

THE DIMMING OF AMERICA  
by  
Peter Navarro  
Ballinger Publishing Co., 127 pages (1985)

Reviewed by

*Robert A. O'Neil\**

Although *The Dimming of America* is not a long book, its brevity belies the seriousness of the topic it addresses. Written by Peter Navarro, of the John F. Kennedy School of Government's Energy and Environmental Policy Center, *The Dimming of America* deals with the current and future economic well being of the electric utility industry, and the impact of that economically distressed industry on the long-term economic well being of the nation at large.

In Mr. Navarro's own words, the book is intended to be an "indictment" of the regulatory process — a process which, according to Mr. Navarro, continues to suppress utility rates with the result that utility executives are foregoing necessary capital investment, to the long-term detriment of consumers, shareholders, national security and overall national economic interests. Mr. Navarro hopes that his book will provide a blueprint for conservative policy reforms designed to prevent the "dimming of America."

Individuals familiar with the regulatory environment in which electric utilities have functioned for the last several years will acknowledge that there is room for improvement in the regulatory process. Of course, the concept of what constitutes "improvement" may differ depending upon whether the individual represents the interests of the industry, or the interests of consumer groups. Personal prejudices aside, however, if it is true that effective reform will require a consensus among both pro-utility and pro-consumer factions, *The Dimming of America* may fail to be the catalyst for change Mr. Navarro desires.

This is because *The Dimming of America* is not an objective book. It is precisely what Mr. Navarro bills it to be: an indictment of the regulatory process. Furthermore, it is an indictment that so greatly simplifies the complex issues affecting the electric utility industry, that those readers with a basic reluctance to accept the fact that long-term benefits often require short-term sacrifice will find ample reason simply to discount the book as pro-utility propaganda.

The ground work for such polarization is laid in the opening chapters, where the confrontation between the regulators and the regulated entities is described. Mr. Navarro briefly outlines the origins of regulation as a counter-balance to the natural monopoly status of utilities, and seeks to underscore the failure of contemporary regulation by comparing it with the effects of regulation in the past. Mr. Navarro writes at page six:

For over seventy years, the regulatory bargain between the PUC's and the utilities worked well. The electric utility industry, in particular, enjoyed a virtually uninterrupted period of prosperity and steady growth. Because of economies of scale and evolving technology, the costs of electricity generation generally fell. So, too, did the real cost of electricity to consumers — even as utility profits climbed ever upward.

---

\*Partner, Miller, Balis & O'Neil, Washington, D.C.

This observation is absolutely correct. During the 1960's utilities earned returns on common equity well in excess of what might be deemed reasonable by today's standards. Also, utility common stock traded in multiples of two and three times book value per share. The fact that exceptional profits were earned does not necessarily mean that regulation worked well. To some, such financial performance suggests a failure of regulation, rather than evidence of success.

Even when Mr. Navarro moves into contemporary examples, he provides ample fodder for anti-utility factions to blame utility management for escalating costs, rather than acknowledge the tremendous impact of such external factors as the 1974 Arab oil embargo and double digit inflation. For example, Mr. Navarro attributes to Lelan F. Sillin, Jr., former chairman of Northeast Utilities, responsibility for a "long delay" in the completion of Connecticut Light & Power Company's Millstone Unit 3. Mr. Navarro attributes this delay to Mr. Sillin's refusal to undertake necessary financing because the common stock of the parent company of Connecticut Light & Power, Northeast Utilities, was selling below book value. These observations, coming as they do in the earliest pages of *The Dimming of America*, are alone adequate to cause readers already prejudiced against the utility industry to assess blame for any failings in the industry not on the regulatory process, but on the management of the regulated utilities.

It is unfortunate that the tone of *The Dimming of America* is so anti-regulatory, and pro-utility, because the work does do a very good job of outlining the factors that have fundamentally altered the economics of electric utility operations in the United States. The inflationary pressures of the Viet Nam war, the increase in fuel costs following the 1973-74 Arab oil embargo, the added capital requirements imposed by the Clean Air Act, and the economic fallout of the Three-Mile Island accident are described as factors that combined to effectively blind-side utility management in their long-term planning. Indeed, one can imagine the frustration of utility management when shortly after the Clean Air Act restrictions had induced utility executives to expend substantial amounts of capital converting coal fired power plants to burn oil, the Arab oil embargo resulted in the escalation of oil prices to a level that made conversion of these same plants back to coal economically desirable.

Although Mr. Navarro's view point is one-sided, he also does a good job of identifying the potential consequences of suppressing utility rates to an unreasonable level. Mr. Navarro identifies three regulatory penalties: (1) a fuel penalty, (2) a cost of capital penalty, and (3) a reliability penalty. The fuel penalty follows from the failure to convert existing power plants or construct new power plants to displace expensive gas and oil fired generation. It also includes the failure to invest in capital-intensive conservation measures. This failure means that over time, and taking into account factors such as present worth versus future worth of cash flows, investments with the lowest overall cost will not be made. The cost of capital penalty is quite simply identified as the premium that utilities must pay for capital due to the increased perception of risk by investors. The reliability penalty relates both to the deferral of necessary maintenance on existing plants due to cash flow problems, and the lowering of reserve levels due to the failure to add necessary additional capacity.

If Mr. Navarro's assumptions concerning fuel prices and load growth are correct, the penalties he describes will be experienced. Many utilities and regulators today are not accepting historic trend lines as the basis for capital investment, but are

seeking to establish detailed economic forecasts of affected service areas to allow optimal system planning. Some utilities are even opting to build gas-fired generation as the most economical way to serve the forecast loads. These decisions may not in fact be driven by the inability to fund the construction of major nuclear or coal-fired generation, but rather by the simple recognition that the most economical solution for the type of load forecast is a different form of generation.<sup>1</sup>

One aspect of *The Dimming of America* that will be disquieting to those knowledgeable about the electric utility industry is Mr. Navarro's selection of statistics to support his underlying thesis. Quite simply, they are suspect. For example, Mr. Navarro cites as the cost of nuclear generated electricity, a price of 3.1 to 2.7¢ per kilowatt hour. In view of the fact that *The Dimming of America* was published in 1985, these statistics are truly extraordinary. Many nuclear power plants are coming on line today at a cost in excess of \$2,000 per Kw of installed capacity. Given the capital and O&M costs of nuclear plants, even the high range of the claimed cost per kilowatt hour simply is not reasonable. For example, if a 22% fixed charge rate<sup>2</sup> is applied to an original cost per Kw of \$2,000, and assuming that the plant operates at a 70% load factor, the cost per Kwh would be over 7¢ per Kwh, exclusive of nuclear fuel cost and fuel disposal.

While Mr. Navarro understates the cost of new nuclear generation, he largely dismisses the economic feasibility of large bulk power purchases among utilities. Basically, Mr. Navarro would prefer that utilities build their own power plants, rather than buy power from other utilities. What Mr. Navarro fails to note in his book is that bulk power purchases can be an effective way for utilities to bring on line large plants while avoiding excess capacity situations. For the selling utility such sales benefit current customers by reducing the amount of "excess reserves" and benefit future ratepayers as well by allowing the recapture of low embedded cost generation to meet future load. The purchasing utility also benefits because it can plan base load additions to coincide with the termination of purchase power contracts, allowing the more effective use of such additions.

While it is possible to take exception with a number of the assumptions that Mr. Navarro has made, as well as the conclusions that he has drawn from them, the fact remains that the volatile environment in which electric utilities are compelled to operate today, and the increasingly capital-intensive nature of their business, indicates the need for new solutions, including reexamination of the regulatory process. For example, on the issue of regulatory reform, Mr. Navarro's suggestion that utility regulators be professionally qualified, insulated as much as possible from political pressure, and provided with competent supporting staffs, is a point that is very well taken.

As for implementatin of reforms, Mr. Navarro suggests that if the states are unwilling to take the necessary measures, the federal government should step in with its own solutions. Mr. Navarro discusses a number of alternatives, including nationalizing regulation, or establishing regional regulatory commissions. A third possibility is the establishment of federal standards that would be mandatory on

---

<sup>1</sup>For a concise and interesting discussion of the factors now influencing utility planning see, Holman, *The Next Generation: Capacity Planning For The 1990's*, PUBLIC UTILITIES FORTNIGHTLY, September 5, 1985.

<sup>2</sup>A fixed charge rate is a shorthand method of establishing annual costs.

state commissions. The federal standards could include the allowance of construction-work-in-progress in rate base, future test years, and the rapid processing of rate cases.

Although the reforms proposed by Mr. Navarro unquestionably would improve the ability of utilities to pass on higher costs in a timely manner, and to finance the construction of capital-intensive facilities, it does not address directly those factors such as volatile fuel costs and uncertain load growth that make the utility planners' job so difficult. Perhaps we should look also at regional or national planning of capacity additions, and the establishment of a national transmission grid to allow the economic utilization of existing and new generation.

The main criticism that this reviewer has of *The Dimming of America* is that it is too simplistic. The book condemns regulation while failing to recognize the many other factors, including poor management, that have rocked the electric utility industry. As to the future, it is not at all clear that higher rates will constitute a panacea to the problems facing the industry. Quite simply, volatile fuel costs, uncertain load growth, and shifting environmental requirements continue to provide formidable obstacles to utility planning.

Nonetheless, anyone concerned with the electric utility industry should read this book. Although it may fail to address adequately some of the complex issues affecting the industry, and may ignore other relevant factors entirely, it will induce the reader to focus on the fact that the nation does indeed have a vital interest in prudent utility planning, and that if business as usual has not worked, the way business is done needs to be changed.

# FEDERAL REGULATION OF ENERGY

by

William F. Fox, Jr.

Shepard's/McGraw-Hill, 1983, 846 pages

Reviewed by

G. William Stafford\*

It may safely be said that any effort to catalogue “the entire spectrum of federal regulation of energy”<sup>1</sup> in a single volume certainly requires an enterprising effort on the part of the author. In this regard, Mr. William F. Fox, Jr., an Associate Professor of Law at Catholic University of America, has undertaken an examination of a vital aspect of United States policy in *Federal Regulation of Energy*, published in 1983 with an annual pocket supplement available. Despite the complex nature of the subject of his work, Mr. Fox has prepared a text that provides a significant description of many aspects of federal energy regulatory policy.

Initially, the book's title may prove somewhat misleading in that it approaches the subject from an historical perspective focused more on substantive than procedural issues. Although a reader gets the impression that the author at times has tried to do too much — at least from the standpoint of the energy practitioner — the historical and technical insights it offers the student of federal energy relations are valuable. Moreover, its detailed explanations of the methods used to meet federal energy goals are useful for those in the position of initiating energy policy. This strength notwithstanding, it appears unlikely that an energy law practitioner would benefit significantly from its use, other than from its historical point of view. A general impression is that the author may have been overly ambitious in his effort to undertake the monumental task of evaluating laws, regulations, and significant judicial decisions in a single work.

Although portions of the book — published almost two years ago — are already unavoidable casualties of time, readers may ultimately profit from its broad approach that highlights a generous cross-section of the energy regulatory process. However, even its use in this manner must be tempered by an awareness and understanding of the incredibly dynamic process it seeks to dissect. Some significant areas of the field of energy regulation are undergoing substantial analyses and restructuring of direction since the publication of the book in 1983. For instance, the natural gas industry and its federal regulators have attempted to respond to changing conditions concerning the transportation and marketing of gas by providing greater access to different markets for natural gas as well as greater latitude for the associated programs governing its transportation.<sup>2</sup> However, this development, as well as the Federal Energy Regulatory Commission's order which eliminates from the tariffs of natural gas pipelines those provisions that operate to

---

\*Associate, Ross, Marsh & Foster, Washington, D.C. The assistance of David L. Wallace, a third year student at the Georgetown University Law Center, in the preparation of this review is greatly appreciated.

<sup>1</sup>W. Fox, *Federal Regulation of Energy* at vii.

<sup>2</sup>See, e.g., *Tenneco Oil Co., et al.*, 28 FERC ¶ 61,383 (1984); *Tenneco Oil Co., Houston Oil & Mineral Corp.*, 25 FERC ¶ 61,234 (1983).

recover variable gas costs for gas not taken by the buyer,<sup>3</sup> are not mentioned in the most recent pocket supplement made available by the publisher.<sup>4</sup>

Despite these negative observations, the book should survive as a thorough and reliable basic research tool; a feat attributable in no small part to its focus on "what is rather than what ought to be."<sup>5</sup> That the author even managed to distill such an incredibly complex and wide-ranging field as energy regulation into one volume may itself be a testament to his comprehension of the issues involved in energy regulation.

The text of *Federal Regulation of Energy* is divided into seven basic parts, each analyzing different sources of energy which have been the subject of federal regulation. From an introduction to the origins of federal energy regulation, the author proceeds to an analysis and discussion of energy control issues relating to each regulated energy source. Although this approach at times makes the book a tedious "read", it may ultimately extend the book's shelf-life by providing the practitioner, policymaker and initiate alike with a ready reference guide to lessons of the past.

The following areas discussed in the chapter on petroleum typifies the broad scope of topics considered: leasing, exploration, and production of petroleum; development of the Outer Continental Shelf; taxation of oil; ratemaking for petroleum pipelines; petroleum product marketing; crude oil refining controls; the history of controls on price and allocation; considerations relating to the import and export of petroleum; federal reserves of petroleum; and environmental and safety developments. Other sections of the book provide similar in-depth deliberations in the areas of natural gas, nuclear energy, coal, and electricity. Certain other miscellaneous regulatory controls — such as those concerning synthetic fuels, emergency authorities, development of energy on Indian lands, and international energy regulation — are also considered.

To the author's credit, he cautions that "[g]littering generalizations about federal energy regulation make no sense in the 1980s."<sup>6</sup> This maxim is followed throughout *Federal Regulation of Energy* as it addresses, in some detail, many of the various production, exploration, environmental, pricing, ratemaking, taxation and certification issues relating to the regulation of various energy sources. The author provides a thorough and balanced discussion of the important contributions that prior legislation and regulation can make towards a proper understanding of current energy regulatory issues. He has carried this forward by analyzing the enabling legislation concerning most of the various energy sources. This includes not only the substance and history of significant amendments, but also the positions and goals set forth by various administrations. The inclusion of well-written synopses of certain key judicial decisions relating to legislation also helps the reader to develop some sense of the evolution of governmental policy in these areas.

Indeed, the contribution that prior legislation makes towards a proper understanding of current energy regulatory issues appears to be a major benefit to

---

<sup>3</sup>Order No. 380, Elimination of Variable Costs from Certain Natural Gas Pipeline Minimum Commodity Bill Provisions, FERC Statutes and Regulations ¶ 30,571; Order No. 380-A, FERC Statutes and Regulations ¶ 30,584, *appeal pending*, *Wisconsin Gas Co. v. FERC*, No. 84-1358 (D.C. Cir.).

<sup>4</sup>The 1985 Supplement is said to be current through November 1984.

<sup>5</sup>W. Fox, *Federal Regulation of Energy* at vii (emphasis omitted).

<sup>6</sup>W. Fox, *Federal Regulation of Energy* at 10.

be derived from study of *Federal Regulation of Energy*. Mr. Fox highlights this point through his emphasis on the justifications for certain federal energy regulations. For instance, the author demonstrates that the Windfall Profit Act<sup>7</sup> was aimed at reducing the profits accruing to oil companies as domestic petroleum price controls were lifted, the Geothermal Energy Act<sup>8</sup> was implemented to increase production of geothermal energy, and the Powerplant and Industrial Fuel Use Act<sup>9</sup> was meant to provide an incentive for utilities and industrial boilers to burn more coal and less oil and natural gas. With the benefit of this type of perspective, the author hypothesizes that "a unified energy policy may be impossible" in this country.<sup>10</sup> In fact, from this chronology of legislation the reader draws a true appreciation for the profound diversity and inconsistency that is federal energy regulation.

Rather than criticizing this diversity, however, Mr. Fox uses it as a teaching device by focusing on the evolution of legislation with respect to each energy source. The benefits of such an approach are numerous. Most significantly, perhaps, the reader understands that because energy policy (at any level) is not formulated in a vacuum, the policymaker must be simultaneously responsive to the pressure of politics, the demands of time, and the lessons of history. Potentially complicating this analysis is the realization that policymakers from different agencies with overlapping areas of responsibility must often respond to conflicting pressures and demands. The author observes that this potential for conflict is most striking in the area of natural gas imports, where federal jurisdiction is bifurcated between FERC and the Economic Regulatory Administration of the Department of Energy. He correctly points out the criticism of some that FERC, as an independent agency, is not as sensitive as ERA to the executive branch's conduct of foreign policy.

The author's discussion of the engineering and technical side of energy regulation is particularly noteworthy and should prove beneficial to many practitioners, if not the student. This success is attributable in no small part to the author's generous reliance on informative charts and diagrams. His examination of the change in nuclear siting and licensing regulations in the aftermath of the Three Mile Island incident best illustrates this point. In that section he skillfully blends a technical discussion of the series of events causing the accident with an analysis of its impact on the evolution of the Nuclear Regulatory Commission's present-day licensing process and emergency planning procedures. A similar approach is used successfully in his discussion of petroleum production issues and the economic regulation under which they have operated.

*Federal Regulation of Energy* draws strength from the author's recognition and analysis of the complete lack of any comprehensive national energy policy today. Mr. Fox's awareness and exploration of the various political, economic, scientific and technological facets of energy regulation highlight the considerable amount of diversity and inconsistency tolerated in the federal government's regulation of energy.

---

<sup>7</sup>Pub. L. No. 96-223, 94 Stat. 229 (1980).

<sup>8</sup>Pub. L. No. 96-294, 94 Stat. 763 (1980).

<sup>9</sup>Pub. L. No. 95-620, 92 Stat. 3291 (1978).

<sup>10</sup>W. Fox, *Federal Regulation of Energy* at 10.



## **SUBMITTED COMMITTEE REPORTS**

