barbed wire, danger, conflict and weapons. It seems that the teaching of energy and society, in all its complexity, may be ripe for review and new initiatives. Of course it will be necessary to avoid claiming that a single technology, or set of technologies, provides a unique answer to energy problems. To their credit, all the speakers at this symposium avoided this pitfall, whatever their personal convictions. It is a shame that the same could not be said for many of the comments from the audience which often lapsed into praise of a single energy source, with assertions masquerading as facts. One of the brick-bats hurled at education was that a little knowledge could be dangerous since it often left the recipients anxious about nuclear power, and it then took a great deal of effort before those poor people came to see the truth, that their fears were completely unfounded. Perhaps the area of energy education most in need of review is the one that cautions adults (of the expert variety) that energy issues may not always be as clearcut as they seem.

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Book reviews

Lacking logic and direction

ENERGY POLICY IN AMERICA SINCE 1945

by Richard H.K. Vietor

Cambridge University Press, Cambridge, UK, 1985, 379 pp, \$29.95

From any perspective, public or private, 1973 was a benchmark in US and international energy policy and policymaking. As most know, the problems that ensnared the harnessing of energy did not emerge with the OPEC oil embargo.

Complexity and confusion

Despite its many implications to modern history, the embargo did not bring into being the circularity, complexity and confusion characteristic of US energy policy and policy-making since the early 1940s. Indeed, a thoughtful assessment of the sweeping post-war energy economic developments may help us understand the problems and prospects of energy policy in the USA today. For one, we may be able to decide if the problems since 1973 are essentially new, or rather just manifestations of more constant relationships within the nexus of businessgovernment interaction. For another, we may be able to ascertain whether or not an historical perspective reveals any fundamental improvements in either energy policy product or process

Undeniable success

That US energy policy has traditionally lacked not only logic but direction is one of Richard H.K. Vietor's points in Energy Policy in America since 1945. Vietor offers these conclusions after tracing fossil-fuel developments through the post-war period. The first section of the book covers the 'Transition to peace and fluid fuels, 45-58', while the second documents 'Managing the surplus through the politics of stasis, 59-68'. A third identifies the 'Second energy transition: adjustment to depletion, 69-80'. The three sections add up to an undeniable success. It would be difficult to find a more accurate, complete and unabridged discourse on coal, natural gas and petroleum happenings up to 1980 that addresses the range of confusing currents as well. Yet, this discussion of energy is only the vehicle that Vietor uses to explain his thoughts on business-government relations; it is in this vein that we find the most distinguished contributions. We may consider energy the case study and businessgovernment relations the focus, with the irrationality of the energy policy process evident throughout both discussions.

Nevertheless, the energy-specific conclusions are noteworthy, both for their scope and soundness. Casting aside the chagrin of many energy officials, Vietor contends that

the government's domestic policies for fossil fuels generally failed. They reduced economic efficiency in return for marginal gains in equity, temporary and misleading stabilization of markets, and little or no benefit to national security. (p 345)

Throughout the book the author tells how rhetoric obscured rational thought, how an inefficient policy process emerged. From this and other evidence, he proposes some principles of energy management:

passive tools of intervention are better than active ones. A tariff is better than a quota. A windfall tax is better than price controls. National rate-making is less harmful than area rate-making, and a case-by-case approach is futile. If a synfuels plant is desirable, get industry to build it with the minimal subsidy and assumption of risk that is needed to succeed. (p 354)

Before developing these guidelines, however, Vietor depicts a scene of jurisdictional mismatches, short-sighted business and public policy, piecemeal policy development, ill logic and an absence of economics. It is clear, therefore, why the USA has not had – and still does not have – any coherent national energy policy. Vietor provides the accurate and authorative evidence for something we have all suspected when it comes to energy policy: the solutions are often worse than the problems.

At the same time, the book constitutes more a thoughtful discussion on business—government relations than a mere explanation of energy policy. From the overall energy findings, Vietor makes his point convincingly:

It is a saga, not of heroes and villains, but of ineffective institutions and administrative process. For readers convinced that big business contrived the energy crisis, the story must be disappointing. For those committed to theories of regulatory capture or public-interest reform, the story should be frustrating. And for managers, bureaucrats or others who would like to see a more effective industrial policy, the story should put the relationship of business to government in a critical perspective. (p 345).

So we must conclude that public policy (in this case energy policy) fails when it is not responsive to market forces:

markets . . . are a force regardless of the extent of administrative intervention. They cannot be ignored or bottled up indefinitely without repercussions, usually negative. (p 352)

The discussion also illustrates the futility of having methodologies that contradicts the market, or that continually support a failure of institutional relations. 'When the functions of making policy and carrying it out are blurred', Vietor notes, 'any potential for administrative effectiveness is reduced, if not lost altogether' (p 353). Vietor shows us some of the most salient developments in business—government relations are best rendered through a history of energy policy identification, formulation, implementation and evaluation.

Welcome contribution

Another welcome contribution can be found in Vietor's five propositions that form a useful template in explaining US political economy. The first proposes that 'market disequilibria precipitate policy issues and subsequent government initiatives': a second posits that 'political processes differ according to prevailing conditions of supply and price', and a third suggests that 'despite its superior resources, business exercises limited influences on public policy, in part because of its structural diversity, and that of the federal governments'. Fourth, 'administrative management of markets is likely to suffer from inherent problems that include faulty statutory design, incomplete data, bureaucratic constraints, and imposition of contradictory criteria'. Lastly, the 'breadth of government intervention in business fluctuates within limits set by ideology, institutions, and the market's own tendency to clear' (p 9.12, 352). These propositions, however self-evident they may appear, do add to our understanding of the contentiousness of devising sound energy policies and point out that a reliance on the market must be a guiding principle in policy-making. The five-tiered template also illustrates many of the failures of post-war energy policy, and would seem to explain policy performance in other areas of society as well.

Notable shortcomings

Having said all this, Vietor's work harbours some notable shortcomings. First, the discussion is only of fossilfuel policy developments from 1945 until 1980. There is little discussion of nuclear power, solar power or, for the most part, energy conservation. The caveat that nuclear power 'occurred' as an isolated political phenomenon' (p 2) is insufficient. Surely nuclear power has been an important, perhaps pivotal, part of the US energy scene since 1945; how can these energy sources, now producing up to 15% of power in some areas of the country, be excluded from a discussion of energy policy? The book also lacks a good analysis of electric utilities, especially of the recent financing problems, confronting the industry. The utilities deserve more coverage. In the same way. Vietor's discussion of the relationship of environmental planning to energy planning is less than adequate. Environmental concerns have guided energy policy since the late 1960s, and this banner development should not be overlooked or relegated to other works. No discussion of energy policy can be separated from one on environmental policy. Nor can nuclear power (or the associated issue of hazardous materials management) be ignored in the post-war energy discussion. At the very least, the book's title should be revised to reflect these omissions.

Host of changes

By ending his study at 1980, Vietor ignores a host of changes in post-war energy policy brought about by the Reagan Administration, under the guise of the 'free market system'. The Reagan Administration's assault was not only on specific energy policies but on the policy-making process itself, and therefore on the make-up of the energy policy community. From this, can we not conclude that the Administration cast aside the 'national energy policy that was in place in 1980' and refragmented the *de facto* energy policy process? Editorial deadlines might

have prevented an in-depth analysis of Reagan's new energy policy, but this is not reason enough to end a book; the book's 1985 publication allowed enough time to assess the impact of post-1980 developments. Other authors have already covered some of these issues and impacts and the changes over this period were so massive that abrupt energy changes could have been foreseen. Because 1980 was perhaps as critical to US energy policy as 1973, the cutoff at the Reagan Administration's tenure is unfortunate. Any post-1980 analysis will probably show continued fatalism in US energy policy.

Enlightening discussion

Overlooking these latter points, it is easy to recognize Vietor's contributions to energy studies, and more importantly, to business-government studies. The coherent, enlightening discussion of fossil-fuel economics and policy that he offers goes a long way to explain the US energy scene. Time and again, he marshalls considerate evidence to suggest that logic, even poor logic, has little in common with energy policy. However, the book is not the complete historical analysis of US energy policy since 1945 that its title implies - it is, rather, an analysis of fossil-fuel policies in the 1945-1980 period. In this respect, it is excellent. And not surprisingly, Vietor's recommendations apply nicely to development in other policy areas, primarily because he understands the dilemma: 'how to balance short-term circumstances of oversupply with the longterm inevitability of depletion' (p 76). In fairness to a wider group of readers, let us hope the misleading title will be changed to 'Business-government relations: A study of US fossil-fuel policy, 1945-1980'. Vietor deserves our thanks, however, for his achievements in addressing an entirely complex energy history with so much success.

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