



Iowa Research Online  
The University of Iowa's Institutional Repository

---

School of Urban & Regional Planning Publications

---

12-1-1988

# Synthesizing Politics, Rationality, and Advocacy: Energy Policy Analysis for Minority Groups

James A. Throgmorton  
*University of Iowa*

---

Copyright © 1989 Policy Studies Organization. Posted by permission.

*Review of Policy Research*, 8:2 (December 1988), pp. 300-321.

Hosted by Iowa Research Online. For more information please contact: [lib-ir@uiowa.edu](mailto:lib-ir@uiowa.edu).

**SYNTHESIZING POLITICS, RATIONALITY AND ADVOCACY:  
ENERGY POLICY ANALYSIS FOR MINORITY GROUPS**

*J.A. Throgmorton*

Policy analysts have long recognized that the linkage between science and politics is the focal concern of their practice (Lindblom, 1980). Some deny that analysts need to consciously integrate science with politics, recommending instead a retreat to pure rationality (e.g., Schneider, Stevens, & Tornatzky, 1982; Stokey & Zeckhauser, 1978) or pure action (Bardach, 1977). Most, however, stress the importance of skillfully blending science with politics (Benveniste, 1977; Bozeman, 1986; Brewer & deLeon, 1983; House, 1982; MacRae & Wilde, 1985; Meltsner, 1976, 1985; Torgerson, 1986; Wildavsky, 1979, 1987). For them, analysts simply cannot be effective unless they provide information and conceptual approaches that decision makers can use. Yet even the best of these analysts fail to provide clear guidance about how to synthesize politics and rationality without hopelessly sacrificing one or the other.

In this paper I am going to argue that advocacy is the missing link, or more specifically, that three primary activities (scientific analysis, political influence, and advocacy) can be blended in such a way as to create four distinct roles for policy analysts. Three of the roles -- issue advocacy, mobilization, and client advocacy -- disregard one of the primary activities and thereby yield political incompetence, technical incompetence, or systematically distorted knowledge (Habermas, 1979) respectively. The fourth role, communicative synthesis, enables teams of analysts to conduct high quality research, address their client's pressing problems, and build a constituency for the client's programs and the team's research.

To assess the utility and validity of this claim and to gain some insight into how analytical teams can achieve this synthesis, I will analyze and critique one team's recent efforts to define -- under sponsorship of the U. S. Department of Energy's (DOE's) Office of Minority Economic Impact -- the impacts of federal energy policy and programs on minority groups. For reasons described later in this paper, the analytical team initially did not know whether it was expected to act as technician, "issue advocate," or "client advocate" (Jenkins-Smith, 1982). Gradually, however, the team discovered that it was expected to be a client advocate. Performing this role, the team produced some useful and enlightening models and research results; unfortunately it also failed to report or address many other potentially important topics. Most importantly, it was not allowed to complete work on how nuclear power plant abandonments might affect minorities,

---

I thank the many people who have read and critiqued various versions of this paper. Of special note are Martin Wachs at UCLA; Cora Marrett at the University of Wisconsin - Madison; Helen Ingram at the University of Arizona; Cheryl Contant, Peter Fisher, David Forkenbrock, and Carol Parsons at the University of Iowa; many friends and former associates at Argonne National Laboratory and the U.S. Department of Energy's Office of Minority Economic Impact; and three anonymous reviewers.

and it was not allowed to assess the impact of DOE's reliance -- on energy market deregulation. Acting as client advocates, the team unintentionally but systematically distorted knowledge concerning minorities and energy.

I will conclude by discussing how analysts can respond to clients who systematically distort research in the name of client advocacy. In particular, I will urge analysts to recognize that they have three distinct audiences (clients, technical peers and lay constituencies) and that successful synthesis depends on communicating forthrightly with each of them.

### THE DILEMMAS OF POLICY ANALYSIS

Primers suggest that good analysts should apply objective, scientific methods to policy problems, thus making policy decisions more "rational" and improving the problem-solving abilities of organizations. Stokey and Zechhauser (1978) emphasize the use of quantitative methods based on decision analysis, utility theory, welfare economics, and operations research, and Quade (1975, p. 43) proclaims his "faith that a much wider and more intelligent use of policy analysis . . . can make a great contribution to better public decisions."

Yet, as readers of this journal well know, there is far more to policy analysis than rote application of quantitative methods. Most importantly, policy analysts are expected to produce knowledge that is usable in policy-making. Thus, policy analysts need to have some political savvy. As Guy Benveniste (1977) emphasizes:

Would-be experts cannot expect to draft policies without knowing a considerable amount about the policy environment. They must be able to recognize the arguments of practitioners, to realize their strengths and weaknesses, and to temper their own narrow field of expertise with the kinds of generalized folklore and knowledge that prevails in the environment. (p. 93)

Further, clients typically want analysts to perform sophisticated, balanced insightful analyses under extreme pressures, with inadequate resources in a short time (House, 1982).

How can scientific rationality be blended with political savvy so as to produce policies that are both effective and feasible? Partial answers can be found in the literature concerning the roles of planners and policy analysts. Most of this literature points repeatedly to two polar opposite roles (Baum, 1983; Howe, 1980; Meltsner, 1985; Rabinovitz, 1969; Vasu, 1979). Many analysts prefer to be "technicians," trusting in the power of objective, scientific research. Many others prefer to act as "politicians," that is, in ways that are politically relevant and likely to influence political debates directly. Beyond this important distinction lies a large area of residual ambiguity. Various authors claim that analysts can also be "mobilizers" (Rabinovitz, 1969), "partisan analysts" (Lindblom, 1980; Lindblom & Cohen, 1979), "advocate planners" (Davidoff, 1965), "entrepreneurs" (Meltsner, 1985), or "hybrids" (Howe & Kaufman, 1979).

Though tapping something important, these residual formulations seem disconnected from one another. Most importantly, they lack clarity about the role of advocacy in policy analysis. Should analysts be advocates for immediate clients, intended beneficiaries, "the Truth," or some combina-

tion of the three? Missing also is useful guidance to analysts about how to reconcile these diverse roles (technician, politician, and advocate) in practice.

Jenkins-Smith (1982) provides some needed guidance by distinguishing between issue and client advocacy. Issue advocates, he claims, seek to place their intended beneficiaries' interests above those of their immediate clients. They actively participate in political processes, seeking ways to be more persuasive and to mobilize coalitions in support of recommended policies. Needing an uncommitted or like-minded client to be successful, issue advocates can choose between "voice" or "exit" (Hirschman, 1970) to exert influence. Client advocates seek to influence policy-making by providing analytical support for their immediate client. "The client's advocate will be most at home working on issues with a committed client," Jenkins-Smith writes, "and if the facts do not clearly favor the client, working in a situation involving high levels of analytical uncertainty. The uncertainty will permit the analyst to shade his analysis in the client's favor without moving beyond the pale of analytical plausibility" (p. 96).

Jenkins-Smith concludes that differing styles of analysis fit best in different policy environments and that no one style will cover the full range of organizational conditions. I want to suggest a conceptual model that hopefully clarifies how the roles of technician, politician, and advocate relate to (and partly overlap) one another.

Assume that individual analysts can, in principle, perform anyone of three pure activities or roles: technician, politician, or advocate. The technician would apply the objective techniques of science to identify optimum or efficient solutions to a problem. Peer approval would be his or her reward. A politician would rely on skills of communication and coordination to build client trust and confidence, to balance competing interests, and to forge compromises that a sufficiently powerful coalition of interests is willing to support. Pleasing his or her immediate client would be the politician's reward. An advocate would use rhetoric and symbolic actions (e.g., demonstrations and marches) to obtain adoption of innovative policies and programs. Obtaining benefits for the program's constituency would be his or her reward.

In practice, these activities shade into one another so as to create four distinct roles for analysts (see Figure 1 and Table 1). One role is equivalent to Rabinovitz's mobilizer. Acting in this role non-technical analysts build a coalition of interests in a given policy, then coordinate the actions of the coalition's various members. They try to please their client by building a constituency, yet they also try to direct a flow of benefits to that constituency. The second is equivalent to Lindblom's partisan analyst, Davidoff's advocate planner, and Jenkins-Smith's issue advocate. Representing a particular set of values or interests, these analysts use rigorous scientific techniques in support of their constituency. The third additional role is equivalent to Jenkins-Smith's client advocate and Wildavsky's policy analyst. They attempt to please immediate sponsors by providing rigorous and timely studies and reports.

Each of these constructs describes what *individual* analysts do, but none of them adequately characterizes the policy analytic project as a whole. Many practicing analysts actually work as members of *project teams*. They divide their labor into individual roles in order to increase their overall

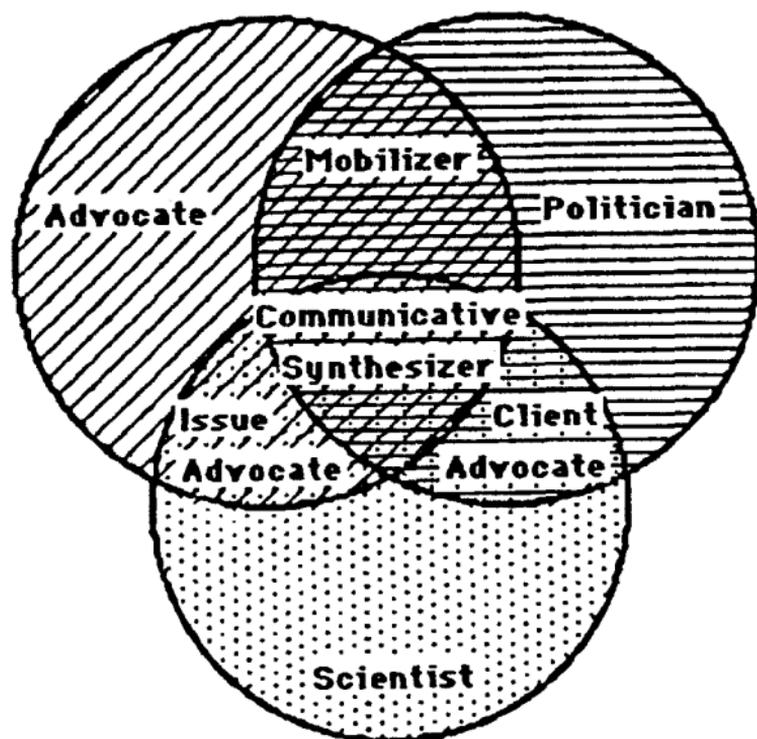


Figure 1. Conceptual Model of Policy Analytic Roles.

Table 1  
Differences Between Primary Policy Analytic Roles

Role	Required Skills	Primary Orientation	Measure of Effectiveness
Technician	Objectivity, expertise substantive knowledge	Truth	Obtain peer approval
Politician	Communication, trust, confidence, persuasion	Action	Please client
Advocate	Rhetoric, symbolic acts, (demonstrations, marches)	Values, Interest	Benefit constituency

effectiveness and efficiency. To succeed, these teams have to synthesize rationality, power, and advocacy: they must conduct high quality research that uses appropriate data, methods, and theoretical frameworks; they must provide timely studies and reports that address their sponsor's pressing problems and help justify its existence; and they must produce research that addresses a beneficiary's pressing problems and thereby helps build a constituency for the sponsor's programs and the analyst's research.

The effort to forge such a synthesis confronts several difficult problems and will often fail because of the complexity of their interaction.<sup>1</sup> If the team ignores its advocacy role, it will fail to create and sustain a constituency strong enough to lobby successfully for adequate research funding or to indicate research projects that legitimately address issues of vital concern to the constituency. Further, it will appear to lack "critical distance" from its sponsor and thereby lose credibility in the eyes of its ostensible beneficiaries. If it ignores its political role, it will not affect decision making, and it will not be able to obtain the financial resources needed to address issues adequately. And if it ignores its scientific role, it will lose analytical credibility and -- if listened to -- help produce policies and programs that are ineffective, inefficient, or yield unexpected consequences.

As this second body of literature suggests, policy analysts need to know more than just the methods of their trade. They also must learn to be "reflective practitioners" (Schon, 1983) who can - in concrete situations - synthesize rationality, power, and advocacy. This type of knowledge differs from knowledge of analytical methodology, yet it is scarcely taught or mentioned in literature.<sup>2</sup> We need to learn how to achieve this synthesis in practice, to learn what hazards to expect and how to overcome them. That is the purpose of the case about to be described.

### ENERGY POLICY ANALYSIS FOR MINORITY GROUPS

Successful project teams have to be reflective practitioners who synthesize advocacy, power and rationality in practical situations. To assess the utility and validity of this argument, we need to look in detail at particular cases. In what follows I will recount the efforts of an analytic team at Argonne National Laboratory to conduct an energy research program for the U.S. Department of Energy's Office of Minority Economic Impact from late 1983 through mid-1986. The story is based primarily on my observations as project manager for most of that time period.

I will first set the team's research context by clarifying who the major actors were and what they sought to accomplish. I will then recount the project team's experiences in conducting its research. Since the purpose of this article is to enlighten the process of policy analysis, the reader should not expect to find detailed data concerning minority energy consumption and expenditure patterns or about the effect of specific energy policies and programs on minorities. Rather, the article describes the flow of events and decisions that led to the project team's production of those data; that is, how some research topics were pursued while others were avoided, how the participation of some groups was solicited while the involvement of others was hindered, and how some research results were published while others were not. However, substantive research results will be summarized later

in this paper in order to clarify how process affected the visible product. Readers interested in additional details about the team's research findings should consult Throgmorton and Bernard (1986) and the numerous other technical reports cited herein.

In this particular case, four major actors or groups stand out:

- the U.S. Department of Energy (DOE) and its Office of Minority Economic Impact (OMEI).
- Argonne National Laboratory (ANL).
- A policy analytic team at ANL that conducted a minority energy research program for OMEI.
- A constituency of blacks, Hispanics, and other minorities.

### **The U. S. Department of Energy**

The DOE was established in August, 1977, by President Carter and the Congress to consolidate diverse federal energy programs and to develop and implement a comprehensive national energy policy. Less than four years after its creation, however, DOE discovered that a new President and a more conservative Congress rejected its mission. The election of Ronald Reagan dramatically accelerated a shift away from national energy planning and toward energy market deregulation (Katz, 1983).

According to the new administration, the goal of national energy policy was to foster an adequate supply of energy at reasonable costs. To achieve this goal, the new administration adopted two strategies: (1) to minimize federal intervention in energy markets while maintaining public health and safety and environmental quality, and (2) to promote a balanced and mixed energy resource system (DOE, 1982). Regardless of any potential inconsistency, these strategies were to be pursued in large part by strongly supporting nuclear power. As the following paragraph from the Department's policy plan indicates, equity considerations were not to be emphasized:

If a successful energy policy achieves its goal of fostering an adequate supply of energy at reasonable costs, but does not respond adequately to the income limitations of the poor, society may decide, as ours has, to provide assistance. However, attempts to provide this assistance by restricting prices or allocating energy resources will distort our national energy system while offering inadequate assistance to some and unintended windfalls to others. Therefore, national energy policy reflects our belief that those in need should be assisted directly, not as a part of energy policy, but rather as part of our national income maintenance policies and programs. (1983a, p. 2)

### **The Office of Minority Economic Impact**

At no point does the Department's plan give special attention to minorities. Concern for minorities is nonetheless expressed in 42 U.S.C. Section 7141, which created an Office of Minority Economic Impact (OMEI) within DOE. This legislation requires OMEI to do the following:

- advise the Secretary of DOE on the effect of policies, regulations, and other actions of the Department on minorities and minority business enterprises.

-conduct a research program to determine the effects of DOE programs, policies, and regulations on minorities; and recommend policies to assist minorities and minority business enterprises concerning such effects.

Does this mean that Congress expected OMEI to be an advocate for minority interests? Perry (1984) argues persuasively that it did. According to him, many black leaders had been disturbed by President Carter's failure to seek their advice when preparing his first national energy plan. Fearing that his proposals would increase energy prices, and thereby reduce economic growth, new job creation, and income growth for low income and minority households, they persuaded Congress to create OMEI.

OMEI's activities are overseen by the Secretary of DOE and his aides, but its funding requests must normally be approved by the House and Senate Budget and Appropriations Committees. In 1985, 19 blacks, 11 Hispanics, and 3 Orientals served in the House (Ehrenhalt, 1985). All but one of them were Democrats, and one of the black representatives, William H. Gray III, was chairman of the House Budget Committee. Thus OMEI's budget and operations were influenced by Congressmen who, representing OMEI's primary constituency, had interests and objectives that differed substantially from those of the Reagan administration.

### **The Minority Population**

According to OMEI's enabling legislation, the minority population consists of blacks, American Indians, Eskimos, Orientals, and Hispanics. Thus, these sub-populations represent OMEI's intended beneficiary and primary constituency. In 1980 roughly 46 million Americans (or about 20%) of the total U.S. population belonged to the minority population of concern to OMEI, and about 70% of these 46 million people lived in only twelve states (U.S. Bureau of the Census, 1984). Tending to be poorer and less well educated than the national average, this minority population historically has had difficulty in having its interests and points of view represented by pluralist politics (Verba & Nie, 1972). Furthermore, this minority population is by no means homogeneous; its members vary in economic conditions, language, ethnic heritage, and place of residence.

Perhaps more importantly in the present context is that the major black and Hispanic interest groups have paid relatively little attention to energy issues. Economic growth, jobs, education, civil rights, and immigration rank higher on their agenda (see, for example, Billingsley et al., 1987). Other than sharing a general concern for the effect of energy policy on jobs and economic growth, these groups do not agree about what energy policy would be of greatest benefit to minorities.

### **Argonne National Laboratory and the Project Team**

Argonne is one of nine government-owned, contractor-operated multi-purpose national energy laboratories (Asbury, 1984). Its basic mission is to conduct research and development concerning higher-risk, longer-term energy technologies (e.g., nuclear fission and fusion), and most of its employees are physical scientists. Still, the Laboratory has a sizeable contingent of social scientists and systems engineers who assess the social

and economic factors associated with energy policies, programs, and technologies. ANL's managers tend to see the Laboratory as a home of scientific, neutral, objective, unbiased research; a bastion of technical rationality.

Argonne's social scientists confronted a dilemma. Policy analysis relies heavily on economic theory and methods. From that perspective one would not expect blacks and Hispanics to use energy differently than whites of similar income, class, or location. But OMEI's legislation instructs it, and its policy analysts, to define problems and its research agenda in terms of minorities. Thus the team had to focus on minorities rather than income or class. The dilemma quickly assumed institutional form. Argonne management repeatedly questioned the legitimacy of conducting research that seemed overtly political, whereas OMEI repeatedly questioned the Laboratory's commitment to research concerning minorities.

The context described above suggests that -- unbeknownst to them at the outset of their work -- Argonne's policy analysts would confront several difficult questions about their role. Was OMEI an advocate for minorities or was it simply another DOE technical support group? Was the project team an "issue advocate" for minorities, a "client advocate" for OMEI and DOE, or a "technician" seeking "the Truth?" Did any of the major minority groups have clearly articulated positions on energy policy, and would they be a strong constituency for minority energy research? Or were they preoccupied with other pressing problems and largely unaware of OMEI and its research program? And last, would the team's economically-oriented technical peers accept the legitimacy of focusing on *minority* energy issues?

### Conducting the Minority Energy Research Program

Argonne began its work in late 1981 when OMEI asked two ANL economists to develop an econometric model that could project the impact of changing economic conditions on the residential energy consumption and expenditure patterns of minority households. Pleased with the resulting model (see Poyer, 1983; Poyer & Teotia, 1982), OMEI decided to increase Argonne's funding (and to expand its scope of work) by a factor of 10.

One major factor greatly complicated the project team's work at the outset: it new little about OMEI or minorities.<sup>3</sup> The person who knew the most about OMEI had temporarily departed ANL for a one-year sabbatical; the two dozen analysts brought "on board" (including myself, the new project manager) had virtually no expertise with regard to *minority* energy behavior. Recognizing our collective ignorance, we quickly concluded that we had to *develop a common base of knowledge about blacks and Hispanics*. Individual staff members were asked to analyze socio-economic and cultural literature to uncover basic facts about the minority population and then to brief the remainder of the staff about those facts. We found this to be quite helpful, but OMEI staff were dismayed to learn that their funds were used to support such trivial pursuits. According to OMEI's program manager, Argonne had been "brought on board" because its staff were already expert. Thus there was no reason to support this kind of work. As a result, we had no legitimate way to learn about, to converse with, or to understand the diversity of, minority interest groups.

We suggested holding a series of *workshops to solicit input from experts about minorities and energy* in various regions around the country. The

first two regional workshops did not go well. Participants (most of whom were minority energy activists or governmental officials) flared when OMEI staff said that the participants could not see a copy of the workshop's summary report until after DOE policy officials reviewed it. Similarly OMEI staff bristled when the participants insisted that DOE had no coherent policy toward minorities and energy. No more workshops of this type should be held, said OMEI; any future meetings should target higher level energy business people. We understood OMEI better now. It clearly attached great importance to maintaining consistency with overall DOE policy. More importantly, though, we learned that there were at least two minority constituencies: minorities who worked for large energy businesses and those who were engaged in smaller scale community development efforts. OMEI seemed to define the former group as its primary constituency.

Our first major analytical task was to *assess the impact on minorities of residential energy tax credits*. After collecting a substantial amount of data and submitting a draft report, several team members wanted to write a journal article reporting their results. However, OMEI insisted that no article be published until the administration had finalized its position on the issue. OMEI claimed "client privilege" whereas we -- at the time -- defined the issue as one of academic freedom. Should we "knuckle under" or should we argue strongly for our right to publish? Doing the former would violate the prime contract between Argonne and DOE and would conflict with our desire to inform peers of our work and to give minorities information. Doing the latter would upset the OMEI staff and risk losing the contract. We did not want to alienate the Office, for we thought of ourselves as partners in an interesting and important research project. Further, we did not know whether OMEI's stance was permanent or simply a temporary aberration. So eventually we backed down and agreed to defer publication. This experience taught us, first, that OMEI wanted us to act as a "client advocate" rather than as either an "issue advocate" or a "technician," and second, that if we wanted to publish on controversial topics we would have to gain OMEI staff's personal trust and confidence.

Our second major analytical task was to *assess the effect on minorities of the Environmental Protection Agency's (EPA's) proposed rule to reduce the lead content of gasoline*. This was a major opportunity for OMEI, for it represented the first time that the Office had been asked by DOE management to comment formally on a proposed rule. We were well prepared to respond to this request; it involved subjects (transportation and air pollution) that we knew well, and we had ready access to an applicable data set. We responded quickly. The resulting report (Rose et al., 1984) was well-received; DOE used the report in preparing its overall comments on EPA's proposal. The report also resulted in press releases announcing the work, conference papers, follow-up work, and kudos all around.

OMEI next asked us to *investigate DOE's Weatherization Assistance Program (WAP)*. The request was quite appropriate, for weatherization assistance directly affects minorities. However, since DOE management had not specifically requested such a study, OMEI initiated it without fanfare and with little funding. One of us investigated the formula by which WAP funds were allocated to the states and concluded that the formula tended not to benefit eligible minority households in proportion to their numbers. When presented with a short draft report, WAP officials

responded with hostility. The study was uninformed and methodologically unsound, they said. Surprised, perhaps naively so, we responded that we would be happy to work with WAP to correct any errors and to address any major issues that WAP wanted to consider. The peace overtures were in vain. Thus our analytical team rediscovered the importance of having our draft reports reviewed by technical peers prior to sending them to OMEI or other offices.

We then suggested *investigating the impact on minorities of abandoning incomplete nuclear power plants*. Depending on the spatial correlation between the residential patterns of minorities and the service area boundaries of utilities that might have to abandon plants, the impacts could be substantial. A special DOE Nuclear Power Plant Abandonment Task Force took considerable interest in the proposal and agreed to help it along. But as the work proceeded, we began to see that the Task Force feared that the research might harm the ability of utilities to obtain rate increases from state public service commissions. At one point a member of the task force told us that "if we end up with [i.e., find] a negative impact upon the community, then we [the Task Force] won't want to proceed with the study" (Throgmorton, 1985). To translate: if objective research was likely to produce information that might harm a utility (regardless of what it might find concerning minorities), then the Task Force did not want that research done. The research project was abandoned after \$50,000 had been spent.

What is going on here?, many of us began to ask. First told not to publish articles on a controversial topic (tax credits), then told not to waste our time talking with community development activists, we now were being told not to do an objective study for fear it might harm some electric utilities. Frustrated and seeking guidance, I read Meltzer's *Policy Analysts in the Bureaucracy* (1976). There I read his warning about the consequences that might accompany DOE's and OMEI's actions (p. 256) :

Distortion and suppression . . . are not completely risk-free tactics. First, the analysts who did all the work for the original report become demoralized. Second, the report does not stay suppressed for long; it gets leaked, and the agency suddenly finds itself fighting in a public arena. Third, once the story is leaked the reputation of the agency suffers and its analytical credibility is seriously impaired. Finally, the agency may actually be pursuing an erroneous policy by such tactics.

Our research team then proposed dozens of other possible policy research tasks. Many subsequent personal conversations with OMEI staff gradually revealed two key instructions:

*-Non-DOE programs should be ignored, even if they have a major effect on the energy consumption and expenditure patterns of minorities. The Department of Health and Human Services' Low Income Home Energy Assistance Program is the best example of these programs. Further, non-DOE programs that address energy-related deaths, illnesses, utility disconnections, consumer debts, or reduced transportation mobility were also off-limits.*

*-Potentially adverse effects of the administration's market strategy should be ignored. The effects of deregulating petroleum and natural gas markets were not to be investigated.*

Based on these experiences, we concluded that any future research on specific energy policy questions would be hazardous. If a policy issue was hot politically, then we would not be able to write or speak about it until the issue had cooled. But then there would be little purpose in writing. If allowed to undertake a policy research project, we would risk not being allowed to finish our research or else being allowed to publish only findings that were consistent with DOE policy. We sought alternative paths. The only constructive alternatives we could then see were to concentrate on basic research and on devising ways to assist small minority-owned energy firms. We retreated to the protective embrace of basic research; long-term "enlightenment" (Weiss, 1978) became our unspoken objective.

We quickly undertook and completed a series of research reports designed to *clarify basic energy consumption and expenditure patterns of minority households* (Klein et al., 1984; Millar, Morrison & Vyas, 1986; Poyer, 1984). These reports were apparently well-done and initially well-received. One respected reviewer wrote in a personal letter, for example, that Millar, Morrison, and Vyas' report concerning transportation patterns was "outstanding, and . . . that it addresses a real void in the published literature. . . . The analysis is thorough, the paper is well organized, and the exposition is clear and convincing."

We also initiated a series of tasks designed to *assist minority-owned energy-related businesses*. Several staff members prepared a guide to financial, technical, and managerial resources (Levine, Suchy, & Wallingford, 1985). OMEI then distributed a few thousand copies around the country. Other staff members held a series of four workshops for small minority-owned energy businesses. A third group of staff members conducted research concerning the likely market penetration of new energy technologies (Teotia et al., 1987). Much of this work was non-controversial, was consistent with DOE's market-oriented policy, and brought high visibility to OMEI. But its very success began to reveal problems. At the workshops, minority owners of small businesses pressed OMEI to define exactly how it could help them get government or utility contracts. And DOE staff began to question the wisdom of doing so much basic research and business development work. They reminded OMEI that the Office's primary mission was to advise the Secretary of DOE about the impact on minorities of Department policy and programs. OMEI thereupon pressed us to be more policy oriented.

Pressure to do relevant policy research increased dramatically as Congress began its annual budget hearings in early 1986. Recognizing that it would not gain much support in Congress unless it could document the value of its sponsored research, OMEI strongly encouraged us to mobilize political support. In particular, it wanted Argonne management to lobby a local black Congresswoman who was a member of the House Energy and Commerce Committee. It also urged us to subcontract to small minority-owned businesses and to support minority professors and students during the year. And OMEI pressed even harder for Argonne to perform more policy-relevant research and to cut back on basic research and business development activities.

How could we improve the technical quality of our research, develop a political constituency, and draw favorable Congressional attention to OMEI? That was the question we faced early in 1986. We thought the key

might be to create a supportive, but critical, community of inquirers. Accordingly, we urged OMEI to sponsor a *minority energy research conference*. Perhaps there we would be able to give "outside" researchers a chance to critique our work, to affect our research agenda, and to investigate potential subcontracting opportunities. Not coincidentally, we also suggested holding the conference in Washington, D.C., at a time when Congressional committees would be deliberating budgets for the coming year.

At this point (mid-1986), I decided to resign from Argonne and to begin teaching at the University of Iowa. This decision was partly a personal one, involving factors completely extraneous to the present story. But, as will be discussed in the following section, it was partly based on what I had seen and learned while working at ANL for OMEI.

Argonne's project team has continued its work for OMEI, albeit at a greatly reduced scale. Whether the difficulties encountered from early 1984 through mid-1986 continue I am in no position to say. However, one event suggests that they do. In May, 1987, OMEI convened a "Socioeconomic Energy Research and Analysis Conference" in Washington. Roughly 40 researchers submitted papers to well over 200 attendees, thus -- at least temporarily -- creating a network of minority energy researchers. It is not yet clear, though, how permanent or influential that network will be. Nor is it clear that people who did not attend the conference will ever learn what was presented there. As of the moment I write this, DOE has not yet published the conference proceedings.

## REFLECTIONS OF A PRACTITIONER

At the outset of this paper I argued that successful analytical teams have to synthesize, in practice, the competing demands of rationality, politics, and advocacy. If it pursued any two of those demands with disregard for the third, a team would fail. The tale of the Argonne team suggests that successful analysis depends heavily on the analysts' ability to converse openly and honestly with three diverse audiences: technical peers, clients, and a lay constituency. Unable to converse with a broad range of minority interests, the Argonne team was unable to identify (and help create) a constituency strong enough to ensure that its interests were explored and its concerns were addressed.

### Reflective Practice: Between Scylla and Charybdis

Experienced analysts, we began our work for OMEI aware of the literature concerning "technicians" and "politicians" in policy analysis. As "reflective practitioners," however, we rather quickly formed a sharper image of the particular situation. After our first few months of work, we defined it as a Scylla and Charybdis-type problem. By this we meant that OMEI and we were jointly caught between a Conservative Republican administration pursuing an energy policy of retrenchment and a liberal minority constituency that was overwhelmingly Democratic. Seeing ourselves and OMEI as members of the same team, we tried to respond to OMEI's guidance. Thus we were willing to back down on the tax credit censorship issue.

Gradually, however, we began to redefine the situation. The regional workshop argument between minorities and OMEI, and OMEI's abandon-

ment of the nuclear study demonstrated that our initial conceptualization was off the mark. Regardless of the good intentions of certain OMEI staff members, the evidence now suggested that the Office was an advocate for DOE energy policy and that they wanted us to be "client advocates." We now redefined the situation such that we were between Scylla and Charybdis, with OMEI being a lighthouse of uncertain reliability.

Something still was missing from our construct, though. Neither of our initial conceptualizations incorporated conflict between the roles of advocate and technician. However, when we tried to retreat to basic research (to avoid political complications), we quickly learned that OMEI wanted us to mobilize support for minority energy research, we also learned that political lobbying was not uncommon at Argonne, but that technicians were not supposed to do it. Lobbying for specific programs and contacting Congressmen and their staffs were activities restricted to higher level management. Thus, we reconceptualized for a third time. We were between Scylla and Charybdis, with Prometheus looking over our shoulders.

This third reconceptualization -- now articulated more thoroughly in the opening section of this paper -- helped us to understand our situation better. When translated back into the language of policy analysis, it enabled us to understand more clearly the hazards of pursuing two of the demands of policy analysis while disregarding the others.

One hazard was technical incompetence. The clearest example of this occurred when we critiqued the Weatherization Assistance Program's funding allocation formula. By not being rigorous enough in our technical analysis, and then failing to use peer review procedures to catch our errors, we opened ourselves up to the claim that we did not know what we were doing. We never regained our lost technical credibility, and WAP continued to make decisions without regard for their impact on minorities. Another example of the hazards of apparent technical incompetence comes from the question that our technical peers repeatedly posed: why are you analyzing minority energy patterns when income, location, and class are the major variables? Not authorized to explore this question -- it implicitly challenged OMEI's right to exist -- we could not give a credible answer. Many analysts concluded that we were politically-motivated advocates.<sup>4</sup>

A second hazard was political incompetence. Initially thinking that OMEI would be an advocate for minorities in DOE decision making, we sought to produce information that OMEI could use to benefit minorities. Thus we were quite surprised to discover that OMEI wanted us to be a "client advocate": when DOE's nuclear task force lost interest, OMEI abandoned the study, regardless of the issue's potential significance for minorities. Similarly, OMEI was more concerned about consistency with DOE policy than with informing minorities about how eliminating the tax credits might affect them. To the extent that we acted as issue advocates, to that extent we lost political credibility with OMEI and DOE.

Lastly, there was the hazard of "constituency incompetence." Our central problem was that we did not know enough about minority interests concerning energy and energy policy. Nor were we permitted to learn more. OMEI rejected initial efforts to understand minorities as a waste of valuable resources. It then rejected our efforts to conduct workshops with community development-oriented minorities as misguided and inappropriate. Without knowing more about minority energy patterns, and without know-

ing more about the full range of minority interest groups, we could not propose research topics that minorities would benefit or learn from. Not benefitting from our research, those groups had no reason to support OMEI politically. Lacking pressure from constituents, minority Congressmen had no strong incentive to support OMEI. OMEI did strongly encourage us to draw minority faculty, students, and consultants into the program; time and again they told us of complaints about having a "lily white" organization like Argonne tell minorities about the minority community. OMEI also strongly encouraged us to develop contacts with minorities who worked with the Edison Electric Institute, the National Gas Association, and other major industrial interests. But only minorities whose policy positions coincided with those of the administration deserved an audience.

### **Client Advocacy Systematically Distorts Research**

As reflective practitioners we learned that straying too far from advocacy, rationality, and politics was a hazardous venture. More specifically, we learned that client advocacy systematically distorts (Forester, forthcoming; Habermas, 1979) communications. Our research had produced several interesting findings (Throgmorton & Bernard, 1986) but many other potential results went unreported or unaddressed.

Much of our published work supported earlier research; i.e., that income, climate (for the residential sector), and location (for the transportation sector) are the key variables affecting minority energy use. Some of our findings were new: (1) relative to white households, black and Hispanic households have been less successful at adapting to the energy price shocks of the past dozen years, (2) black and Hispanic households have also been less successful at conserving residential or transportation energy or at taking advantage of new business opportunities created by changes in energy markets, (3) minority energy use patterns are not simply a matter of economics, climate, and metropolitan location, and (4) the energy use patterns of poor black households differ significantly from those of poor non-black households.

Far more important than what we reported, however, was what we could not report or address. By terminating the regional workshops, we cut off one channel through which minorities could discuss and discover their interests. By not publishing our residential energy tax credit research, we failed to tell minorities how they would be affected by elimination of tax credits. By not pursuing our weatherization research, we failed to advise minorities about how that program could be improved. By not assessing the impact of DOE's reliance on energy market deregulation, we failed to assess the effect on minorities of the administration's single most important energy policy. Acting as client advocates, we had either abandoned or avoided research that might have conflicted with core elements of the administration's political agenda. Further, we had failed to help minorities discover where their interests lay with regard to energy policy, we had failed to address issues of potentially vital concern to minorities, we had failed to assess the administration's energy policy and programs in terms of how they affect minorities, and we had failed to create and sustain a strong minority constituency.

DOE's decision to stop work on the nuclear power plant abandonment study, and OMEI's acquiescence, decisively influenced this conclusion. I noted earlier in this paper that there is no strong consensus among minorities about their interests with regard to energy policy. However, it is clear that one of their vital concerns is economic growth and enhanced job opportunities. Economic growth is also one of the Reagan administration's primary objectives. DOE policy presumes that economic growth requires an equivalent growth of power generation capacity, and it gives special emphasis to the role of nuclear plants in this growth (DOE, 1983b). Thus it is possible that the administration's electric power policy would benefit minorities. However, another point of view argues that economic growth can occur without any significant increase in utility-owned power generation capacity, that conservation and small power production should be encouraged instead of new nuclear and coal plants (Lovins, 1985; Sant, 1979). Would conservation and small power production benefit minorities more than new nuclear and coal plants? Without careful technical analysis, with all key assumptions subject to criticism and debate, no one could know. Expected to act as client advocates, we were not allowed to pursue this kind of analysis. As a result, a casual reader of the analytical team's reports would never suspect that there was any debate or controversy over national electric power policy and that the resolution of the debate might have significant consequences for minorities.

Further influencing our conclusion was the team's inability to investigate alternative explanations for its research findings. The team was gradually discovering that -- when income and location or climate were statistically controlled -- minority groups (especially blacks) appeared to differ from the majority population in their ability or willingness to make long-term capital investments in energy-efficient automobiles, appliances and other consumer durables (Throgmorton & Bernard, 1986). What could explain these differences, assuming for the moment that they are valid? One possible explanation derives from the observation that blacks and Hispanics are more likely than the majority population to live in central cities. Public policy (especially that of the current administration) has encouraged investment in suburbs and in the newer metropolises of the Sun Belt, and it has facilitated disinvestment in older, central city neighborhoods (Hanson, 1983; Mollenkopf, 1983). Given such a public policy, it might be irrational for minority households to invest in energy-efficient consumer durables. Conversely, an urban-oriented administration might pursue a policy based on rehabilitation and reinvestment in aging neighborhoods and structures; energy conservation could be seen as an indigenous energy resource to be "mined" by locally-based minority energy entrepreneurs. Thus it may well be that public policy helps create differences in minority and majority energy patterns that confound the expectations of economically-trained analysts. Argonne's project team never had an opportunity to investigate such policy-oriented questions.

To produce credible and legitimate policy analysis that enlightens and empowers the public in a technically rigorous and politically effective way, analytical teams have to overcome or bypass the distortions that client analysis systematically engenders. That means redefining the audience for policy analysis and finding appropriate ways to communicate with each major component of that audience.

### **Successful Policy Analysis Requires an Ability to Communicate Forthrightly with Technical Peers, Political Clients, and Lay Constituents**

To write of advocacy and systematically distorted communications is to raise the issue of audience, for when one speaks or writes one does so with a particular audience in mind. One creates a community (at least temporarily) involving the writer and his or her readers (White, 1987). And the question this paper raises most acutely is what kind of community should policy analysts help create or maintain? Should that community be client-centered, constituency-centered, centered on the analyst's technical peers, or a blend of all three? I have implicitly argued that it should be a blend and that the Argonne team's inability to communicate forthrightly with its minority constituency goes a long way toward explaining why the team did not succeed. What can an analytical team do when its immediate client seeks to create a client-centered community and thereby constrains the team's ability to communicate with its other audiences?

Several steps might be taken, steps that move from the simple and obvious to the more risky and complex. One set of steps would be appropriate for a team that wants to continue working for a specific client. Such a team that wants to communicate with its technical peers could -- as the Argonne team proposed to do -- convene annual or biennial research conferences and create a formal external peer review process. Taking these steps is absolutely necessary for a team to maintain its technical credibility, but taking them will not necessarily yield research that is any less distorted. Conference attendees and technical reviewers frequently point out methodological errors, faulty logic, and omitted references, but they rarely criticize analysts for research not undertaken, results not produced, or processes through which research topics are avoided or abandoned. Further, convening research conferences and establishing a peer review process will not assure that a lay constituency will be able to influence the team's research agenda. Not being experts, lay constituents will tend to be ignored at technical conferences and in peer review.

A team that wants to communicate with its lay constituency while continuing to work for its client will face a more difficult task. It can identify the major constituent organizations, ensure that they receive copies of final reports and articles, and brief them whenever possible about the contents of those publications. These suggestions somehow beg the question, however, for it is precisely the client's efforts to constrain communication with the lay constituency that distorts communications in the first place. Further, they leave out "behind the scenes" activity that suppresses and distorts key information. Necessary though they are, these steps would not help constituents understand how clients shape the stream of information being produced by an analytical team.

In order to increase its credibility with lay constituencies a research team will have to consider several other, more risky, steps. It might leak draft reports that have been suppressed or internal memoranda that document the ways in which certain research topics were avoided, suppressed, or distorted. Or a team might give constituency groups information that could be used in proposing amendments to the client's enabling legislation. For example, the Argonne team might have helped minority interest groups lobby for the following changes in OMEI's enabling legislation:

-instruct OMEI to prepare a substantive agenda of policy issues that are--in light of minority income, residential, and energy consumption and expenditure patterns--important from a minority point of view;

-instruct OMEI to prepare, on its own initiative, independent analyses of any proposed federal actions that are likely to have major effects on minority energy patterns or minority energy businesses;

-instruct OMEI to report biennially on minorities and energy.<sup>5</sup>

Taking such actions might - - at least in the present case -- have given minority organizations some of the information needed to define their energy interests, to create a constituency for better funded and more effective minority energy research, and to lobby effectively in Congress. These actions are also quite risky for career-minded analysts, for it is difficult to see how they could distance themselves from the leaks and legislative activity. They would have to be prepared to resign or be fired.

Thinking of resignation leads to a second set of steps, steps that do not require the analysts to continue working for a specific client. If analysts cannot maintain critical distance from their clients, and if they believe that their clients are suppressing or distorting research in such a way as to significantly affect action on public problems, then they must find other ways to communicate with their peers and the lay public. One way is to document empirically and publicly the process and substantive consequences of suppression and distortion. Greider's (1981, 1986) description of the "education of David Stockman and other Americans" exemplifies how this can be done for the public-at-large. The analyst's publicly disclosed conclusions, beliefs and worries may prove to be wrong or unfounded, but at least those errors and concerns will be exposed through private suppression.<sup>6</sup>

Public disclosure of private distortion is a necessary part of credible policy analysis. But it too is not enough. Effective analysis depends in large part on the competition of ideas. Thus analysts who believe that client advocacy is distorting knowledge on a particular policy issue must be willing to leave the team and client, seeking to find or create a new institutional setting for research concerning that issue. Rather than defining themselves simply as a small group of experts who work for a specific client, they can define themselves as a resource for a much larger network of researchers and constituents who are interested in, or affected by, the issues that the team addresses. The present case offers an example. Rather than to continue working for OMEI, some of Argonne's analysts could help create a new minority energy research center (modeled, perhaps, after the Joint Center for Political Studies in Washington, D.C.) that is independent of DOE and fairly close to major minority interest groups. Such a center would have three primary objectives:

1. to articulate and justify a clear theoretical rationale for focusing on minorities rather than income, class, or location;
2. to pursue a research agenda that is designed to discover where the interests of minorities lie with regard to energy policy. The agenda should give special attention to the interaction between electric power policy, economic growth, and minority economic well-being (Throgmorton, 1987); and

3. to keep abreast of, review, and -- when necessary -- contest, OMEI-sponsored research.

### SUMMARY

I began this paper by claiming that successful practice depends on the ability of policy analysts to synthesize political influence, advocacy and rigorous analysis. I then assessed the utility and validity of this claim, and hopefully provided some insight into how analytical teams can achieve this synthesis, by describing and critiquing an effort to define the impacts of federal energy policy and programs on minority groups. In the end I concluded that the particular team in question failed to maintain critical distance from its client, hence unintentionally but systematically distorted knowledge concerning minorities and energy. It did so largely because it failed to find ways to communicate honestly and openly with its lay constituency. Thus I also concluded that successful analysis depends on the ability to communicate honestly and openly with three distinct audiences: clients, technical peers, and the lay public. By striving to communicate forthrightly with these three audiences, policy analysts may hope to synthesize politics, rationality and advocacy, and thereby produce policy analyses that are feasible, effective, and truthful.

### NOTES

<sup>1</sup> Marris and Rein (1967, 1982) discuss how these roles interacted in the design and implementation of antipoverty reform programs.

<sup>2</sup> I do not mean to suggest that political decision making is not taught or discussed. Clearly it is, perhaps most effectively through the case study method (see Robyn, 1987). However, such approaches are limited to teaching students how to be client advocates (see Behn, 1985). They do not teach students how to devise policies that relevant constituencies perceive to be legitimate and representative.

<sup>3</sup> Ten percent of our staff were minorities as defined by OMEI.

<sup>4</sup> This conflict between a client's problems and the analysts' disciplinary interests inheres in policy analyses. Many policy analysts (e.g., Stokey & Zeckhauser, 1978) believe that problems should be defined and tested in terms of the core discipline. Many others (e.g., Quade, 1975; Wildavsky, 1979, 1987) emphasize that the analysts' choice of hypotheses and research design is driven by the nature of the problems faced by the client: "Policy analysis must create problems that decision makers are able to handle with the variables under their control and in the time available" (Wildavsky, 1979, 1987, p. 16).

<sup>5</sup> Are these changes feasible? I think they are for two reasons. First, a new administration will enter office in January, 1989. Change will be in the air. Second, Congress has demonstrated its displeasure with other agencies that have failed to fill the advocacy role. Distressed with the Civil Rights Commission's apparent failure to monitor enforcement for civil rights laws,

the Senate Appropriations Committee recently voted to reduce the Commission's budget (Williams, 1987). On the other hand, the changes I have suggested are not likely to occur unless minority interest groups see a need for their adoption.

<sup>6</sup> Simply writing this article raises important ethical questions (see Amy, 1987; Benveniste, 1984; Brown, 1986; Wachs, 1985). When I first began putting these ideas together, my friends at Argonne said "you can't write that." Writing such an article would upset our clients in OMEI and lead either to termination of the contract or my departure. Later, after I had left the Laboratory, reviewers wondered whether this article might offend or harm my former colleagues at ANL and OMEI. I certainly do not want to hurt or offend my Argonne or DOE colleagues. They all try to do their best in a difficult situation, and I like and respect them. Further, they do not interpret the facts of the case in the same way as I do. Still, my interpretation deserves to become part of the public dialogue. Unless someone speaks out, Argonne and DOE will continue to systematically distort information concerning minorities and energy. To let that happen would be unethical.

#### REFERENCES

- Amy, D.J. (1987). Can policy analysis be ethical? In F. Fischer & J. Forester (Eds.), *Confronting values in policy analysis: The politics of criteria* (pp. 45-67). Beverly Hills: Sage Publications.
- Asbury, J.G. (1984). *The role of the multiprogram laboratories of the Department of Energy in context with federal energy R & D policy*. ANL/EES - TM - 269. Argonne, IL: Argonne National Laboratory.
- Bardach, E. (1977). *The implementation game*. Cambridge: MIT Press.
- Baum, H.S. (1983). *Planners and public expectations*. Cambridge: Schenkman Publishing Co.
- Behn, R.D. (1985, Spring). Policy analysts, clients and social scientists. *Journal of Policy Analysis and Management*, 4, 428-432.
- Benveniste, G. (1977). *The politics of expertise*. San Francisco: Boyd & Fraser Publishing Co.
- Benveniste, G. (1984, Summer). On a code of ethics for policy experts. *Journal of Policy Analysis and Management*, 3, 561-572.
- Billingsley, A., et al. (1987). *The state of black America 1987*. New York: National Urban League.
- Bozeman, B. (1986, June). The credibility of policy analysis: Between method and use. *Policy Studies Journal*, 14, 519-539.
- Brewer, G., & DeLeon, P. (1983). *The foundations of policy analysis*. Homewood: Dorsey Press.
- Brown, P.G. (1986, Fall). Ethics and education for the public service in a liberal state. *Journal of Policy Analysis and Management*, 6, 56-68.
- Davidoff, P. (1965, November). Advocacy and pluralism in planning. *Journal of the American Institute of Planners*, 31, 331-338.
- Ehrenhalt, A. (Ed.) (1985). *Politics in America: Members of Congress in Washington and at home*. Washington, DC: Congressional Quarterly Press.
- Forester, J. (forthcoming). *Planning in the face of power*. Berkeley: University of California Press.

- Greider, W. (1981, 1986). *The education of David Stockman and other Americans*. New York: Signet Books.
- Habermas, J. (1979). *Communication and the evolution of society* (Tr. by T. McCarthy). Boston: Beacon Press.
- Hanson, R. (Ed.) (1983). *Rethinking urban policy: Urban development in an advanced economy*. Washington, DC: National Academy Press.
- Hirschman, A.O. (1970). *Exit, voice, and loyalty*. Cambridge: Harvard University Press.
- House, P. (1982). *The art of public policy analysis*. Beverly Hills: Sage Publications.
- Howe, E. (1980, October). Role choices of urban planners. *Journal of the American Planning Association*, 46, 398-409.
- Howe, E., & Kaufman, J. (1979, July). The ethics of contemporary American planners. *Journal of the American Planning Association*, 45, 243-255.
- Jenkins-Smith, H.C. (1982, Fall). Professional roles for policy analysts. *Journal of Policy Analysis and Management*, 2, 88-99.
- Katz, J.E. (1983). *Congress and national energy policy*. New Brunswick: Transaction Books.
- Klein, Y., et al. (1984). *Patterns of residential energy demand by white, black, hispanic, low-income and non-low income households* (ANL/EES-TM-284). Argonne, IL: Argonne National Laboratory.
- Levine, E., Suchy, K., & Wallingford, P. (1985). *A resource guide for small minority-owned energy businesses* (DOE/MI-006). Washington, DC: U. S. Department of Energy.
- Lindblom, C.E., & Cohen, D.K. (1979). *Usable knowledge*. New Haven: Yale University Press.
- Lindblom, C. (1980). *The policy-making process*. Englewood Cliffs: Prentice-Hall Inc.
- Lovins, A.B. (1985). Written comments submitted to the U.S. Senate Committee on Energy and Natural Resources. *Electric power: Potential for shortages in the 1990's*. 99th Cong. 1st sess. S. Hrg. 99-253.
- MacRae, D., Jr., & Wilde, J.A. (1985). *Policy analysis for public decisions*. Lanham: University Press of America.
- Marris, P., & Rein, M. (1967, 1973, 1982). *Dilemmas of social reform*. Chicago: University of Chicago Press.
- Meltsner, A.J. (1976, 1985). *Policy analysts in the bureaucracy*. Berkeley: University of California Press.
- Millar, M., Morrison, R., & Vyas, A. (1986). *Minority and poor households: Patterns of travel and transportation fuel use* (ANL/ES-149). Argonne, IL: Argonne National Laboratory.
- Mollenkopf, J.H. (1983). *The contested city*. Princeton: Princeton University Press.
- Perry, H.L. (1984). Black participation and representation on national energy policy. In M.F. Rice & W. Jones, Jr. (Eds.) *Contemporary public policy perspectives and black Americans*. Westport: Greenwood Press.
- Poyer, D. (1983). *Residential fuel consumption patterns for poor, black, and elderly households: A comparative study. Vol. II: Analytical Assessment* (ANL/EES-TM-236). Argonne, IL: Argonne National Laboratory.
- Poyer, D. (1984). *Analysis of regional demand for natural gas by black and non-black families* (ANL/EES-TM-268). Argonne, IL: Argonne National Laboratory.

- Poyer, D., & Teotia, A. (1982). *Residential fuel consumption patterns for poor, black, and elderly households: A comparative study. Vol. I: Data base development* (ANL/EES-TM-207). Argonne, IL: Argonne National Laboratory.
- Quade, E.S. (1975). *Analysis for public decisions*. New York: American Elsevier Publishing Co.
- Rabinovitz, F. (1969). *City politics and planning*. New York: Atherton Press.
- Robyn, D. (1987, Winter). What makes a good case? *Journal of Policy Analysis and Management*, 6, 292-295.
- Rose, K., et al. (1984). *Effects on minority and low-income households of the EPA proposal to reduce leaded gasoline use* (ANL/EES-TM-289). Argonne, IL: Argonne National Laboratory.
- Sant, R.W. (1979). *The least-cost energy strategy*. Pittsburgh: Carnegie-Mellon University Press.
- Schon, D.A. (1983). *The reflective practitioner*. New York: Basic Books.
- Schneider, J.A., Stevens, N.J., & Tornatzky L.G. (1982, December). Policy research and analysis: An empirical profile. *Policy Sciences*, 15, 99-114.
- Stokey, E., & Zeckhauser, R. (1978). *A primer for policy analysis*. New York: Norton.
- Teotia, A., et al. (1987). *Projecting market demand for residential heat pumps* (ANL/ES-150). Argonne, IL: Argonne National Laboratory.
- Throgmorton, J.A. (1985). Personal notes of telephone conversation with a member of DOE's Nuclear Power Plant Abandonment Task Force.
- Throgmorton, J.A. (1987). Least cost electric utility planning: A preliminary assessment of its implications for blacks and hispanics. Presented at the Socioeconomic Energy Research and Analysis Conference, Sponsored by the U.S. Department of Energy's Office of Minority Economic Impact, Washington, DC: (May 21-22).
- Throgmorton, J.A., & Bernard, M.J., III (1986). Minorities and energy: A review of recent findings and a guide to future research. In *Proceedings from the American Council for an Energy-Efficient Economy: 1986 summer study on energy efficiency in buildings*, August 17-23, 1986. Washington: American Council for an Energy-Efficient Economy.
- Torgerson, D. (1986, July). Between knowledge and politics: Three faces of policy analysis. *Policy Sciences*, 19, 33-59.
- Torgerson, D. (1986, December). Interpretive policy inquiry: A response to its limitations. *Policy Sciences*, 19, 397-405.
- U.S. Bureau of the Census. (1983). *Statistical abstract of the United States, 1984*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Energy. (1983a). *The national energy policy plan* (DOE/S-0014/1). Washington, DC: U.S. Department of Energy.
- U.S. Department of Energy. (1983b). *The future of electric power in America: Economic supply for economic growth*. DOE/PE-0045. Washington, DC: U.S. Department of Energy.
- Vasu, M.L. (1979). *Politics and planning*. Chapel Hill: University of North Carolina Press.
- Verba, S., & Nie, N.H. (1972). *Participation in America*. New York: Harper & Row Publishers.
- Wachs, M. (Ed.) (1985). *Ethics in planning*. New Brunswick: Center for Urban Policy Research.

- Weiss, C.H. (1978). Improving the linkage between social research and public policy. In L.E. Lynn, Jr. (Ed.), *Knowledge and policy: The uncertain connection* (pp. 23-38). Washington, DC: National Academy of Sciences.
- White, J.B. (1987). Rhetoric and law: The arts of cultural and communal life. In J.S. Nelson, A. Megill, & D.N. McCloskey (Eds.), *The rhetoric of the human sciences: Language and argument in scholarship and human affairs* (pp. 298-318). Madison: University of Wisconsin Press.
- Wildavsky, A. (1979, 1987). *Speaking truth to power: The art and craft of policy analysis*. New Brunswick: Transaction Books.
- Williams, L. (1987, September 24). Senate panel votes to reduce budget for civil rights unit.

Copyright of Policy Studies Review is the property of Policy Studies Organization and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.