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978-1-107-00517-4 - U.S. Energy Policy and the Pursuit of Failure

Peter Z. Grossman

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U.S. ENERGY POLICY AND THE PURSUIT OF FAILURE

U.S. Energy Policy and the Pursuit of Failure is an analytic history of American energy policy. For the past forty years, the U.S. government has tried to develop comprehensive policies on energy, yet these efforts have failed repeatedly. These failures have not resulted from a lack of will or funds but rather from an inability to differentiate between what could be undertaken and what could actually be accomplished. This book explains how and why various policy efforts have come about, shows why politicians have been eager to back them, and analyzes why they have inevitably failed. Over the past four decades, U.S. energy policy makers have pursued not just policies that have failed but also a policy process that leads to failure.

Peter Z. Grossman is the Clarence Efroymson Professor of Economics at Butler University. He is coauthor, with Edward S. Cassedy, of *Introduction to Energy* (Cambridge University Press, 1998) and coeditor, with D. H. Cole, of *The End of a Natural Monopoly: Deregulation and Competition in the Electric Power Industry*. His scholarly articles have appeared in journals such as *Energy Policy*, *Economic Inquiry*, *The Journal of Legal Studies*, and the *Journal of Public Policy*. For seven years, Professor Grossman was a regular columnist on economic issues for the *Indianapolis Star*, and he has contributed commentary to many magazines and newspapers, including *The Wall Street Journal* and *The Christian Science Monitor*.

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Primary Sources

BPL – George H. W. Bush Presidential Library

Collections:

John H. Sununu Papers, White House Chief of Staff, Jan. 21, 1989–Mar. 28, 1992: “Sununu”

Phillip D. Brady Papers, Assistant to the President and Staff Secretary, Jan. 13, 1991–Oct. 1992, “Brady”

CPL – Jimmy Carter Presidential Library

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Katherine (Kitty) Schirmer and Erica Ward, Associate Director of the Domestic Policy Staff (Ward succeeded Schirmer); combined papers cover the entire Carter presidency, entries are under “Schirmer/Ward”
Chief of Staff (COS) Papers: Hamilton Jordan, Carter aide, COS from 1979–80, “COS (Jordan)”

Landon Butler, Deputy COS, “COS (Butler)”

Frank Press Papers, Director, Office of Science and Technology Policy (OSTP), “Press”

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Michael Raoul-Duval Papers, Special Counsel to the President, “Duval”
Council of Economic Advisors (Alan Greenspan chair) Documents and Papers, “CEA (Greenspan)”

Richard B. (Dick) Cheney Papers, Deputy Assistant to the President; later Assistant to the President; “Cheney”

Glenn R. Schleede Papers, Domestic Council: Assistant Director for Natural Resources; Associate Director for Energy and Science, 1973–5, “Schleede”

Frank G. Zarb Papers, Administrator, Federal Energy Administration 1974–6, “Zarb”

NPL – Richard M. Nixon Presidential Library

Collections:

Edward E. David, Jr., Papers, Science Advisor to the President, Director of the Office of Science and Technology (OST), Chairman of the Federal Council for Science and Technology, and Chairman of the President’s Science Advisory Committee, “David”

Energy Policy Office (EPO) Papers, 1973: John A. Love, Director of the EPO June 1973–Nov. 1973, “EPO (Love)”; Charles J. DiBona, Deputy Director of the EPO and Special Assistant to the President for Energy, “EPO (DiBona)”

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WCPL – William Clinton Presidential Library

WSP – William Simon Papers, Lafayette College (catalogued by Drawer number, instead of Box)

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Preface

On August 25, 1980, Congressman Jim Wright (D-TX) rose on the floor of the U.S. House of Representatives to address his colleagues about an energy bill, the Magnetic Fusion Energy Engineering Act of 1980 (MFEE). “[T]his decision and what flows from it,” Wright declared, “may well rank alongside the great discoveries of history, the discovery of fire and the discovery of electric power.”¹ The legislation had dramatic intent. It would solve all of America’s long-term energy dilemmas by demonstrating the commercial feasibility of electric power generation by nuclear fusion, a controlled version of a hydrogen bomb. The bill made it “the declared policy of the United States . . . to establish a national goal of demonstrating the engineering feasibility of magnetic fusion by the early 1990s . . . [and] operation of a magnetic fusion demonstration [electric power] plant at the turn of the twenty-first century.” The bill passed the House with only six dissenting votes; later it would pass the Senate unanimously. The principal author of the bill, Representative Mike McCormack (D-WA), claimed it was “the most important piece of energy legislation passed by this or any other country.”²

The hubris of the bill was breathtaking. The passage of a piece of legislation portrayed as the catalyst of the next “discovery of fire”? Sustainable net energy from nuclear fusion had never been achieved in the laboratory, much less on the scale of a power plant. There were major scientific and engineering hurdles to be overcome. Essentially, Congress was legislating that there *would be* solutions by dint of the bill’s passage. Wright likened the effort to the Manhattan Project that led to the atomic bomb; McCormack compared it with the Apollo space program. Actually, it was comparable to

¹ CR, 96th, 22898, Aug. 25, 1980.

² Quoted in “Nuclear Fusion Growth Aim of New U.S. Law,” *New York Times*, Oct. 9, 1980, D1.

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neither. Neither of those programs sought to create a technology that would be commercially successful. This program was expected to create a new technology for an estimated cost of \$20 billion that would ultimately triumph in the marketplace. By 2050, McCormack predicted, all electric power would be generated by nuclear fusion. The fuel, a heavy isotope of hydrogen found in seawater, was sufficient to provide energy “literally . . . [for] billions of years.”³ In other words, it would resolve all U.S. energy problems essentially forever.

In the months before the bill was passed, the United States had just experienced its second major energy crisis in less than a decade, and the American people wanted solutions. Fusion was the ultimate answer – and especially attractive to members of Congress because they really had not voted to do much of anything. The \$20 billion was not authorized or appropriated. It was just a wish. It was a vote then for an energy solution without a concern about either cost or feasibility. As one lobbyist declared at the time, “Congress needed to vote for an energy *thing*, particularly one with the potential to save the world [and where] no extra money would be spent at first.”⁴

Within a few years, it became apparent that the technology was nowhere near where it needed to be to make this fantasy come true. The breakthroughs did not materialize, and by the early 1990s, so far from a demonstration of feasibility, the goal of fusion seemed farther away than when the bill had passed. A physicist told *Business Week*: “People have been saying ‘fusion is 30 years away – and always will be.’ Except now it seems to be 60 years away.”⁵ As of this writing (2012), the technological hurdles of fusion still have not been overcome.

Yet, the MFEE Act was illustrative of the way U.S. energy policy had developed during the 1970s – and to a large extent has remained to this day: there is always a promised solution, usually through a technological wonder, or a group of wonders, that will settle America’s energy dilemmas once and for all. Officials generally promise that this solution will be achieved without imposing significant costs on voters, either because they claim it can be achieved cheaply or because the cost will be imposed on oil companies or other vilified groups with large resources. But in the end, there is no solution. The wondrous technological answer does not materialize. The MFEE was probably the most extreme example of a congressionally mandated energy

³ CR, 96th, 22897, Aug. 25, 1980.

⁴ Quoted in R. Smith (1980, 291).

⁵ Quoted in “Hot Fusion Is Burning Dollars – and Little Else,” *Business Week*, Oct. 15, 1990, 62.

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panacea, but the same year President Jimmy Carter signed a bill to turn massive amounts of coal into a substitute for oil and natural gas, and the year before that, he had proclaimed as a national goal that by 2000, 20 percent of all U.S. energy would be solar. Of course, Carter's plans did not work out either. The liquefied, gasified coal program was a failure in all respects, and as of 2011, solar was contributing less than 1 percent to U.S. energy consumption.

Nevertheless, policy makers keep returning to these sorts of ideas whenever there is believed to be an energy crisis. A technological energy solution has never been realized, yet there is always a next idea for policy makers to endorse. The United States continues in the pursuit of the latest version of the same legislative program with the belief that this time, things will be different. But the motivations, along with almost delusional thinking that has been exhibited in the past (as in the case of the MFEE), do not change. Members of Congress declare that the new legislation will be, as they avowed the last time, transformative; this time, Congress will act and America will discover fire.

I began to study energy issues quite by chance. I was a business and financial journalist working in New York City in the late 1970s when I was asked to write a book for young people about the dramatic power failures of New York City and surroundings that had occurred in 1965 and 1977. The second of these I had witnessed, and I had accumulated a number of articles on what had happened and why. The book, *In Came the Darkness: The Story of Blackouts* (Four Winds Press 1981), was my introduction to the energy field.

At the time I began it, I knew little about energy and little also about economics. I had experienced the gas lines of 1973–4; the ones in 1979 had less impact on me personally because at that time I did not own a car. But generally, I accepted the prevailing narrative about energy: America was rapidly running out of all fossil fuels; the country was dependent on oil from countries that belonged to the Organization of Petroleum Exporting Countries (OPEC), most of which wished us ill; the prices of oil and natural gas were going to rise continuously; nuclear power was inherently dangerous; and Americans would have to learn to get by with less energy and probably would be poorer because of it.

Over the ensuing decade, I began to study economics and worked with an electrical engineering professor, Edward S. Cassedy, on a college-level text on energy and society designed for STS (science, technology, and society) programs. The first edition of the book, *Introduction to Energy: Resources, Technology and Society* (Cambridge University Press 1990), although full of

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useful information about the processes of energy conversion and the methods of resource measurements, reflected the 1970s' narrative. Supply was dwindling but with the proper support, technologies such as solar heating would be successfully commercialized. It was a technology considered only five years away from mass adoption.

As the 1980s passed, however, it became clear to me, first, that the narrative was wrong. The world was not running out of oil and gas. Reportedly, less than twenty years of oil remained in the United States in 1980, but in 1990, there was said to be about the same amount of oil left. Second, it seemed evident that the 1970s' energy narrative was still the only way policy makers and much of the public ever thought about energy. As I was completing my Ph.D. in economics at Washington University (St. Louis), I returned to energy issues and wrote a working paper for the Center for the Study of American Business (St. Louis) on alternative energy. It was plain that no alternative energy technology, including nuclear power, had ever become truly cost competitive with conventional technologies; my argument was that top-down directed policy on alternative technology development was likely to fail if the goal was actually commercialization. The commercialization process was a far more complex set of social interactions than could be encompassed and directed through any piece of legislation, executive order, or agency diktat. This did not mean that government had no role to play in energy development but that its role needed to be rethought to account for the actual processes of innovation, adoption, and diffusion.

I revisited the entire range of energy issues with the revision of *Introduction to Energy*, which appeared in a second edition in 1998. By the time Professor Cassedy and I had finished, I was becoming convinced that the U.S. energy policy process itself was, by its nature and construction, destined to fail. It was, above all else, crisis-driven and thus tended to lurch from extreme legislation like the MFEE to measures that were largely ineffectual to an unspoken acceptance of a status quo in which markets determined prices and quantities of energy resources; people complained when the price was too high and just used more when the price fell. But each time there were rising prices, policy makers declared a new crisis and brought out the exact same ideas that they had had in the previous crisis, and all of the themes could be traced back to the energy crises of the 1970s. Few policy makers seemed to have new ideas. Debates from the 1970s could have been cut and pasted into the Congressional Record of the last twenty-five years with little loss of consistency. The only changes were the target dates, the names of the legislators and presidents, and sometimes the preferred technology.

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But the issues were framed the same way, blame was cast on many of the same players, and the solutions were based on the same assertions.

It may be fairly noted that as a historian of policy, I have the benefit of hindsight, and the arguments I make about the consequences of policies that seem obvious today may not have seemed so at the time they were enacted. But there have been lessons of history with respect to energy that go back decades. Policy failures are not a recent phenomenon. Nevertheless, for the past forty years, it appears that policy makers have learned nothing from the past. That policy has always failed has seemed irrelevant to each new Congress, to each new presidential administration, and to each new agency head. It is as if officials are saying that they know their ideas will fail, but they will pursue them anyway because they cannot think of anything else to do. They will pursue a course of action that sounds pleasing to voters but has no chance of success. They will willfully pursue failure.

Finally, that has been the story of U.S. energy policy, the pursuit of failure, a story that has seemed impervious to facts and remains mightily resistant to change.

Hence, the title and the genesis of this book.

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A book like this depends on cooperation and assistance from many people. Above all, I relied on a number of library collections, particularly those housing the papers of presidents Richard Nixon, Gerald Ford, Jimmy Carter, George H. W. Bush, and William Clinton, as well as the Library of Congress and papers in the libraries of Lafayette College and Washington State University. The staffs of all these libraries were extraordinarily helpful in locating pertinent records related to the events and policies in question. I would mention in particular the help I received from Jason Shultz (Nixon), William McNitt (Ford), Albert Nason (Carter), and Doug Campbell (Bush) as well as the assistance of Diane Shaw (Lafayette College, William Simon Papers) and Cheryl Gunselman (Washington State University, Mike McCormack Papers). Ms. Gunselman also put me in touch with Congressman McCormack, who gave a long engaging interview that provided a great deal of background on the making of energy policy during his congressional tenure, 1971–80.

I owe special thanks to Professor Joseph Pratt, head of the Center for Public History and the Energy Management and Policy Group at the University of Houston (UH). Professor Pratt offered me the opportunity to spend the spring 2012 semester at UH teaching from a draft of my book, which in itself was of great value, as discussions with students helped me clarify my ideas. He also gave my manuscript a remarkably close and extremely helpful reading. Overall, my book benefited greatly from my experience at UH.

I also received important help from my colleagues at Butler University, where I have taught since 1994. The Business School dean (Chuck Williams) and associate deans were entirely supportive of my efforts on this book, gave me a release from teaching for a semester, and encouraged me to take the opportunity to go to Texas. William Rieber, chair of the combined Economics, Finance, and Law departments during most of this period,

was an especially strong advocate on my behalf, for which I will always be grateful. His successor as chair, Robert Bennett, was completely supportive as well.

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I was able to explore the issues of this book in presentations to other seminars and colloquia. In talks to Indiana University's Vincent and Elinor Ostrom Workshop in Political Theory and Policy Analysis; the Foundation for Research on Economics and the Environment; the Searle Center for Law, Regulation and Economic Growth (Northwestern University); and the Southern Economic Association, I received excellent suggestions from many scholars and policy experts. The latter two presentations were facilitated by David Haddock (Northwestern School of Law), who has encouraged my work in this area for several years.

I also wish to thank five reviewers of my proposal for Cambridge University Press who not only persuaded Cambridge to contract for the book but provided suggestions to get the project moving in the right direction; one reviewer for a helpful positive review of the entire manuscript; Professor James Smith (Southern Methodist University), a leading economic historian of U.S. energy, for a quick turnaround and helpful comments of a draft of Chapter 3; Charles Silverstein for useful feedback on Chapter 1; John Mugge, Larry Powers, Kayla St. Clair and Nathan Grossman for assistance in the development and completion of the book; my editor, Scott Parris, for his support of this project and acceptance of my occasionally revised timetable to completion; his assistant Kristin Purdy, for help in getting the completed manuscript in process; and the Cambridge production staff for the work they did in getting this book to press.

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