that there is no other adequate means of presenting the consumer point of view or protecting the consumer interest; and (4) have standing in instances where it has intervened to seek judicial review of the state agency decision.

I think that the establishment of a consumer agency as set forth above would establish a sense of confidence in the fairness of regulatory activity. It would be of benefit not only to consumers, but also to regulated utilities because knowledge that their proposals will be tested by such a consumer agency should insure greater care in the preparation of proposals and more careful research, planning, and review before proposals are finally formulated and presented to regulatory agencies.

I should like to turn now to Ronald H. Coase's broad views on the basic paper. The fundamental weakness of Professor Coase's paper is that it fails entirely to relate to the real world. It rests wholly on the premise that competition, which he assumes without demonstrating, is the great self-regulator and is available or useful in utility regulation. This assumption is clearly nonsense for two basic reasons. First, while competition may affect price levels in some instances, it does not guard against the concomitant debasement of quality or quantity. Man's experience has shown from earliest history that social action is essential to safeguard the consumer against predatory action. (Even the code of Hammurabi contained penalties for false weights and measures.) Without belaboring the point by tracing the record over the millennia of government intervention to protect the consumer, let us turn to the current situation. Aside from weights and measures regulation, which, incidentally, after thousands of years is still needed to protect the consumer in almost every competitive market, we have an entire series of laws to insure the quality of what we buy, its packaging, pure food and drug, inspection, and similar statutes. All of these are applicable in this wonderful competitive market which Professor Coase promises will bring us the consumer millennium. He should realize, as we all do, that when the pressures of price competition become strong, the hidden debasements begin. The problem is that most consumers have no means of determining whether such debasements have taken place. Organized society must then step in to give reasonable assurances that we will be protected against the evils of competition.

Second, and even more important, his entire theory rests on the fallacious premise that competition is possible or feasible in most of these regulated activities. Are we going to tear up our streets and have competing gas mains, water mains, or electric wires? Will we have the choice of putting five different telephones on our desk in order to reach some segment of the population? I assume that as an economist Professor Coase is reasonably familiar with the principles of economies of scale, natural or economic monopolies, and other factors which make competition impossible even assuming it were to be effective.

I might say, parenthetically, that insofar as price and readily discernible quality are concerned, I would agree with him that an ounce of competition is worth several pounds of regulation. However absent the availability of that ounce of competition, I think any reasoning man readily would accept all of the chamber of horrors he describes to receive the benefit of the regulatory activity which is designed to insure the availability of vitally needed services on a nondiscriminatory basis and at reasonable charges.

There is no doubt that both regulation and competition have failed in some aspects and that neither will fail to bring about the millennium of perfect justice in the future. Regulation has, however, at least in the fields in which I am familiar—domestic and international communications in both voice and records—succeeded in obviating major evils, enhancing availability of service, and pushing down unit rates as various economies become available. The problems of protecting the consumer interest should not be distorted by setting up the sort of straw man that Professor Coase does. He says that it is not easy to identify a general consumer interest and cites several areas where there may be conflicts between consumers. He forgets, however, to list the most important one, that is, where all consumers overpay and no
competition is available to rectify the matter. He further assumes that consumers always will demand, or that the regulatory agencies will allow utilities returns which are less than their cost of money. His concern only seems to be with a likelihood that returns will be too small, forgetting that they could be too great and thereby lead to worse injustices.

The problems of the world are complex and growing more so. Men who devote their lives to thinking and teaching can make a substantial contribution to the resolution of these problems. However, they should not hide from all reality in the cloisters of academia nor adopt the elitist attitude that the poor, benighted consumer does not know what is good for him. Regulation in our complex world will be with us. Let us devote our attention to improving it, correcting it, and insuring that it serves our needs rather than derogating it with broad strokes completely unrelated to the world in which we live.

NOTES

The opinions expressed in this article, except when supported by specific citation to a commission decision or other official pronouncement, are those of the author and do not necessarily reflect the views or policies of the Federal Communications Commission.

1. It is to be stressed that the above conclusions are a sum of twenty-five years of experience at the Federal Communications Commission in regulating a group of carriers who, one can say, generally were interested in providing the caliber of service which would meet the public need, particularly in the international field where the writer's experience has been most extensive.

2. For example, the U.S. government as a large user of telecommunications is a strong supporter of bulk discount rates, which may not necessarily always be in the interest of the average user. If the discounts are too steep, the average user would be required to overpay in order to insure a fair return to the regulated utility.

Discussion

JOSEPH C. SWIDLER
New York State Public Service Commission

As a member of a regulatory agency, I find myself in a rather paradoxical position on this program. The announced subject, "The Muted Voice of the Consumer in Regulatory Agencies," illustrates the paradox. The framing of the subject says that the consumer should have a voice, but that, alas, his voice is muted. If the subject read "The Muted Voice of the Consumer in Some Regulatory Agencies," we might assume that the consumer's voice was unmuted in other agencies, and presumably that consumer muteness before regulatory agencies, like other imperfections of nature and man, was subject to improvement. Rather, the phrasing of the subject implies that muteness of the consumer is inherent in the present regulatory system, an implication I cannot accept.

Professor Warne in the keynote presentation on this panel accepts the thesis implicit in the subject without qualification and, for that matter, without discussion. He refers at one point to the
deficiencies "of most utility commissions," and he has used similar qualifiers in other uncomplimentary passages, but the total picture he portrays is one of unrelieved regulatory apathy, or worse. In my view, this is far too sweeping a picture, and does not comport with reality.

In attempting to correct the picture—I will not say to defend the regulatory agencies—I find myself under some handicaps. In the first place, one cannot prove honesty or ability, but dishonesty is provable and sometimes indicatable, and incompetence is frequently painfully clear. The next time an agency or commissioner is attacked in the press, Professor Warne's thesis will be remembered as prophetic, but there are not likely to be many news articles commending the work of a commission or commissioner, even if deserved.

In the second place, I am by no means satisfied with the performance of regulation in the Federal Power Commission, which I once headed, in the other federal and state regulatory agencies throughout the country, or even in the New York State Public Service Commission, of which I am now chairman. I spend a great deal of my time attempting to improve regulatory performance in the consumer's defense of the status quo.

With this preliminary, let me acknowledge that there is much of merit in what Professor Warne says. Many state regulatory agencies are underfinanced and understaffed. In some states salary levels are too low to attract and hold dedicated and competent commission members and staff. In the states of relatively small population, in particular, there are inadequate resources with which to mount an effective consumer case in response to the rate and certificate applications of the utilities. I add, however, in all fairness, that I have been surprised and pleased on more than one occasion to find high levels of energy, ability, and consumer dedication in commission members and staff who were working for disgracefully low pay and with little public recognition of the value and importance of their services.

I have not always been a regulator and I hope I have some perspective on the problems of regulation. When I first entered the regulatory area as chairman of the Federal Power Commission, after twenty-four years with the Tennessee Valley Authority and several years in private law practice representing public and cooperative power systems, I viewed with some qualms the thanklessness of a regulatory agency member's job. In the first speech that I made as FPC chairman, after a couple of months in office, I summed up my feelings in a way that I have had no occasion to change.

The unfortunate men who have responsibility for regulating prices are not likely to be popular. Any price we fix is apt to be too low for the seller and too high for the man who finally pays the bill. If, by any chance, the regulators should satisfy both seller and purchaser, then undoubtedly there would be third parties to say that the wrong method was used, and that the result was illegal. If there was ever a public office in which it was clear that one could not win for losing, this is it.1

I went on to add that there were compensations by way of challenging problems and stimulating associations, and that the history of the Federal Power Commission indicated that the official life of a member was unlikely to be mercifully short, so that he could "look forward to returning soon to the more relaxed life of coaching from the sidelines," a comment supported by the ravels of time which the last decade has contributed to the history of that agency.

If it was tough to be a regulator in the first half of the sixties, it is infinitely worse now. By comparison, those were the good old days of simple problems and of ready and popular solutions. The period was characterized by generally stable prices. At the same time the utilities were reaping great benefits from the economies of scale as they constantly escalated the size and efficiency of their equipment. The cost of the primary fuels was steady or declined during this period. The cost of money was also steady and well below the rate of return, even at levels between 5 and 6 percent. The nation had not yet awakened to the threat which mounting productivity and especially increases in energy supply posed for the environment. Relatively speaking, the investment in protection for environmental purposes was rudimentary and cheap. Rate reductions and refunds were the order of the day.

All this has changed. Equipment prices are now at about twice the level of ten years ago. The economies of scale have leveled off. A great deal of equipment, especially for the electric utility industry, has proven difficult to build and to keep on the line, and the lead time has stretched out for generating units from...
three or four years to almost double that time. Environmental requirements have added greatly to the cost of plant and to the delays in placing plants in operation, without any contribution of income. Some generating units are years behind schedule and the cost of delay in putting on the line a single generating unit of about 800 megawatts capacity typically will run at the rate of about $100,000 a day, exclusive of interest during construction.

The cost of the primary fuels upon which the utilities depend—coal, oil, and natural gas—has increased by half or more in the last few years. The requirement to substitute low sulphur for high sulphur fuels for environmental reasons has further added to fuel costs. The cost of money has gone through the roof, and there are very few major utilities in the country, and certainly none in the Northeast, with a rate of return as high as the current cost of money. The utilities in New York, which a decade ago were able to finance more than 60 percent of their new capital needs from earnings, leaving only 35 to 40 percent to be raised in the capital market, now must raise money by new issues of bonds and stocks to the extent of 75 percent of annual capital needs, and annual capital requirements have increased two and one-half times in the decade.

As a consequence of the convergence of all these pressures, in New York, where the situation is more difficult than in the nation as a whole, but which is not atypical of several other parts of the country, interest coverages which a decade ago ran a comfortable rate of about 4.5 times interest requirements now are between only two and three times interest requirements for most companies, and for some of them hovers only slightly above the minimum of two times coverage. This is required by most bond indentures and without which it is impossible to issue new debt securities. The average interest coverage today in New York for the major companies is 2.3. Of the nine major utilities companies in New York whose stocks are traded on the open market, two are selling below book value. The stocks of four other companies are selling within a few percent above book value, and new issues would need to be priced below book in order to sell. In six out of nine companies, therefore, each new issue of stock serves to dilute the stockholders' equity.

At the same time that the utilities are caught in this painful vise, the country as a whole suffers from an acute inflation. Increases in utility rates serve to accelerate the inflationary spiral. Resistance to rate increases is natural and indeed inevitable when rising utility charges compound the plight of the large proportion of our citizens whose incomes have not benefited from the general inflation, and who face a declining standard of living. Utility prices are the most visible of all because they are fixed in public adversary proceedings, and consumers tend to vent their frustrations and disappointments on the utilities and the regulatory agencies as the targets of opportunity. In a period such as this it is impossible not to disappoint the expectations and the hopes both of consumers who yearn for rate stability or reductions and of the utilities who seek protection against the risk of financial catastrophe.

The poor press of the utility commissions in recent years is probably inevitable, and is partly their own fault, but a great deal of the criticism seems to be astonishingly unfair and uninformed. For example, Senator Lee Metcalf was castigating utilities which earned more than a 6 percent return and suggested that the earnings in excess of 6 percent were virtual theft of the consumers' money. This is at a time when it was no longer possible for the utilities to carry on their business successfully at this level of earnings. The criticism was repeated by many people and organizations which should have known better. It is not strange that the general public should pick up the cue. Many consumers, without benefit of detailed information and close analysis of the impact of the economic currents of our time on the utilities which serve them, are led to doubt that the agencies of government which approve rate increases have been acting in the exercise of an honest discretion and after intensive searching and study of the facts. When I receive mail, as I frequently do, challenging my honesty, asserting that I am in the pocket of the power companies, or the telephone companies, or the gas companies, what is most painful to me is not that my own good faith is held in question, but that the writers have lost a part of their belief in the effectiveness and integrity of government, a loss which hurts them and harms our country.

The basic need in appraising the performance of regulatory agencies is to define their role. It is fundamental to my concept of this role that it has the responsibility to insure that its staff puts in a full consumer case in every proceeding. Consumer groups should, of course, be free to supplement the record with their
own testimony if they choose. Municipalities and other public bodies are usually active on behalf of their citizens in proceedings involving large consequences, and their participation is also desirable and helpful. Nevertheless, in my view the primary responsibility for consumer protection falls upon the commissions themselves, and I do not believe that they adequately fulfill their functions unless they have the necessary staff to assure protection of the consumers' interests available to them.

Not all commissions are in a position to discharge this responsibility, but I can assure you that in the period that I served as chairman of the Federal Power Commission, the staff assumed the evidentiary burden for the consumer in every important proceeding, and I believe that the goal of that agency is the same today. It is also the practice before the New York State Public Service Commission. The New York commission has some 500 employees, including several hundred engineers, accountants, lawyers, hearing examiners, and environmental experts. The staff has been assigned a general responsibility for aggressive protection of the consumer interest. The members of the commission do not supervise the presentation of the staff case and treat the staff as an independent party. I find it hard to believe that any other group or interest could exceed their zeal in consumer protection.

Also during the period that I served as chairman, the FPC ordered rate reductions and refunds in natural gas cases alone amounting to some billion dollars. A good case could be made, and even some consumer groups now believe, that the commission fixed rates for natural gas in the field at a level too low to encourage adequate production or to enable the interstate pipelines to compete with intrastate buyers in the Southwest for available supplies. Many attribute the current acute gas shortage to this cause. However this may be, and without necessarily accepting this view, certainly it can be said that the history of the FPC in that period lends little support to Professor Warne's thesis.

Let me now comment on some of the specific matters raised in Professor Warne's paper. Relying on the authority of Senator Metcalf of Montana, it is said that the commissions do not divulge basic information unless under compulsion and that some commissions do not even press for such data for their own information. Senator Metcalf follows utility regulatory matters perhaps more closely than any other senator, but his feud with the Montana Power Company is a legend, and his attacks on the company and on utilities generally are the mainstays of his campaign. I doubt that he would claim to be an impartial authority. At any rate, his book Overcharge is based largely on data from FPC reports and other information supplied him by the commission. He may not have received all of the information he requested, but he certainly has been enabled to probe very deeply. Previously the New York State Public Service Commission did not publish comprehensive reports on the operations of utilities under its jurisdiction, but beginning last year a number of such reports were issued, and I believe that they provide a great wealth of basic data for appraising the operations of the companies under our jurisdiction. Special investigations and reports are issued as problems arise on which additional information is required.

I will not say that all utility commissions follow the same practice, but I know that a great deal of basic information is made available by other commissions. Most of the commissions do not have the staff or financial resources with which to compile or publish such data. However, every major electric and gas pipeline company in the country files elaborate reports with the Federal Power Commission, whose publications, based on these reports, constitute a tremendous national reservoir of detailed data. So far as I know there is far more detailed information available to the people of this country with respect to the operations of electric utilities than for any other industry group. The New York commission's reports cover much the same information, but they cover more industry groups and they are made available many months earlier than the reports of the FPC.

Professor Warne portrays the typical commission proceeding as one in which the adversary process is undermined because of the uncritical acceptance by commissions of the presentations of counsel for the utility companies and the absence of an effective balancing presentation on behalf of the consumer. This picture may perhaps be accurate in some jurisdictions, but I do not believe it is typical. The larger states, where most of the consumers live and where most revenues are involved, can command the necessary resources to present an effective case on behalf of the consumer. Commissions in the smaller states can and frequently do employ outside experts in important cases. Some small states are animated by strong sentiment for strict regulation, and they achieve high
Regulation and Consumerism

standards of performance despite limitations of staff and money. The sophistication and expertise of a commissioner is not necessarily proportionate to the scale of the utilities in his state.

In my own experience, also, there has been effective representation by public agencies and consumer groups, which intervene in most major proceedings. Most large municipalities do not stand by idly when the rates to their citizens are in question. I believe they have an obligation to participate whenever they believe that they can make a contribution to the record. Industries, housing authorities, the Department of Defense, the General Services Administration of the Federal Government, and other large users are frequently heard in important proceedings. Their interest is the same as that of the small consumer in holding down the overall level of rates but, of course, they may have a special interest in the question of rate design, that is, how any overall increase shall be apportioned among the various classes of customers. On this issue, the commission itself or the cities or the many volunteer consumer groups participating in such cases must make the case for an allocation of rate responsibility which protects the residential and small commercial customers.

Professor Warne quotes in full, and then dismisses, a letter from the Interstate Commerce Commission making the point that large shippers frequently provide an effective case in opposition to applications for increased transportation rates. I am not equally familiar with ICC cases, but I can say that in FPC proceedings where wholesale rates are involved, the resistance to rate increases by the retailers (or support for rate reductions, in happier days) is vigorous and effective. A large distributing gas company is likely to employ counsel and expert witnesses matching those of the gas pipelines.

Let me address myself next to the major proposal of Professor Warne, that the federal government provide consumer counsel in proceedings before both state and federal regulatory agencies, as it relates to the state commissions. My principal difficulty with this proposal is that it is based on the assumption that the regulatory agencies are themselves not capable of presenting a consumer case or that they are not interested in doing so. It seems to me also that the proposal carries with it an acceptance of the notion that the functions of the commissions should be further judicialized, that they should be limited to decision of cases on the basis of the presentation made by the utilities on the one hand and a federal consumer counsel on the other. I fear that the effect of federal assumption of the consumer protection function before state commissions would mean the attrition of that function within the commissions themselves. If this should happen, it would be a big step in the wrong direction.

There are philosophical problems as well. One may ask why the federal government should impose its conception of the way to manage the state regulatory machinery upon the respective states. For the federal government to assume that the states are not willing or able to protect their own consumers, and to interpose a federal presence in every state regulatory proceeding, raises serious questions as to the appropriate relationship between the federal government and the several states. As a next step, should the federal government establish a regulatory agency in Texas to pass upon retail rates although the state of Texas has declined to do so? I pass these questions by, however, and come back to my principal difficulty with this proposal, that it is based on a wrong conception of the way the regulatory process functions in many, if not most, of the states, and that it would do great damage to the historic concept that public utility commissions should carry the primary responsibility for consumer protection themselves. At the very least, it seems that before considering a proposal which may prove equivalent to federal pre-emption of state responsibilities for protecting utility consumers, there should be substantial documentation by impartial experts of the implicit charge of Professor Warne that the state regulatory commissions by and large have failed to do a reasonable job of protecting the consumers' interests.

What most public service commissions need is money, plus a reasonable degree of freedom in hiring an expert staff. The latter problem is almost as serious as the former, because in some states the whole level of compensation for the civil service is far too low, and it is difficult for the utility commissions to secure a special dispensation to pay the amounts required to employ qualified staff. Moreover, in small states the regular flow of work may be too small to justify a staff competent to handle a big case when it comes along. There are a number of ways to meet this problem. One is to establish regional centers for groups of utility experts who can be made available to
participating commissions. These centers would be free from the salary and other employment restrictions of the cooperating states. Another is to enlarge the headquarters staff of the National Association of Regulatory Utility Commissioners (NARUC) in Washington to provide a general consulting service for state commissions. There has been some progress along both these lines. NARUC is now in the process of hiring several experts in utility regulation who will be available to consult and aid any of the state commissions which require their services. A significant regional experiment is now being tried in New England. In a 1970 report commissioned by the New England Regional Commission on the power situation in New England, which has come to be known as the Zinder Report, one of the recommendations was that the New England Regional Commission itself establish a pool of utility experts who would be available to the various state commissions in New England. The recommendation was approved by the New England governors and is now being implemented. A staff director, formerly head of an FPC regional office, has already been hired. This pioneer demonstration in regional cooperation is particularly gratifying to me because I am one of the authors of the Zinder Report.

The public utility commissions need not only money and staff but also a more activist conception of their role, and such a change in conception is now taking place. This is what Professor Ben Lewis called the wedding of the adversary and surveillance approaches. No longer is it enough for a commission simply to decide adversary cases, even with the best of records before it. I believe the commissions should exercise an increasing influence on the conduct of the utility enterprises, short of taking on management responsibility. They should encourage cost reductions by greater efficiencies and by state or regionwide coordination, including the planning, construction, and operating areas of utility performance. They should monitor the effectiveness of procurement procedures. Where complaints indicate the existence of problems they should look to a company’s billing and collection methods. They should review the operations of the utilities with an eye to environmental consequences as well as economics. A continuing focus on reliability of supply is commanding an increasing emphasis from utility commissions. They should be appraising the plans of the utilities from the viewpoint of long-range availability of primary fuels as well as initial costs. They should also be in constant touch with the operating results and financing requirements of the companies. In brief they should be attempting to avoid problems by taking the initiative at the earliest possible stage instead of waiting for complaints and adversary proceedings. One can see signs of these stirrings throughout the country. It is a growing trend, and it should be encouraged. There are many ways in which a federal department of consumer affairs could provide such encouragement, including the judicious infusion of grants-in-aid, but I doubt that federal intervention in state proceedings as the primary guardian of the consumers is one of them.

In voicing my difficulties with the proposal for federal participation in state commission proceedings I want to make clear that this does not go to the question of creation of a U.S. department of consumer affairs, although the consumer counsel proposal is involved in the bills to create such a department. On the contrary, I strongly support such a department. As cochairman with Bronson LaFollette of the Consumer Task Force of the Democratic campaign organization in the last presidential election, I sponsored such a proposal. My question rather is whether it is appropriate for the federal government to impose on such an agency a responsibility which I believe will impair the effectiveness of important agencies of the states.

Neither do I believe that the state utility commissions should be shielded from public scrutiny, either by federal agencies or any other group. I should think that if a federal department of consumer affairs is created one of its responsibilities should be to monitor the effectiveness of all the consumer protection agencies of the states, including the public utility commissions. Its role, however, should be to support and strengthen these agencies, rather than to compete with them, or to undermine public confidence in individual agencies or in regulation as an institution on the basis of blanket charges.

In sum, we all recognize that many state utility commissions have serious problems of underfunding and understaffing. It would be strange if this situation did not result in a lack of zeal and aggressiveness on the part of some of them and contribute as well to a constrained understanding of their proper role. The cure is neither sweeping condemnation which ignores the real achievements of many of them, including those which somehow
make-do surprisingly well on very small budgets, nor roving federal cadres of consumer lawyers and experts. Rather, the solution is to appraise fairly the quality of the work of the respective commissions, to spotlight failures of performance, to recognize excellence when it occurs, and to create a climate of support for the funding of the work of the commissions on a state-by-state basis or through the use of regional organizations.

NOTE

Contributors

DAVID H. ARMSTRONG is chairman of the Illinois Commerce Commission. He holds the B.S. degree from the University of Notre Dame and the J.D. degree from the University of Michigan where he was editor of the Michigan Law Review. He is a member of the Illinois State Bar, Federal District Bar, and United States Tax Court. Mr. Armstrong practiced law with Sears and Streit in Chicago; he was engaged in private practice in Aurora at the time of his appointment, in 1968, to the Illinois Commerce Commission. His professional activities include membership on the executive committee of the National Association of Regulatory Commissioners, the committee on communications of the National Association of Regulatory Utility Commissioners, and secretary-treasurer of the Great Lakes Conference of Utility Commissioners.

MARVER H. BERNSTEIN is professor of politics and public affairs, Princeton University. He earned the B.A. and M.A. degrees from the University of Wisconsin and the Ph.D. degree from Princeton University. Professor Bernstein has served as consultant to the U.S. Civil Service Commission, the American Institute of Architects, National Municipal League, Economic Stabilization Agency, and in the office of the State Comptroller of Israel. During 1942-1946 he served as budget examiner for the U.S. Bureau of the Budget. He is the author of two books and coauthor of one. His memberships...
include the American Political Science Association, American Society for Public Administration, and National Academy of Public Administration; he is a fellow, American Academy of Arts and Sciences.

JOHN A. CARVER, JR. is a commissioner with the Federal Power Commission, now serving his second term. He holds the A.B. degree from Brigham Young University and the LL.B. degree from Georgetown University. Commissioner Carver served as undersecretary of the interior, assistant secretary of the interior for public land management, assistant attorney general of Idaho, and administrative assistant to Senator Frank Church. He practiced law in Boise, Idaho, and was a civil service employee of the U.S. Civil Service Commission and the War (later Army) Department. His professional memberships include the Idaho, District of Columbia, American Bar, and Federal Bar Associations.

RONALD H. COASE is a professor on the faculty of the University of Chicago Law School. He was awarded the B. Com. and D. Sc. degrees from the London School of Economics, where he also taught. Professor Coase was a faculty member at the Dundee School of Economics and Commerce, and at the University of Liverpool in Great Britain, and in this country at the University of Virginia and the University of Buffalo. He served as acting British director of statistics and intelligence, and was a fellow in the Center for Advanced Study in the Behaviorial Sciences at Stanford University. Professor Coase has published extensively, most recently in the *Journal of Law and Economics* and the *Bell Journal of Economics and Management Science*.

ASHER H. ENDE is deputy chief, Common Carrier Bureau, Federal Communications Commission. He holds the B.A. degree from Brooklyn College, LL. B. degree from Brooklyn Law School, and the M.P.A. degree from New York University. He has served as hearing examiner with the Federal Communications Commission, and as chief of branch in the International Division of the Common Carrier Bureau and also as a supervisory attorney with the FCC.

FRANCES E. FRANCIS is an attorney with the New England River Basin Commission. She holds both the M.A. and Ph.D. degrees from Harvard University and attended Yale University Law School and Dickinson College. Ms. Francis served as an attorney in the office of general counsel and also as legal assistant to Commissioner Ross in the Federal Power Commission.

WILLIAM R. HUGHES is vice president of Charles River Associates, Incorporated. He was awarded the B.S. degree from the University of Maryland and both the A.M. and Ph.D. degrees from Harvard University. He taught economics at Boston College, Wesleyan University, and at Harvard University; he served as staff economist with the National Power Survey, Federal Power Commission. His principal consulting assignments prior to his present position were with the Federal Reserve Bank of Boston, the New England Regional Commission, and the U.S. Department of Justice. Mr. Hughes is a member of the American Economic Association, Econometric Society, and the Royal Economic Society.

BEN W. LEWIS is professor emeritus of economics at Oberlin College. He was awarded the A.B., M.A., and Ph.D. degrees from the University of Michigan and the LL.B. degree from Western Reserve University; he was awarded an honorary degree from Oberlin College. Professor Lewis was program advisor to the international division of the Ford Foundation. Since 1954 he has had consulting assignments with twelve federal departments and agencies, with law firms on antitrust cases, with the American Telephone and Telegraph Company executive program, the University of Michigan public utility executive program, as well as with many American Economic Association and Joint Council on Economic Education teaching programs. He is the author of twenty-four articles on antitrust and public utility regulation. His memberships include the American Economic Association and the Midwest Economic Association.

RALPH T. McELVENNY is president of the Michigan Consolidated Gas Company and of American Natural Gas Service Company, chairman of Michigan Wisconsin Pipe Line Company and chairman of American Natural Gas Production Company. He holds the A.B.
degree from Stanford University, the J.D. degree from Stanford University Law School, and an honorary J.D. degree from the Detroit College of Law. Mr. McElvenny began his career working for the Guaranty Trust Company of New York, then went to Washington, D.C., as a conservator in the office of the controller of the currency. He joined the staff of the Securities and Exchange Commission where he worked for eleven years as an attorney and administrative officer with the general counsel, registration division, and the public utilities division. He was associated with the United Light and Power System, as vice president and director. He moved to Detroit in 1950 to work with the companies in the system of the American Natural Gas Company, previously a subsidiary of the United Light and Power Company. Mr. McElvenny became president of the American Natural Gas Company, then chairman of the board of directors, continuing as chief executive officer. He is a member of the American Bar Association, admitted to practice in New York, various federal courts, and the United States Supreme Court. His list of memberships is long; he serves on the boards of directors of twenty-one organizations.

FRED P. MORRISSEY is professor of business administration in the Graduate School of Business, University of California, Berkeley. He holds the B. Com. and M. Com. degrees from the University of Toronto and the Ph.D. from Columbia University. He has taught at the University of Toronto, also at Stanford University. Professor Morrissey served as commissioner on the California Public Utilities Commission during 1967-1969; he was a consultant to the American Hospital Association and the California Hospital Association. He has published extensively; his most recent articles have appeared in *Public Utilities Fortnightly* and the *California Management Review*.

CHARLES F. PHILLIPS, JR. is professor of economics at Washington and Lee University. He earned the B.A. degree from the University of New Hampshire and the Ph.D. from Harvard University. He is the author of two books and many articles on antitrust and regulation published in professional journals. His principal consulting assignments include rate of return testimony for the Chesapeake and Potomac Telephone Company of Virginia, Panhandle Eastern Pipe Line Company, South Central Bell Telephone Company, South Carolina Electric and Gas Company, and Virginia Electric and Power Company. He is a member of the American Economic Association, Southern Economic Association, and the American Marketing Association.

PAUL RODGERS is general counsel and administrative director of the National Association of Regulatory Utility Commissioners. He attended Georgia Military College and holds the A.B. degree from Mercer University and the LL.B. from Walter F. George School of Law. He was assistant attorney general of Georgia and an attorney for the Atlanta Gas Light Company. Mr. Rodgers is a member of the American Bar Association, the Georgia Bar Association, the Federal Communications Bar Association, and the Federal Power Bar Association.

RICHARD A. ROSAN is senior vice president and general counsel of the Columbia Gas System Service Corporation. He is a graduate of Cornell University and holds the LL.B. degree from the Yale University Law School. Mr. Rosan was associated with the law firm of Cravath, Swain, and Moore before joining the Columbia Gas System in 1951.

ANDREW M. ROUSE is vice president, INA Corporation, Philadelphia, and formerly was associated with Arthur D. Little, Inc. He was awarded the B.A. degree from Franklin and Marshall College, the LL.B. degree from Columbia University School of Law, and the M.B.A. degree from the Harvard University Graduate School of Business Administration. His most recent publication was (as coauthor) "Housing as a National Priority," published in the May 1971 issue of *George Washington Law Review*. Mr. Rouse's memberships include the Association of Public Administrators, American Historical Association, and the American Association of Consulting Engineers.

WARREN J. SAMUELS is professor of economics, Graduate School of Business Administration, Michigan State University. He holds
the B.B.A. degree from the University of Miami and the M.S. and Ph.D. degrees from the University of Wisconsin. Professor Samuels taught at the University of Missouri, Georgia State College, and the University of Miami before joining the faculty at Michigan State University. His research and publications include a book and several articles with focus on the interrelationship of law, economics, and public policy. Professor Samuels is a member of the American Economic Association, the Association for Comparative Economics, and the Law and Society Association. He is the editor of the *Journal of Economic Issues*.

NORMAN D. SCHWARTZ is assistant general counsel of the U.S. Postal Rate Commission. He is a graduate of Norwich University and holds the LL.B. degree from Boston University. Mr. Schwartz was chief of the rates branch of the Federal Communications Commission, a trial attorney for the National Labor Relations Board, and advisor to the U.S. Department of Labor. He was consultant to the Alaska Taskforce, U.S. Department of Commerce, and served on a Federal Communications Commission committee to revise procedures. He is a member of the American Bar Association.

WILLIAM G. SHEPHERD is professor of economics at the University of Michigan. He was graduated from Amherst College, attended the University of Glasgow on a Fulbright Fellowship, and holds the M.A. and Ph.D. degrees from Yale University. His extensive research and writing in both this country and Great Britain is in the fields of industrial organization and public policy and comparative economic systems. During 1967–1968 Professor Shepherd served as a special economic assistant to the assistant attorney general for antitrust in the U.S. Department of Justice, and also as a member of the President's Task Force on Communications.

JOSEPH J. SPENGLER is professor of economics at Duke University. He holds the A.B., M.A., and Ph.D. degrees from The Ohio State University. Besides teaching at Ohio State, he has taught at the University of Arizona, University of North Carolina, University of Chicago, and the University of Pittsburgh. Professor Spengler has been author, coauthor, editor, and co-editor of twelve books and monographs as well as a great many papers on theory, history of economic thought, and governmental problems. His principal consulting assignments have been for the Sun Oil Company, American Telephone and Telegraph Company, and Southern Bell Telephone Company. His list of memberships includes the American Economic Association and the Royal Economic Society.

JOHN C. SPYCHALKSI is associate professor of business administration at The Pennsylvania State University. He is a graduate of St. Joseph's College and was awarded the M.B.A. and D.B.A. degrees from Indiana University. He taught at the University of Maryland. His articles on transportation have been published in the *ICC Practitioners' Journal* and *Transportation Journal*. Professor Spychalski has been a consultant to the office of Transportation Policy Development in the U.S. Department of Commerce, the National Crushed Stone Association, and the Pennsylvania Department of Transportation. He is a member of the American Economic Association, The Association for Evolutionary Economics, and the American Society of Traffic and Transportation.

JOSEPH C. SWIDLER is chairman of the New York State Public Service Commission. He studied at the University of Illinois, also at the University of Florida, and was graduated from the University of Chicago with the degrees of Bachelor of Philosophy and Doctor of Jurisprudence. Upon his admission to the Illinois State Bar, Mr. Swidler was employed in the Chicago law office of David E. Lilienthal until 1932 when he entered private practice. He moved to Washington to serve as an assistant solicitor in the U.S. Department of the Interior and from that post moved to Knoxville, Tennessee, to work for the newly created Tennessee Valley Authority as its power attorney. In 1941 he returned to Washington, on loan from TVA, to be counsel for the Alien Property Bureau of the U.S. Department of Justice. In the period 1943–1945 Mr. Swidler served in the Navy, rejoining TVA as its general counsel and secretary until he resumed private practice in 1957. In 1961 he was appointed a member and chairman of the Federal Power Commission, continuing in that office until 1965, when he established a law practice in Washington, D.C., in which he was engaged until he assumed his present position.
COLSTON E. WARNE has been president of the Consumers Union since its inception in 1935. He is professor emeritus at Amherst College and holds both the B.A. and M.A. degrees from Cornell University, the honorary M.A. from Amherst College, and the Ph.D. degree from the University of Chicago. Professor Warne served as president of the International Organization of Consumers Unions from 1960–1970, and was a member of the Consumer Advisory Council to the President from 1962–1965. He is the author of three books; his memberships include the American Economic Association and the American Marketing Association.

FRANCIS X. WELCH is editor-in-chief of Public Utilities Fortnightly and professor of public utility law at Georgetown University. He received the B.L., J.D., and LL.M. degrees from Georgetown University. Prior to his present position, Professor Welch was associate editor of Public Utilities Fortnightly, and managing editor of Public Utilities Reports. He also has served as Washington editor of Telephony Magazine. Since 1957 Professor Welch has served as Secretary of the Public Utility Law Section of the American Bar Association. His publications include Cases and Text on Public Utility Regulation, fifth edition, 1968; Conduct of the Utility Rate Case, 1955; and Preparing for the Utility Rate Case, 1954, all published by the Public Utilities Reports, Inc., Washington, D.C.