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Introduction:

Our Dwindling Energy Resources and Public Policy

By GARY L. WIDMAN*

Colorado's Governor Lamm occasionally speaks about a fourth "Newtonian" law—the Law of Conservation of Public Attention. In his experience, the body politic focuses on only two to four issues at any one time. These select issues generate frenzied legislative activity while they are in the public eye, but before and after the time that the public focuses on such issues, the status quo is the legislative order of the day.

Energy issues certainly fit his model. Conservationists, including those with political pulpits, have sounded alarms for decades. In 1907, President Theodore Roosevelt warned:

We are prone to speak of the resources of this country as inexhaustible; this is not so. The mineral wealth of the country, the coal, iron, oil, gas, and the like, does not reproduce itself, and therefore is certain to be exhausted ultimately; and wastefulness in dealing with it to-day means that our descendants will feel the exhaustion a generation or two before they otherwise would.¹

In a later congressional message President Roosevelt observed:

The great basic facts are already well known. We know that our population is now adding about one-fifth to its numbers in ten years, and that by the middle of the present century perhaps one hundred and fifty million Americans, and by its end very many millions more, must be fed and clothed from the products of our soil. With the steady growth in population and the still more rapid increase in consumption our people will hereafter make greater and not less demands per capita upon all the natural resources for their liveli-

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1. Theodore Roosevelt, Seventh Message to Congress, 42 CONG. REC. 76 (1907).

hood, comfort, and convenience. It is high time to realize that our responsibility to the coming millions is like that of parents to children, and that in wasting of our resources we are wronging our descendants.²

But despite public and legislative action in T.R.'s day (which focused primarily on management of forests), despite reminders from conservationists of the realities of a finite earth ever since this day, and despite the environmental awareness and legislative action in the 1960's, the finite limits of fossil energy resources in the face of escalating demands never really came into political focus until 1974 when citizens waited in long lines to fill their automobile gas tanks.

The fossil energy shortage quickly became the central issue which galvanized congressional action and administrative organizations. Since then, energy issues have stayed within that small class selected for public attention, a situation prompted in part by the shortage of natural gas at controlled prices during a winter of record cold. This attention means that energy production and conservation needs long perceived by a few experts, now generate considerable government interest. Conservation measures have been conceived, weighed, and, in part, adopted. Government organizations have attempted to allocate scarce resources and to restrain increasing prices. Research programs for breeder reactors, solar energy and synthetic fuels have been funded at levels only imagined a few years ago.

But underlying the new laws, new agencies, and pleas for reductions in energy use, is a demand for ideas. It is a demand for creativity, judgment, and foresight that falls largely on the legal profession, for it is largely our profession that has filled the legislatures, legislative staffs, and offices of government executives where these ideas are needed. It is therefore important for the legal community to provide fora for the ideas and perspectives that help meet this cry for creativity. This issue of the *Hastings Law Journal* will serve as one such forum.

This symposium sharpens understanding of some energy issues, but it does not offer a full spectrum of policy perspectives. The authors here speak largely from industry experience, and their ideas are untested by rebuttal from government or environmental groups. The contributions are nevertheless helpful and will, on balance, contribute to better energy planning and energy legislation.

2. Theodore Roosevelt, Special Message of the President Transmitting the Report of the National Conservation Commission, 43 CONG. REC. 1274 (1909).

Ratemaking Philosophy

In the first of the articles, Alfred C. Aman, Jr., and Glen S. Howard respond to widely publicized proposals by environment and citizens lobbies for altering electric and gas rate structures in order to discourage energy demand.³ Those original proposals reflected the repeated criticisms of economists who claimed that conventional legal tools for restraining demand and allocating resources are poorly suited to the tasks of energy conservation. Marginal and incremental pricing, it was suggested, could bring demand into line with the least adverse effects on the public and the economy. Environmental groups have proposed various ways to use these ideas for achieving results where conventional legislation might be inappropriate. Modified rate structures have been adopted on a trial basis in several American cities, but it is probably too early to judge their results.

Aman and Howard select some of these proposals for review and criticism. They are first troubled by the concept that rates should reflect anything but cost-based concepts for fear that the ratemaking process reflecting anything but cost-based concepts will be politicized and will become "akin to taxation."⁴ The concern is a legitimate one, but it ignores the necessary fact that cost-based rate structures already reflect a "politicization," albeit a stable one unquestioned until recently. Perhaps the legislatures of the various states should ask whether marginal pricing or reverse rate structures deserve to be tested and whether such structures are better built through taxation policies rather than utility rate structures. But until legislatures take on that task, the utility commissions have the responsibility to serve their public in the best ways that their powers permit. And since they generally appear to have the power to set rates based on considerations other than cost, the question of modified rate structures are proper challenges for them, and for the public, to address.

The authors select their targets and criticize them in depth. They have raised points which require a response, and one hopes that a future issue of this journal will include a response from those who advocate the modified rate structures so severely criticized here.

Competition and Cooperation in the Electric Utility Industry

The average lawyer, like the average citizen, has probably never

3. Aman & Howard, *Natural Gas and Electric Utility Rate Reform: Taxation Through Ratemaking*, 28 HASTINGS L.J. 1085 (1977).

4. *Id.* at 1087.

worried about problems of large and small electric utilities competing with each other, nor have they considered how Federal Power Commission decisions, usually known only to the utility industry, might affect their electric rates, the reliability of their service, or the need for more power generating plants in their own localities. But one of the messages of the article by James Fairman and John C. Scott⁵ is that the public has a larger stake in these decisions than most have suspected.

The authors describe a game of competition played by rules different from those in unregulated industries but a game which can have substantial impact on the need for power facilities and on the rates by which electricity is priced. The policies served by our antitrust laws in other settings have apparently been neglected in these select areas of power transmission and power pools. By their thoughtful discussion, exposing the problems of utilities that could take advantage of "pooling" or "wheeling" plans with neighboring utilities, and by indicating the limits of powers of agencies that might undertake regulation in those areas, the legislative opportunities are defined. The lawyer interested in the energy welfare of his community and the legislator vested with the responsibility for energy policy are well advised to read this piece.

Licensing Nuclear Power Generating Facilities

The article by J. Michael McGarry, III and Troy B. Conner, Jr.,⁶ opens with an assertion that the reader is expected to take on faith: that the licensing function of the Nuclear Regulatory Commission "has all but come to a complete standstill."⁷ But McGarry and Conner then scatter their shots at so many targets that one is not sure whether the fault lies with Congress,⁸ the courts,⁹ the "NRC's overly cautious reaction,"¹⁰ the "extremely liberal" NRC hearing procedures,¹¹ or intervenors in NRC licensing actions.¹²

Despite its urgent (and occasionally caustic) tone, the McGarry-Conner argument is not likely to be a persuasive one. It would be

5. Fairman & Scott, *Transmission, Power Pools, and Competition in the Electric Utility Industry*, 28 HASTINGS L.J. 1159 (1977).

6. McGarry & Conner, *The Nuclear Alternative: An Analysis of Paralysis*, 28 HASTINGS L.J. 1209 (1977).

7. *Id.* at 1209.

8. *Id.* at 1233-42.

9. *Id.* at 1210-17.

10. *Id.* at 1210.

11. *Id.*

12. *Id.* at 1217-21.

compelling if the issues were in fact as simple as they see them and if one could take their premise on faith. Unfortunately, they do not pause to enlighten the reader on both sides of the issues addressed in the appellate arguments they target for criticism. Perhaps it is enough to suggest that most thoughtful readers can see at least some merit in assumptions different from theirs and can see the courts' work in these cases in different terms.

An introductory sentence referring to present estimates on the need for nuclear power supply apparently states the authors' major premise. Their minor premise asserts that licensing has come to a standstill, leading to a conclusion that the country will be much better off when this situation is corrected. Not a word, however, about some of the risks in what a former Atomic Energy Commission official described as the "Faustian bargain" of nuclear power. One might compare the view of the authors with that of Mr. Train:¹³

I would like to see us develop a national energy strategy that includes as one of its keystones the phasing out and eventual elimination of all nuclear power. . . . I think I am most bothered by the waste management and plutonium safeguard problems, both nationally and internationally, and resulting from that the proliferation of nuclear weapons capabilities around the world. I just don't see how it can be managed. I don't see the international institutions to manage these matters effectively at this stage of world development. What I have come to see more and more in the nuclear field is a technology increasingly out of control in terms of the ability of human society to manage it.

It seems clear to me that you are not going to eliminate nuclear power overnight. We have a number of nuclear reactors in operation in the United States. I don't see shutting those down as an immediate possibility. There may even be some new plants built. But with all of that it seems to me we need to develop a very firm commitment to the elimination of nuclear power as a source energy on the earth.¹⁴

One need not go as far as Mr. Train to appreciate that an irreversible dependence on nuclear power is not a matter to be taken lightly. One can fairly believe nuclear power is urgently needed, but if there is anything the country—and the world—needs even more, it is a government institution that assesses nuclear problems objectively, makes decisions objectively, and thereby earns the power, through its

13. Russell Train is a former judge of the federal tax court, former undersecretary of the interior, former chairman of the Council on Environmental Quality in the Executive Office of President Nixon, and a former administrator of the Environmental Protection Agency in the Nixon and Ford administrations.

14. Interview with Russell Train, CONSERVATION FOUNDATION LETTER, Jan. 1977, at 2-3.

credibility, to use and control this technology effectively. The issue is far more serious than that of "conservative" or "liberal" politics of sympathy or opposition to "big business," and deserves the most probing judicial examination.

The crucial issue is whether the country will have objective and reasoned decisionmaking determine the most critical issues in this demanding technological bargain with the future. And that issue—the fairness, objectivity, and effectiveness of the NRC's decision procedures—was the primary one in *Natural Resources Defense Council, Inc. v. Nuclear Regulatory Commission*,¹⁵ which is discussed by the authors. The United States Court of Appeals for the District of Columbia Circuit did not hold that the NRC had made the wrong decision as to whether the proposed Vermont Yankee nuclear power facilities should have been licensed. Rather, in order to assure that its standards for objectivity were satisfied, it asked the NRC to look at the question of waste disposal again so that the court could be certain NRC decisions were based on current information and that the merits of other viewpoints were considered.

The country's interest in a sound decision process for such issues appears to me to be the most urgent priority issue raised by the facts and can easily justify the District of Columbia Circuit's action in monitoring agency decisions. It is unfortunate that the article defines the judiciary's attempts to maintain a quality decision process only in terms of the "uncertainty" which follows even a limited order, and castigates the judiciary (and others) for producing this limited uncertainty.

In another sense, the opinion is a continuing restatement of Judge Bazelon's message to the agencies demanding better decision processes when dealing with complex technological issues. Judge Bazelon, the author of the opinion, had stated earlier:

I cannot believe that Congress intended this court to delve into the substance of the mechanical, statistical, and technological disputes in this case. . . . Thus the court's proper role is to see to it that the agency provides "a framework for principled decision-making." Such a framework necessarily includes the right of interested parties to confront the agency's decision and the requirement that the agency set forth with clarity the grounds for its rejection of opposing views. But in cases of great technological complexity, the best way for courts to guard against unreasonable or erroneous administrative decisions is not for the judges themselves to scrutinize the technical merits of each decision. Rather, it is to establish a

15. Civil No. 74-1385 (D.C. Cir., July 21, 1976), *cert. granted sub nom. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 45 U.S.L.W. 3554 (U.S. Feb. 22, 1977) (No. 76-419).

decision-making process which assures a reasoned decision that can be held up to the scrutiny of the scientific community and the public.¹⁶

Requiring such "reasoned decisions" is perhaps the most crucial responsibility of the judiciary in our time.

Converting from Oil and Gas to Coal

William Foster Cockrell gives us an explanation and a report card on the conversion of oil burning plants to coal.¹⁷ The progress is not encouraging from the perspective of those concerned with avoidable oil consumption. But the coal conversion process is one that has drawn opposition both from industry and environmental groups, while both groups apparently concede that some further progress is possible, if not desirable.¹⁸

The utilities are hesitant to undertake the great capital investment required for the conversion at a time when the low sulfur coal needed by the convertible units is in short supply. The environmentalists have been afraid that the environmental protection standards of the Clean Air Act¹⁹ will be ignored or lowered when the conversions are complete.

Mr. Cockrell argues that both environmental and fuel conservation needs can be met by a conversion program less subject to the vicissitudes of waxing and waning public opinion on the need to conserve oil and gas. His argument is a plea for more legislative attention and for more efficiency on the part of the FEA in the context of the current coal conversion program. He makes a strong case that deserves congressional attention.

Conclusion

Now that energy issues are drawing the congressional interest they deserve, will our regulatory structure respond effectively? The problem will not soon disappear. Responsible estimates show that we have already pumped more than half of the petroleum that will ever be pro-

16. *International Harvester Co. v. Ruckelshaus*, 478 F.2d 615, 651-52 (D.C. Cir. 1973) (Bazelon, C.J., concurring). See also *Ethyl Corp. v. EPA*, 541 F.2d 1, 66 (D.C. Cir. 1976), cert. denied, 44 U.S.L.W. 3715 (1976) (Bazelon, C.J., concurring).

17. Cockrell, *Coal Conversion by Electric Utilities: Reconciling Energy Independence and Environmental Protection*, 28 HASTINGS L.J. 1245 (1977).

18. *Unexpected Obstacles Hinder Ford Plan for Coal Conversion*, 7 NAT'L J. REP. 816 (1975).

19. 42 U.S.C. §§ 1857-571 (1970 & Supp. V, 1975).

duced in the "lower forty-eight" states.²⁰ Without breeder reactors or some breakthrough in fusion power, few will estimate the life of the "nuclear electricity" age at more than one hundred years. It is fashionable now to say that we have plenty of energy to keep us going until the year 2000, by which time solar and other unconventional sources will carry the burden. The year 2000 sounds like a date far into the science fiction future, until you realize it is no farther in our future than 1954 is in our past. Considering the necessary lead time for plant construction and change in public attitudes, can we redesign our social and legal structures for energy and production conservation and use in time?

The *Hastings Law Journal* has provided a useful discussion of several important energy policy questions. These problems will deserve the attention and professional energy of other law reviews and of the organized Bar for years to come.

20. See *USGS Plays a 'Numbers Game' on Remaining Oil, Gas Resources*, 7 NAT'L J. REP. 1349 (1975).

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