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UNITED STATES SYNTHETIC FUELS CORPORATION:
Its Rise and Demise

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UNITED STATES SYNTHETIC FUELS CORPORATION:

Its Rise and Demise

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Dedication

To the Future:

Jackson Priddy Bell

Eleanor Amsler Bell

Leighton Charles Priddy

In Memory of:

Ashley Horne Priddy

Acknowledgments

This project began in 1994, when I returned to school to pursue a master of arts in American history at Southern Methodist University, where a beautiful friendship developed with historian and Professor R. Hal Williams. In classes I took under Hal, I found his enthusiasm and passion for history infectious. When it came time to select the subject for my thesis, I was compelled that the topic had to be the United States Synthetic Fuels Corporation (SFC), where I had worked from 1980-82, and that Hal must be my advisor. That academic paper was completed in 1999 for the MA degree, but it was obvious to me at that time that I had barely scratched the surface of the subject. It seemed to me a superb dissertation topic, with much remaining to be discovered. And, so began a twelve-year pilgrimage to The University of Texas at Austin in 2001 to complete my mission at UT's renowned Department of History.

Many individuals assisted me on this journey. Several former employees of the United States Synthetic Fuels Corporation, with whom I had worked, provided valuable information and guidance. Ralph Bayrer, vice president of projects, was gracious with his time and SFC papers which he had retained. He wrote a book on the SFC that has a different perspective than my dissertation does, yet we remain friends to this day. Larry Lukens was likewise generous with his schedule in offering critical comments on the manuscript as it developed. Betty Nolan shared her SFC papers, which provided superb insights, enhanced through several conversations. Skyla Harris remembered many things that had receded in my mind. Jim Bowden also shared his documents and recollection of events that occurred while he was at the SFC. Former board member Eric Reichl and his lovely wife, Fran, invited me to stay at their house in Princeton, New Jersey, when I visited at length with Eric.

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My mother, Kathryn Priddy, endured my long absence from Dallas and is jumping with joy that this effort is at long last over, and eagerly anticipates our return to Dallas. She has been an ardent supporter of my educational dreams from the start. I wish my father were alive to share in this moment. His two brothers and my uncles, Robert and Charles, celebrate with me.

Throughout this marathon, my wife, Dianne, has endured the good, the bad, and the ugly. We met in 1972 while at UT in the BBA program. She has been with me for the MBA in 1975, the MA in 1999, and now the pinnacle – the PhD. The last degree has tested her patience and love to the nth degree. During the past twelve years at The University of Texas at Austin for the doctorate, our family has blossomed. Our daughter, Amsler, completed law school, married Don

Bell, and blessed us by giving birth to our first two grandchildren, Jackson Priddy Bell (2005) and Eleanor Amsler Bell (2007). Our son, Ashley, married Ashley Suzanne Johnson and they bore us a precious third grandchild, Leighton Charles Priddy (2012). While I have been studying history, our son Ashley graduated from Baylor University with a BA in History, enlisted in the US Army for four years, and after concluding his military commitment, he began studying veterinary medicine and will graduate in June 2013 from the University of Glasgow, receiving his DVM degree a month after his father receives his PhD. Our daughter-in-law also graduated from law school and both Amsler and Ashley Suzanne passed the State of Texas Bar exam. Amsler also passed the State of New York Bar exam.

Without the active assistance of this large group of family, friends, and supporters, as well as the librarians at several presidential libraries and Peggy Ann Brown in Washington, DC, who located many documents that at first seemed impossible to find, I would not have been able to accomplish my mission. I am deeply grateful to each and every one. Thank you!

**UNITED STATES SYNTHETIC FUELS CORPORATION:
Its Rise and Demise**

Hervey Amsler Priddy, Ph.D.

The University of Texas at Austin, 2013

Supervisor: David M. Oshinsky

The energy crisis during the presidency of Jimmy Carter stimulated several major pieces of legislation that together produced the Department of Energy (DOE), the National Energy Plan (NEP), the windfall profits tax, and the Energy Security Act of 1980 (ESA). This dissertation focuses on the Energy Security Act, which was signed into law on June 30, 1980, and created the congressionally chartered United States Synthetic Fuels Corporation (SFC), one of the initial efforts to provide the United States energy security. John Sawhill, nominated by Carter as the first SFC chair, was responsible for managing the corporation along with six other directors. The Senate confirmed none of these seven individuals. This inaction forced Carter to make recess appointments of Sawhill and four others to the SFC board. With the election of former California governor Ronald Reagan as president in November 1980, emphasis on the SFC and financial

assistance for development of a domestic synthetic fuels industry diminished – so much so that the corporation closed its doors in April 1986.¹

The SFC funded four synthetic fuels projects. None survive today.² During its life, Synfuels Corporation spent approximately \$960 million. Congress authorized funding of \$88 billion plus \$35 million in annual administrative expenses (adjusted for inflation) for the SFC, with a maximum of three hundred full-time professional employees, over its legislated twelve-year existence. The mandated goal was the production of at least five hundred thousand barrels of crude oil equivalent per day of synthetic fuels from domestic sources by 1987 and at least two million per day by 1992. The SFC was legislatively chartered to be free of normal government rules, regulations, and procedures. Carter did not want the synthetic fuels effort to be housed within the Department of Energy. He knew that to meet the goals of the act, any entity must be able to move with speed and be permitted to pay above government-level salaries.

Reagan, who did not like the SFC or its mandate, preferred the free market with little or no government interference. Congress simply could not leave the SFC alone, however. So instead of a seven-member board of directors, the SFC ended up with a board of 542 – counting members of Congress.

This dissertation provides an in-depth look at the SFC, Carter's solution to the energy crisis as presented in his July 15, 1979 address to the nation on energy and national goals, commonly referred to as "The Malaise Speech." This talk from the Oval Office, was unique, and

¹ *Synthetic fuels*, for purposes of the Synthetic Fuels Corporation, were defined as any solid or liquid that could be used as a substitute for crude oil or natural gas and that was produced by chemical or physical transformation – primarily from coal, oil shale, or tar sands, including heavy oil. Synthetic fuels did not include solar, wind, renewable, or nuclear. *Energy Security Act Conference Report*, No. 96-824, June 19, 1980, 22.

² The Great Plains Coal Gasification project still operates, but the SFC never funded this project.

remains today the most unusual presidential address in the nation's history. Historians have written and analyzed the first half, a sermon emphasizing all that was wrong with America, but few writers have done the same for second half of the speech, which is the subject of this paper. In the latter part of his speech, Carter emphasized his solution to the country's malaise: solving America's energy shortage, to be accomplished by what he termed an "energy security corporation."

Only two authors have examined the SFC. Sabrina Willis penned a 1987 essay titled "The Synthetic Fuels Corporation as an Organizational Failure in Policy Mobilization," which appeared in *The Unfilled Promise of Synthetic Fuels*, edited by Ernest J. Yanarella and William Green. She argued that SFC problems were "so many and so serious that it is difficult to determine exactly why the corporation failed to come [even] close to achieving the goals set for it by Congress"³ Willis was particularly critical of Ed Noble, appointed as chair of the board of directors by Reagan, when she wrote, "his [Noble] managerial style was too weak to effectively guide a controversial organization."⁴ Willis did not have access to the SFC papers, staff or members of the board of directors. Furthermore, she did not research or make use of the plethora of published congressional hearings. Although her examination was superficial, it was definitely pointed.

In 2011, Ralph L. Bayrer, former SFC vice president of projects, published his account, *The Saga of the U.S. Synthetic Fuels Corporation: A Cautionary Tale*.⁵ Bayrer, an engineer by

³ Sabrina Willis, "The Synthetic Fuels Corporation as an Organizational Failure in Policy Management," in *The Unfilled Promise of Synthetic Fuels: Technological Failure, Policy Immobilization, or Commercial Illusion*, Ernest J. Yanarella and William C. Green, eds. (New York: Greenwood Press, 1987), 71.

⁴ *Ibid*, 85.

⁵ Ralph L. Bayrer, *The Saga of the U.S. Synthetic Fuels Corporation: A Cautionary Tale* (Washington, DC: New Academia, 2011).

education and profession, addressed primarily the engineering aspects of the SFC projects. He presented a favorable assessment of Noble and his leadership. Noble, in Bayrer's opinion, "had a clear view of what he [Noble] wanted to achieve at the SFC," and several "accomplishments" while chair of the Synthetic Fuels Corporation.⁶ Bayrer dedicated his book to Noble, noting the SFC "came to a premature end," and had David Stockman, Reagan's director of the Office of Management and Budget not intervened, Noble would have been almost successful in his strategic vision.⁷ Bayrer, however, did not interview former employees, former board members, or congressional leaders and their staffs. He relied instead on congressional hearings and his own papers. Because Bayrer worked for the SFC from its beginning to the end, the viewpoints in his publication are thus clouded by personal involvement. He did provide invaluable assistance to the author though, answering questions about the projects and providing needed documents, for which the author is most grateful. Yet, after considerable research and numerous interviews, the author does not agree with Bayrer's assessment of the SFC.

The United States Synthetic Fuels Corporation was a superb idea. Its objective was a bold step by a president to address America's addiction to imported crude oil, which had made the nation vulnerable to the vagaries of an unstable region of the world. Unfortunately, a vacuum of presidential leadership, congressional meddling, and embarrassingly poor management cursed the SFC from its very creation.

Almost a full year – 351 days – passed from the date Carter offered the concept of the SFC to the nation until its enactment into law. Moreover, Carter's distraction with a possible

⁶ Email from Ralph Bayrer to author, July 17, 2012.

⁷ Bayrer, 333. Noble's strategic vision was outlined in his 1985 essay in the *Oklahoma Law Review* (38, 1985), 821-824: "Give the country a permanent insurance policy against ever again being held hostage by foreign energy producers."

primary opponent, Sen. Edward Kennedy (D-MA), whom he disliked intensely, hampered the president's ability to remain focused on the issue, as well as his view of the presidency as a trusteeship, above politics.⁸ After the election of Ronald Reagan to the presidency, all interest in supporting synthetic fuels evaporated. The SFC became merely a place to repay political donors and friends – and minor ones at that.

By thoroughly examining the rise and demise of the United States Synthetic Fuels Corporation, historians will be able to see *prima facie* evidence of the importance of commitment, persistence, and leadership – both presidentially and managerially – and how it is possible for a government entity to vanish into the dust bin of history. And, we will be able to answer the questions: what was the SFC, what did it accomplish, what happened to it, and why?

⁸ Charles O. Jones, *The Trusteeship Presidency: Jimmy Carter and the United States Congress* (Baton Rouge, LA: Louisiana State University Press, 1988).

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Introduction

To a very dangerous extent, the vital security of this Nation is in serious jeopardy. We are dependent for many of our essential raw materials on sources in far-off lands, many under the control of possible fickle allies or timid neutrals, some veritably under the guns of our potential enemies.

“Availability of Strategic and Critical Materials to the U.S. in Time of War and for Our Expanding Economy: Hearings Before the United States Senate Committee on Interior and Insular Affairs, Eighty-Third Congress, Second Session” July 9, 1954.

I believe oil represents great political power which has been used...to serve Arab aspirations.... It will...continue to be used in the future and will remain – after God – the real power on which the Arab nation can rely for realizing its aspirations.

Sheikh Ahmed Zaki Yamani, Saudi Arabian oil minister, “The Impact of Oil on International Politics,” lecture at King ‘Abdul-‘aziz University in Jeddah, Saudi Arabia. (April 6, 1980)

[As oil prices increase,] consumption falls and capital is invested in searching for alternative sources of energy. If we force western countries to invest heavily in finding alternative sources of energy, they will. This would take no more than seven to ten years and would result in reducing dependence on oil as a source of energy to a point that would jeopardize Saudi Arabia’s interest.

HE Sheikh Ahmed Zaki Yamani, Saudi Arabian oil minister, lecture at King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, “Petroleum: A Look into the Future.” (January 31, 1981)¹

*America is addicted to oil.*²

President George W. Bush
(January 31, 2006)

*The Iraq war is largely about oil.*³

Alan Greenspan
(2007)

*The U.S. wants a balance of power in the [Middle East] that prevents any power in the region from being able to block the flow of oil to world markets by military means.*⁴

Walter Russell Mead
(March 7, 2012)

¹ “Yamani Takes a Look at the Future for Oil,” *Petroleum Intelligence Weekly, Supplement*, March 9, 1981, 1-5.

² George W. Bush, “Address Before a Joint Session of the Congress on the State of the Union,” January 31, 2006. www.presidenct.ucsb.edu/ws/?pid=65090

³ Alan Greenspan, *The Age of Turbulence* (New York: Penguin Press, 2007), 463.

⁴ Walter Russell Mead, “America Is Stuck With the Middle East,” *Wall Street Journal*, March 7, 2012, A17.



Figure 1. Logo for the United States Synthetic Fuels Corporation

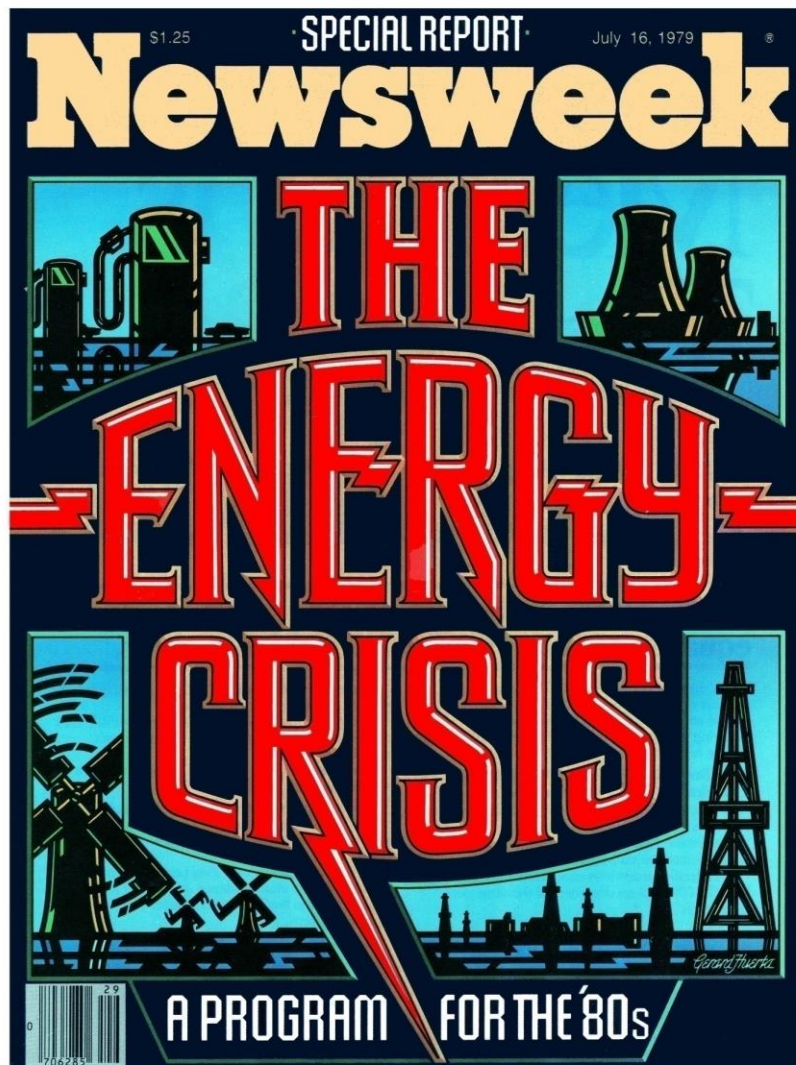


Figure 2. *Newsweek*, July 16, 1979

Over thirty years ago, the United States had an opportunity to use the enormous ingenuity and “can-do attitude” of its people to become free from the burden of importing such large volumes of crude oil. This window of opportunity lasted but two thousand days and then disappeared into oblivion, forever tarred by the criticisms about government waste and mismanagement. What was it? It was the United States Synthetic Fuels Corporation (SFC), a congressionally chartered corporation, created with limitations on duration, spending, professional employees, and budget. The concept was visionary, but it became embroiled in a vacuum of presidential leadership and commitment, congressional meddling, and incompetent management. The demise of the SFC is the exception to President Ronald Reagan’s theory that “a government bureau is the nearest thing to eternal life we’ll ever see on this earth.”⁵

The SFC will be addressed in eleven chapters. The Seventies are covered in chapter one. Energy crises are the unifying theme of this era and these emergencies had a deep but quickly forgotten impact on American society. The background surrounding President Jimmy Carter’s introduction of his Energy Security Act is described in chapter two. The third chapter focuses on the events directly preceding Carter’s July 15, 1979, “Malaise Speech” to the nation, while chapter four examines the speech and its import. The next chapter looks at the efforts of the Carter administration to recapture the initiative from Congress to address the nation’s 1979 energy crisis, as well as Carter’s successful work resulting in the Energy Security Act of 1980, thereby creating the United States Synthetic Fuels Corporation. Chapters six, seven, and eight consider the SFC during the leaderships of its three and only chairs: John Sawhill, Jack McAtee, and Edward Noble. Environmental and socioeconomic issues of synthetic fuels projects are the

⁵ Ronald Reagan, “A Time for Choosing” speech, October 27, 1964: www.reagan/utexas.edu/archives/reference/timechoosing.html

subjects of chapter nine, and chapter ten explains the projects that were funded by the SFC. The conclusion and epilogue view the legacy of the corporation and the 2012 status of the energy supply situation in the United States.

Our story begins with President Jimmy Carter signing the Energy Security Act (ESA) into law on the South Lawn of the White House on Monday afternoon, June 30, 1980.⁶ On this warm, partly sunny day, with temperatures in the high 70s and humidity approximately 40 percent, there was no hint of the dark clouds that would soon emerge over this promising legislation.⁷ The ESA created the congressionally chartered United States Synthetic Fuels Corporation (SFC), which was designed to encourage private industry to enter into the domestic production of synthetic fuels.⁸ The hope was that such a step would reduce the nation's dependence on imported crude oil, especially from politically unstable countries. The Energy Security Act, for purposes of the United States Synthetic Fuels Corporation, defined the term *synthetic fuel(s)*, briefly, as any solid or liquid – primarily from coal, oil shale, or tar sands, including heavy oil – that could be used as a substitute for crude oil or natural gas and that were produced by chemical or physical transformation.⁹ Synthetic fuels, per definition in the Energy Security Act, did not include nuclear power, wind power, solar power, or renewable energy sources.

⁶ President Jimmy Carter, Energy Security Act Remarks on Signing S. 932 into Law, June 30, 1980. The American Presidency Project (APP). www.presidency.ucsb.edu/ws/?pid=44684

⁷ “The Weather,” *Washington Post*, July 1, 1980, C2.

⁸ The ESA contained much more than just the legislation to create the SFC. John Deutch, under secretary of the Department of Energy during the Carter administration, argues that it passed because it contained “something for everyone” and because the windfall profits tax funded almost everything in the ESA. As an example, it was probably the first legislation to authorize and fund a study of the climate effects of greenhouse gases: Title VII – Acid Precipitation Program and Carbon Dioxide Study. John Deutch, *The Crisis in Energy Policy* (Cambridge: Harvard University Press, 2011), 170.

⁹ Conference Report, *Energy Security Act*, Report No. 96-824, June 19, 1980, 22. *Heavy oil* is any type of crude oil that does not flow easily and is closely related to tar sands or oil sands. The Act had subsections on Renewable Energy Initiatives, Solar Energy and Energy Conservation, Geothermal Energy, Acid Precipitation Program and Carbon Dioxide Study, and Strategic Petroleum Reserve.

Carter's efforts to create this government entity had begun with his July 15, 1979, evening Oval Office address to the nation, subsequently referred to as his "crisis of confidence" or "malaise" speech.¹⁰ Almost a full year then elapsed before the necessary legislation was passed. At the signing ceremony, Carter stated that the country would be celebrating its birthday in a few days and that he could think "of no more fitting present [for the United States] than this declaration of energy security or energy independence." Here, then, was the keystone of a national energy policy.¹¹

Washington, DC, was positively consumed with synfuels fever, so much so that a freshly minted twenty-two-year-old political science major, Bill Rankin, from the University of Georgia started a well-respected weekly publication, *The Synfuels Report*, out of his garage and eventually increased its \$250 annual subscription base to almost one thousand.¹²

What began with such fanfare, promise, and excitement, however, died a quiet death on April 18, 1986. The SFC existed for approximately two thousand days, and yet nothing now remains. The organization left no legacy, and few explanations have been offered for the failure of the federally chartered corporation that President Carter had promised would "launch the greatest outpouring of capital investment, technology, manpower, and resources since the space program . . . and would dwarf the combined efforts expended to put Americans on the moon and to build the entire Interstate Highway System."¹³

¹⁰ President Jimmy Carter, Address to the Nation on Energy and National Goals, July 15, 1979, *APP*. www.presidency.ucsb.edu/ws/?pid=32596 (The word *malaise* was not actually used in the speech. Carter speechwriter Gordon Stewart later opined that Bob Shrum, a senior political consultant to Sen. Edward Kennedy (D-MA), attached this moniker to belittle Carter while helping Kennedy in his 1980 presidential campaign.)

¹¹ Carter's Energy Security Act Remarks on Signing S. 932 into Law, June 30, 1980.

¹² William Rankin, phone interview with author November 11, 2011, and email to author December 16, 2011.

¹³ *Ibid.*

The SFC was in the tradition of the New Deal, the Fair Deal, and the Great Society – a federal industrial policy that enabled the government to influence and engage in the private sector. The government attempted to enter the energy industry by swaying the free-market mechanisms. Only these efforts would place America in a proper position, with the necessary “weapons to wage and win the energy war.”¹⁴

In early 1948, the nation’s preeminent geophysicist, Everette Lee DeGolyer, testified before the Special Subcommittee on Petroleum of the Committee on Armed Services in the House of Representatives. The subcommittee “bitterly attacked” DeGolyer for maintaining that the nation could not safely rely on its own oil reserves in case of accelerated demand during wartime. Rep. Lyndon Johnson (D–TX) pressed him hard on this matter, and the testimony finally ended with this exchange:¹⁵

Mr. Johnson: Then, you think that we are safe in assuming that we have sufficient reserves, and also sufficient reserves can be deployed in this hemisphere to make us self-sufficient in oil?

Mr. DeGolyer: I do not think that you are safe in making that assumption. There are two hard facts in the oil business today, and you can like them or dislike them, but they are there and there is no question about it. . . . One of them is that the United States is the greatest consuming area in the world, and the other one is that the Middle East is the area of greatest proved reserves in the world.¹⁶

DeGolyer added that he had no “desire to see government in business.”¹⁷

A few years later, in January 1951, President Harry Truman, concerned about the nation’s material resources during a period of apprehension over the possibility of an expanding conflict in Korea or another world war, formed the President’s Materials Policy Commission. This group

¹⁴ Carter’s Energy Security Act Remarks, June 30, 1980.

¹⁵ Lon Tinkle, *Mr. De: A Biography of Everette Lee DeGolyer* (New York: Little, Brown, 1970), 285.

¹⁶ *Petroleum for National Defense*, Hearings Before the Special Subcommittee on Petroleum of the Committee on Armed Services, House of Representatives, January 19, 20, 21, 22, 28, 29, 30; February 2, 4, 5, 6, 16, 18, 19, 20, 23, 25, 26; March 8, 9, 10, 11, 12, 19, 22, 1948, 371.

¹⁷ *Ibid.*, 374.

was informally referred to as the Paley Commission after its chair, William S. Paley. Truman charged it with examining the nation's materials problems, including energy supplies and demand. The essence of the energy dilemma, according to the Paley Commission, was that the country lacked adequate domestic supplies for future demand growth, especially in times of war. Issued in June 1952, the commission's report comprised five books. Volume III examined the outlook for energy sources and reported that the United States would soon confront a decline of available domestic crude oil supplies. In addition, the report stated, the country would become vulnerable to dependency on huge volumes of imports from the highly volatile Middle East, an area that was traditionally susceptible to attacks from nations in need of crude oil reserves. In the Paley Commission's view, government research should continue to be directed toward bringing the production of oil products from oil shale and coal-based synthesis to a stage at which such endeavors would be commercially attractive. Recommendations in the report encouraged the idea that moderate financial assistance should be given to private companies ready to go ahead with commercial production of oil shale or oil from coal. Such efforts would increase the nation's long-run supply. The five-member commission presciently noted, "[T]he dependence of the free world on vulnerable supplies is also likely to grow. Clearly the security problems in oil are likely to become increasingly difficult as time goes on."¹⁸

On June 4, 1971, Richard Nixon became the first president to send to Congress an energy message of a comprehensive nature. He was prompted to do so by the sharp increase in demand for energy supplies that had begun around 1967. Before this time, energy consumption had been growing at a slower rate than the output of goods and services. During the next four years, energy use had begun to increase at a faster pace. Relatively inexpensive energy had been the

¹⁸ A Report to the President by the President's Materials Policy Commission, *Resources for Freedom, Volume III, The Outlook for Energy Sources*, June 1952, 1, 2, 10.

primary cause of this upsurge. Energy's cheap costs made it an attractive bargain nationwide, and demand responded accordingly.¹⁹ Nixon continued his pleading to Congress in a more urgent message in April 1973. He stressed the fact that the country's energy demands had grown so rapidly that they now outstripped the nation's energy supplies – to the extent that shortages had become a real possibility. With only 6 percent of the world's population, the United States was consuming almost a third of all the energy on the planet. Nixon ordered the end of quantitative controls on oil imports in an effort to increase available crude oil supplies.²⁰

Earlier, on March 25, 1969, Nixon had created a Cabinet Task Force to conduct a comprehensive review of oil-import restrictions. The report of the task force was issued on February 2, 1970. It stated that, in 1959, import restrictions were enacted to protect national security. The reasoning was that in the absence of restrictions, crude oil's domestic wellhead price of \$3.30 per barrel would decline to the world market price of about \$2.00 per barrel, a rate that would negatively affect domestic energy to such an extent that imports would increase dramatically. Foreign suppliers could cut off supplies of crude oil to the detriment of the country's military and economy; or they could threaten a cut-off to influence United States foreign policy. Oil import restrictions were enacted to guard against these events. Among the report's many recommendations, two stand out: (1) a transition to a tariff system to control imports, and (2) further study of security alternatives, which included underground storage and subsidization of shale oil or coal capacity.²¹

¹⁹ President Richard Nixon, Special Message to the Congress on Energy Resources, June 4, 1971. www.presidency.ucsb.edu/ws/?pid=3038

²⁰ Nixon, Special Message to the Congress on Energy Policy, April 18, 1973. www.presidency.ucsb.edu/ws/?pid=3817

²¹ Cabinet Task Force on Oil Import Control, *The Oil Import Question: A Report on the Relationship of Oil Imports to the National Security* (Washington, DC: US Government Printing Office, 1970), 1, 19, 20, 136-138.

The Yom Kippur War began on October 6, 1973, when the armies of Egypt and Syria attacked Israel. In a short time, most of the oil producers in the Middle East reduced their output and cut off shipments of oil to the United States. During an Oval Office address to the nation at 7:30 p.m. on November 7, 1973, Nixon announced “Project Independence,” an effort for the United States to achieve energy self-sufficiency by 1980. He ordered all federal buildings to reduce daytime temperatures to between sixty-five and sixty-eight degrees Fahrenheit and asked the public to do the same. Adding to the nation’s mandatory sacrifice, Nixon then asked governors to reduce each state’s highway speed limits to fifty miles per hour.²² Project Independence led to the creation of the Federal Energy Administration (FEA) in the spring of 1974, the nation’s first dedicated energy agency.

The FEA issued the Project Independence Report in November 1974. John Sawhill, administrator of the Federal Energy Administration, stated in the preface that the purpose of this report, involving more than five hundred professionals, was to evaluate the nation’s energy problems and provide a framework for developing a national energy policy. This report was the most comprehensive energy analysis ever undertaken and an effort to construct an economic model to evaluate current and projected United States energy conditions over the period 1973-1985.²³ It did not recommend specific policy actions. “The problem in the past,” the report noted, “seems to have been that the public, the Congress, and the Executive Branch have focused arguments on particular measures, instead of a total energy policy.” It continued, “To correct this situation, we [the authors] have prepared this report which we believe presents a comprehensive framework within which to evaluate individual issues.” The report provided the framework and

²² Nixon, Address to the Nation About Policies To Deal With the Energy Shortages, November 7, 1973. www.presidence.ucsb.edu/ws/pid=4034

²³ Jerry A. Hausman., “Project Independence Report: An Appraisal of U. S. Energy Needs Up to 1985,” *Bell Journal of Economics*, vol. 6, no. 2 (Autumn 1975), 517.

analytical tools to evaluate changing world and domestic conditions and the impact of alternative policy actions.²⁴

The only product addressed in this definition of energy independence was crude oil. But, the report stated that it was “not a blueprint” for reaching zero imports by 1980, nor did it make actual policy recommendations – a direct contradiction to Nixon’s pledge.²⁵ Defining energy independence presented a challenge to the writers, which prompted them to reevaluate the president’s charge. The authors concluded, “The definition of [energy] independence and the criteria for evaluating it are central to the choice of a U.S. energy strategy.”²⁶

The professionals working on the project wrote:

In response to the embargo and the realization of the potential costs of being increasingly dependent on foreign sources of energy, the President established the goal of energy independence for the United States by 1980. There was considerable divergence of opinion, however, regarding the meaning of energy independence, and there are likely to be even greater differences as to how the goal should be achieved once it is ultimately defined. To some, energy independence is a situation in which the United States receives no energy imports, i.e., it produces all of its energy domestically. To others, independence is a situation in which the United States does import to meet some of its energy requirements, but only up to a point of “acceptable” political and economic viability. The definition of independence and the criteria for evaluating it are central to the choice of a U.S. energy strategy.

If the objective of a long-term energy policy were simply to reduce imports, then the strategy . . . would, indeed, be very simple to set forth. Unfortunately, the reduction of imports, if it means the substitution of more expensive domestic energy sources, could be very easily be accompanied by much higher domestic energy prices, inflation, a drop in real gross national product, supply risks, and a number of undesirable effects, such as environmental degradation and depletion of reserves. Rather than reducing imports per se, our objective should be to reduce our vulnerability to disruptions of imports[,] for this reason, “independence” is better than “self-sufficiency” as a description of our objective.²⁷

²⁴ Federal Energy Administration, *Project Independence: A Summary*, November 1974, preface.

²⁵ *Ibid.*

²⁶ *Ibid.*, 19.

²⁷ Federal Energy Administration, *Project Independence Report, Project Independence*, November 1974, 18-19.

President Gerald Ford and the subsequent director of the Federal Energy Administration (FEA), Frank Zarb, contended with the more precise definition of energy independence as well. During the congressional debate on legislation to extend the life of the FEA, Zarb urged the president to suggest that Congress pass a joint resolution to support the achievement of national energy independence by 1985. As written by Zarb, the resolution read in part:

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That, in recognition of the serious nature of the Nation's continued dependence upon foreign sources of energy, it is hereby declared to be the policy of the United States to become independent of foreign sources for its basic energy needs by 1985, and to achieve such independence by reducing our energy imports to such a level where the economic and national security impacts of an embargo can be completely offset by use of strategic petroleum reserves and other practical emergency measures.²⁸

Zarb presented this suggestion to Ford as a “bare bones” approach, recognizing that if Congress acted upon it, the resolution would be embellished significantly. Zarb also offered Ford the option of submitting a more comprehensive resolution that considered energy independence in relation to other values, such as public health, environmental issues, and the need to encourage competition in all segments of industry.²⁹ Zarb mentioned nothing about increasing supply or advocating measures for conservation. The resolution never passed.

The United States struggled over defining “energy independence” because it lacked then – and still lacks – a comprehensive energy policy. President Carter addressed the difficulty of achieving energy independence in his 1977 National Energy Plan:

²⁸ Memorandum for the President from Frank Zarb, July 7, 1976, Box 3, Frank Zarb Papers, Gerald R. Ford Presidential Library.

²⁹ *Ibid.*

The solution to the problem of vulnerability [to foreign oil supplies] does not lie in a crash program of production to achieve energy independence. There is no justification for a massive, reckless development of all U.S. energy resources, depletion of critical domestic oil and gas reserves, pollution of the environment, draconian conservation measures, and rejection of the substantial economic benefits of oil imports, all in the name of energy independence.

An appropriate and far more sensible goal is relative invulnerability [to disruptions in the supply of imported oil].³⁰

For the purposes of this dissertation, *energy independence* is defined, by the author, as the possession of sufficient domestic energy resources to be free from any foreign or domestic act that would influence and/or impact the nation's domestic and foreign policies, and would be in conflict with the nation's national interests and security. John Deutch and R. James Woolsey (former director of the Central Intelligence Agency), in a more nuanced interpretation of *energy independence*, stress reducing import dependence so that oil does not become a lever that exporting countries can use, explicitly or implicitly, to constrain US foreign policy interests.³¹

Energy independence under Nixon implied that the United States is entirely self-sufficient for all its energy requirements. This capability was impossible, and still is – given the relationship between government and the private market. There are no institutional mechanisms to bridge the gap between the free market and government that would provide for the cooperation needed to build a foundation for energy independence. *Energy security* is a more complex and subtle term, as it has military and economic components. Some would argue that the United States has energy security because the nation has the largest, most powerful military in the world and if “push comes to shove,” the nation could just go and take what it needs. It is more appropriate to view energy security in economic terms, as well as possessing secure national

³⁰ *The National Energy Plan*, Executive Office of the President, Energy Policy and Planning, April 29, 1977, 27.

³¹ John M. Deutch, *The Crisis in Energy Policy* (Cambridge: Harvard University Press, 2011), 73.

energy supplies without recourse to military action and/or market dependence on unstable or rogue suppliers. If domestic production and imports from Canada and Mexico were the entirety of the nation's supply, then America would be secure.³² *Energy independence* is an elusive term. The more appropriate and useful phrase is *energy security* or possibly *energy self-sufficiency*, which implies self-sufficient in energy supplies. However, this latter phrase lacks the import of *energy security*.

President Gerald Ford began his presidency at an ominous time. The energy threat remained, so much so that he admitted to a reporter privately and bluntly, "The Saudis have us by the balls."³³ He said on January 13, 1975, that the country was "in trouble." In his State of the Union speech two days later, he added, "the state of the Union is not good," two very provocative admissions by the leader of the free world, which he followed with "I've got bad news." Ford boldly predicted that by 1985, ten years from his January 13 address to the nation, the United States would "be invulnerable to foreign disruptions or oil embargoes."³⁴

Early in his term, March 1, 1977, Carter sent to Congress a proposal to create the Department of Energy (DOE) to consolidate the work and functions of more than fifty different agencies that divided responsibilities for development and implementation of the nation's energy policy. As a member of the cabinet, the energy secretary would report and be accountable directly to the president. Carter hoped that this new cabinet-level department would quickly enable his administration to institute the comprehensive energy plan that the country had sorely

³² Email from Tony Dammer to author, January 13, 2013.

³³ Thomas Borstelmann, *The 1970s: A New Global History from Civil Rights to Economic Inequality* (Princeton: Princeton University Press, 2012), 57.

³⁴ President Gerald Ford, Address to the Nation on Energy and Economic Programs, January 13, 1975, and Address Before a Joint Session of Congress Reporting on the State of the Union, January 15, 1975. www.presidency.ucsb.edu/ws/?pid=4916 and www.presidency.ucsb.edu/ws/?pid=4938 (respectively).

lacked.³⁵ The DOE Organization Act, S. 826, was signed into law on August 4, 1977. The president issued Executive Order 12009 providing for the effectuation of the DOE on September 13, 1977 – a rapid turn-around for Congress, but not an indicator of expedience for of energy legislation to come.³⁶

By July 1979, Carter concluded that to achieve his energy vision, he must abandon the DOE when proposing the policy's keystone, the Energy Security Act, and that he must be especially careful to keep the SFC separate from the DOE. He wanted a separate and distinct government entity that would put the nation on the road to energy independence. At the same time, he strongly believed in the government's ability to solve the country's energy problems.

Three hundred and fifty-two days after the “malaise” speech, President Carter signed into law the Energy Security Act – the vehicle by which the country would “conquer” its crisis of spirit, “rekindle” unity, gain confidence in the future, and provide a “new sense of purpose.”³⁷ The July 15, 1979, address to the nation had been prompted by domestic policy advisor Stuart Eizenstat urgently writing to Carter about the June 1979 domestic energy crisis:

I do not need to detail for you the political damage we are suffering from all this [gas lines, lack of gas]. It is . . . sufficient to say that nothing which has occurred in the Administration to date – not the Soviet agreement on the Middle East, not the [Bert] Lance matter, not the Panama Canal treaties, not the defeat of several major domestic legislative proposals, not the sparring with Kennedy, and not even double-digit inflation – have added so much water to our ship. Nothing else

³⁵ President Jimmy Carter, Department of Energy Remarks Outlining Proposed Legislation to Create the Department, March 1, 1977, and Department of Energy Announcement of Activation Date and Nominations for Positions in the Department, September 13, 1977. www.presidency.ucsb.edu/ws/?pid=7097 and 6626 (respectively).

³⁶ Jimmy Carter, “Department of Energy Remarks Outlining Proposed Legislation to Create the Department,” www.presidency.ucsb.edu/ws/?pid=7097, “Department of Energy Organization Act and Bill Amending the Small Business Administration Act Remarks on Signing S. 826 and H.R. 692 into Law,” www.presidency.ucsb.edu/ws/?pid=7916, “Executive Order 12009 – Department of Energy,” www.presidency.ucsb.edu/ws/?pid=6624

³⁷ President Jimmy Carter, Address to the Nation on Energy and National Goals, July 15, 1979, *APP*. www.presidency.ucsb.edu/ws/?pid=32596

has so frustrated, confused, angered the American people – or so targeted their distress at you personally.³⁸

Energy was the “centerpiece of his domestic program,” but it still took Carter thirteen days shy of a year to get his July 15, 1979 legislation through Congress.³⁹ Early in his term, Carter had stated to the American people that energy was “the greatest challenge that our country will face during our lifetime,” and that the issue would “test the [country’s] character,” as well as the president’s and Congress’s ability to lead and govern.⁴⁰ Carter, in one of his addresses to the nation, went so far as to claim boldly, “The future of the country we love is at stake.”⁴¹

Carter experienced difficulty in finding people to serve on the SFC’s seven-member board of directors. After some effort, he did nominate a diverse, well-qualified board possessing qualifications to lead this new entity. Unfortunately, Carter was not able to gain Senate confirmation for his nominees, and thus had to resort to recess appointments for five of his candidates. This situation was not an auspicious development. President Reagan declared the SFC operational on February 8, 1982, over one-and-one-half years after its enactment.

During its brief existence of two thousand days, the SFC had three different chairs and a revolving door of board members and senior officers. It provided financial assistance to only four synthetic fuels projects. The SFC spent a little less than \$1 billion, including general and administrative expenses.

When it did shut its doors in April 1986, the corporation left behind a checkered past and a reputation for excessive spending. Quite possibly, it also tainted any desire of Congress to take such an active role in solving the nation’s energy problems. During the congressional debate on

³⁸ Memorandum from Stuart Eisenstat to the President, June 28, 1979. Box 137, 6/22/79 – 7/1/79, Jimmy Carter Library.

³⁹ Ira Shapiro, *The Last Great Senate* (New York: Public Affairs, 2012), 47.

⁴⁰ President Jimmy Carter, Address to the Nation on Energy, April 18, 1977, *APP*, and Energy Address to the Nation, April 5, 1979, *APP*. www.presidency.ucsb.edu/ws/?pid=7369 and 32159 (respectively).

⁴¹ Energy Address to the Nation, April 5, 1979.

the ESA, speakers referenced and compared the ESA to the congressionally chartered Union Pacific Railroad, created in 1862 by “An Act to Aid in the Construction of a Railroad and Telegraph Line from the Missouri River to the Pacific Ocean, and to secure to the Government the Use of the same for Postal, Military, and Other Purposes.”⁴² By 1980, Congress had forgotten the questionable actions that had surrounded the building of the railroad – specifically, financial issues that involved Crédit Mobilier of America, the construction arm of the project.⁴³ As it had with the Union Pacific legislation over a century earlier, Congress carefully deliberated over the ESA legislation in an attempt to prevent impropriety. Unfortunately, just as with construction of the railroad, the national lawmaking body did not anticipate what eventually occurred with the ESA and the United States Synthetic Fuels Corporation.

When Ronald Reagan assumed the presidency at the beginning of 1981, the direction of the federal government reversed itself 180 degrees. Reagan’s ideology opposed centralization of power in the federal government and control of the energy market. His position was one of decentralization of power and the restoration of a free market in energy.⁴⁴ “The counter revolution of the 1970s,” as journalist Robert Kuttner called it, brought back the influence of enthusiasts for a pure free-market economy.⁴⁵ The new paradigm held that capitalism had a better chance of solving the nation’s ills than did government intervention. Reagan had captured the public’s angst about government’s interference in people’s lives, government spending, bureaucracy and waste, high and unfair taxes, government corruption, lack of unity and

⁴² *Compilation of the Energy Security Act of 1980, and 1980 Amendments to the Defense Production Act of 1980*, Committee on Banking, Finance and Urban Affairs, House of Representatives, Committee Print 96-17, Part 1, September 1980, 410. Maury Klein. *Union Pacific*, vol. 2: 1862-1893 (Minneapolis: University of Minnesota Press, 2006), 4, 79-81.

⁴³ *Ibid.*

⁴⁴ *Mandate for Leadership*, 213-219.

⁴⁵ Borstelman, 127.

patriotism, liberalism, and government leadership.⁴⁶ As Reagan pithily stated, “[G]overnment is not the solution to our problem – government is the problem.”⁴⁷ He stood for three core principles: smaller government, lower taxes, and stronger national defense.⁴⁸ Michael Boskin, chair of the Council of Economic Advisors under President George H. W. Bush, wrote recently, “Industrial policy failed in the 1970s. . . . Letting government, rather than marketplace competition, pick winners and losers” was a bad idea then as well as today [2012]. The Obama administration has advocated for the “biggest outbreak of American industrial policy since President Jimmy Carter’s proposed \$88 billion [\$274 billion in 2012 dollars] synthetic-fuels program.”⁴⁹ As a percent of the 1980 federal budget (\$531.6 billion), \$88 billion represented seventeen percent; using the same percentage on the proposed 2013 federal budget of \$3.8 trillion, yields \$646 billion.

Reagan believed that the oil and gas industry must be allowed to operate free from most government interference. If it were permitted to do so, then Americans would have little reason or cause to worry about energy crises and a diminishing supply of fossil fuel resources.⁵⁰ During the 1980 election campaign, Reagan advocated scrapping Carter’s entire energy program, including abolishing the Department of Energy.⁵¹ Reagan did not like Carter’s “use less energy” approach, which Reagan deemed a negative outlook on the future of America. Urging less federal regulation and more emphasis on private enterprise to solve the nation’s energy crisis, Reagan once famously commented, “The Department of Energy has a multi-billion-dollar budget

⁴⁶ Shapiro, 302.

⁴⁷ President Ronald Reagan, Inaugural Address, January 20, 1981.
www.presidency.ucsb.edu/ws/pid=43130

⁴⁸ Shapiro, 353.

⁴⁹ William J. Boskin, “Washington’s Knack for Picking Losers,” *Wall Street Journal*, February 15, 2012, A13.

⁵⁰ Lawrence S. Paulson, *Reagan on Energy* (New York: The Oil Daily, 1981), 1.

⁵¹ *President Reagan*, Congressional Quarterly, 1981, 82.

in excess of \$10 billion. It hasn't produced a quart of oil or a lump of coal, or anything else in the line of energy."⁵²

The road to perdition is paved with good intentions, and both President Carter and Congress certainly had admirable goals in creating the United States Synthetic Fuels Corporation. Yet the SFC was doomed almost from the beginning. This dissertation will explore the reasons why the SFC failed and search for lessons that can be learned from its story. Who knows? In another hundred years or so, Congress may try again to charter a mission-specific corporation. Perhaps this dissertation can serve as a reminder to those future congressional representatives. After all, "hindsight is always better than foresight."

There have been hundreds of books written on the United States energy situation. In the exhaustive list, four stand out. Two are by energy historian Daniel Yergin, *The Prize* and *The Quest*, another is Richard Vietor's book, *Energy Policy in America Since 1945*, and then there is the edited volume by Crauford Goodwin, *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions*.⁵³

Yergin's *The Prize: The Epic Quest for Oil, Money, and Power* was published in 1991 and was awarded the Pulitzer Prize in General Nonfiction the following year. This book centered on three themes: (1) The rise and development of capitalism and modern business, with oil being the world's biggest and most pervasive business, arose in the last decades of the nineteenth century; (2) oil is a commodity intimately intertwined with national strategies, global politics, and

⁵² *Ibid.*, 110.

⁵³ Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York: Simon & Schuster, 1991), and *The Quest: Energy, Security, and the Remaking of the Modern World* (New York: Penguin Press, 2011). Richard H. K. Vietor, *Energy Policy in America Since 1945: A Study of Business-Government Relations* (Cambridge, England: Cambridge University Press, 1984). Crauford D. Goodwin, ed., *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions* (Washington, DC: The Brookings Institution, 1981).

power, and; (3) the world has become a hydrocarbon society and man/woman has become hydrocarbon man/woman. Yergin argued that examining the economic, social, political, and strategic consequences of the world's reliance on oil would illuminate the past, allow a better understanding of the present, and help anticipate the future.

The Quest: Energy, Security, and the Remaking of the Modern World, published in 2011, is Yergin's sequel to *The Prize*. He focuses on globalization and its impact on the energy demand-and-supply situation. By then, oil had become a truly global business. The growth in world energy demand in future decades will be enormous, he felt, reflecting a more prosperous global economy and rising standards for living of billions of people moving out of poverty. Security issues surrounding the supply of crude oil will continue to remain a fundamental concern for the world's economies, with the principle focus being on the Middle East, the Persian Gulf, and North Africa. The risks of conflict, crisis, and disruption remain inherent and when things go wrong, the consequences are dire, Yergin noted. Oil will continue to be critical in meeting the challenges ahead for a prosperous and growing world. The quest for oil is as much about the human spirit and human creativity as it is about technology.

Richard Vietor's book was intended to present the history of the fossil-fuel energy policy in the United States since 1945, and to provide a framework for understanding how business and government interact. Vietor is a professor at the Harvard Business School. He argues that government intervention into the energy industry has been the norm rather than the exception, and that actions by the federal government fostered the energy conditions that prevailed in the 1980s and 1990s. Prior to the early 1970s, most historians did not possess a generic perspective on "energy," as economists were primarily the authors of the literature. After 1973 and the Arab oil embargo, a plethora of studies resulted that varied in quality and purpose. The sources of

continuity in the history of US energy policy were physical depletion, energy economics, and ideological conflict. The sources of change were the interactions of business and government which, in turn, shaped the political economy.

Energy Policy in Perspective is a volume of in-depth essays exploring the nation's energy history and policies from the Truman administration through the Carter administration. The book examines important energy issues. Proposed solutions to America's energy crises actually have substantial histories and are not anything new under the sun, as many believed. The paramount question since the Truman administration has been how the federal government behemoth mobilizes itself to wrestle with the large concerns of energy. Goodwin's message is that the topic of energy demands serious and continuing national attention and discussion grounded in a better understanding of the choices and their implications. Often, national leaders simply did not foresee the full effects of what they were doing. In some cases, authors/historians do not get their energy facts correct. For example, Laura Kalman, professor of history at the University of California, Santa Barbara, covers the period 1974-1980 in her 2010 book *Right Star Rising*. She writes that Carter's energy policies, in conjunction with corporate average fuel economy standards (CAFE), restored the United States to energy independence by 1982.⁵⁴ This statement is simply not true. During 1982, the United States imported 28.1 percent of its crude oil needs, or 4,298,000 barrels per day.⁵⁵ Prescient comment did exist as Theodore White opined in his 1982 book *America in Search of Itself*, which covered presidential elections from 1956-1980. Writing about the 1956 election and the 1956 Suez Canal crisis, White remarked that America's effort to quash the military efforts of the British and French to take over the Suez Canal had given the

⁵⁴ Laura Kalman, *Right Star Rising: A New Politics, 1974-1980* (New York: Norton, 2010), 53.

⁵⁵ US Energy Information Administration, *Annual Energy Review 2011* (Washington, DC: U.S. Department of Energy, 2012), 120-121.

Arab world “the opening to choke off the flow of oil and energy on which the new American way of life depended.” This action, or non-action on the part of the US, was the largest lesson history would read into the 1956 presidential campaign.⁵⁶

⁵⁶ Theodore H. White, *America in Search of Itself: The Making of the President 1956-1980* (New York: Harper & Row, 1982), 95-96.

Timeline

1816 – First company (forerunner of Baltimore Gas & Electric Company) incorporated in the United States to produce gas from coal. After World War II, low-cost natural gas became more available as pipelines were built to transport it throughout the nation.

1850s – Oil shale industry begins in Scotland. Between 1850-1962, over one hundred shale mines were in operation. The Scottish oil shale industry began to decline in the 1930s.

1910-1918 – World War I.

1919 – The high price of gasoline (\$3.40 per gallon in 2012 prices) and the absence of large oil fields in the United States lead to the first oil shale boom.

1939-1945 – World War II. Estonia had a modest but relatively sophisticated shale oil industry that the Germans used. The Germans also developed a robust synthetic fuel industry using coal to make fuel for the German war machine.

1944 – In the United States, the Synthetic Liquid Fuels Act becomes law, passing the Senate unanimously and the House by a wide margin. This act authorizes the Bureau of Mines to spend \$30 million on synfuels research.

1950 – SASOL Limited formed in South Africa to make natural gas and liquids from coal.

1954 – Eisenhower administration terminates the federal synfuels program due to pressure from the large oil companies. Two long-range energy developments set in motion: (1) tremendous increase to the United States of imported oil, and (2) oil industry diversification into coal, oil shale declined.

1970 – Crude oil production peaks in the United States.

1971 – Production of crude oil in the United States begins its inexorable decline, decreasing 1.3 percent from 1970 volumes. Crude oil imports begin to increase dramatically.

1973-1974 – Arab oil embargo.

1973 – Project Independence introduced by President Richard Nixon.

1975 – Energy Independence Act of 1975 proposed by President Gerald Ford. Also in 1975, the Energy Independence Authority Act of 1975 transmitted to Congress.

1979 – The Shah of Iran is overthrown in February. Gasoline crisis in the summer. Malaise address to the nation on July 15. Energy Security Act proposed.

1980 – June 30, 1980 Energy Security Act signed into law. The United States Synthetic Fuels Corporation created.

September 1980 – John Sawhill nominated for chair of the SFC, with six others, for a total of seven. Executive Order 12242 signed by Carter assigning SFC responsibilities to the DOE and DOD until SFC declared operational.

October 1980 – Following the inability of the Senate to confirm Carter's board nominees, Carter makes recess appointments to the board.

November 1980 – Ronald Reagan elected president.

1981 – January – Members of the board submit undated resignations to President Reagan and Reagan accepts them at the end of the month. Jack McAtee assumes acting chair position.

April 1981 – Reagan nominates Edward Noble as chair.

May 1981 – Reagan nominates four individuals (Robert Monks, Victor Schroeder, Victor Thompson, and Howard Wilkins) to the SFC board. After Noble is confirmed and sworn into office, McAtee resigns.

October 1981 – Other four board nominees sworn in as members of the board.

1982 – February 1982 – Reagan declares the SFC operational and officially open for business via Executive Order 12346.

May 1982 – Reagan announces the nomination of two additional SFC board members (John Carter and Milton Masson).

August 1982 – These two new members are sworn into office.

1983 – August 1983, the president and chief operating officer of the SFC, Schroeder, resigns his position as an officer, but remains a board member.

1984 – January 1984 – Monks resigns from the board.

February 1984 – Wilkins and Masson resign from the board.

April 1984 – Thompson resigns as president of the SFC and as a board member. Reichl nominated to the board.

May 1984 – John Carter resigns from the board.

October 1984 – Corcoran and MacAvoy nominated for the SFC board.

November 1984 – Corcoran, MacAvoy, and Reichl receive recess appointments.

December 1984 – Corcoran, MacAvoy, and Reichl sworn in as board members.

1985 – June 1985 – Corcoran, MacAvoy, and Reichl confirmed by the Senate.

December 1985 – P.L. 99-190 passed which terminated SFC authority to award new financial assistance. One hundred twenty days left to transfer projects to the Treasury and to shut down.

1986 – April 1986 – P.L. 99-272 passed which formally discontinued the SFC. Offices are closed, out of business and swept into the dust bin of history, to be forgotten. One of the only government agencies to cease existence.

Chapter 1: The Seventies

In 1961, President John F. Kennedy called for “landing a man on the moon and returning him safely to the earth” before the end of the decade.¹ Near the close of the sixties, in July 1969, that challenge became a reality. British correspondent Robert Hargreaves aptly observed, “Never was a nation more confident in its power, more certain of its destiny,” and yet noted that the era of possibilities soon became the age of doubt.²

Even though it was mid-1969, the era of the sixties could be considered to have ended, and the angst-ridden seventies to have commenced, with Apollo 11’s safe return to earth. This event represented the culmination of the country’s belief in the limitless potential of its societies and government – and indeed in itself – to confront and solve the challenges facing the United States. American University Professor Howard McCurdy described the national confidence surrounding the moon landing and safe return as, “If we can do this, we can do anything.”³ Unfortunately, such a situation produced impossible hopes and dreams.⁴

However, an ominous foreboding of unhappy events to come occurred while the space mission was on the moon. On July 19, 1969, Mary Jo Kopechne, a twenty-eight-year-old passenger in a car driven by Sen. Edward Kennedy (D-MA), drowned when the senator’s car plunged into a pond on Chappaquiddick Island near Martha’s Vineyard. He delayed reporting the fatal accident to the police for almost ten hours.⁵ Fortunately for Kennedy, newspaper and

¹ John F. Kennedy, “Special Message to the Congress on Urgent National Needs,” May 25, 1961. www.presidency.ucsb.edu/ws/?pid=8151

² Robert Hargreaves, *Superpower: A Portrait of America in the 1970s* (New York: St. Martin’s, 1973), 3.

³ “A Feat For the Ages, For All Mankind,” *Dallas Morning News*, August 26, 2012, 6A.

⁴ David Frum, *How We Got Here* (New York: Basic Books, 2000). David M. Oshinsky, “Brat Pack,” *New York Times*, March 12, 2000, BR13.

⁵ In 1973, *National Lampoon Encyclopedia of Humor* published a mock Volkswagen advertisement that is a precursor to the negative political ads in the Twenty-First Century. The ad shows a Volkswagen beetle car floating in water. The caption, in large type, reads, “If Ted Kennedy drove a Volkswagen, he’d be president today,” because it floats just long enough. The body of the ad references Mary Jo Kopechne

television headlines were preoccupied, overwhelmed with the Apollo 11 moon landing and subsequent reports of the first man walking on the moon. Nevertheless, time marches onward. The seventies had commenced, with Kennedy's presidential dreams shattered, at least temporarily.⁶

Much of the late 1950s and the 1960s prior to 1968 were characterized by overriding optimism about the future.⁷ The United States was in the midst of a prolonged economic boom, spurred in part by low energy prices and technological innovation. During the sixties, economists thought all that was left for them to do was to "fine-tune" the economy. This era of growth was expected to continue unhindered for decades to come, and resource constraints and the concept of limits to growth were not considered to be issues of great importance. During the Vietnam War, previous assumptions about the environment, technology, economic growth, and energy development began to be reexamined by the American public, its leaders, and its institutions.⁸

Various labels have been applied to the 1970s, but the most appropriate is the "Malaise Decade," in which there was an abundance of "deception, doubt, and despair."⁹ Historian Judith Stein commented that it was "the only decade other than the 1930s wherein Americans ended up poorer than they began."¹⁰ This era had the deepest recession since World War II, rising oil

with, "And, like Mary Jo Kopechne, it's only 99 and 44/100 percent pure." *National Lampoon Encyclopedia of Humor*, 1973, 29.

⁶ "Woman Passenger Killed, Kennedy Escapes in Crash," *New York Times*, July 20, 1969, 1.

⁷ Historian James T. Patterson argues in his 2012 book *The Eve of Destruction: How 1965 Transformed America* that 1965 was the "hinge for the sixties" – the year of military escalation, riots in Watts, splintering of the civil rights movement, and mounting cultural change and polarization. James T. Patterson, *The Eve of Destruction: How 1965 Transformed America* (New York: Basic Books, 2012), ix.

⁸ Committee on Energy and Natural Resources, *Energy: An Uncertain Future; An Analysis of U.S. and World Energy Projections Through 1990*, Publication No. 95-157 (Washington, DC: US Government Printing Office, 1978), 5, 14.

⁹ These three words were spoken by Vice President Hubert Humphrey describing the attitude of the nation in 1968 and are appropriate for the era of the 1970s. Lewis Chester, Godfrey Hodgson, and Bruce Page, *An American Melodrama: The Presidential Campaign of 1968* (New York: Viking Press, 1969), 145.

¹⁰ Judith Stein, *Pivotal Decade* (New Haven, CT: Yale University Press, 2010), xi.

prices, high employment, and inflation.¹¹ In his 1976 book, *The Poverty of Power*, Barry Commoner wrote that the United States confronted three crises: (1) environmental survival (consider the Three Mile Island nuclear power plant in Pennsylvania), (2) energy shortages, and (3) economic decline.¹² Commoner argued that these three were interrelated, and thus a solution to one caused problems in the others. But, he wrote, solving the energy crisis offered the hope of “leading” the nation “out of the labyrinth of [the] interwoven crises.”¹³ To Commoner, “The energy crisis [in the 1970s] illuminates the world’s most dangerous political issues.”¹⁴ Additionally, it resulted in “a bitter confrontation between Congress and the President” that led to a poverty of power.¹⁵

Historian Peter Carroll called his book about the decade *It Seemed Like Nothing Happened*.¹⁶ In contrast, Edward Berkowitz titled his book *Something Happened*.¹⁷ Bruce Schulman, author of *The Seventies*, called the decade “the most significant watershed of modern U.S. history, the beginning of our own time,” as a great shift in American culture, society, and politics occurred.¹⁸ Historian Charles L. Ponce de Leon writes in the March 2012 issue of *Reviews in American History* that Schulman’s book was “cheekily revisionist,” but nevertheless ignited, for the 1970s, renewed interest in what was once thought of as “the backwash of the tumultuous 1960s.”¹⁹ Mark Fiege, historian, has written provocatively that, “After 1970, the nation entered a period of environmental, economic, and political turmoil that extended into the

¹¹ *Ibid.*

¹² Barry Commoner, *The Poverty of Power* (New York: Alfred A. Knopf, 1976), 1. Also see Laura Kalman, *Right Star Rising* (New York: W.W. Norton, 2010), 38.

¹³ *Ibid.*, Commoner, 3.

¹⁴ *Ibid.*, 4.

¹⁵ *Ibid.*

¹⁶ Peter Carroll, *It Seemed Like Nothing Happened* (New Brunswick, NJ: Rutgers University Press, 2000).

¹⁷ Edward Berkowitz, *Something Happened: A Political and Cultural Overview of the Seventies* (New York: Columbia University Press, 2005).

¹⁸ Bruce J. Schulman, *The Seventies* (New York: Free Press, 2001), xii.

¹⁹ Charles L. Ponce de Leon, “How Pivotal Were the Seventies?” *Reviews in American History*, volume 40, number 1, March 2012, 128-138.

twenty-first century.” Although no single cause attributed to this chaos, he argues that much of it resulted from the fact that the United States consumed more petroleum than it could supply from reserves within its territory.²⁰

David Frum agreed that the decade brought “the most total social transformation” or “social convulsion” to the nation “since the coming of industrialism,” caused by Vietnam, desegregation, technology, and inflation/stagflation.²¹ Beth Bailey and David Farber argued that this period may have been the nation’s “strangest decade.” It was the age of limits – gas lines – while at the same time the age of excess – pet rocks and “earth-tone polyester, as well as overtly sexual music.” The decade gave the public the iconic yellow smiley face in the midst of stagflation and “malaise.”²² Tom Wolfe labeled it “The ‘Me’ Decade,” due to the emphasis on individual well-being, as opposed to the issues of social and political justice that had prevailed during the sixties.²³ Sociologist Robert Bellah observed that Americans were “endangered” by an excess of “expressive individualism,” which in turn placed emphasis on self-expression to the detriment of the concerns and responsibilities toward the community.²⁴

An appropriate metaphor for the decade of the seventies displaying its silliness occurred on September 23, 1973, in Houston, Texas, at the Eighth Wonder of the World – the Astrodome. That Thursday evening, a grand diversion took place, and shifted the nation’s focus away from Watergate, the disillusionment of Vietnam, and the impending resignation of Vice President Spiro

²⁰ Mark Fiege, *The Republic of Nature: An Environmental History of the United States* (Seattle, WA: University of Washington, 2012), 396.

²¹ *Ibid.*, Schulman and David Frum, *How We Got Here* (New York: Basic Books, 2000). David M. Oshinsky, “Brat Pack,” *New York Times*, March 12, 2000, BR13.

²² Beth Bailey and David Farber, eds., *America in the Seventies* (Lawrence: University Press of Kansas, 2004), 1.

²³ Tom Wolfe, “The ‘Me’ Decade,” *New York*, August 23, 1976. <http://nymag.com/news/features/45938/> and www.gale.cengage.com/pdf/samples/sp656755.pdf

²⁴ Quoted in Robert M. Collins, *More: The Politics of Economic Growth in Postwar America* (New York: Oxford University Press, 2000), 135.

Agnew. In front of 31,000 fans, with a national television audience of 40 million (90 million worldwide) at the Battle of the Sexes, Billie Jean King destroyed Bobby “the male chauvinist pig” Riggs in a tennis match by 6-4, 6-3, 6-3. As a reporter for the *Houston Post* penned, “It could have only happened in America.” Waiters in black tie served Henry Mancini, Desi Arnez, Jr., Glenn Campbell, Andy Williams, Claudine Longet, and Robert Stack, among many other Hollywood stars. Howard Cosell was master of ceremonies. Courtside seats sold for a face value of \$100 – much more from scalpers. It was Macy’s Thanksgiving Day Parade and Hollywood combined – show business at its apex, the place to see and be seen. By trouncing the huckster hustler who had beaten Margaret Court on Mother’s Day, Billie Jean won \$100,000. King had accomplished more for women and women’s sports than had been accomplished to date, all in a circus-like atmosphere.²⁵ It was a welcome respite from the country’s woes.

During the summer of 1972, “a strange year for the American political system,” the stupidity and farce of the 1970s became evident in the presidential election and the Democratic Party. George McGovern had been selected by Democrats at their national convention to be the standard bearer. He “mourned” the American society’s “loss of faith” and trust in government, and he championed its restoration. A survey by Harris highlighted people’s “sharply declining confidence in the leadership” of the nation’s institutions. In a rush to make a decision on his running mate, McGovern selected the hard-charging and respected Senator from Missouri, Thomas Eagleton. Immediately following the convention, questions arose about Eagleton’s alleged drinking problems, past medical hospitalizations for depression, and electroshock treatments to cure the depression. McGovern was forced to state publicly and forcefully that “I’m a thousand percent behind Tom Eagleton.” After an eighteen-day onslaught by the press and

²⁵ Dale Robertson, “The Record Set Straight,” *Houston Post*, September 21, 1973, 1A, 17A. Selena Roberts, *A Necessary Spectacle* (New York: Crown Publishers, 2005).

McGovern's supporters, Eagleton withdrew his name as the vice presidential candidate, providing a disaster for the Democratic Party. The possibility of restoring trust and confidence to the country was lost. Subsequently, Robert Sargent Shriver, Jr. became McGovern's running mate.²⁶ Nixon won in a landslide with 61 percent of the popular vote to McGovern's 36 percent. The Eagleton case had an historic impact on the politics of 1972 and beyond – the selection of a running mate entailed a more thorough and in depth review process.²⁷

In preparation for the 1972 presidential election, the *Washington Post* prepared a series of reports on the mood of the country. Indicative of the decade of the seventies, the individual voter felt helpless that government could not solve the problems of high taxes, rising prices, unemployment, crime, inadequate schools, and transportation. These issues, cutting across virtually every segment of the electorate, reflected a society that was out-of-control, generating mounting frustration. The voters rated the economy as the number one problem, with the Vietnam War being second. There was little faith that government could solve the problems and the nation's institutions were not viewed as responding adequately, if at all.²⁸

Christopher Lasch, more than a quarter century after Henry Luce had proclaimed "the American Century," reported that the confidence of the American people [in the 1970s] had fallen "to a low ebb," marked by narcissism and diminishing expectations.²⁹ People despaired over the loss of faith in their leaders [Watergate], a stagnating economy, and the "impending exhaustion of

²⁶ Joshua M. Glosser, *The Eighteen-Day Running Mate* (New Haven: Yale University, 2012), 28, 33, 197. Fred Barnes, "The Also-Ran Who Also Ran," *Wall Street Journal*, July 21-22, 2012, C6.

²⁷ Haynes Johnson, "Turned-Off Public Picks Continuity Over Change," *Washington Post*, October 1, 1972, A1.

²⁸ *Ibid.* Hayne Johnson, "Nixon Gets Credit for Trying," *Washington Post*, October 3, 1972, A1. Haynes Johnson, "Discontent Doesn't Spell Nixon Loss," *Washington Post*, October 5, 1972, A1. Haynes Johnson, "A Campaign of Apathy," *Washington Post*, October 7, 1972, A1.

²⁹ Christopher Lasch, *The Culture of Narcissism: American Life in an Age of Diminishing Expectations* (New York: W.W. Norton, 1978), xiii.

natural resources.”³⁰ Worse still, society had apparently “used up its store of constructive ideas,” as well as the “capacity” and “will to confront the difficulties” threatening to overwhelm the populace, all of which rendered the United States unable to provide solutions to the vexing problems facing its society.³¹ Recently, Jeff Madrick, visiting professor at The Cooper Union and former economic columnist for the *New York Times* as well as author of *The Case for Big Government*, commented that in the 1970s the country experienced both very high inflation and very high employment simultaneously, causing most people to lose confidence in the government’s ability to manage the economy.³²

Three themes dominate the seventies: distrust of government, the plague of energy prices and shortages, and inflation/economic stagnation. The seeds of suspicion about government were planted during the presidency of Lyndon Johnson and blossomed during the presidency of Richard Nixon. The plague and stagnation began with financing of the Vietnam War and intensified with the 1973-74 Arab oil embargo.

Over the decade, one of the most dramatic price increases occurred in the cost of a barrel of domestic crude oil, which was \$3.18 in 1970 and \$21.59 in 1980 – a whopping 579 percent increase.³³ Meanwhile, domestic production of crude oil declined 11 percent, from 3.5 billion barrels in 1970 to 3.1 billion barrels in 1980. Imported crude oil as a percentage of domestic supply rose from 23.2 percent in 1970 (1.2 billion barrels imported) to 40.1 percent in 1980 (2.5 billion barrels imported), reflecting a 73 percent increase overall.³⁴ Domestic daily consumption of crude oil amounted to 14,607,000 barrels in 1970, rising by 16 percent to 17,056,000 barrels in

³⁰ *Ibid.*

³¹ *Ibid.*

³² Pauline Arrillaga, The Associated Press, “Groundswell Against Big Government Grows,” *Dallas Morning News*, March 18, 2011, 7A.

³³ Energy Information Administration, *Annual Energy Review*, 2008, 169.

³⁴ DeGolyer and MacNaughton, *Twentieth Century Petroleum Statistics*, 2008, 20, 53.

1980.³⁵ The per-gallon price of leaded regular gasoline rose 231 percent, from \$.36 in 1970 to \$1.19 in 1980.³⁶

Energy and inflation were the predominant economic issues facing the nation during the 1970s, and they were intertwined. Exploding energy prices caused dramatic inflation, while rising inflation contributed to soaring energy prices. *Stagflation* became the economic moniker – stagnant economy, hyperinflation, and high unemployment. Because many Americans distrusted their government, it was virtually impossible for that government to address these interconnected issues in an effective and timely manner.

The generally agreed upon consensus is that the energy crisis began in the fall of 1973. There is certainly a good argument for this, but a closer look reveals otherwise. During 1972, warnings about the energy shortage were the staple of advertising. Philip Dougherty of the *New York Times* wrote that no public issue since World War II had generated such a deluge of advertising as the energy crisis. Mobil Oil Corporation put forth a significant effort with one-quarter-page ads every Thursday on the Op-ed Page of the *New York Times*. Conoco made a major and possibly successful effort with full-page ads in newspapers and consumer and trade magazines, blanketing the nation, with the bold and large type heading: *Energy & America*. The copy of the ad excerpted sections of the speech “The United States Energy Outlook: Its Implications for National Security” given by chief executive officer John McLean before the World Affairs Council, in Pittsburgh, Pennsylvania on September 21, 1972. More than 70,000 copies of the full text of this address were requested, Walter Cronkite displayed the ad on his

³⁵ Department of Energy, Energy Information Administration, Table 5.11. www.eia.doe.gov/emeu/aer/txt/ptbo511.html

³⁶ *Annual Energy Review, 2008*, Energy Information Administration, June 2009, 181. There are no figures available for unleaded gasoline prior to 1976.

evening news show, all levels of government requested copies as well, and the Associated Press devoted news columns to it.³⁷

McLean pointed out that in September 1972, the United States was obtaining about 26 percent of its crude oil needs and 12 percent of its energy requirements from foreign sources. He projected that by 1985 the nation would be importing 10-to-15 million barrels per day – 40-to-55 percent of the country’s crude oil and 23-to-32 percent of total energy from abroad. Such dependence upon a small number of distant foreign nations for a vital portion of the energy supplies of the United States would be a new and dangerous fact of life not previously faced by the nation. His solution: Let the private sector discover and develop the country’s natural resources, including synthetic fuels, while the federal government develops a comprehensive national energy policy that establishes priorities and guidelines to eliminate delays, conflicts, and confusion that prevailed within the federal bureaucracy.³⁸

The United States had a foreboding of the havoc that energy shortages would create in early January 1973, when bitter cold and crippling storms swept the Midwest and fuel distribution problems paralyzed parts of the Northeast. The *Washington Post* reported that the severe cold weather triggered one of the worst fuel shortages to strike any region of the country in the last twenty years – natural gas, propane, and heating oil were in short supply in six states of the Midwest. The scarcity of these heat sources forced the closure of many factories, schools, churches, and civic buildings. The public schools of Denver, Colorado, faced an almost complete shutdown – all high schools and secondary schools closed, and only five elementary schools opened after an emergency delivery of heating oil. The bitter cold drove demand beyond natural-

³⁷ Philip Dougherty, “The Selling of the Energy Crisis,” *New York Times*, April 1, 1973, 203. “Energy & America,” *Washington Post*, November 29, 1972, C11. John G. McLean, “The United States Energy Outlook: Its Implications for National Security,” *Vital Speeches of the Day*, vol. 39, issue 3, November 11, 1972, 72.

³⁸ *Vital Speeches*, 73-74.

gas-pipeline capability, while the heating oil shortage resulted from refineries placing too much emphasis on gasoline production.³⁹ With this extreme cold, Gene Smith of the *New York Times* reported that Mississippi, Louisiana, and Arkansas experienced pervasive plant closures, putting more than 40,000 workers temporarily out of work. In the Minneapolis-St.Paul area, fuel shortages actually began in December 1972, where four schools came within one day of running out of heating oil, but were kept open by a 20,000-gallon emergency supply.⁴⁰

In the Northeast, three major airlines – American, Trans World (TWA), and Allegheny – suffered flight-schedule disruptions from a shortage of aviation fuel. Such scarcity, along with the lack of adequate fuel in the Midwest, indirectly raised a major issue of national energy policy: Should US oil companies be permitted to increase their imports of completely refined oil products?⁴¹

The January 1973 fuel shortage impacted even the city of Austin, Texas and the University of Texas. On Tuesday, January 9, 1973, the university was forced to close due to bitter cold weather and a shortage of fuel – buildings could not be heated. The *Wall Street Journal* highlighted the ironic fact that the university was “one of the biggest owners of oil and gas properties in the nation.”⁴² This closure delayed the start of the spring semester by a week. The late beginning left in question whether students would get their traditional spring break. The students were not happy campers. They returned to euphoria when president Stephen Spurr announced that indeed there would be a spring break, with the same number of days, from April 9 to 14, a week later than previously scheduled. There were no changes in “dead days” before final

³⁹ Thomas O’Toole, “Lack of Fuel Is Crippling Middle West,” *Washington Post*, January 6, 1973, A1.

⁴⁰ Gene Smith, “Northeast Is Bracing Itself For Possible Energy Crisis,” *New York Times*, January 15, 1972, 63.

⁴¹ Robert Samuelson, “3 Airlines’ Flights Disrupted By Shortage of Fuel in N.Y.” *Washington Post*, January 10, 1973, A3.

⁴² “Oil-Rich Texas University Caught in Fuel Shortage,” *Wall Street Journal*, January 11, 1973, 7.

exams or graduation dates. The students had fewer classroom days in the spring 1973 semester and even those were reduced an additional day with the official closing of the university on January 25, 1973, for the funeral of former President Lyndon Johnson.⁴³ Surprisingly, the overriding issue for the students was not to have the new dates preclude them from voting in the April 1973 city council election. College students exhibited excitement about local politics following the election of Jeff Friedman to the city council in 1971, fresh out of the University of Texas Law School. In 1975, he became Austin's "hippie mayor." The shortage of natural gas impacted Austin, but not the university, into late January, when the city was placed on a 100-percent curtailment.⁴⁴ Interestingly, during the summer of 1973, the Shah of Iran warned Nixon and Secretary of State Henry Kissinger "the normal trend will be that oil will rise in price until shale or gasification of coal becomes profitable."⁴⁵

Following President Nixon's order to end oil import quotas in April 1973, demand surged ahead of domestic oil production during the summer of 1973. Consequently, gas lines appeared throughout the country. The government reported that over 1,000 filling stations had closed during the first half of 1973 due to a lack of gasoline. Many more establishments had instituted rationing in order to regulate the amount that motorists could purchase.⁴⁶ In New York City, gasoline began to be rationed to drivers on May 10, the first time since World War II.⁴⁷

⁴³ Mary Moody and Robert Schwab, "Fuel Shortages Shut Down UT," *Austin American-Statesman*, January 10, 1973, 1. Robert Faulk, "Spring Break 'In the Dark,'" *Daily Texan*, January 17, 1973, 1. Jeanne Janes, "Reactions Favorable for Spring Break," *Daily Texan*, January 23, 1973, 1. John Yemma, "Regents' Okay Expected For Calendar Modification," *Daily Texan*, 1. Andrew Scott Cooper, *The Oil Kings: How the U.S., Iran, and Saudi Arabia Changed the Balance of Power in the Middle East* (New York: Simon & Schuster, 2011).

⁴⁴ John Gandy, "City Gas Curtailed Again, UT Remains Unaffected," *Daily Texan*, January 29, 1973, 1.

⁴⁵ Memorandum for the President's File from Henry Kissinger of meeting with His Imperial Majesty Mohammad Reza Shah Pahlavi, Shahanshah of Iran, on Tuesday, July 24, 1973, in the Oval Office. National Security Archive. Andrew Scott Cooper, *The Oil Kings: How the U.S., Iran, and Saudi Arabia Changed the Balance of Power in the Middle East* (New York: Simon & Schuster, 2011), 139.

⁴⁶ Edward Cowan, "The Gasoline Shortage: Real or Contrived?" *New York Times*, June 8, 1973, 51.

⁴⁷ "Exxon Stations on 2 Toll Roads Are Limiting Sales of Gasoline," *New York Times*, June 20, 1973, 87.

By fall 1973, with the nation's short attention span making people forget the inconveniences from earlier in the year, the price of gasoline (and even energy as a whole) did not generate much public concern for most Americans. Gas was consistently inexpensive and readily available, with filling stations located at nearly every intersection. Such a lackadaisical attitude changed abruptly on October 17, 1973, when the Organization of Petroleum Exporting Countries (OPEC), led by the Arab states, announced a selective embargo on all oil destined for the United States and Western industrialized nations, along with a 70-percent increase in the reference price for crude oil. The situation intensified, culminating in a complete suspension of oil shipments to the United States.⁴⁸ At the OPEC meeting announcing the embargo and price increase, one delegate reported that higher crude oil prices benefited US interests because they would motivate that country to "find new energy sources more quickly."⁴⁹ In early November 1973, President Richard Nixon announced "Project Independence 1980," which he described as a "series of plans and goals set to insure that by the end of this decade, Americans will not have to rely on any source of energy beyond our own."⁵⁰ The Federal Energy Office and its administrator, John Sawhill, directed Project Independence. Sawhill, in the planning stage, altered Nixon's publicly announced goal to that of increasing domestic energy supplies and reducing energy demand so as to protect the economy against energy supply cut-offs and arbitrary price increases.⁵¹

In an instant, the American public was confronted with learning to live with less. For the month of November 1973, the stock market, as measured by the Dow Jones Industrial Average,

⁴⁸ Victor Bondi, *American Decades 1970-1979*. (Detroit, MI: Gale Research, 1995), 9. Clyde Farnsworth, "Oil as an Arab Weapon," *New York Times*, October 18, 1973, 1. "Arabs Term Their Oil Embargo More Severe Than Foreseen," *New York Times*, November 5, 1973, 62.

⁴⁹ Farnsworth, 18.

⁵⁰ Richard Nixon, "Address to the Nation About Policies To Deal With the Energy Shortages," November 7, 1973. www.presidency.ucsb.edu/ws/edu/ws/?pid=4034 Richard Nixon, "Address to the Nation About National Energy Policy," November 25, 1973. www.presidency.ucsb.edu/ws/?pid=4051

⁵¹ Memorandum to EEAG Members from John Sawhill, March 12, 1974. Declassified Documents Reference System, University of Texas at Austin.

fell more than one hundred and thirty-four points (14 percent), the worst plunge since 1929. President Nixon asked for a nationwide speed limit of 50 miles-per-hour for cars and 55 for trucks and buses. With a mandated reduction of heating oil, thermostats in homes would be reduced, day and night, to an average of 68°, and 64° in offices, stores, and factory buildings. Mustang Ranch outside of Reno, the only licensed brothel in Nevada, reduced reception-room thermostats to 68° from 75° and had its girls wear pantsuits and gowns instead of bikinis. A school superintendent from Massachusetts put the nation's feelings in the context of Watergate: "The energy crisis is like Watergate. We know something is wrong but we don't know quite what it is."⁵² In the Nixon administration, there existed apostles of free-market principles who favored curbing gasoline consumption by hiking the price at the pump through taxes rather than mandatory rationing.

John Jimison, researcher at the Congressional Research Service of the Library of Congress, labeled, in 1980, the Arab oil embargo as "the great watershed event" of the 1970s. Historian Tyler Priest of the University of Houston concurs, writing in June 2012, "Historians agree that the October 1973 embargo of oil to the United States by Arab members of the Organization of Petroleum Exporting Countries was a watershed event in U.S. history."⁵³

Nicholas Lemann, who referred to the OPEC embargo as the "epochal event of the seventies," argues that this oil cut-off proved to be the "pivotal moment at which the mass upward economic mobility of American society ended, perhaps forever."⁵⁴ For several generations, upward mobility had been the defining characteristic of the nation's culture, but the

⁵² "A Time of Learning to Live With Less," *Time*, December 3, 1973, 45-53.

⁵³ *Energy – Is There a Policy to Fit the Crisis?* Subcommittee on Energy and Power, House of Representatives, September 1980, Committee Print 99-IFC-57, 7. Tyler Priest, "The Dilemmas of Oil Empire," *Journal of American History*, June 2012, 240.

⁵⁴ Nicholas Lemann, "How the Seventies Changed America," *American Heritage*, July/August 1991. www.americanheritage.com/articles/magazine/ah/1991/4/1991_4_39

embargo “ushered in a long period of inflation” and economic stagnation.⁵⁵ Historian Robert M. Collins has written that the 1973-74 oil embargo, in conjunction with OPEC’s 400-percent increase in the price of oil, “threw” the American motorist into a “tizzy” and the country’s economy “into a tailspin,” causing a “vicious downward economic spiral.”⁵⁶ The many problems and inconveniences caused by the embargo caused American citizens to lose confidence in their leaders, regardless of party affiliation, and in the elected officials who were driving the nation. The public equated the energy policy failure with other national failures such as Vietnam and Watergate.⁵⁷

Barry Commoner observed that with the “enormous importance of petroleum in the U.S. economy, an ensured supply of oil ought to be among the highest of national priorities.”⁵⁸ Ensuing debates and discussions between the president and Congress were “largely fruitless,” seriously hampered by a shortage of facts – specifically, how much oil the nation possessed or required.⁵⁹

There had been some red flags. The Texas Railroad Commission (TRC), a state regulatory body controlling oil and gas production, set allowable oil well production at 100 percent of maximum rate in April 1972, for the first time since 1948. In comparison, the previous month’s rate had been 86 percent.⁶⁰ This production rate has remained at 100 percent ever since. Byron Tunnell, TRC head, warned in a particularly prescient June 1972 statement, “America is facing an energy shortage that is going to become more severe, one so severe our very national

⁵⁵ *Ibid.*

⁵⁶ Robert M. Collins, *More: The Politics of Economic Growth in Postwar America* (New York: Oxford, 2000), 127.

⁵⁷ Mark Fiege, *The Republic of Nature: An Environmental History of the United States* (Seattle, WA: University of Washington, 2012), 383-384.

⁵⁸ Commoner, 34.

⁵⁹ *Ibid.*, 35.

⁶⁰ “Texas Oil Rate at 100% for First Time Since ’48,” *New York Times*, March 17, 1972, 52.

security may be endangered.”⁶¹ At a March 1973 TRC hearing in Abilene, Texas, the warnings continued. One oil industry executive reported, “The Nation must have domestic energy if it is to maintain a strong economy, continue to reduce poverty and provide for the national security.”⁶² Another gave fair warning that the United States had developed an “Achilles heel with respect to energy supplies,” and projected that by 1985 the country would depend mostly on Saudi Arabia and Iran for about 52 percent of its crude oil and 24 percent of its total energy requirements – double the 1970 levels.⁶³

Years earlier, the United States had an opportunity to preview the effects of an energy shutoff when 80,000 square miles of the Northeast experienced a blackout on November 9, 1965, leaving thirty million people in the dark. No riots or widespread looting occurred. New Yorkers helped one another until power was restored after almost fourteen hours.⁶⁴ The event was encapsulated in the 1968 Hollywood comedy *Where Were You When the Lights Went Out?*, starring Doris Day, Robert Morse, Terry Thomas, and Patrick O’Neal. Yet a 1977 power outage was not quite as humorous. When New York City experienced another blackout on July 13 of that year, peace and harmony did not prevail. Instead, citywide looting and disorder, including arson, were rampant. A subsequent congressional study estimated the cost of damages at over \$300 million. A Ford Foundation research analysis, *Blackout Looting!* by Robert Curvin and Bruce Porter, stated that 1,616 businesses lost between \$135 million and \$150 million through

⁶¹ “Maximum Oil Output Set in Texas,” *New York Times*, June 12, 1972, 67.

⁶² Robert Wright, “Industry Officials Stress Scope of Energy Crisis,” *New York Times*, March 14, 1973, 55.

⁶³ *Ibid.* In fact, crude oil imports amounted to 32.3 percent of total supply in 1985, and total energy requirements from imports amounted to 9.9 percent. Iran accounted for less than 1 percent of crude oil imports to the United States in 1985, while Saudi Arabia accounted for 4.1 percent. DeGolyer & MacNaughton, 2008, 53; 2008 *Annual Energy Review*, 5.

⁶⁴ <http://blackout.gmu.edu/events/t11965.html>

theft and other property damage.⁶⁵ The city government's own costs were estimated at \$12 million, while the electric utility Con Edison lost \$5.5 million in revenue.⁶⁶ Never in history had all five boroughs of New York City been simultaneously involved in civil disorder.⁶⁷ Curvin and Porter concluded that the primary cause of violence was the "serious national economic decline that [had] created exceedingly high levels of unemployment and high costs for food and other necessary goods," which had resulted in "substantially" worsened living standards.⁶⁸

Following President Lyndon Johnson's Vietnam "credibility gap," people in the United States began to question the honesty and transparency of their government and elected representatives.⁶⁹ Author Robert A. Caro writes, "The loss of trust in the presidency, of belief in what the President [Johnson] was saying, escalated under Richard Nixon . . . , but it began under Johnson."⁷⁰ Nixon's approval of the secret bombing of Cambodia was only the tip of the iceberg in his lack of full disclosure. During the 1972 presidential campaign, operatives of the Committee to Re-Elect the President (CREEP) broke into the Democratic National Party headquarters in Washington's Watergate building and bugged it with listening devices. This initial act culminated in Nixon's resignation two years later after the Watergate scandal unfolded, which only deepened the nation's suspicions about government and political leaders.

⁶⁵ Robert Curvin and Bruce Porter, *Blackout Looting!* (New York: Gardner Press, 1979). Director Spike Lee released a 1999 movie about this blackout titled *Summer of Sam*. Lee used the lens of the serial killer known as Son of Sam (David Berkowitz), who terrified New York City residents with random killings at the time, to tell the blackout story. The movie starred John Leguizamo, Adrien Brody, and Mira Sorvino.

⁶⁶ Curvin, xiii, 24.

⁶⁷ *Ibid.*, 59.

⁶⁸ *Ibid.*, 183.

⁶⁹ "Credibility gap" refers to Johnson's disingenuous statements about the status of the Vietnam War. *Washington Post* writer Murray Marder defined it as a "perceptibly growing disquiet, misgiving or skepticism about the candor or validity of official declarations" from the government. Marder, Murray, "Credibility Gap: Greater Skepticism Greets Administration Declarations," *Washington Post*, December 5, 1965, A21.

⁷⁰ Robert A. Caro, *The Years of Lyndon Johnson: The Passage of Power* (New York: Alfred A. Knopf, 2012), xix, 604.

Two films of the period reflected this wariness of government and told the public that it was not merely okay to distrust government, it was actually well advised.⁷¹ *The Parallax View* (1974), starring Warren Beatty, focuses on an obscure Parallax Corporation, whose mission is political assassination. *Three Days of the Condor* (1975) presents actor Robert Redford as a CIA employee who inadvertently uncovers a renegade CIA plot to take over the oilfields in the Middle East to protect the United States from impending oil shortages.

Government doubt intensified following Nixon's resignation in August 1974, when President Gerald Ford pardoned Nixon the following month. Public outrage over the pardon was one of the factors that cost Ford the 1976 election. In hindsight, Ford made an incredibly courageous decision, but paid a steep price for it. Ford candidly stated in his 1975 State of the Union Address that the "state of the Union is not good." Millions of Americans were out-of-work, and inflation and severe energy difficulties loomed over the country.⁷² The *Washington Post* reported in March 1984 that more than a fourth of all citizens lived in poverty at one time or another during the 1970s.⁷³

At the beginning of the seventies, the US population was 203,302,000, and by 1980 it had increased 11.4 percent to 226,542,000, the smallest percentage gain since the 1930s.⁷⁴ Inflation in 1970 was at 5.7 percent, jumping to 13.5 percent in 1980, reflecting a 136.8 percent rise. Unemployment over the course of the ten-year period rose 44 percent, from 5.0 percent to 7.2 percent. The resulting Misery Index (unemployment rate combined with inflation) increased 92

⁷¹ Chris Vognar, "The First Casualty of War? Truth," *Dallas Morning News*, March 12, 2010, 1E.

⁷² Gerald Ford, "Address Before a Joint Session of the Congress Reporting on the State of the Union," January 15, 1975. www.presidency.ucsb.edu/ws/?pid=4938

⁷³ Philip Hilts, "1 in 4 Americans Poor at Times in 1970s," *Washington Post*, March 8, 1984, A2.

⁷⁴ US Census Bureau, *Statistical Abstract of the United States: 2012*, 8, Table 1. Population and Area, 1790-2010.

percent, from 10.8 to 20.8 percent. Meanwhile, the Consumer Price Index (CPI) rose 87.1 percent during the decade, yielding an inflation rate of 102.9 percent.⁷⁵

As a measure of the nation's anemic economic health, the Dow Jones Industrial Average (DJIA) began the decade at 800.36. The high of 1051.70 was reached on January 11, 1973, and the DJIA did not close above 1000 again until January 6, 1981. At the end of this ten-year span, the DJIA had increased only 5 percent, to 838.74. The prime rate – the interest rate banks loaned money to their most creditworthy customers – registered 8.5 percent in January 1970 and rose to 15.25 percent in December 1979, representing a 79-percent increase.⁷⁶ This bank rate reached 21.5 percent, still an all-time high, on December 19, 1980. Mortgage rates for a thirty-year fixed-rate product increased 48 percent, from 7.6 percent in 1970 to 11.2 percent by the end of 1979.⁷⁷ The nation suffered from a case of serious economic blues.

During a 1977 World Series game at Yankee Stadium, ABC sports announcer Howard Cosell uttered a now-familiar phrase that summed up New York at that time. While looking at his monitor showing an aerial view of a raging fire being broadcast to the nation, he said, “There it is, ladies and gentlemen, the Bronx is burning.”⁷⁸ New Yorkers had a preview of the chaos during the September 1977 U.S. Open tennis tournament held for the last time at the West Side Tennis Club in Forest Hills, Queens. During a third round match between John McEnroe and Eddie Dibbs, thirty-three year-old Manhattan spectator James Reilly was shot in the leg by a bullet fired from a nearby building. With the recent July 1977 blackout, the associated looting, as well as the terror inflicted on the city by the Son of Sam killer still fresh in the minds of all, the two players quickly exited the court. Play was suspended for six minutes. Most of the 6,943

⁷⁵ www.inflationdata.com/inflation/Consumer_Price_Index.com

⁷⁶ www.wsjprimerate.us/wall_street_journal_prime_rate_history.htm

⁷⁷ www.freddiemac.com

⁷⁸ Jonathan Mahler, *Ladies and Gentlemen, The Bronx is Burning* (New York: Farrar, Straus, and Giroux, 2005), 330.

spectators were unaware that anything other than some kind of minor disturbance had occurred. As tennis commentator Bud Collins aptly said, “It has been a crazy summer in New York.” The stray bullet was just one of several “bizarre” events that defined the Open of 1977: Transgender issues; mutinous fans, disgusting breaches of etiquette; and, an unusually strung tennis racquet, referred to as the “spaghetti” racquet. Michael Steinberger of the *New York Times Magazine* describes the 1977 tennis tournament as “the wildest Open ever played.”⁷⁹

Prior to and during the 1977 blackout, New York had been experiencing severe financial difficulties, with bankruptcy looming on the horizon. This crisis resulted in one of the most famous headlines in the history of the city (see Figure 1.1.). Ford’s response to New York City, as well public disdain for Washington insiders following Watergate, and exacerbated by Ford’s pardon of Nixon, contributed to Ford’s defeat and Carter’s win in the 1976 presidential election.

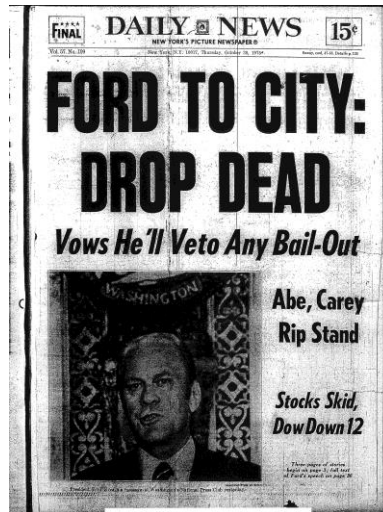


Figure 1.1. New York Daily News, October 30, 1975

Not only did the city of New York undergo serious financial tribulations during the seventies, but a major icon of American business also bore the brunt of economic dislocations

⁷⁹ Michael Steinberg, “Queens Was Burning,” *New York Times Magazine*, August 26, 2012, 34-39. “Spectator Is Shot At Forest Hills,” *New York Times*, September 5, 1977, 11.

caused by inflation and high energy prices. Foreshadowing the events of 2008-2009, Chrysler Corporation ran out of money in late 1979, spurring the Carter administration to provide loan guarantees to the company of up to \$1.5 billion. Carter signed the Chrysler Corporation Loan Guarantee Act into law on January 7, 1980, thus saving Chrysler in the nick of time, along with thousands of jobs.⁸⁰

The nation's vulnerability to energy and more bad luck for Carter occurred on March 28, 1979, when the "United States experienced the worst accident in the history of commercial nuclear power generation" at the Three Mile Island (TMI) Unit 2 nuclear power plant near Middletown, Pennsylvania.⁸¹ Fortunately, there was neither loss of life nor any injuries. The perception of nuclear power as a safe energy source, however, had been altered for decades to come. TMI occurred prior to disasters at nuclear plants in Chernobyl, Ukraine (1986), and Fukushima Prefecture, Japan (2011). Both of these events have been classified at the highest level of seven – *major accident* – on the International Nuclear and Radiological Event Scale, while TMI is considered a level five, or *accident with wider consequences*.⁸²

Without explanation or notification, Carter had cancelled an earlier speech planned immediately following July 4, 1979. He and his senior staff, along with select invited guests, retreated to Camp David for an intense ten days of self-analysis. He came down from the mountain on Sunday, July 15, for the televised speech. In this address titled "Energy and National Goals," Carter outlined for Americans what he labeled a "national crisis of self-confidence" and stated that to regain this, the nation must address its energy crisis head-on. *New*

⁸⁰ John Brooks, "Annals of Finance – The Kicker," *New Yorker*, January 7, 1985, 45-57.

⁸¹ *Report of the President's Commission on the Accident at Three Mile Island* (Washington, DC: US Government Printing Office, 1979), 2.

⁸² International Nuclear Event Scale (INES). The scale is from one to seven, with seven being the most serious. Each level of the scale indicates that an event is ten times more severe than the level below it. www-news.iaea.org and "Resources & Stats: Fukushima, Chernobyl and the Nuclear Event Scale," Nuclear Energy Institute, September 11, 2011.

York Times reporter, Hedrick Smith, called the speech “part sermon, part program, part warning.” Pundits quickly named it the *Malaise Address*. Carter began his thirty-three-minute talk at 10 p.m. EDT from the Oval Office. The president, while speaking before an audience of 65 million – the largest he had ever reached during his presidency – was determined and emphatic, frequently gesturing with a clenched fist to make his point.⁸³ After President Carter’s “Crisis of Confidence” speech of July 15, 1979, the appropriate designation for the seventies might have been “The Decade of Malaise.”

The domestic economy suffered relentless damage from two energy crises, while the nation’s foreign policy experienced significant decline in prestige along with diminution of its ability to act independently. By decade’s end, Americans became convinced that the military capability of the Soviet Union had surpassed that of the United States. The image of an omnipotent US superpower was tarnished. Justification for this attitude was bolstered by the November 4, 1979, seizure of US citizens and the US Embassy in Tehran by Iranian students. The capture of Americans presaged Carter’s 1980 election defeat. The hostages were intentionally not released until moments after President Ronald Reagan took the oath of office on January 20, 1981.

An interesting cultural sidebar is that both the 1973 and 1979 energy crises entered mainstream culture in several different ways. Singer and songwriter Dickie Goodman brought out two comic recordings: *Energy Crisis ’74* and *Energy Crisis ’79*. The words in each reflected the times, with specific references to prominent individuals of the year in question. Two separate board-game designers came up with family games (see Figures 1.2 and 1.3). The 1973 crisis produced *Energy Crisis Game* by Iteration, encouraging players to “Buy . . . Trade and Plan with

⁸³ Hedrick Smith, “Part Homily, Part Program,” *New York Times*, July 16, 1979, A1. Terence Smith, “A Six-Point Program,” *New York Times*, July 16, 1979, A1. Daniel Horowitz, *Jimmy Carter and the Energy Crisis of the 1970s* (Boston: Bedford/St. Martin’s, 2005), 13.

Crucial Energy Resources” and to “get involved in the challenge of planning [the] nation’s energy reserves.” The game was described as “an instructive introduction to the complexities of energy management.”⁸⁴ A 1979 product from Macmillan Game Company was *Gas Crisis*, billed as “Exciting, Entertaining, and Educational,” as well as a game with a message. It was touted as the “#1 game of the 1980s!!” The instruction booklet accompanying the game stated:

Thank you for your interest in GAS CRISIS, an extremely topical and timely game as we enter the 1980s. The prudent use of our natural resources is a concern to all of us that certainly should not be brushed aside lightly. . . . [Gasoline is a limited commodity.] Alternate energy sources must eventually be found before everybody, as in GAS CRISIS, runs out of gas.⁸⁵

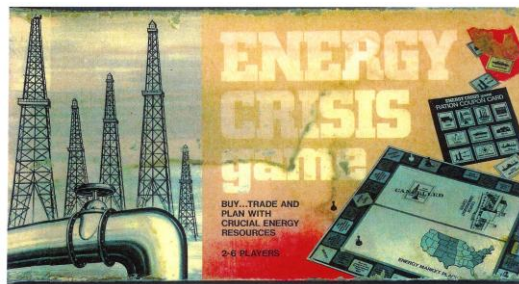


Figure 1.2. *Energy Crisis*, 1973 board game

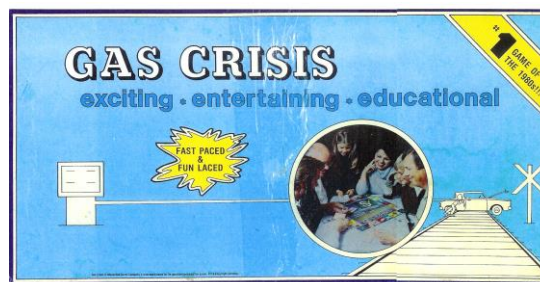


Figure 1.3. *Gas Crisis*, 1979 board game

⁸⁴ *Energy Crisis Game* by Itemation, 1973.

⁸⁵ *Gas Crisis*, “Components and Rules of Play,” Macmillan Game Company, 1979.

The feeling of US impotence was compounded when 50,000 heavily armed Soviet troops invaded Afghanistan in late December 1979. President Carter was particularly concerned that this incursion was “a steppingstone to possible control over much of the world’s oil supplies” and could thus constitute a clear and present danger to the United States.⁸⁶ The president proclaimed the Carter Doctrine in his January 23, 1980, State of the Union Address to a joint session of Congress:

Let our position be absolutely clear: An attempt by any outside force to gain control of the Persian Gulf Region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force.⁸⁷

Unfortunately for the American people, more proof of the nation’s international decline during the 1970s was forthcoming. In the darkness at a remote desert location in Iran on April 25, 1980, an aborted American hostage-rescue effort followed an aircraft collision, resulting in loss of lives. This all-service effort failed for lack of adequate equipment, planning, and intelligence, making the United States appear inept. The 1980s thus began with rising tensions in the Middle East and the threat of a more militant Soviet Union.⁸⁸

In fact, President Carter had aggressively confronted the twin issues of inflation and energy. He nominated Paul Volker to be chair of the Board of Governors of the Federal Reserve System in late July 1979. Volker acknowledged the country’s difficulties at his August 1979 swearing-in ceremony, saying that the United States faces “economic difficulties really unique in our experience. And, we’ve lost that euphoria that we had 15 years ago, that we knew all the answers to managing the economy.” Referring to Carter, Volker thanked the president for his

⁸⁶ Jimmy Carter, “Soviet Invasion of Afghanistan Address to the Nation,” January 4, 1980. www.presidency.edu/ws/?pid=32911

⁸⁷ Jimmy Carter, “The State of the Union Address Delivered Before a Joint Session of the Congress,” January 23, 1980. www.presidency.ucsb.edu/ws/ws/?pid=32911

⁸⁸ Don Oberdorfer, “‘Me Decade’ Looms For Oil Users,” *Washington Post*, March 23, 1980, A1.

forthrightness in addressing and prioritizing the problems of inflation and energy.⁸⁹ Volker almost immediately began to raise interest rates to levels that had not been seen before – or since – resulting in the demise of inflation.⁹⁰

Energy hounded Carter from his very first day in office and stayed with him throughout his term. Walter Rosenbaum writes, “The Carter administration began with a natural gas crisis and ended with the Iranian hostage crisis. . . . From start to finish, energy issues crowded [Carter’s] agenda.”⁹¹ He tried many times to alert the country about its energy issues. Nothing stuck with the citizens. For a few months, people would conserve while voicing displeasure, but once prices had declined to their previous low levels, the public returned to narcissistic concerns. The American populace never really believed Carter’s warning on impending energy shortages, prompting the following cartoon (Figure 1.4):

⁸⁹ Jimmy Carter, “Department of the Treasury and the Federal Reserve System remarks at the swearing in of G. William Miller as secretary of the Treasury and Paul A. Volker as chair of the Board of Governors of the Federal Reserve System,” August 6, 1979. www.presidency.ucsb.edu/ws/?pid=32711

⁹⁰ The prime rate that banks charge their most creditworthy customers rose to a high of 20 percent in April 1980. www.wsjprimerate.us

⁹¹ Walter A. Rosenbaum, *Energy, Politics, and Public Policy*, Second edition (Washington, DC: CQ Press, 1987), 6. John Costley Barrow III, “An Era of Limits: Jimmy Carter and the Quest for a National Energy Policy.” PhD dissertation, Vanderbilt University, 1996, 1.

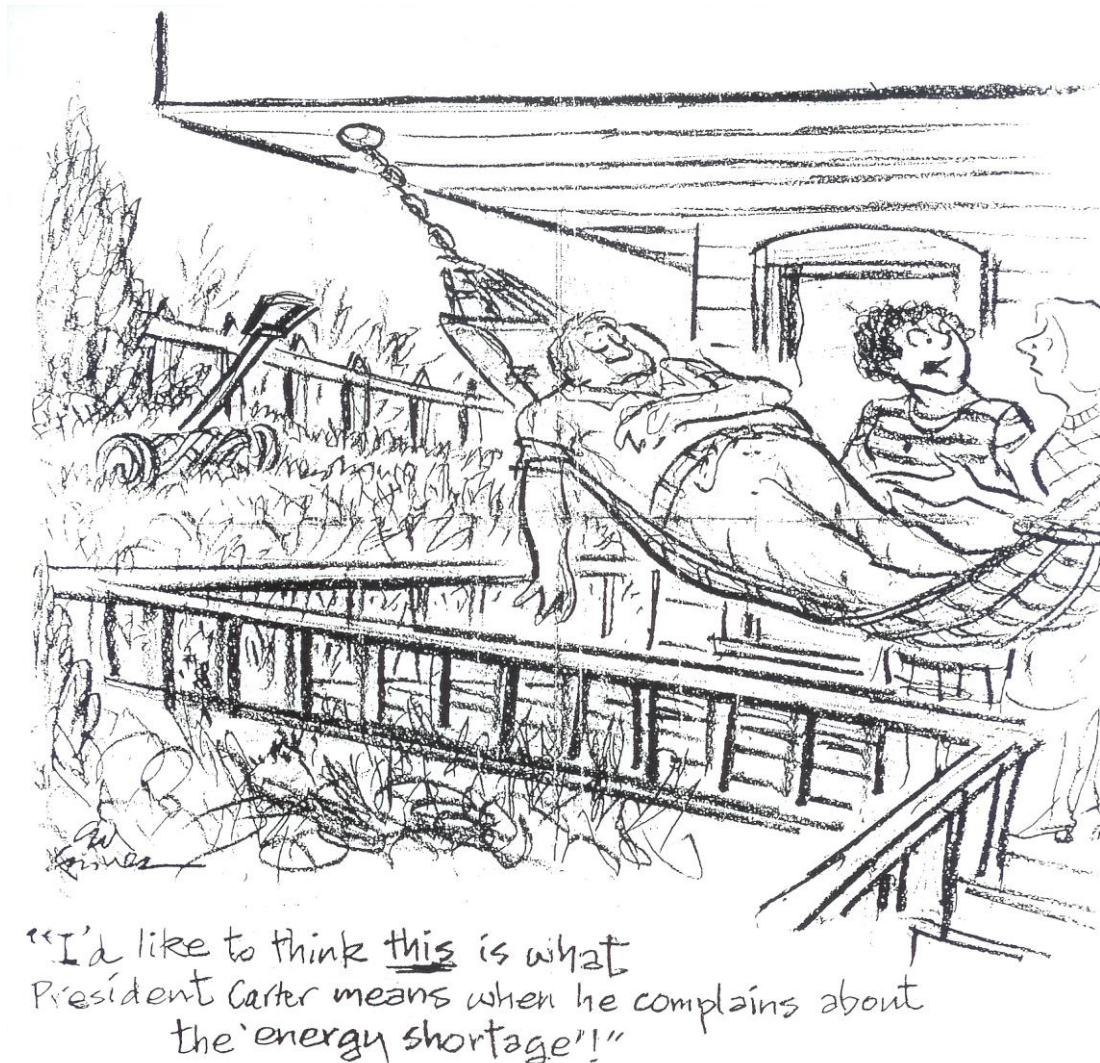


Figure 1.4. Cartoon by Fred Fisher (author's collection)

The energy crisis during his administration did, however, result in several major pieces of legislation. Congress passed the Department of Energy, the National Energy Plan, the windfall profits tax, and the Energy Security Act of 1980 (ESA), to name four. The concept of the federal entity known as the United States Synthetic Fuels Corporation (SFC), created by the ESA,

originated in a suggestion from President Ford's vice president, Nelson Rockefeller, in mid-1975 to spur development of synthetic fuels.⁹²

The corporation was unique in the annals of Congressional legislation: (1) limited life of twelve years, (2) restricted to three hundred full-time professional positions, (3) general and administrative expenses not to exceed \$35 million annually, with an inflation factor, (4) governed by a seven-member board of directors with staggered terms, the longest being seven years, (5) authority, subject to presidential approval, to pay employees at private market rates – to attract the most qualified individuals to the task at hand, (6) board nominated by the president, confirmed by the Senate, with removal only for neglect of duty or malfeasance in office, (7) all obligations backed by the full faith and credit of the United States, and (8) synthetic-fuel production goals mandated by statute.

The country had been involved with synthetic fuels for many years. In the twentieth century, attention to the subject arose early in 1918 during World War I. At the time, there was a concern that the United States might possibly be facing a gasoline “famine,” as Guy Elliott Mitchell of the United States Geological Survey reported in *National Geographic Magazine* (Figures 1.5 and 1.6).⁹³ The country's petroleum fields were showing signs of depletion, leading many to suggest that the downward trend in production foreboded impending shortages of fuel, as domestic production of oil had begun to trail domestic consumption.⁹⁴ Mitchell described one of the greatest mineral resources in the United States, one that would supply the needs of war and

⁹² *Synthetic fuel* is defined as any solid, liquid, or gas that can be used as a substitute for crude oil or natural gas. Synthetic fuels would be derived primarily from the country's domestic resources of coal, oil shale, tar sands, and heavy oil. It did not, for the purposes of the Synthetic Fuels Corporation, include solar power, wind power, renewables, or nuclear power.

⁹³ Guy Elliott Mitchell, “Billions of Barrels of Oil Locked Up in Rocks,” *National Geographic Magazine*, February 1918, 195-205.

⁹⁴ Joseph Charles Marchese, “Government and Energy: The Demonstration Program for Synthetic Liquid Fuels, 1944-1955,” PhD dissertation, Princeton University, 1983, v, 6.

peace and enable the country to maintain its supremacy over the rest of the world as a producer of crude oil. This resource was the “mountain ranges of rock [oil shale] that will yield billions of barrels of oil.” With oil shale, the country could rest assured of a supply of gasoline “for many generations to come,” he wrote.⁹⁵ No commercial oil shale operations then existed in the country. Oil had been commercially recovered from shale in Scotland, Estonia, and Brazil, but only in small operations.⁹⁶ The United States Bureau of Mines, beginning about 1916, had been conducting small-scale studies on the characteristics of oil shale and shale oil. Mitchell’s *National Geographic* article piqued the interest of the private sector in oil shale. Within a few years of the article, Union Oil Company had acquired oil shale lands, primarily in Colorado, and had tested about twenty experimental retorts to convert kerogen into crude oil.⁹⁷

The origins of federal-government involvement in the synthetic fuels industry had a strong national security underpinning, with the focus on providing energy for military preparedness. Similarly, the ESA had a major emphasis on national security as evidenced in the “Findings and Purpose” section, when Congress declared that “the achievement of energy security for the United States is essential to . . . the maintenance of national security,” as well as to increasing the “Nation’s security.”⁹⁸ In 1924, Congress appropriated the first funds for an oil shale study pursuant to a presidential Naval Fuel Oil Committee appointed to study the problem of obtaining adequate fuel for the Navy.⁹⁹ Concern over “to-morrow’s gasoline” dominated the

⁹⁵ Mitchell, 205.

⁹⁶ Subcommittee on Employment Opportunities, Committee on Education and Labor, House of Representatives, Hearings on May 9, 10, and 16, 1979 (Washington, DC: US Government Printing Office, 1979), 13.

⁹⁷ Joseph Charles Marchese, “Government and Energy: The Demonstration Program for Synthetic Liquid Fuels, 1944-1955,” PhD dissertation, Princeton University, 1983, v, 11.

⁹⁸ *Energy Security Act*, section 100 (a)(1) and (b)(1)

⁹⁹ James M. Fischer, “The New Synthetic Fuels Program: Boomlet or Bust,” *Tulsa Law Journal*, 1981, vol. 16, number 3, 362. R. B. Smith, “To-Morrow’s Gasoline?” *Scientific Monthly*, vol. 28, no. 4, April 1929, 336-342.

national discussion. There appeared to be no limit to the number of automobiles that the United States could build and sell, yet there was a limit on the nation's petroleum supply. Oil resources were being rapidly exhausted.¹⁰⁰ With the discovery in 1930 of the giant East Texas oil field, the urgency of utilizing oil shale resources in the United States abated.

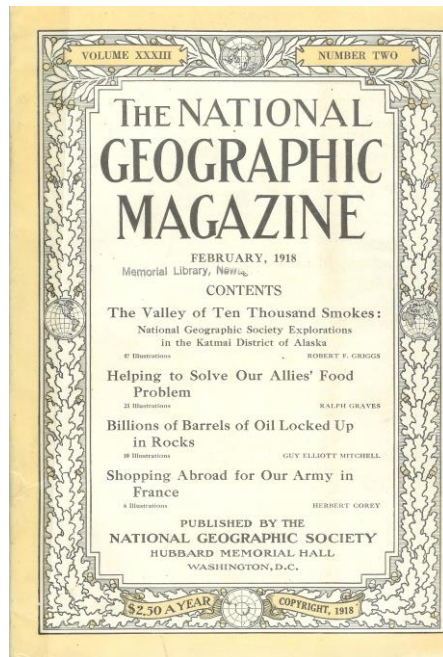


Figure 1.5. February 1918 *National Geographic Magazine*

¹⁰⁰ R. B. Smith, "To-Morrow's Gasoline?" *Scientific Monthly*, vol. 28, no. 4, April 1929, 336-342.

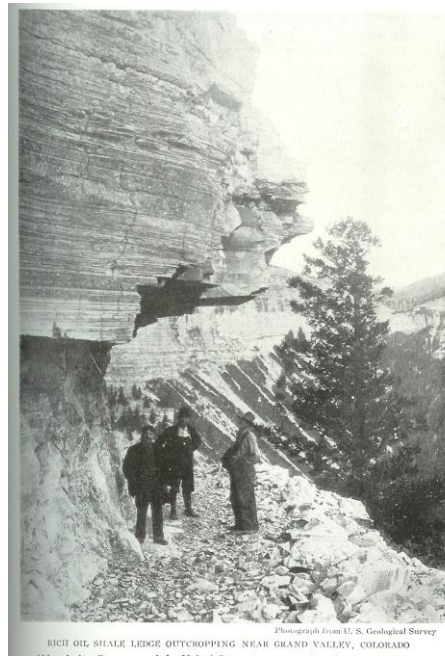


Figure 1.6. Oil shale photograph from the February 1918 *National Geographic Magazine* (page 203)

The next major initiative to develop synthetic fuels came with the passage of the Synthetic Liquid Fuels Act of 1944 (P. L. 290), which authorized the use of \$30 million over a five-year period for construction and operation of synthetic fuels primarily from coal and oil shale to conserve and increase the nation's oil resources. Historian Joseph Marchese has written that with the enactment of this legislation, "there was a startling occurrence; the federal government had not previously involved itself in . . . the energy sector." Marchese stated that "traditionally, the private sector had produced, transmitted, and marketed energy and had carried the responsibility of developing new technologies relating to their product."¹⁰¹

¹⁰¹ Joseph Charles Marchese, "Government and Energy: The Demonstration Program for Synthetic Liquid Fuels, 1944-1955," PhD dissertation, Princeton University, 1983, v, 36. Marchese writes, "Before 1900, the federal government rarely intervened directly into the affairs of the energy market," 1.

Congress extended this law in 1948, authorizing an additional \$30 million.¹⁰²

Congressional interest in this act was reflected by the comments of Sen. Joseph O'Mahoney (D-WY), chair of the Senate Committee on Interior and Insular Affairs:

There will be plenty of gasoline . . . but only if the United States rapidly expands its program for the production of synthetic fuels. Without such a program we shall become an importer of petroleum and thus dependent upon other lands and other peoples for the fuel supply we must have to maintain the commercial and industrial leadership which America now enjoys.¹⁰³

With the election of President Dwight Eisenhower in 1952, the national effort to develop a synthetic fuels industry ceased. The National Petroleum Council, an oil-and-gas-industry advisory committee, issued a report stating that “all methods of manufacturing synthetic liquid fuels” were “definitely uneconomical” and that the need for a synthetic fuel industry remained in the “distant future.”¹⁰⁴ Energy markets had developed into a glut position as a result of production from oil fields in the Middle East. The Eisenhower administration was anxious to reduce an anticipated federal budget deficit as well as limit federal involvement in the national economy.¹⁰⁵ According to Richard Vietor, the Truman administration tried to develop, for national security purposes, a domestic synthetic fuels industry in cooperation with the oil industry. After the election of Eisenhower, the petroleum industry was in a better position to define the national interest. Synthetic fuels took a back seat to future reliance on foreign oil.¹⁰⁶ Prior to dismantling the effort, the country had two coal liquefaction conversion plants operating

¹⁰² Richard H. K. Vietor, *Energy Policy in America Since 1945* (Cambridge: Cambridge University Press, 1984), 51.

¹⁰³ *Energy Initiatives of the 96th Congress*, Publication No. 97073, June 1982, 7.

¹⁰⁴ *Ibid.*, 59.

¹⁰⁵ Marchese, vi.

¹⁰⁶ *Ibid.*, 53.

in Louisiana and Missouri. They were producing liquid fuel from coal at a cost of only about 2 cents a gallon more than the cost of similar grade fuel then being produced from petroleum.¹⁰⁷

The Synthetic Liquid Fuels Act of 1944 had some positive aspects – a few demonstration plants – but it was unsuccessful in meeting its primary objective: to demonstrate the economic and technological feasibility of initiating a commercial synthetic liquid fuels industry.¹⁰⁸ The technology had not been developed in an economic manner – that is, it cost too much to make the product, and private industry was not in support of the government. Additionally, federal employees focused on synthetic fuels lacked imaginative leadership and sufficient expertise.

The decision in 1954 by the Eisenhower administration to terminate the synfuels effort “set in motion two long-range energy developments that culminated in 1974.”¹⁰⁹ The first was the inevitable increase in the country’s dependence on imported oil, and the second was the decline in the use of coal and oil shale as alternative energy resources.¹¹⁰ Vietor states succinctly: “The synfuels path was not chosen, and the inexorable alternative of growing dependence on foreign oil became a matter of history.”¹¹¹

Compared to oil and gas, coal is an inconvenient form of energy. Converting coal to oil and gas became a major industry almost two hundred years ago – one hundred years before the country learned to convert coal to electricity. The first company producing synthetic gas from coal in the United States was formed in Baltimore, Maryland in 1816 as the predecessor of Baltimore Gas & Electric. The organization of similar companies in other cities occurred over the next two decades. The first large-scale use of synthetic gas from coal was for street

¹⁰⁷ *Congressional Record – House*, April 25, 1979, 8522.

¹⁰⁸ Marchese, 384-385.

¹⁰⁹ Richard H.K. Vietor, “The Synthetic Liquid Fuels Program: Energy Politics in the Truman Era,” *Business History Review*, vol. 54 (1), 32.

¹¹⁰ *Ibid.*, 32, 33.

¹¹¹ *Ibid.*, 34.

lighting.¹¹² The gas-from-coal industry supplied virtually all the gas to the cities along the Eastern Seaboard and as far inland as Chicago and St. Louis until World War II. In the 1920s, there were an estimated 11,000 coal-gas producers in the United States: 6,500 in steel plants, 1,500 in glass plants, 1,500 in ceramics and lime-burning plants, 1,000 in gas utilities, and 500 in metallurgical and chemical plants.¹¹³ Coal liquefaction is discussed below.

During and after World War II, cross-country oil pipelines were converted into moving low-cost natural gas to the major gas markets in the industrial Northeast. Coal-based gas, obtained by cumbersome technology, had only one-half as much heat content as natural gas. Soon, the entire US gas grid was upgraded to natural gas, or methane, with about 1,000 Btus per cubic foot. Coal-based gas plants were shut down and in less than ten years, what had been a rather large synthetic gas industry was scrapped. Despite the death of the industry, coal-gas technology had become more elegant, efficient, and compatible with the high-heat-content gas used by industry.¹¹⁴

During the late nineteenth and early twentieth centuries, before widespread availability of electricity, Americans used coal-oil burning lamps for illumination. Ruth Moloney Cowgill of Marion, Ohio has written a small book of poems titled *The Coal Oil Lamp Generation*. During the Great Depression, she recalls, their farm was five miles from the nearest town and electric lines had not reached her area, so like all of her neighbors, the family used coal oil lamps in the evening.¹¹⁵ Coal-oil was manufactured from cannel coal, mineral wax, and bituminous shale.

¹¹² Gloria Bates, "Energy: Coal Gasification – A Source of Energy," *Oklahoma Law Review*, vol. 34, 133-134.

¹¹³ *Synthetic Fuels From Coal: Status and Outlook of Coal Gasification and Liquefaction*, Publication No. 96-17, June 1979, 18.

¹¹⁴ House of Representatives Hearings Before the Subcommittee on Employment Opportunities, *Domestic Energy Resources, Part I*, May 9, 10, and 16, 1979, 16, 17.

¹¹⁵ Ruth Moloney Cowgill, *The Coal Oil Lamp Generation* (1998), Preface.

Early in the life of gas stations, many had coal-oil available for sale to their customers (Figure 1.7).



Figure 1.7. A green-trimmed Texaco filling station that sold coal-oil for oil-burning lamps, pumped by hand from the square painted tank

One of the first major uses of coal liquefaction was in Germany during World War II where large-scale plants produced up to 90 percent of Germany's peak war-time aviation and motor fuel.¹¹⁶ The Republic of South Africa recognized in 1947 the dangers to energy dependence when the nation passed the Liquid Fuel and Oil Act and formed the Liquid Fuel and Oil Advisory Board. South Africa's situation was compounded by its policy of apartheid. In 1950, South Africa incorporated the South African Coal, Oil, and Gas Corporation (SASOL), with all shares owned by the government. By 1955, the first gasoline was produced from South

¹¹⁶ *Synthetic Fuels From Coal*, 48.

African coal (Figure 1.8). The production facilities were expanded in 1966 and the output provided feedstock for at least three refineries. In 1979, the second and third production facilities were planned after the new government in Iran cut off oil supplies to South Africa. To finance these plants, SASOL went public, selling and listing shares on the Johannesburg Stock Exchange. Shares were listed on the New York Stock Exchange in 2003. With the addition of SASOL III in 1984, the three plants combined provide South Africa with at least 50 percent of its needs for liquid fuels.¹¹⁷ The company began showing a profit in the late 1960s by overcoming technical problems and focusing attention on costs. For the fiscal year ending June 30, 2011, SASOL had an operating profit exceeding \$3.8 billion on revenues of \$18.3 billion. It operates in thirty-eight countries with over 33,000 employees.¹¹⁸

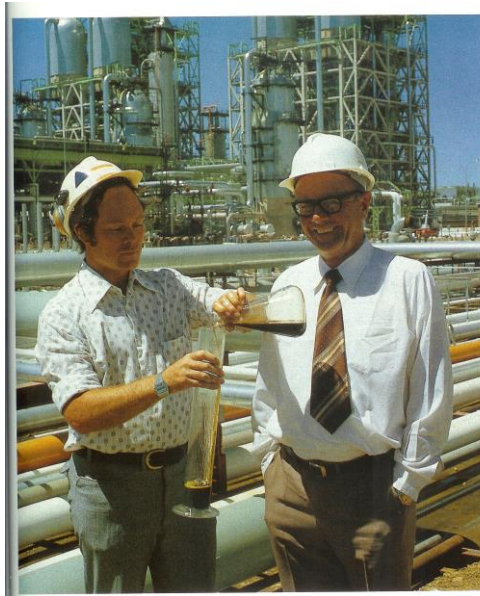


Figure 1.8. SASOL employees clink glasses of SASOL Two's first oil.¹¹⁹

¹¹⁷ *Extending the Defense Production Act of 1950, As Amended*, October 1979, 96th Congress, 1st Session, Senate Report 96-387, 138.

¹¹⁸ SASOL 2011 Annual Report, *SASOL 50 Years of Innovation, Mind over Matter: The SASOL Story: A Half-Century of Technological Innovation*.

¹¹⁹ Petra Wessels, *Crescendo to Success* (Cape Town, SA: Human & Rousseau, 1990), 85.

Shale oil was produced in France as early as 1838, Scotland since 1850, Brazil and Australia before 1900, and Sweden and Germany before 1925.¹²⁰ As early as 1920, the United States government, via the Bureau of Mines, established a laboratory in Colorado to undertake studies concerning the fundamentals of oil shale retorting, yields, and characteristics of oil shale products. President Calvin Coolidge appointed a naval fuel-oil committee in 1924 to study the problem of obtaining an adequate and dependable supply of fuel oil for the Navy. In 1924 and 1944, Congress appropriated funds for the construction and operation of demonstration and pilot plants to produce liquid fuels from oil shale.¹²¹ Dr. Philip White, assistant administrator for fossil energy at the Energy Research and Development Administration, testified in November 1976 that shale oil production was closer to commercial acceptance than were other liquid fuels or synfuel alternatives. It is technically simpler than liquids from coal and consequently cheaper. Coal-derived syncrudes produce a high yield of gasoline and fuel oil; shale oil derived syncrudes yield a high percentage of middle distillate oils upon which the mass-transportation industry of the United States depends. The technologies for oil shale and coal had not been demonstrated in the United States on any significant or commercial scale.¹²² An interesting footnote to oil shale technology occurred in the late 1950s and early 1960s. The Atomic Energy Commission, under the 1957 Project Plowshare Program, along with the US Bureau of Mines, developed and planned using nuclear explosives to fracture deeply buried oil shale in preparation for an *in-situ*

¹²⁰ Shale oil comes from oil shale, which is a fine-grained, laminated, sedimentary rock containing solid organic material called kerogen, which upon destructive distillation produces a substantial amount of oil. Fisher, *Tulsa Law Review*, 1981, vol. 16, no. 3, 359. Fred L. Hartley, and Claude S. Brinegar, "Oil Shale and Bituminous Sand," *Science Monthly*, vol. 84, no. 6, June 1957, 275-289.

¹²¹ Fisher, *Tulsa Law Journal*, 1981, vol. 16, no. 3, 359.

¹²² *Oversight – Prototype Oil Shale Leasing*, Hearing Before the Subcommittee on Minerals, Materials, and Fuels of the Committee on Interior and Insular Affairs, United States Senate, November 30, 1976, 13, 17, 23. *Extending the Defense Production Act of 1950, As Amended*, Senate Report 96-387, 141.

(underground mining of oil shale) combustion-extraction process. Given the possible devastating environmental, structural and political consequences of such an explosion, it is fortunate that nothing came of this endeavor.¹²³

Since 1943, the Senate Committee on Energy and its predecessor, the Committee on Interior and Insular Affairs, had favored the establishment of a national synthetic fuels policy. In 1944, Sen. Joseph O'Mahoney (D-WY), the chair of the committee wrote:

There will be plenty of gasoline . . . but only if the United States rapidly expands its program for the production of synthetic fuels. Without such a program we shall become an importer of petroleum and thus dependent upon other lands and other peoples for the fuel supply we must have to maintain the commercial and industrial leadership which America now enjoys

Petroleum products can be made from coal, and the coal supplies in the United States are so large that we need not worry about them for the next several hundred years ¹²⁴

¹²³ M.A. Lekas and H. C. Carpenter, "Fracturing Oil Shale With Nuclear Explosives For In-Situ Retorting," *Quarterly of the Colorado School of Mines*, vol. 60, no. 3, July 1965, 7- 30.

¹²⁴ *Extending the Defense Production Act of 1950*, 126.

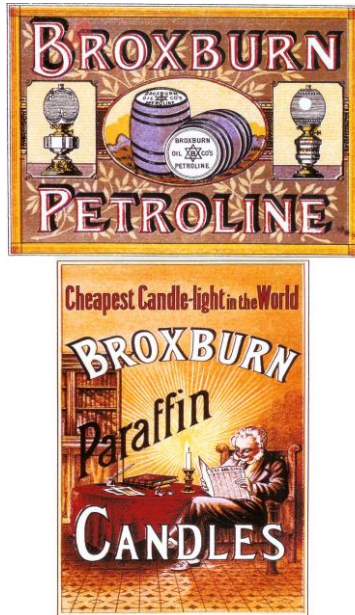


Figure 1.9. Broxburn was one of the five major Scottish shale oil companies in operation at the start of the twentieth century (circa 1900)

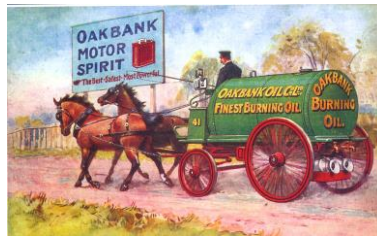


Figure 1.10. Another example of an early Scottish shale oil company

The 1973 oil embargo and simultaneous increase in petroleum prices stimulated congressional interest in synthetic fuels. The Ford administration, using an idea offered by Vice President Nelson Rockefeller, came up with an aggressive \$100-billion plan in October 1975 to achieve energy independence by 1985. The proposal called for the creation of an Energy Independence Authority (EIA), a government corporation providing financial assistance to synthetic fuel projects. Aid would be in the form of loan guarantees to private business concerns. This proposed legislation was also designed to expedite government regulatory procedures that

impacted energy development. The EIA did not pass, as concerns over energy prices and shortages waned.¹²⁵

The Ford-proposed EIA is significant. Carter's suggested 1979 Energy Security Corporation, which subsequently became the United States Synthetic Fuels Corporation, was modeled almost directly on Ford's idea. The EIA was to be a new government corporation, with a five-member presidentially appointed and Senate-confirmed board of directors, to assist in achieving energy independence for the nation by providing loans, loan guarantees, price guarantees, or other financial assistance to private-sector synthetic fuels projects. A limited number of EIA executives could be paid without regard to executive-branch salary limits. The EIA would have had a ten-year life. It would supplement and encourage private capital investment, and would have had financial resources of \$100 billion. As of October 1975, the White House reported that the nation's energy situation had continued to deteriorate since the 1973-74 Arab oil embargo. Oil imports were about 37 percent of domestic oil consumption and were expected to continue to increase to more than 50 percent of consumption by 1985. The White House counted on the EIA contributing the equivalent of up to 10-15 million barrels of oil per day of new energy production. If nothing were done, the Ford administration anticipated that imports of crude oil would be 12 million barrels per day. With an operating EIA, the United States would be energy independent.¹²⁶

Like Nixon and Ford, Carter never achieved his comprehensive energy policy for the country. He tried in every way possible, even creating a twelfth cabinet department – the behemoth known as the Department of Energy. He simply wasn't able to convince either Congress or the citizenry of the seriousness of the nation's energy problems.

¹²⁵ *Energy Initiatives of the 96th Congress*, June 1982, Publication No. 97-73, 7-8.

¹²⁶ "Energy Independence Authority Briefing Book (1)" Frank Zarb Papers, Box 6, Gerald R. Ford Presidential Library.

What occurred during the 1970s was the *perfect storm* in energy. Just a few years into the decade, OPEC imposed an embargo on exporting crude oil to the United States due to its support of Israel in the Yom Kippur War. This restraint ended in 1974, with crude oil prices having increased dramatically. After the outbreak of the Yom Kippur War in October 1973, the international price for crude oil doubled, and then doubled again. At the end of 1972, the average world crude price per barrel was \$2.66, rising to \$11.21 at the end of 1973 (a 321.4 percent rise year-to-year), \$11.42 at year-end 1974 (1.9 percent increase year-to-year), and \$12.03 at the end of 1975 (5.3 percent rise year-to-year). From 1972 to the end of 1975, world crude prices had jumped 352.3 percent. Prices in the United States, which were controlled, registered a 126.3-percent rise from \$3.39 per barrel in 1972 to \$7.67 in 1975.¹²⁷

No sooner had the nation recovered from this oil shock when another hit in 1979, precipitated by the Iranian revolution. Again, crude prices skyrocketed. At the end of 1978, world crude oil averaged \$14.15 per barrel and by the end of 1980 it had risen to \$36.93, a jump of 161 percent. Domestic prices, partially decontrolled by this time, rose 140 percent, from \$9 to \$21.59 per barrel.¹²⁸ Increasing prices for gasoline hit American pocketbooks when the average annual gasoline pump prices increased 58 percent during the OPEC oil embargo and another 119 percent during the Iranian revolution.¹²⁹

By the summer of 1979, travesties of the past decades (Watergate, Vietnam, the oil embargo) converged and boiled over into public anger and frustration at both society and government: the cost of filling up the family car had risen dramatically, assuming that a gasoline station was open and even had gasoline; stagflation was inexorably eating into wages; the cost of living had increased with no commensurate rise in wages; and government could not be trusted.

¹²⁷ *Twentieth Century Petroleum Statistics – 2010*, Dallas: DeGolyer and MacNaughton, 2011, 13, 34.

¹²⁸ *Ibid.*

¹²⁹ www.eere.energy.gov/vehiclesandfuels/facts/2005/fcvt_fotw364.html

A feeling of despair permeated the country. Americans were pessimistic about the future of the United States, and about their own personal futures. According to White House pollster Patrick Caddell, there was a “psychological crisis of the first order.”¹³⁰

This dissertation will focus on the Energy Security Act of 1980 – specifically, the congressionally chartered United States Synthetic Fuels Corporation signed into law on June 30, 1980. That action represented the country’s most ambitious effort to develop a synthetic fuels industry. The SFC acted as a catalyst, an investment bank, to provide financial assistance to synthetic fuel projects. The corporation signaled the government’s effort to enter the energy industry, the last bastion of the New Deal.

The SFC shut down in April 1986. Only four projects had been assisted, and these quickly closed up shop. The corporation is now long gone and forgotten. If anything, the mere mention of its name brings accusations of government waste and Washington run amok. And, it demonstrates that the public has a short memory when the immediate crisis abates, losing interest in solutions.

Let’s see if the charges are appropriate.

¹³⁰ Natasha Zaretsky, *No Direction Home: The American Family and the Fear of National Decline, 1968-1980* (Chapel Hill: University of North Carolina Press, 2007), 214-215.

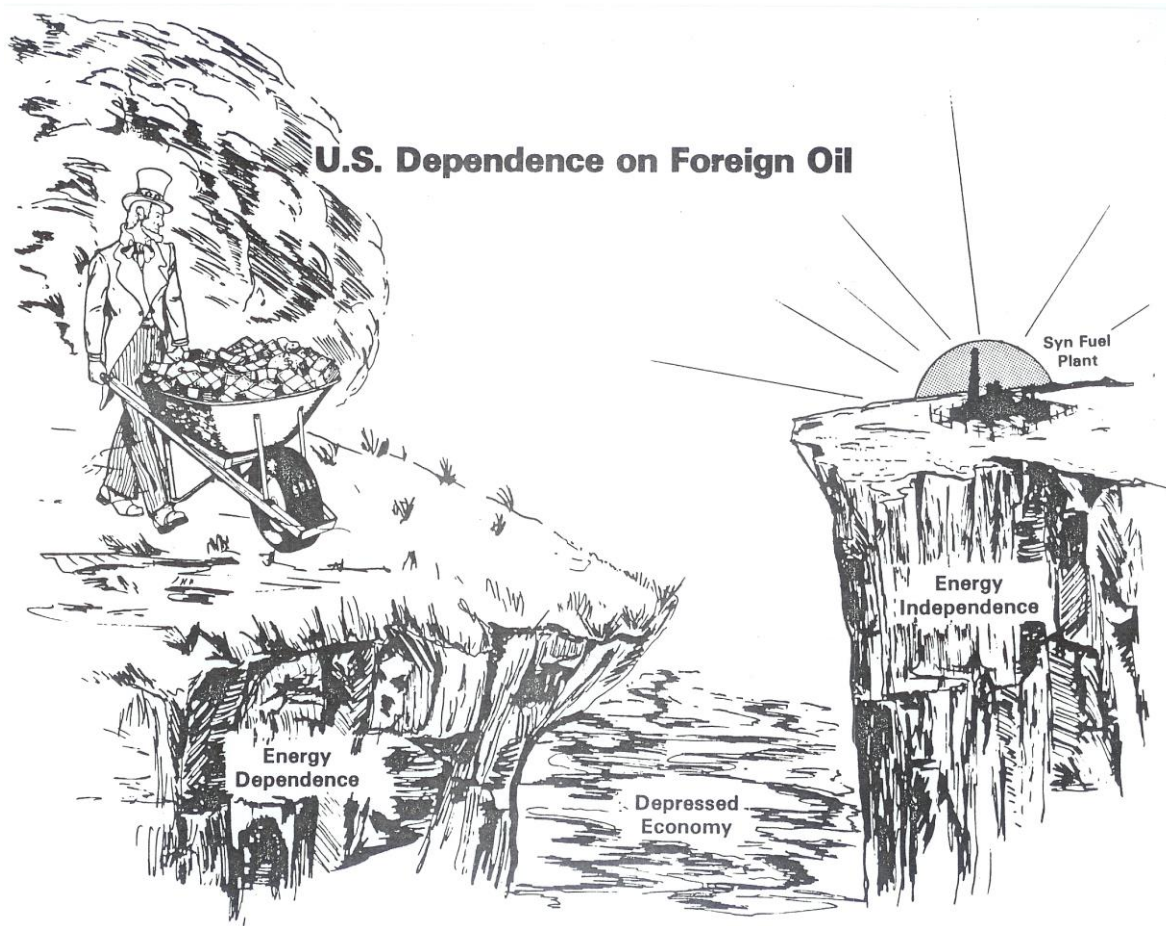


Figure 1.11. From a speech given by Robert Blakely, "An Approach to Risk and Financial Assistance at the Synthetic Fuels Corporation" (May 1981)

Chapter 2: Background

“It seemed as if a new ice age had arrived,” *Newsweek* reported in January 1977.¹ Miami was hit by its first-ever recorded snowfall. It also snowed in Fort Lauderdale, Palm Beach, Fort Myers, and even Freeport in the Bahamas.² On January 20, 1977, while James Earl Carter, Jr., took the oath of office as the nation’s thirty-ninth president, Americans were focused more on the bitterly cold weather than on the inaugural events. At noon, the designated time for the transfer of presidential power, the temperature in the nation’s capital was 28 degrees Fahrenheit.³ In fact, record low temperatures gripped much of the country, with some spots registering the coldest levels in more than a century. Other news reports related disheartening accounts of layoffs that idled thousands of workers, and shortages of natural gas that forced school closings. Overtaxed power systems caused brownouts in Detroit, for only the third time in that city’s history. Severe supply shortages of natural gas threatened to cripple parts of the United States for the rest of the year. Energy issues topped the list of concerns, although inflation and unemployment still grabbed the bulk of the headlines.⁴

During the 1976 presidential campaign, President Ford and candidate Carter addressed energy issues only in passing. In a Gallup poll taken the week before the election, 47 percent of respondents considered the high cost-of-living to be the most important issue facing the country, and 31 percent considered unemployment the most salient one. According to an October 12, 1976, *New York Times* and CBS News national survey, 52 percent of respondents considered inflation the most important problem facing the country, while 38 percent considered it to be

¹ “The Deep Freeze,” *Newsweek*, January 31, 1977, 34.

² George Lardner, Jr., and Robert Meyers, “Miami Is Hit by First Recorded Snow,” *Washington Post*, January 20, 1977, A-1, A-7.

³ “The Weather,” *Washington Post*, January 21, 1977, C2.

⁴ “America’s Mood-The South—A Show Me Attitude,” *Time*, January 24, 1977, 11.

unemployment. “Even more significant, twice as many voters think that the economy is getting worse as thinks it is getting better.”⁵ These problems ranked one and two, respectively, with energy not even mentioned on the list.⁶ A study of editorial space in ten of the nation’s leading newspapers conducted during the campaign indicates “economic concerns were the most influential factors. . . . [C]ampaign editorial remarks on the economy centered on inflation, unemployment and taxes.”⁷ In many cases, all three were interwoven in the same news story. The 1976 national unemployment rate was 7.7 percent, down from 8.5 percent the previous year. Inflation averaged 5.8 percent in 1976, down from 9.1 percent in 1975 and 11 percent in 1974.⁸ The 1976 Misery Index (unemployment rate plus inflation rate) registered 13.5 percent.⁹

In August 1976, Carter mentioned at a campaign press conference that during the pre-embargo era, “President Nixon had said that the nation was importing 25 percent of its oil needs, and in 1976, the country is approaching the 50 percent level.”¹⁰ Just prior to the 1973-74 oil embargo, the White House indicated that “imports accounted for approximately 33 percent of all crude oil and petroleum products.”¹¹ By 1976, import levels had increased to 43 percent of total

⁵R. W. Apple, Jr., “Carter, Focusing on Ford Record, Gains Among Independents in Poll,” *New York Times*, October 15, 1976, 1, B4.

⁶*The Gallup Poll: Public Opinion 1872-1977*, 2 (Wilmington, DE: Scholarly Resources, 1978), 913.

⁷ David S. Myers, “Editorials and the Economy in the 1976 Presidential Campaign,” *Journalism Quarterly*, Winter 1978, 55 (4), 755, 757.

⁸ Bureau of Labor Statistics, March 2005. <http://www.usinflationcalculator.com/inflation/historical-inflation-rates/> <http://www.miseryindex.us/>

⁹ <http://www.miseryindex.us/>

¹⁰ *The Presidential Campaign 1976, 1 (1): Jimmy Carter* (Washington, DC: US Government Printing Office, 1978), 386. At the same press conference, Carter changed this statistic from 40 to 50 percent after a reporter pointed out that it was currently at 40 percent. Carter replied that he knew for a fact that during March 1976, it was 50 percent (p. 390).

¹¹ Office of the White House Press Secretary; folder November 7, 1973, Pres. Energy Statement: Box 45; White House Central Files: Staff member and Office Files: Energy Policy Office: John F. Schaefer; Richard Nixon Presidential Library and Museum, Yorba Linda, CA.

crude needs, a 30 percent escalation from 1973 levels.¹² Alarm bells clanged, but were not heard, or were ignored.

On September 21, 1976, Carter proposed the creation of a new cabinet-level agency, the Department of Energy. In his announcement, Carter stated, “[M]y plan for energy reorganization at the federal level . . . will permit us . . . to deal with our energy crisis.”¹³ Even two-and-one-half years after the oil embargo, he noted the United States still had no energy plan. He vowed to advocate for “the development of a coherent energy policy, and [make] the creation of a government organization that can put it into effect, the highest priority.”¹⁴

Energy was mentioned during the first presidential debate on September 23, 1976.¹⁵ Replying to a question on nuclear power, candidate Carter said, “[T]he energy policy of our nation is one that has not yet been established [E]very other developed nation in the world has an energy policy except us.” With heightened anxiety, Carter noted there were only “35 years of oil left in the whole world. We’re going to run out of oil.”¹⁶ Carter wanted America to shift from oil to coal and oil shale, while at the same time employing “strict conservation measures.”¹⁷

¹² Department of Energy, Energy Information Agency, *Annual Energy Review 2008*, June 2009, 129. Also, DeGolyer and MacNaughton, *Twentieth Century Petroleum Statistics, 2008*. Dallas: DeGolyer and MacNaughton, 2008, 53.

¹³ *The Presidential Campaign of 1976*, 656, 660.

¹⁴ *Ibid.*

¹⁵ “Transcript of the Debate,” *New York Times*, September 24, 1976, A21

¹⁶ Carter’s estimate of thirty-five years of oil left is the reserve-production ratio, which provides the number of years a volume of reserves will last based on recent production. E-mail to author from Gary Swindell on March 12, 2012. Jay Hakes, Director of both the Carter Library and the Energy Information Agency from 1993-2000, has commented that during this period of the late 1970s there was great ignorance about how to view oil and gas reserves. This misunderstanding was particularly acute with people in the nuclear industry, who almost without exception tended to underestimate greatly the amount of oil available. Carter and his energy advisor James Schlesinger had experience and favored nuclear power. The energy experts believed that oil usage would continue to rise at the meteoric rate of the 1960s and early 1970s. Thus, the proven reserves would be divided not by the then-current consumption but by the higher rates expected in the future. Jay Hakes emails to the author, March 10, 11, 2012.

¹⁷ *Ibid.*

During his presidential campaign, Carter appointed James Schlesinger, formerly Nixon's defense secretary and one-time atomic energy czar, to be his energy advisor. After taking office, Carter asked Schlesinger to prepare a comprehensive energy policy by the end of the first three months of his fledgling administration. Carter later reminisced that he and Schlesinger "started working on the energy thing early on: in the first sessions we ever had down . . . in Plains. We worked on it during the interim period."¹⁸

Once elected, President Carter wasted no time in taking up the energy issue, acknowledging the great importance of establishing "limits." Believing the nation could no longer "bear any burden or pay any price," the president stated in his inaugural address, "[W]e have learned that 'more' is not necessarily 'better', that even our great nation has recognized limits, and that we can neither answer all questions nor solve all problems. We cannot afford to do everything So, together, in a spirit of individual sacrifice for the common good, we must simply do our best."¹⁹ Carter's "primary thought on Inauguration Day was about the potential shortage of energy supplies" affecting the nation.²⁰

The day after the inauguration, January 21, 1977, the president issued a press release calling on all Americans, no matter what the source of heating in their homes, "to turn their thermostats down to 65 degrees in the daytime and lower at night." He concluded by reminding the nation that "our energy problems are real and cannot be ignored . . . and that [the] Nation

¹⁸ Interview with Jimmy Carter, Miller Center Interviews, Carter Presidency Project, 19, November 29, 1982, 70 (Jimmy Carter Library).

¹⁹ *Public Papers of the Presidents of the United States: Jimmy Carter, 1977*, Book 1, 2.

²⁰ Jimmy Carter, *Keeping Faith* (Fayetteville: University of Arkansas Press, 1995), 23.

needs a coherent energy policy and such a program of energy action will be formulated *promptly* [emphasis added].”²¹

In that release, the new president delivered the disturbing news that the escalating shortages of natural gas had been so serious that over 200,000 workers were impacted by the closure of their companies’ operations. An equal number of children found their schools shut by these same shortages.²²

The president sent his first piece of legislation, the Emergency Natural Gas Act of 1977, to the speaker of the House and the president of the Senate on January 26, 1977. This legislation provided a “simple, temporary measure to enable the government to cope with an unprecedented shortage of natural gas supplies.”²³ In his news briefing discussing the legislation, also held on January 26, Carter said, “Four thousand plants are now closed. Four hundred thousand people have been laid off because of natural gas shortages.”²⁴ The numbers had doubled within five days of his January 21st announcement. The president reiterated his earlier request for Americans to dial down their thermostats, just as he had done in the White House and had mandated for all government buildings.²⁵

Continuing his blitz to educate the public about the energy crisis, on January 27, 1977, Carter traveled to West Chester, Pennsylvania, to address students and to hold a question-and-

²¹*Public Papers of the Presidents of the United States: Jimmy Carter, 1977, Book 1-January 20 to June 24, 1977, 7.*

²²*Ibid.*, 6-7.

²³*Ibid.*, 20.

²⁴*Ibid.*, 21.

²⁵*Ibid.*, 22.

answer session at Stetson Junior High School.²⁶ The president responded to a question about the natural gas shortage, saying “We’re running out of natural gas and oil. We only have enough to last 25 or 30 years. [Based on current reserves divided by current production. Refer to footnote sixteen.] And it’s going to mean that we are going to have to do without things we’ve done with in the past, and we’re going to all have to make some small sacrifices”²⁷ The president warned children that their future lifestyles would not be as comfortable as those of their parents. In the United States, it was commonly assumed that each successive generation had expected an improved standard-of-living over that of the prior generation.

Carter sent telegrams to governors in twelve states on Sunday January 30, 1977, expressing his concern about the human suffering and economic problems caused by the energy shortages and asking for specific information on energy-related problems in each state, and soliciting ideas to ease or resolve these issues.²⁸ Further, demonstrating his concern, the president traveled to Pittsburgh, Pennsylvania, after every school in the state had been closed due to the natural gas shortage. At the Westinghouse plant in Pittsburgh, Carter spoke candidly: “I think to the extent that we can let the American people know that this is the first major indication of a permanent energy shortage and that all of us have to do our part, perhaps it is a good forewarning

²⁶ According to David Halberstam, noted oil industry analyst Charley Maxwell coined the phrase “energy crisis,” and started using it as early as 1970. David Halberstam, *The Reckoning* (New York: William Morrow, 1986), 16.

²⁷ *Public Papers: Jimmy Carter*, Book 1, 29.

²⁸ *Presidential Documents*, 13 (5), January 26, 1977, 101; *Presidential Documents*, 13 (6), January 30, 1977, 114. Jimmy Carter, “Natural gas Emergency text of a telegram to the Governors of 12 States,” January 29, 1977. The twelve states were: Georgia, Illinois, Indiana, Kentucky, New Jersey, New York, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia. www.presidency.ucsb.edu/ws/?pid=7300

that might keep us from having very severe national catastrophes in the future.”²⁹ He added that “our country . . . wastes more energy than the total amount we import.”³⁰

Back in Washington after his Pittsburgh trip, Carter spoke on the South Portico of the White House about what he had observed and learned. Thermostats of public and private buildings in Pennsylvania, at the order of Gov. Milton Shapp, had been reduced to 62 degrees. Carter stressed two points: “One is [that] this is the first strong indication of a permanent, very serious energy shortage. . . . [T]he energy shortage . . . is going to get worse instead of better.” The second point “is that we are all in this together. Every household that keeps its temperature too high . . . contributes to the unemployment of American people” and damages our society.³¹ Continuing his theme of sacrifice and deprivation, Carter boldly but unrealistically suggested that Americans “cut down the thermostats very low, even as low as 50 degrees”³²

In a cabinet meeting on Saturday January 29, 1977, the president commented that he had “been getting an increasing number of very serious reports about the impact of the energy shortage . . . on different states in our country.”³³ Due to the severity of the crisis, Carter suggested legislation to move the United States to a four-day, ten-hours-per-day, workweek requiring buildings to be heated only four days a week instead of five.³⁴

The president later recalled that “[s]hortly after the Congress convened, we announced that we would have a bill to the Congress in ninety days. During that ninety-day period, Jim Schlesinger and Stu Eizenstat and others . . . worked as closely as they could with congressional

²⁹ *Presidential Documents*, 13, (6), January 30, 1977, 115.

³⁰ *Public Papers: Jimmy Carter*, 1977, Book 1, 38.

³¹ *Ibid.*, 45.

³² *Ibid.*, 46.

³³ *Public Papers of the Presidents of the United States: Jimmy Carter*, 1977, Book 1- January 20, 34.

³⁴ *Ibid.*

leaders who were interested in energy [T]here was an inclination [on the part of Congress] to postpone addressing that question [energy].”³⁵

Barbara Kellerman, the James McGregor Burns Lecturer in Public Leadership at Harvard’s John F. Kennedy School of Government, writes that Carter “spent more time on energy policy than any other domestic issue,” choosing to become immersed in this complicated fray at the very start of his presidency.³⁶ Carter believed, Kellerman writes, that “he had a mandate for change that would signal an end to automatic and perpetual growth in America and reverse the ever-increasing expectations of the post World War II generations.”³⁷

Perhaps noteworthy in hindsight, this was not the first instance of a president recognizing the importance of a national energy policy. Six-and-a-half years earlier, on June 4, 1971, President Richard Nixon notified Congress, “[T]his is the first time that a message on energy of a comprehensive nature has been sent to the Congress by a President of the United States.” Rapidly declining domestic oil and gas reserves had attracted Nixon’s attention, along with a doubling of the nation’s energy usage during the previous twenty years. Since 1967, the demand for energy had increased even more dramatically, while during prior decades “energy consumption had generally grown at a slower rate than the national rate of output of goods and services.”³⁸

The relatively low cost of energy in the United States had caused demand to skyrocket. From 1960 through 1973, domestic use of crude oil had increased 77 percent, from an annual rate

³⁵ *Carter Presidency Project: Final Edited Transcript, Interview with Jimmy Carter*, Miller Center, November 29, 1982, 24.

³⁶ Barbara Kellerman, *The Political Presidency: Practice of Leadership* (New York: Oxford University Press, 1984), 186.

³⁷ *Ibid.*

³⁸ *Presidential Documents*, 7 (23), June 7, 1971, 855-856.

of 3.6 billion barrels to 6.4 billion barrels.³⁹ Furthermore, the price had been maintained at an attractive level by OPEC nations until the 1973 Arab embargo, when it quadrupled.⁴⁰ The cost per barrel of crude oil produced in Saudi Arabia increased from an average \$1.34 per barrel in 1969 to an average \$9.60 per barrel in 1973, a 611-percent rise.⁴¹ In 1960, the domestic price of crude oil averaged \$2.88 per barrel, but by 1973 it was \$3.89, a modest 35-percent increase of \$1.01 per barrel over the thirteen-year period.⁴²

Faced with the embargo, President Nixon addressed the nation in November 1973, about the energy emergency, announcing that the country was “heading toward the most acute shortage of energy since World War II.” At this point, 46 percent of Americans considered the energy crisis the most important problem facing the country. It ranked as the number one issue by twenty-one percentage points, compared to the next critical topic of the high cost-of-living.⁴³ He implored Americans to use less energy, develop new sources, and cultivate the “capacity to meet our [energy] needs without relying on any foreign nation.”⁴⁴ Nixon expected development of the nation’s coal reserves and oil shale to remedy the energy supply problem as he summoned citizens to “unite in committing the resources of this Nation to a major new endeavor, an endeavor that in this Bicentennial era we can appropriately call ‘Project Independence.’” He challenged the nation to set about this national goal “in the spirit of Apollo, with the determination of the Manhattan Project, that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign sources.” Under

³⁹ *DeGolyer and MacNaughton, 2008, 64.*

⁴⁰ “How to Save Energy,” *Newsweek*, April 18, 1977, 74.

⁴¹ *DeGolyer and MacNaughton, 2008, 13.*

⁴² *Ibid.*, 34.

⁴³ *The Gallup Poll: Public Opinion 1972-1977*, vol. 1 1972-1975, 230. The poll showed 46 percent of the people considered the energy crisis the most important issue, with 25 percent picking the high cost-of-living.

⁴⁴ *Presidential Documents*, 9 (45), November 7, 1973, 1312.

Project Independence, he urged Americans to “be able to meet America’s energy needs from America’s own energy resources.”⁴⁵ Nixon also proposed a national speed limit of 50 miles per hour, which Congress subsequently legislated at 55 miles per hour. Additionally, Nixon directed that daytime temperatures in federal offices be reduced immediately “to a level of between 65 and 68 degrees.”⁴⁶

The Nixon administration was also concerned about the 1973-74 oil embargo imposed on the United States as a result of the nation’s support of Israel during the Yom Kippur War. President Nixon ordered William E. Simon, head of the newly established Federal Energy Administration, to “plan a standby gasoline-rationing system, one that required the use of ration coupons.” Under a rushed deadline, the Bureau of Engraving and Printing printed 4.8 billion ration coupons, measuring 1.5-by-3.5 inches, at a cost of \$12 million. These vouchers were never used and were subsequently destroyed in spring 1984.⁴⁷ A few survived, however. Figure 1.1 shows a copy of one of the coupons.⁴⁸

⁴⁵ *Presidential Documents*, 1316-1317.

⁴⁶ Richard Nixon, “Address to the Nation About Policies To Deal with the Energy Shortages,” November 7, 1973. <http://www.presidency.ucsb.edu/ws/?pid=4034>

⁴⁷ Coupon storage costs ran about \$20,000 per year. They were stored in Quonset huts with doors welded shut at an Army depot in Pueblo, Colorado. The coupons, weighing over 2,000 tons, cost \$150,000 to destroy. The government placed serial numbers on the coupons. “The idea at the time was that the motorist would simply write in his license number in the designated spot and sign his name.” Concern over coupon security came from the engraved likeness of George Washington, the same image used on the one-dollar bill. Because that portrait is “read” by automatic bill-changing machines and other devices, the ration coupons could not simply be thrown away due to the potential for large-scale fraud. If someone inserted a coupon into a change machine, a dollar in change would emerge. *Omni*, 7 (4), January 1985, 57, and Robert D. Hershey Jr., “Gas Rationing Coupons Pose Disposal Problem,” *New York Times*, May 31, 1983, A18.

⁴⁸ Ed Rochette, “Ration Coupons Hit Market,” *Numismatic News*, June 16, 1987, 1-17.



Figure 2.1. Gas ration coupon from Nixon era⁴⁹

John Sawhill, director of the Federal Energy Administration, submitted the *Project Independence Report* to President Ford in November 1974. This document was a comprehensive 1,100-page evaluation of the nation's energy problems and available options, which included increasing domestic energy supplies, instituting conservation measures, and establishing a standby energy program.⁵⁰ Unfortunately, the Watergate scandal diverted Nixon's attention, and Project Independence became a lower priority for him. Once the Arab embargo ended, the energy crisis dropped to the fourth most important issue, with only 6 percent of the public considering it foremost. By then, the high cost-of-living was identified as the top issue for 48 percent of the respondents.⁵¹ OPEC voted in March 1974 to end the embargo, looking forward to having a continuing and more forceful role in the Middle East, as well as the rest of the world. They had successfully unsheathed "the oil weapon," and made their presence known as a force to be reckoned with. The American populace seemed to forget quickly about energy after the embargo concluded and they were able once again to purchase easily gasoline for their vehicles.

After Nixon's laborious exodus, his successor, President Gerald Ford, offered a modified version of Project Independence, which he labeled the Energy Independence Act of 1975 (EIA) and incorporated in his State of the Union address on January 15, 1975. EIA never passed

⁴⁹ Author's private collection.

⁵⁰ Federal Energy Administration, *Project Independence Report* (Washington, DC: US Government Printing Office, 1974), 1.

⁵¹ *Gallup Poll*, 291.

Congress due to its complexity, Ford's unelected status, and the short-lived concern for energy on the part of the general population.⁵²

By October 1975, Ford was increasingly perturbed by the inaction of Congress on his EIA legislation. He proceeded to propose the Energy Independence Authority Act of 1975 (EIAA-75) as part of the continuing quest for national energy self-sufficiency. In his letter of transmittal to the speaker of the House and the president of the Senate, an exasperated Ford remarked that two years had gone by since the embargo and Congress had yet to pass his EIA bill. He again urged prompt congressional action on this legislation. Frustrated by "excessive delays," Ford decided to send Congress his EIAA, which he hoped would have better success. The EIAA-75 called for an Energy Independence Authority, "a new partnership between the private sector and the Federal government to assure action on vital energy projects in the next decade." Ford estimated that "capital requirements for energy independence [would] total \$600 billion over the next ten years."⁵³

The staff of Vice President Nelson Rockefeller had developed the idea of the Energy Independence Authority. It would have powers beyond those of traditional government agencies, and be run as a federal corporation with a five-member board headed by a chair who would also serve as chief operating officer. This agency would have total financing of \$100 billion, broken into \$25 billion in equity capital and \$75 billion in borrowing authority.⁵⁴ Without doubt, Ford

⁵² President Ford sent this bill to Congress on January 30, 1975.
<http://www.presidency.ucsb.edu/ws/?pid=5294>

⁵³ President Gerald Ford, letter to the speaker of the House and president of the Senate transmitting proposed legislation to establish an Energy Independence Authority, October 10, 1975.
<http://www.presidency.ucsb.edu/ws/?pid=5318>

⁵⁴ Michael Turner, *The Vice President as Policy Maker: Rockefeller in the Ford White House* (Westport, CT: Greenwood Press, 1982), 114-117. A staff member for Stuart Eizenstat (Carter's domestic policy advisor) wrote a memorandum to Eizenstat dated July 13, 1979, in which the writer offered forty pages of articles about Ford's Energy Independence Authority and Nixon's Project Independence. The staffer was

was committed to providing the nation with the means to achieve energy independence, but his plans languished on Capitol Hill. He had ties to former President Nixon, had pardoned Nixon, and he lacked the necessary prerequisite of being elected by the people to his position. Unfortunately, Ford did not see this legislation come to fruition.⁵⁵

When the Carter administration commenced its efforts, the country was still without a national energy policy. It almost seemed as though the American people were against having one. During the campaign, Carter's ideas focused mostly on energy conservation measures. The Emergency Natural Gas Act of 1977 permitted shifting natural gas from one interstate pipeline to another, while liberalizing interstate gas prices.

As a result of subsequent conversations with oil company executives, however, Carter modified his views to stimulate domestic production in tandem with conservation, while providing some assurance of price protection for consumers. At this stage, his stand on environmental issues was unequivocal: "If there is ever a conflict, I will go for beauty, clean air, water, and landscape." As the energy crisis escalated, though, many business people told him that compromises were "imperative if his economic and energy goals [were] to be met."⁵⁶ By summer 1979, the country was in a major energy panic. In the interest of national security, Carter virtually abandoned the environmentalists with his proposed Energy Mobilization Board (EMB). Permitting regulations had become so complex, bureaucratic, and burdensome that Carter proposed the establishment of the EMB in the Executive Office of the President. While ensuring that environmental standards would be met, the EMB would "slash through red tape and

researching Carter's proposed Energy Security Corporation. Domestic Policy Staff: Eizenstat, Box 202. "Energy Security Corporation [CF, O/A 727]," Jimmy Carter Library.

⁵⁵ *Presidential Documents*, 11 (3), January 15, 1975, 50-51.

⁵⁶ "The Big Problems," *Newsweek*, January 24, 1977, 30.

bureaucratic obstacles and set absolute deadlines for actions at the Federal, State, and local levels.” Succinctly, the EMB was to designate nonnuclear energy facilities critical to import reduction goals, and for each facility to convert disparate, disconnected proceedings and requirements into a single coordinated and expedited decision process.⁵⁷

Several other critical issues were vying for the new president’s attention, and some were just as important as energy. All posed challenges for the administration, such as ways to deal with rising inflation, reduce unemployment, and streamline and reorganize the government. On April 19, 1979, the Commerce Department released a report stating that the annual rate of inflation in the first quarter had “surged to 9.5 percent from . . . an average of 7.6 percent for all of 1978.” Less than four months later, on August 3, 1979, the Bureau of Labor Statistics reported that the nation’s unemployment had risen “a tenth of a percentage point to 5.7 percent of the work force.”⁵⁸ Even though this figure was a “statistically insignificant increase,” the Carter administration policymakers “braced for a relatively steep recession.” Dr. Janet L. Norwood, the commissioner of labor statistics, stated, “[C]learly . . . there is a slowdown in the economy.”⁵⁹

Carter touted himself as a “Washington outsider,” but this image put him at a disadvantage on these issues. It gave the impression that he lacked a network and understanding of how things worked in the Capitol. Carter also had to handle a growing Soviet threat and forge a peaceful settlement in the Middle East. He wanted to develop a comprehensive national health insurance plan, and provide a rescue strategy for the nation’s urban ills, including a bailout for

⁵⁷ *The President’s Program For United States Energy Security*, The White House, Washington, DC, July 1979. Author’s possession.

⁵⁸ Edward Cowan, “Growth in Economy Plunged in Quarter But Inflation Rose,” *New York Times*, April 20, 1979, A1.

⁵⁹ Philip Shabecoff, “Jobless Rate in U.S. Up Slightly in July to 5.7% from 5.6%,” *New York Times*, August 4, 1979, A1.

bankrupt New York City. A federal loan guarantee for Chrysler Corporation was soon added to the list of major time-consuming initiatives.⁶⁰

On February 2, 1977, less than two weeks after his inauguration, Carter delivered a “fireside chat” from the White House library, broadcast to the nation on television and radio. He was informally dressed in a beige cardigan sweater, with a tie and navy blue trousers.⁶¹ Sitting in a red velvet chair in front of a roaring fire, he attempted to set the mood for his plea about what Americans “needed to do together,” saying, “One of our most urgent projects is to develop a national energy policy. As I pointed out during the campaign, the United States is the only major industrial country without a comprehensive, long-range energy policy.”⁶² George Reedy, former special assistant to President Johnson, opined that this was Carter’s “most effective presentation.” After questioning dozens of people the day following the president’s speech, Reedy noted that none remembered the specifics of Carter’s speech, but they had “received the message” that the days of cheap, convenient energy were over.⁶³

Congress had hurriedly passed the Emergency Natural Gas Act of 1977 on Wednesday February 7, 1977. At the signing ceremony, Carter stated that the nation “is in the midst of a very serious energy crisis.”⁶⁴ In this fireside chat, Carter commended Congress for passing the act, but acknowledged the problem of inadequate future planning and the lack of any definitive conservation effort. These issues predated the immediate winter predicament, and they were unlikely to be resolved soon. Carter offered a preview of conservation and other energy

⁶⁰ “The Big Problems,” 29-34.

⁶¹ Kellerman, 187.

⁶² Carter, *Keeping Faith*, 99.

⁶³ George E. Reedy, *The Twilight of the Presidency: From Johnson to Reagan*, rev. ed. (New York: New American Library, 1987), 134.

⁶⁴ Jimmy Carter, “Remarks on Signing the Emergency Natural Gas Act of 1977,” February 2, 1977. <http://presidency.ucsb.edu/ws/?pid=7442>

initiatives to be formally introduced with the energy program on April 20, reminding the public that “the energy shortage is permanent.”⁶⁵ Carter urged people to “make modest sacrifices,” and learn to live thriftily – reiterating his theme of *sacrifice and deprivation*.⁶⁶ Setting a definitive date of April 20 represented an overly ambitious goal, which would be difficult, if not impossible, to meet under the best of circumstances.

While Carter worked feverishly with James Schlesinger (Carter’s energy advisor) and Stuart Eizenstat (Carter’s domestic policy advisor) to prepare the comprehensive energy plan, the president continued wrestling with the dilemma of how to persuade the American people to start conserving energy resources. Early research convinced Carter that conservation measures alone would more than compensate for all the imported oil. Carter relied on this idea in his speech on February 2, 1977, when he stated, “The amount of energy being wasted which could be saved is greater than the total energy that we are importing from foreign countries.”⁶⁷ He struggled with how much to boost energy prices in trying to motivate people to conserve, while still being able to avert a recession – or even worse, a depression. Carter genuinely tried to adopt energy proposals he considered morally right, but one author wrote that Carter’s attempts “led to a Sisyphean effort that exemplified the failure of his administration.”⁶⁸ In the February 2 address, the president again pleaded for “sacrifice and deprivation” by the citizenry.⁶⁹ He advocated “mutual sacrifice,” once again recommending that the public keep “thermostats . . . at 65 degrees

⁶⁵ *American Presidency Project*, Item 7455.

⁶⁶ *Ibid.*

⁶⁷ *Ibid.*

⁶⁸ James Everett Katz, *Congress and National Energy Policy* (New Brunswick, NJ: Transaction, 1984), 97.

⁶⁹ The phrase “sacrifice and deprivation” originated at a conference on November 9-10, 2007, hosted by the Center for Public History at the University of Houston titled “American Energy Policy in the 1970s.” Energy historian Richard Vietor was most likely the originator of the phrase.

in the daytime and 55 degrees at night,” as this step “could save half the current shortage of natural gas.”⁷⁰

Carter believed in moderate government intervention to achieve the common good. He was deeply committed to protecting and maintaining the environment. Schlesinger, in contrast, focused mostly on himself and his personal agenda, advocating for strong government intervention. His attitude was that he had never met a nuclear power plant he did not like. Eizenstat’s approach, by contrast, was similar to Carter’s. Both Carter and Eizenstat had a strong moral compass, and Eizenstat was abidingly loyal to the president.

In preparation for the unveiling of his energy plan, Carter took a “dog-and-pony” show on the road. He wanted to sell the program, as well as demonstrate to people across the country that Washington was listening. At a session on energy in Charleston, West Virginia, on Thursday March 17, 1977, Carter invalidated the previous energy independence policies of his predecessors and signaled the end of Project Independence:

One thing that I believe ought to be corrected: I don’t see any prospect nor need for our own country to be energy self-sufficient anytime in the future. It might very well be that the oil that we purchase now at say \$15 a barrel is a very good bargain, and oil and gas that we leave in our grounds at this point for use later on might be one of the most precious deposits that we have.

So, I don’t think that we are going to set in an overall energy policy a goal of complete self-sufficiency from imported oil or even liquid natural gas. But obviously we could cut down on the amount of oil that we import. . . .

I believe that we’ve got to – and the whole country has got to go into the process of reexamining past considerations that we accepted just as a routine matter. . . .⁷¹

⁷⁰ Report to the American People, 2.

As part of a public relations campaign to sell his much-anticipated National Energy Plan (NEP), Carter decided to address the nation by television on Monday April 18, 1977. He intended to unveil at least a few key ideas to test public reaction before making an official announcement on Wednesday, April 20. All three major television networks initially declined to carry the speech, reflecting the low priority given the energy issue by the media. The president, miffed by the snub, modified his approach from “this is available for live coverage” to a more formal request. The networks finally acquiesced, providing the exposure he wanted.⁷²

Prior to this speech, Carter knew that he would have a difficult, if not impossible task, in achieving passage of his upcoming energy plan. David Rosenbaum of the *New York Times* wrote on April 15, 1977, that Carter’s energy plan “is likely to lead to one of the most bitter legislative battles in decades,” based on initial reaction from Congress and staff members. The president faced the possibility that he could “be rebuffed by a Congress controlled by his own party,” with “traditional alliances” torn asunder and members subjected to hounding from competing special interests.⁷³

During the twenty-minute address to the nation, delivered from the significant and formal setting of the Oval Office at 8 p.m. local time, President Carter added “oomph” as he outlined energy plan details within a moral context: “Our decision about energy will test the character of the American people and the ability of the president and the Congress to govern this Nation. This difficult effort will be the moral equivalent of war, except that we will be uniting our efforts to

⁷¹ Jimmy Carter, “Charleston, West Virginia, Remarks in a Panel Discussion and Question-and-Answer session on Energy,” March 17, 1977. <http://www.presidency.ucsb.edu/ws/?pid=7182>

⁷² Russell D. Motter, “Seeking Limits: The Passage of the National Energy Act as a Microcosm of the Carter Presidency.” In Herbert D. Rosenbaum and Alexej Ugrinsky, eds., *The Presidency and Domestic Policies of Jimmy Carter* (Westport, CT: Greenwood Press, 1994), 575.

⁷³ David Rosenbaum, “Energy Plan Faces Bitter Struggle and Uncertain Future in Congress,” *New York Times*, April 15, 1977, 1.

build and not destroy.”⁷⁴ In the second line of the speech, he admonished viewers, “With the exception of preventing war, this is the greatest challenge that our country will face during our lifetime. The energy crisis has not yet overwhelmed us, but it will if we do not act quickly.”⁷⁵ Continuing the *sacrifice and deprivation* theme of his entire presidency, the 126-page National Energy Plan (NEP) booklet issued by the Executive Office of the President stated: “Individuals can keep their homes at 78° F. during the summer and at 65° F. during the winter.”⁷⁶

Congress acknowledged the severity of the energy crisis by compiling and printing, for their use and reference, documents relating to the April 1977 speeches by Carter as well as his April 22 news conference in the publication of *The President’s Energy Program: A Compilation of Documents*.⁷⁷ Considerable interest generated by the NEP forced Congress also to compile and publish a pamphlet of sample editorial comments found in various newspapers (all fifty states and the District of Columbia) and periodicals (six national weeklies), as well as individual commentaries by several columnists (twenty-four nationally syndicated).⁷⁸ One commentator stated explicitly that Carter’s program “put the government squarely into the energy business.”⁷⁹ Another observed the president “has undertaken a task more formidable than that of any man who has ever held the office.”⁸⁰ The general tone of the editorials and commentary was that Carter had alerted the nation to a major problem confronting the United States: “Americans are energy alcoholics,” and it was time to “sober up.” To do this, sacrifices were required by everyone.⁸¹

⁷⁴ *Presidential Documents*, 13 (17), April 18, 1977, 560-561.

⁷⁵ *Ibid.*

⁷⁶ *The National Energy Plan*, Executive Office of the President, Energy Policy and Planning, April 29, 1977, 47.

⁷⁷ *The President’s Energy Program: A Compilation of Documents*, Publication No. 95-16, May 1977.

⁷⁸ *Editorial Comment on the Energy Situation*, June 3, 1977.

⁷⁹ *Editorial Comment*, 104.

⁸⁰ *Ibid.*, 94.

⁸¹ *Ibid.*, 50.

New York Times columnist Russell Baker coined the acronym “MEOW” for the phrase “moral equivalent of war” in his April 23, 1977, piece titled “A Meow In Search of an Enemy.” That phrase has remained forever linked both to the speech and to Carter.⁸² The public’s immediate response was mostly positive to the “MEOW Speech.” According to a Gallup Poll conducted from April 29 to May 2, 1977, 55 percent of Americans had a “favorable” reaction to the president’s plan, and 66 percent considering the energy situation “very serious” and 55 percent “fairly serious.”⁸³ Here was the first indication that the new president was capable, possibly, of assuming a commanding leadership role as he seized the initiative on energy.⁸⁴

Future president and former California governor Ronald Reagan had some choice words about Carter’s energy plan. Because it lacked the essential element of hope for a better tomorrow, Reagan speculated, the American people would not rally behind Carter for any length of time. The plan’s message was one of sacrifice and deprivation for untold years to come. The massive effort to sell the program to the nation would do nothing except burn up a lot of human energy. For precedence, Carter should have considered at President John Kennedy’s national goal of a lunar landing and safe return within the decade of the sixties. That objective was an example of a positive long-range solution to a national problem. Carter’s plan “rested on the faulty premise that government, rather than a freely functioning market, would provide all the answers,” embracing a New Deal and Great Society solution of the government solving the

⁸² Russell Baker, “A Meow In Search of an Enemy,” *New York Times*, April 23, 1977, 19.

⁸³ *The Gallup Poll: Public Opinion 1972-1977*, vol. 2, 1976-1977 (Wilmington, DE: Scholarly Resources, 1978), 1101-1102.

⁸⁴ Burton I. Kaufmman, *The Presidency of James Earl Carter, Jr.* (Lawrence: University Press of Kansas, 1993), 33.

nation's problems. The president ignored the greatest energy source that the country possessed – “the restless American mind.”⁸⁵

Carter acknowledged that coping with the energy crisis was going to require more than mere conservation, and he made this point perfectly clear when he stated, “We could continue to ignore this problem — as many have done in the past — but to do so would subject our people to an impending catastrophe.”⁸⁶ Hedrick Smith observed in the *New York Times* the day after the speech that the president had intentionally chosen to wear a pin-striped suit in contrast to his cardigan sweater to emphasize a more serious tone when he announced the grim news that longer-term sacrifices were necessary.

The president kept trying to mold public opinion for his forthcoming NEP, which would be presented to Congress in two days. Congress wanted higher energy prices, plus taxes on natural gas and oil. Carter challenged the public's sense of entitlement to gas-guzzling cars as he pressed for major changes in America's lifestyle.⁸⁷ On April 18, the White House Press Office released copies of an eighteen-page report by the Central Intelligence Agency (CIA) titled “The International Energy Situation: Outlook to 1985.” Although an unconventional move for this normally top-secret organization, the report predicted significant price increases for all energy forms by 1982-83. The document was evidently released by the CIA at the president's behest, as he sought to generate increased support for the NEP initiative.⁸⁸ Based on this CIA report, Carter stated at an April 15 afternoon meeting with a group of publishers, editors, and broadcasters that

⁸⁵ Lawrence S. Paulson, *Reagan on Energy*. (New York: Oil Daily, 1981), 48-50.

⁸⁶ *Presidential Documents*, 13 (17), April 18, 1977, 566.

⁸⁷ Hedrick Smith, “A Rare Call for Sacrifices,” *New York Times*, April 19, 1977, A1.

⁸⁸ Edward Cowan, “C.I.A. Sees Oil Price Increases Unless Conservation Cuts Demand,” *New York Times*, April 19, 1977, A24, and Carter, Jimmy, “Interview with the President: Question-and-Answer Session with a Group of Publishers, Editors, and Broadcasters,” April 15, 1977. www.presidency.ucsb.edu/ws/?pid=7363

“the known world reserve supplies are much less than we had thought earlier.”⁸⁹ At a morning press conference the same day in anticipation of his April 18 address to the nation, a somber Carter replied to the statement that a majority of the people did not think there was an energy crisis: “I’m going to do all I can in addition to the two speeches next week [one to the nation and the other to a joint session of Congress] to convince the American people of the truth [that there is an energy crisis] . . . using whatever means that I have at my command, that is the commitment that I have . . . [When the people] “see the truth, they’ll cooperate in trying to cut down the waste of energy.”⁹⁰

Carter demonstrated a strong preference for consensus-building strategies with his tactful advance public-relations maneuvers, including an opinion survey of 450,000 Americans and meetings with energy industry representatives, before formulating the NEP. By contrast, his chief energy strategist, James Schlesinger, preferred to shoot first and ask questions later. Nevertheless, Schlesinger would become the first secretary of the new Department of Energy.⁹¹ It is a somewhat incongruous thought that a president who had been so cognizant of the need to monitor public sentiment to gain support would select a right-hand advisor who had done just the opposite, ignoring anyone else’s opinion on energy issues – save his own. Part of the explanation for Schlesinger’s penchant for operating in isolation was probably his ego, but it was also partly justified by not wanting to risk having the plan influenced by Congress or any special interest groups.⁹² Schlesinger was widely perceived “to be as arrogant as he was brilliant.” He could not

⁸⁹ *Ibid.*

⁹⁰ Jimmy Carter, “The President’s News Conference,” April 15, 1977. www.presidency.ucsb.edu/ws/?pid=7357

⁹¹ Carter, *Keeping Faith*, 100.

⁹² Katz, *Congress and National Energy Policy*, 97.

and would not “defer to those who disagreed with him, regardless of their position or title.”⁹³

Bob Woodward referred to Schlesinger as a “prickly intellectual,” who on more than one occasion was insubordinate to his commander-in-chief when Schlesinger was secretary of defense under President Gerald Ford. After several provocations, Ford finally fired him in November 1975.⁹⁴

Carter’s NEP bore many similarities to Nixon’s Project Independence, which is not surprising given Schlesinger’s earlier involvement as defense secretary for both the Nixon and Ford administrations. Elder Witt, in the *Congressional Quarterly Weekly Report*, observed, “[I]f President Carter’s energy package creates a sense of *déjà vu* on Capitol Hill, it is with good reason. None of its key elements are original . . . some are similar to proposals made by President Ford. Others are suggestions set out by Democratic Congressional leaders in response to the Ford program.” Witt compared the energy proposals initiated by Nixon, Ford, and Carter, crediting Carter with creating a “unified policy framework” by his endorsement of a national energy conservation program, but viewing Nixon and Ford as offering only lip service to conservation. Witt assessed Carter’s initiative as superior because it embraced the full spectrum: “convincing, persuading, pressuring, and requiring Americans to make scarce supplies of oil and gas go further—by simply using less.” By contrast, Witt saw Nixon and Ford’s proposals focusing on increasing domestic energy supplies, and not nearly as coercive.⁹⁵

⁹³ John C. Barrow, III, “An Era of Limits: Jimmy Carter and the Quest for a National Energy Policy.” PhD dissertation, Vanderbilt University, 1996, 50. Barrow writes that Carter asked Schlesinger to develop the plan in almost complete secrecy. Involvement of existing government agencies would be kept to a minimum, and policy planners were to keep a safe distance from the vast array of constituents who had a vested interest in the program, 55.

⁹⁴ Bob Woodward, *Shadow* (New York: Simon & Schuster, 1999), 566, 572.

⁹⁵ Elder Witt, “Carter’s Proposals: A More Unified Framework...But Many Familiar Elements From Earlier Debates,” *Congressional Quarterly Weekly Report*, April 23, 1977, 728.

President Carter formally presented his comprehensive NEP on April 20, 1977, in a televised speech before a joint session of Congress. Setting the tone, Carter began, “During the last three months, I have come to realize very clearly why a comprehensive energy policy has not already been evolved. It’s been a thankless job, but it is our job.” He envisioned the NEP leading “to an even better life for the people of America.” The nation’s “energy policy will be innovative, but it will be fair and predictable. It will not be easy; it will demand the best of us—our vision, our dedication, our courage, and our sense of common purpose. It will be a test of our basic political strength and ability.”⁹⁶

Carter attacked the energy industry: “[W]e need facts that we can count on. We need an independent information system that will give us reliable data about energy reserves and production, emergency capabilities, and financial data from the energy producers.” At this time, the president did not believe there was sufficient competitive activity. He recommended “individual accounting . . . from energy companies for production, refining, distribution, and marketing . . . for domestic and foreign operations.” He pushed for “[s]trict enforcement of the antitrust laws The energy industry should not reap large, unearned profits [Any] windfall . . . should be captured for the people of our country.”⁹⁷ Carter announced that he was going to ask Congress to combine the fifty various federal agencies responsible for energy matters into a new energy department.⁹⁸ Subsequently, on Thursday August 4, 1977, the Senate confirmed Schlesinger as the first secretary of energy, and he was sworn in the following day.⁹⁹

⁹⁶ *Presidential Documents*, 13(17), April 20, 1977, 566, 572.

⁹⁷ *Ibid.*, 571-572.

⁹⁸ Jimmy Carter, “Department of Energy Remarks Outlining Proposed Legislation To Create the Department,” March 1, 1977. [www.http://presidency.ucsb.edu/ws/?pid=7097](http://presidency.ucsb.edu/ws/?pid=7097)

⁹⁹ Jimmy Carter, “Secretary of Energy Remarks at the Swearing In of James R. Schlesinger,” August 5, 1977. [www.http://president.ucsb.edu/ws/?pid=7940](http://president.ucsb.edu/ws/?pid=7940)

The DOE became an entity on Saturday, October 1, 1977, the twelfth cabinet-level department and the first one created in eleven years.¹⁰⁰

Hedrick Smith declared in the *New York Times*: “President Carter signaled to the nation...that he had chosen energy as the issue on which to test and build his Presidential leadership.” Smith observed that this seemed to mark a pivotal point in the new president’s administration, as Carter moved from the informal, down-home demeanor of his first months in office to a more forceful, executive-in-command style. The columnist noted the observations of one presidential scholar (not identified in the article) who commented that Carter came “across as prudent, provident, far-sighted—doing what is best for America If you are going to have a terribly hard fight, then fight on what is a ‘flag issue.’”¹⁰¹ *Times* columnist James Reston remarked that Carter “has seized the energy crisis as a historic idea that needed to be clarified.” Continuing, Reston wrote that Carter “is simply saying that we are running out of gas and getting in a jam, and that this is not a regional, political, or a class problem, but a national problem.” He applauded the president for being “willing to face some of the most powerful industrial forces of the nation,” and to confront “the energy problem.”¹⁰²

Carter and Schlesinger failed to consult Congress in the initial meetings as they formulated the National Energy Plan, thereby missing an opportunity for relationship building their leadership and with Congress. This oversight would eventually handicap the president’s effectiveness, since congressional leaders have an innate desire to be included in the formative stages of any new legislation. Senate members were particularly unreceptive to the NEP, which

¹⁰⁰ Executive Order 12009, September 13, 1977. [www.http://presidency.ucsb.edu/ws/?pid=6624](http://presidency.ucsb.edu/ws/?pid=6624) and [pid=7940](http://presidency.ucsb.edu/ws/?pid=7940)

¹⁰¹ Hedrick Smith, “Concessions on Taxes and Prices: A Test of Leadership,” *New York Times*, April 21, 1977, 35.

¹⁰² James Reston, “Carter’s Best Week,” *New York Times*, April 24, 1977, E19.

was described by one writer as “one of the most complex legislative packages in U.S. history, and one which would affect almost every aspect of American life.”¹⁰³

The Energy Information Administration estimated that 1976 imports made up 42.8 percent of total petroleum supply, or 2.7 billion barrels. By 1977 this figure had increased to 47 percent (3.2 billion barrels), with the bulk of it for both years coming from the Middle East.¹⁰⁴ The NEP detailed Carter’s original proposals for energy conservation, which indicated that he felt it was possible to save 5.2 million barrels of imported oil per day based upon “optimistic” estimates, or 5.1 million barrels per day based upon “pessimistic” estimates.¹⁰⁵ The United States, however, actually imported a total of 8.8 million barrels of oil per day in 1977, and would import 8.4 million barrels of oil per day in 1978.¹⁰⁶ Based on these data, Carter’s plan reflected that even in his more “optimistic” scenario, the nation would at best save only about 60 percent of the imported oil through the broad-ranging conservation measures that he proposed, thus abandoning his earlier premise that conservation alone would solve the import problem.

The administration provided Congress with a plan that was packaged as an essential energy conservation policy.¹⁰⁷ Part of the NEP consisted of “carrots and sticks, offering subsidies to encourage innovation and efficiency, along with taxes and higher prices to discourage waste.”¹⁰⁸ Although there were 113 provisions, the major components of Carter’s original NEP were ten-fold, including tax credits for home insulation and energy savings, a standby gasoline

¹⁰³ Katz, *Congress and National Energy Policy*, 99.

¹⁰⁴ DeGolyer and MacNaughton, *Twentieth Century Petroleum Statistics: 1998*. Dallas: DeGolyer and MacNaughton, 1998, 53, 61.

¹⁰⁵ Katz, *Congress and National Energy Policy*, 111.

¹⁰⁶ DeGolyer and MacNaughton, *Petroleum Statistics*, 53.

¹⁰⁷ James L. Cochrane., “Carter Energy Policy and the Ninety-Fifth Congress,” *Energy Policy in Perspective: Today’s Problems, Yesterday’s Solutions*, Goodwin, Crauford D., ed. (Washington, DC: The Brookings Institution, 1981), 579.

¹⁰⁸ “How to Save Energy,” 71.

tax if consumption rose markedly, and a “gas-guzzling” car tax to be rebated for buyers of fuel-efficient models. Carter proposed mandatory energy-efficiency standards for major home appliances, including furnaces. He sought to extend natural-gas price controls to all gas sold, but to allow higher price ceilings. Additionally, Carter proposed a tax on crude oil to bring the price to world levels, rebating the tax to the public. Another provision suggested a tax on utilities and industry to discourage excessive use of oil and natural gas, with the government also requiring utilities to convert to coal from oil and gas. Lastly, a provision advocated a federally directed reform of electric utility rates.¹⁰⁹

The booklet was prepared by the Executive Office of the President (Energy Policy and Planning) titled *The National Energy Plan*, and distributed in tandem with his speech of April 20. Statistics in this pamphlet indicated that if all aspects of the NEP were effectively implemented, a savings of four-and-one-half million barrels of oil per day was feasible, reflecting a 20-percent decrease from the projected level of demand without the NEP. The booklet highlighted the projection that these savings would reduce foreign oil imports from an estimated no-NEP level of twelve to sixteen million barrels per day to about seven million barrels per day by 1985, a reduction of 42-56 percent. To achieve Carter’s ultimate import goal of under six million barrels per day, the president relied on “voluntary conservation” measures.¹¹⁰ If none of the proposed conservation measures was adopted, Carter estimated that imports of foreign oil would expand to sixteen million barrels of oil by 1985.¹¹¹

¹⁰⁹ *The National Energy Plan*, Executive Office of the President (Energy Policy and Planning), April 29, 1977, 46.

¹¹⁰ *Ibid.*, 94.

¹¹¹ *Ibid.*

Following Carter's April 20th speech, the administration began organizing an "extensive campaign" to sell the energy plan to the public and Congress.¹¹² The White House created twenty-four legislative teams, each informed on different aspects of the proposed legislation. Speakers would be available to discuss the legislation in various congressional districts. The nation's "hinterland[s]" would receive the "major thrust" of public relations attention, with Hollywood stars participating in radio and television commercials: John Denver, Johnny Carson, Pearl Bailey, June Allyson, Dinah Shore, Joe Campanella, and the Captain and Tennille.¹¹³ In one commercial, John Denver is shown walking through a sylvan glen while telling the audience, "The difference you make makes all the difference."¹¹⁴

Trying to obtain congressional approval for the NEP prompted President Carter to write in his diary on June 7, 1977, "The influence of the special interest lobbies is almost unbelievable, particularly from the automobile and oil industries."¹¹⁵ States representing these industries were most antagonized by the plan because of its pro-consumer stance, the meddlesome impact it would have on their industries, and the additional taxes that would inevitably be imposed on both industries. Due to its extensive range of impact, the NEP inspired more lobbying than any other legislation in the history of government.¹¹⁶

"The House finished its work on the omnibus bill expeditiously, with a final vote on our entire proposal on August 5 [1977]," which was incredibly quick, according to Carter's memoir. The House vote of 244-177 reflected the "party unity and Congressional responsibility," for

¹¹² Martin Tolchin, "Carter's Aides Push His Energy Program," *New York Times*, May 20, 1977, 9.

¹¹³ *Ibid.*

¹¹⁴ *Ibid.*

¹¹⁵ Carter, *Keeping Faith*, 104.

¹¹⁶ Katz, *Congress and National Energy Policy*, 119.

which House Speaker Tip O'Neill (D-MA) had appealed.¹¹⁷ The initial success in getting House approval for the NEP was due primarily to the strong leadership that O'Neill provided. An added impetus for getting this legislation expedited through the House occurred Wednesday, July 13, 1977, at 9:36 p.m. (EDT), when "[a] vast power failure plunged New York City and Westchester County into darkness . . . disrupting the lives of nearly 9 million people." The power outage continued for more than twenty-five hours, providing critical evidence of just how devastating the energy crisis could be. Over 3,700 people were arrested for looting, 2,000 stores sustained losses from burglaries calculated in excess of \$1 billion, thousands of city dwellers were trapped in elevators and subways, an estimated \$20 million was lost in missed retail sales, and between \$5 million and \$15 million was lost in brokerage commissions.¹¹⁸

By contrast, the blackout that occurred twelve years earlier at 5:27 p.m. (EST), on Tuesday November 9, 1965, in New York City (and most of the Northeast) had the opposite results, with New York police reporting "little trouble" from looting and violence.¹¹⁹ The temperature was not hot, as fall had arrived with cool, almost cold, nights. The National Opinion Research Center found that this blackout did not cause widespread panic or fear, primarily because people understood it as an ordinary interruption of service and because radios helped them to interpret the event as it unfolded. There were certainly twinges of fear, as the *New Yorker's* Talk of the Town reported: "Was there anyone whose mind was not touched, at least

¹¹⁷ Jones, *The Trusteeship Presidency*, 131; James L. Cochrane, "Carter Energy Policy in the Ninety-Fifth Congress," *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions*, Goodwin, ed. (Washington, DC: The Brookings Institution, 1981), 578.

¹¹⁸ Robert D. McFadden, "Power Failure Blacks Out New York; Thousands Trapped in the Subways; Looters and Vandals Hit Some Areas," *New York Times*, July 14, 1977, A1. Michael C. Jensen, "Stores, Banking and Wall Street Disrupted," *New York Times*, July 15, 1977, A1. James Goodman, *Blackout* (New York: North Point Press, 2003).

¹¹⁹ Fred Powledge, "City's Glitter Goes But Not Its Poise," *New York Times*, November 10, 1965, 1. A. M. Rosenthal and Arthur Gelb, *The Night the Lights Went Out* (New York: New American Library, 1965).

fleetingly, by the conviction that this was it – that the missiles were on the way, and Doomsday was at hand?”¹²⁰

The meaning of blackouts changed significantly over the course of the twentieth century. The 1965 blackout appeared to be an “anomaly,” with no long-term implications. People did not perceive any real or potential threat in the situation. In later years, the perception of and response to blackouts changed. Urban Americans came to understand how vulnerable their city could become when its energy system shut down – within a week or less, urban life would be unsustainable, tensions aggravated, leading to civil unrest and criminality.¹²¹

With summer vacation looming and the Senate not in session again until after Labor Day, Carter postponed trying to sell his plan until September 1977.¹²² In the Senate, the NEP lacked a champion of Speaker O’Neill’s caliber.¹²³ The NEP definitely lost its earlier momentum during that summer recess, however, and a taxpayer revolt was starting to spread across the country.

The Gallup Poll reported in December 1977 that the Carter administration’s eight-month campaign to convince the public of the seriousness of the energy situation had made little headway. In a poll “just prior” to the April 1977 “moral equivalent of war” speech, 41 percent of the US population said the energy situation was “very serious,” while 39 percent replied “fairly,” and 16 percent responded “not at all.” Eight months later in December 1977, the percentages remained virtually unchanged.¹²⁴

¹²⁰ “The Talk of the Town,” *New Yorker*, November 20, 1965, 45.

¹²¹ David E. Nye, *When The Lights Went Out: A History Of Blackouts In America* (Cambridge: MIT Press, 2010), 84-103.

¹²² Katz, *Congress and National Energy Policy*, 119.

¹²³ Carter, *Keeping Faith*, 103.

¹²⁴ *Gallup Poll*, vol. 2, 1976-1977, 1240.

By the time of the June 1978 congressional primaries, it was evident that one of the hottest issues was a nationwide uprising against high taxes. As usual, California proved to be a trend-setting state with Proposition 13, which offered a controversial rollback in property values to the tune of a whopping \$7 billion. With many endorsements, including former California Gov. Ronald Reagan and Nobel Prize-winning economist Milton Friedman, the amendment to the state constitution passed by a 2-to-1 margin.¹²⁵ According to Howard Jarvis, one of the two men responsible for Proposition 13, “Government is the biggest growth industry in this country The only way to cut the cost of government is not to give them money in the first place.”¹²⁶ This proposition prompted major changes in the Golden State, including government layoffs and salary freezes, as California leaders aggressively responded with true “austerity government.”¹²⁷

No doubt the 1978 taxpayer revolt had an impact on the US Senate, where leadership was in the hands of lawmakers from energy-producing states. Due to the Senate’s procedural rules, a small group of leaders could either completely block a piece of legislation, or amend it to shreds.¹²⁸ After more lengthy Senate deliberations, only two of the original ten components of Carter’s energy proposals passed – one that proposed tax credits for home insulation and energy savings, and another that mandated energy efficiency standards for major home appliances. Two of the components were approved by the Senate in a weakened form – a moderated tax on utilities and industries to discourage excessive oil and gas use, and a diminished proposal requiring

¹²⁵ “Generals of a Rebellion by California Taxpayers: Howard Arnold Jarvis and Paul Gann,” *New York Times*, June 8, 1978, A25.

¹²⁶ *Ibid.*

¹²⁷ Wallace Turner, “California Voters Approve a Plan to Cut Property Tax \$7 Billion,” *New York Times*, June 7, 1978, A1. Robert Lindsey, “Budget Cuts Begun After Californians Vote to Curb Taxes,” *New York Times*, June 8, 1978, A1.

¹²⁸ Kaufman, *The Presidency of James Earl Carter, Jr.*, 58.

utilities to convert from oil and gas to coal. The remaining six NEP measures proved too controversial in the Senate, and were either rejected outright or were never even considered.¹²⁹

After an eighteen-month battle on Capitol Hill, the president achieved a partial victory in his quest for a national energy plan.¹³⁰ On October 15, 1978, the NEP received final congressional approval. Carter announced, “We have declared to ourselves and the world our intent to control our use of energy and thereby to control our own destiny as a nation.”¹³¹ One of the unexplained mysteries is the three-week lapse between approval on October 15 and the president’s signature on November 9, 1978. At a 9 a.m. signing ceremony in the East Room, Carter said, “Today we can rightfully claim that we have a conscious national policy for dealing with the energy problems of the present and also to help us deal with them in the future.”¹³² After signing the bill, Carter departed for Kansas City, Missouri. He was asked at a presidential news conference there how he might like to alter his energy plan in the New Year. Carter responded by mentioning his continuing uneasiness regarding the excessive consumption of oil and the imports it necessitated, and his determination to enact more legislation in the future.¹³³

Due to its hasty assembly, the NEP ended up creating more questions than answers, such as the effect the “gas-guzzler” tax would have on the automotive industry, the inflationary consequences of the standby gasoline tax, and the costs of converting from natural gas to coal.¹³⁴ At a time when President Carter wanted desperately to win the support of his constituents for this major energy initiative, the rush to introduce the NEP within the first ninety days of his

¹²⁹ Katz, *Congress and National Energy Policy*, Table 6.1, 102-103.

¹³⁰ Barrow, “An Era of Limits: Jimmy Carter and the Quest for a National Energy Policy,” 129.

¹³¹ *Presidential Documents*, vol. 14 (43), October 15, 1978, 1784.

¹³² *Presidential Documents*, 14 (45), November 9, 1978, 1978.

¹³³ *Ibid.*, 1992-1993.

¹³⁴ Kaufman, *The Presidency of James Earl Carter, Jr.*, 33-34.

administration resulted in the alienation of Congress, industry, and voters. When Eizenstat was asked why the ninety-day commitment was made, he acknowledged that the president “did not want to have a 90-day deadline put upon him. But it may have been that he said . . . we’ve really got to do something. This is a quiet crisis but it’s going to ultimately erupt.” It was Eizenstat’s recollection that deadlines were President Carter’s “style” for dealing with “the bureaucracy that does work very slowly,” realizing that “you lose your popularity month by month in your first year.” The president wanted to “make sure that when this was proposed and fought for[,] he would be at the height of his popularity.”¹³⁵ Carter was not phased by early indications of public disenchantment, saying, “I am willing to give up some of my own personal popularity . . . to require [people] to face the brutal facts.”¹³⁶

In addition to intense lobbying efforts by a spectrum of special-interest groups, and the usual divisiveness along partisan lines, the NEP effort undeniably was hampered by the fact that Carter was unable to commit his undivided attention to its passage. If he had focused his attention, he would have minimized time spent crisscrossing the globe trying to resolve world issues. Despite Carter’s best attempts, White House communication efforts on behalf of the NEP were inadequate. James Abourezk (D-SD) described his contacts with White House staffers: “They don’t know what we’re doing and we don’t know what they’re doing . . . they say they’re working but we don’t know at what.”¹³⁷ In its final form, the “legislation which Carter signed into law [on November 9, 1978] was hardly ‘the moral equivalent of war’ that he first described when he sent his plan to Capitol Hill in April 1977. . . . [M]ost of the original proposals, which had been based on the principle of conservation through taxation rather than deregulation and tax

¹³⁵ Interview with Stuart Eizenstat, Miller Center Interviews, Carter Presidency Project, vol. 13, January 29-30, 1992, 38, Jimmy Carter Library.

¹³⁶ “How To Save Energy,” 71.

¹³⁷ Katz, *Congress and National Energy Policy*, 120.

credits, had been either scaled back or . . . eliminated entirely.”¹³⁸ Instead of “war,” Schlesinger subsequently described the NEP efforts as akin to the search for the spirit that captivates the public during actual war. He believed the president had obtained the idea for the phrase “moral equivalent” from a television interview Schlesinger had previously given to news reporter Nancy Dickerson.¹³⁹

Carter viewed the NEP passage as a hollow victory, saying the legislation that was finally enacted would “result in savings of about 2.5 million barrels of oil per day by 1985,” less than half of what his original optimistic/pessimistic scenarios had predicted. Even when Carter signed the legislation, he admitted, “I’ve not given up on my original proposal.”¹⁴⁰ The congressional research service commented that the NEP passage “was particularly impressive because it took place in the absence of an energy emergency.”¹⁴¹ The price of oil had declined during NEP deliberations, leading Congress to assume that the energy crisis “had been weathered and the crunch was over.”¹⁴² Carter, on the other hand, believed that “world oil demand would outrun supply by 1985 and that a ‘catastrophe’ would result unless measures were taken to change consumption patterns.”¹⁴³ Events in the Middle East proved Carter correct in his forecast of impending doom – only instead of happening in 1985, it occurred in 1979.

After passage and signing of the NEP, President Carter knew that during 1979, the White House “would have to develop the second phase of . . . energy legislation, including oil price decontrol, taxation of the windfall profits of oil companies, and the development of synthetic

¹³⁸ Kaufman, *The Presidency of James Earl Carter, Jr.*, 108.

¹³⁹ Interview with James Schlesinger, Miller Center Interviews, Carter Presidency Project, vol. 22, July 19, 1984, 16, Jimmy Carter Library.

¹⁴⁰ *Presidential Documents*, 15 (45), November 13, 1978, 1993.

¹⁴¹ Committee on Energy and Natural Resources, *Energy Initiatives of the 96th Congress*, June 1982, 1.

¹⁴² *Ibid.*

¹⁴³ *Ibid.*

fuels.” He was also keenly aware that domestic oil prices were artificially low compared to continuing escalation in the price of imported oil. As a consequence of these pricing inconsistencies, waste was actually encouraged, exploration and production for oil and natural gas were discouraged, and alternative energy sources (such as synthetic fuels) were underdeveloped. Carter’s many public addresses on energy were falling on deaf ears, and voters appeared increasingly apathetic and aggravated. Carter later observed that “the public lacked interest in energy except when long gas lines formed or a sudden price increase made people angry,” and both were occurring with increasing frequency.¹⁴⁴ Summarizing his overwhelming sense of frustration in April 1979, Carter spoke to the nation from the Oval Office in a live radio-television broadcast. “The National Energy Plan, which I proposed in April 1977, was the first major effort to deal with all these [energy] problems. Then, for eighteen long months, Congress debated, and special interests struggled for advantage.” Reflecting on the outcome, he said, “Some of my original proposals were enacted, and the benefits are already obvious. But proposals dealing with oil were not adopted, and we have now lost precious time that we could not afford.”¹⁴⁵

As the first two years of the Carter administration drew to a close, the president and his energy aide Schlesinger felt seriously wounded from the battle being waged to get this skeleton of a national energy plan passed. Schlesinger wanted to resign, but the president persuaded him to remain. Much important work lay ahead wherein Schlesinger’s expertise would prove essential. After the trials and tribulations of 1977 and 1978, the president could not imagine how much worse matters might possibly get in the New Year.

¹⁴⁴ Carter, *Keeping Faith*, 113-114.

¹⁴⁵ *Presidential Documents*, 15 (14), April 5, 1979, 611.

Chapter 3: Prelude to July 15, 1979: The Push for Synthetic Fuels Grows

President Carter's popularity hit a low point in July 1978. His 39-percent approval rating coincided with increasing public concern over the high cost-of-living and a weakening economy. Furthermore, despite Carter's repeated dire warnings, only 60 percent of Americans were aware of the country's reliance on foreign oil. More than one in four citizens still believed the United States produced enough oil and gas to meet its own energy needs. Carter's year-long crusade to convince the public about the seriousness of the nation's energy problems had clearly not succeeded. By the end of the year, Carter's popularity was a tad bit over 50 percent – 51 percent.¹ Political columnist Hugh Sidey of *Time* observed that the president had focused his concentration, as well as his administration's, on controlling inflation, and stressed saving over spending. Carter began demonstrating more decisive leadership instead of trying to be everything to everybody.²

Nonetheless, the "Great Carter Revival" turned out to be a short-lived phenomenon. A difficult learning experience for Carter in 1978 was facing the emasculation of the recently enacted National Energy Plan (NEP). He had learned the importance of having a network of positive relationships within the Washington establishment, particularly with Congress and the press. Belatedly, he realized that his attitude of moral self-righteousness often provoked an extra measure of resentment and hostility from the media, increasing their determination to unearth some scandal to humble and embarrass him in his evangelism. Years later, Carter acknowledged

¹ "Carter's Energy Warning Fails to Alarm the Nation, *Gallup Opinion Index*, Report No. 157, August 1978, 24; "Carter at Midterm," *Gallup Opinion Index*, Report No. 163, February 1979, 4.

² Hugh Sidey, "The Crux of Leadership," *Time*, December 11, 1978, 44.

that his style of governing included “an attitude of piety that aggravated some people,” even though it was the source of his political success in 1976.³

By the end of 1978, there was a new challenge as it was clear to Carter that inflation now ranked as “Public Enemy No. 1.” It gave the administration a better sense of mission than it had had during the first two years.⁴ Robert Strauss, the president’s trade counselor, probably oversold what was feasible when he claimed that “the Carter inflation fight will be a Camp David performance raised to the tenth power[,]” which, of course, elevated expectations into the stratosphere.⁵

But, just as Carter was starting to earn public plaudits and attract a few political allies on the home front, a major American energy ally in the Mideast experienced a cataclysmic upheaval. Supporters of Ayatollah Ruhollah Khomeini forced Reza Pahlavi, Shah of Iran, to leave that country on January 16, 1979. The religious extremist Khomeini returned to Iran from France two weeks later on February 1, 1979, following fifteen years in exile.

Problems in Iran’s oil output initially became evident in late 1978, with strikes and the departure of several foreign technicians. By the end of the following year, in mid-December 1979, Iranian oil output plummeted by over 70 percent. At the end of December, Iranian production was at a twenty-seven-year low of 500,000 barrels per day, with a total cessation of exports.⁶ Friendly relations with Iran were also vital to the political interests of the United States. Iran shared a 1,600-mile border with the Soviet Union, providing a barrier to the spread of

³ Interview with Jimmy Carter, Miller Center Interviews, Carter Presidency Project, vol. 19, November 29, 1982, 70, Jimmy Carter Library.

⁴ “1979 Outlook: Recession,” *Time*, December 25, 1978, 50.

⁵ Sidey, “The Crux of Leadership,” 4.

⁶ Joseph A. Yager, “The Energy Battles of 1979.” In *Energy Policy in Perspective: Today’s Problems, Yesterday’s Solutions*, Crauford Goodwin, ed. (Washington, DC: The Brookings Institution, 1981), 603.

communism in the Middle East. The boundary also provided locations for top-secret US listening posts (CIA code name “Tacksman”), yielding highly valuable intelligence information related to Intercontinental Ballistic Missile Development.⁷ Many American allies (including Europe and Japan) relied heavily on Iran’s oil exports – particularly Israel. Over 70 percent of Israeli petroleum needs were met by oil from Iran, even though less than 10 percent of US oil imports originated in Iran.⁸ Under the Shah’s leadership, Iran opted out of the 1973 oil embargo, instead providing a consistent and reliable oil supply to the United States when it was cut off from several other Mideast sources. Finally, Iran had a significant voice in OPEC’s pricing policies, so it was beneficial to America’s relations with OPEC to remain in good standing with Iran.

The turmoil in Iran caught Washington completely off guard. Indeed, the president reprimanded the Central Intelligence Agency for its failure to give advance notice about the rapid deterioration in the political situation there.⁹ Numerous early warning signs had surfaced during the preceding year, but the Carter administration appeared oblivious to them. Professor James Bill, director of the Center for Middle Eastern Studies at the University of Texas at Austin, argued that US media coverage of the Iran events had “over the years been consistently sparse, superficial, and distorted.” In Bill’s opinion, “[m]ajor newspapers such as the *New York Times*, the *Washington Post*, and the *Wall Street Journal* ha[d] been especially weak in their reporting on Iran, misrepresenting the nature and depth of the opposition to the Shah.”¹⁰ What probably troubled Carter most about the Iranian situation was that it jeopardized his single-minded focus on coping with the inflation problem in the United States.

⁷ Admiral Bobby Inman email to the author, March 18, 2010.

⁸ James A. Bill, “Iran and the Crisis of ’78,” *Foreign Affairs*, 57 (2), Winter 1978-79, 336-337.

⁹ “If the Shah Falls,” *Newsweek*, December 18, 1978, 43.

¹⁰ Bill, “Iran and the Crisis of ’78,” 323-324.

The January 15, 1979, issue of *U.S. News & World Report* featured an article titled “Iran: Carter’s Biggest Crisis.” It detailed the “high stakes” represented in this threat to a vital source of oil for the West, as well as the increased danger of Soviet expansion. The article succinctly identified two serious handicaps that hampered President Carter’s decision-making ability: failure of political intelligence and the sharp split within the administration over what course of action to pursue with Iran.¹¹ The latter was not an easily resolved problem. According to Eizenstat, “[T]he fall of the Shah . . . was the watershed event of the Carter administration.”¹²

Despite the troubles in Iran, inflation remained the public’s number one concern, receiving the bulk of Carter’s attention in his 1979 State of the Union address. The president gave minimal attention to energy, mentioning the topic only twice. Carter called on Congress “to take other anti-inflation action . . . to conserve energy, to increase production and to speed development of solar power. . . .”¹³ Listeners noticed that the president had declined to address seriously the energy topic in this important annual address. His plea to increase production reflected the growth in domestic drilling activity for natural gas that took place after 1975, as the number of new producing natural gas wells drilled had increased over 80 percent by the end of 1980 – from 9,438 to 17,132, due to the impact of the National Gas Policy Act (NGPA).¹⁴ “Is it conceivable,” Melvin Conant of the *Petroleum Economist* asked, “that the President, even with the uncertain quantity of oil to be expected from Iran and increasing strain between Riyadh and Washington, believes that ‘energy’ is of such low interest as to warrant virtually no reference to the subject in his annual policy review to the Congress and the citizens?” The president’s course

¹¹ “Iran: Carter’s Biggest Crisis,” *U.S. News & World Report*, January 15, 1979, 24-28.

¹² Interview with Stuart Eizenstat, Miller Center Interviews, Carter Presidency Project, vol. 8, January 29-30, 1992, 77, Jimmy Carter Library.

¹³ *Presidential Documents*, 15 (4), January 23, 1979, 105.

¹⁴ DeGolyer and MacNaughton, *Twentieth Century Petroleum Statistics*, 2005, 27.

of action in ignoring the nation's energy needs had generated an attitude of "apathy compounded by indifference" in Congress.¹⁵

Carter already knew that he had spent a significant amount of political capital in securing passage of the NEP, and decided against revisiting the energy issue then. The public became increasingly preoccupied with more pressing concerns about inflation and the high cost-of-living. A Gallup survey at the time showed six in ten Americans (62 percent) considered the high cost of living/inflation as the most important problem facing the nation. The public ranked international problems/foreign policy as the second most critical item, registering 18 percent, while energy came in third with 14 percent.¹⁶ Americans were exasperated from hearing about the energy crisis non-stop. Carter had failed to establish public awareness, interest, or momentum on key energy issues. Gallup commented that even though only four in ten (43 percent) Americans felt that the current energy situation was very serious, that figure represented "virtually the same percentage recorded in six previous surveys on the subject covering a period of nearly two years."¹⁷ The president's warnings had fallen on deaf ears.

With the passage of the NEP, which also included the NGPA, the White House believed the nation's energy crisis had been temporarily resolved. The NGPA set out a series of maximum lawful prices for various categories of natural gas, including gas sold in both interstate and intrastate markets.¹⁸ As a result, natural gas drilling increased dramatically, quickly creating a surplus. Energy Secretary Schlesinger announced on January 9, 1979, a "major shift in the

¹⁵ Melvin A. Conant, "Lack of Political Direction as Supply Problems Mount," *Petroleum Economist*, April 1979, 140.

¹⁶ *Gallup Poll, Public Opinion 1979* (Wilmington, DE: Scholarly Resources, 1980), 94.

¹⁷ *Ibid.*, 100.

¹⁸ James L. Cochrane, "Carter Energy Policy and the Ninety-Fifth Congress," In *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions*, Goodwin, ed. (Washington, DC: The Brookings Institution, 1981), 585.

Administration's energy policy . . . the United States would emphasize increased . . . consumption of natural gas . . . to reduce oil imports.”¹⁹

Two days later, Carter forwarded to Congress a fifty-page expanded version of the State of the Union address, in which energy accounted for little more than three pages that built “upon the framework of the National Energy Act.” The communication lacked any mention of two critical components: decontrol of crude oil prices and development plans for a synthetic fuel industry.²⁰ This oversight suggested that either Carter lacked specific details for his energy strategy or it was not among his priorities. The same understated approach regarding energy issues also characterized the president's budget message and his economic report, both of which were delivered along with the State of the Union address to the new Congress in January 1979.²¹

The 1980 fiscal budget Carter presented to Congress reduced funding for the Department of Energy from an estimated \$8.6 billion in fiscal 1979 to \$7.9 billion in fiscal 1980, and “two large demonstration projects for creating synthetic fuels from coal were cut.”²² One project was eliminated entirely from the 1980 budget, and the administration also sought to rescind this project's \$19 million in outlays that passed in the 1979 budget. A second project was also cut. With inflation now recognized as the nation's most serious foe, Carter declared he wanted a “lean and austere” budget, with political leaders on both sides in agreement on the need for spending restraint to help ease inflationary pressures.²³

¹⁹ Anthony J. Parisi, “Schlesinger Urges Shift to Gas Use,” *New York Times*, January 10, 1979, D1.

²⁰ Joseph A. Yager, “The Energy Battles of 1979,” *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions*, Crauford Goodwin, ed. (Washington, DC: The Brookings Institution, 1981), 601.

²¹ *Ibid.*, 601-603.

²² *The Budget of the United States Government, Fiscal Year 1980* (Washington, DC: US Government Printing Office, 1979), 127. Richard J. Levine, “Carter Faces Problems in Achieving the Goals of Fiscal 1980 Budget,” *Wall Street Journal*, January 23, 1979, 7.

²³ *Ibid.*, 1, 7.

Schlesinger's attitude about the Iranian situation probably contributed to energy's low position on the president's list of priorities. To the energy secretary, Iran was a nonevent. On January 9, 1979, when he announced the administration's new natural gas policy to reduce imports, Schlesinger said, "Iran could get production back to four million barrels a day within two months after a 'political revolution' of the present civil conflict."²⁴ Previously, the production level had been six million barrels per day. Schlesinger expressed no concern and showed no comprehension of the potential impact the Iranian crisis would eventually have on the United States and its allies. The *Petroleum Economist* magazine reported that Schlesinger waffled regarding the ramifications of losing access to imports of Iranian crude. He "first reported there would be no problem for twelve months; within several weeks it became six months, and the latest is less than three." Finally, "these confidence-building assessments [were] accompanied by a reference to a probable need for 'allocation' but not for 'rationing.'"²⁵

As 1979 unfolded, Carter would not "signal" to international friends and foes American intentions with respect to Iran and the Middle East. This loss of stature was both a cause and effect in the president's handling of foreign policy. "There was a pervasive sense at home and also abroad that Carter [was] not in command."²⁶ Observers commented that no one event or mistake had produced this new season of political depression for Carter. But, the Iranian revolution had the immediate effect of making oil prices soar. The posted price for West Texas intermediate crude oil climbed from a stable \$14.85 per barrel throughout 1978 to \$32.50 per barrel by year-end 1979. At that time, the record high world price of \$39.50 per barrel was sustained from April 1979 through the end of 1980, representing an increase of 166 percent over

²⁴ Anthony J. Parisi, "Schlesinger Urges Shift to Gas Use," *New York Times*, January 10, 1979, D-1-D-3.

²⁵ Conant, "Lack of Political Direction," 140.

²⁶ "Carter: Looking Becalmed," *Time*, January 22, 1979, 26. "Carter: Black and Blue," *Time*, March 5, 1979, 11.

the twenty-month period. Although price quotes for Iranian crude are not available on a monthly basis, the annual year-end price of Iranian crude rose from \$12.81 in 1978 to \$28.50 in 1979, and reached a high-point of \$37.00 in 1980, reflecting an unprecedented 189 percent increase for the two-year period.²⁷

In spring 1979, three prominent Washington insiders circulated an influential memorandum about a plan to boost US oil output and break OPEC's grip on the nation.²⁸ The three authors were Paul Ignatius, former secretary of the Navy (1967-69); Lloyd Cutler, prominent Washington attorney and White House counsel to President Carter; and Eugene Zukert, former secretary of the Air Force (1961-65) and a member of the Atomic Energy Commission. The writers argued that the United States needed "to create a substitute for natural petroleum" to protect the country from the vagaries of crude oil prices, as set by the OPEC cartel.²⁹ Referencing the nation's experience with synthetic rubber, aluminum, and other raw materials during World War II (as well as the Korean War) they suggested that "the United States could create additional [crude] capacity from synthetics." If the nation has the "will," it "can create a synthetic oil industry capable of producing 5 million barrels a day." This goal could be accomplished "within five to ten years from sources such as shale, tar sands, heavy oil, coal and farm crops."³⁰ The estimated costs for the proposed program would be \$20 billion to \$40 billion annually over the next five to fifteen years, for each one million barrels of synthetic capacity, or \$100 billion to \$200 billion. The technology is "proven," the authors concluded.

²⁷ *1986 Energy Statistics Sourcebook* (Tulsa, OK: PennWell, 1986) , 288, 312.

²⁸ Paul R. Ignatius, Eugene M. Zuckert, and Lloyd N. Cutler, "A Plan to Boost U.S. Oil and Break OPEC's Grip," *Washington Post*, June 10, 1979, D-1-D-3.

²⁹ *Ibid.*

³⁰ *Ibid.*

To carry out this program, the three energy commentators recommended that Congress create the Petroleum Reserve Corporation (PRC) to be led by an established business executive such as John deButts, recently retired chair and chief executive officer of AT&T.³¹ The PRC would be authorized to issue federally guaranteed bonds and enter into market-guarantee agreements.³² Before a Senate subcommittee, Ignatius testified that the three writers became concerned about the energy problem in early 1979.³³ In April, they put their ideas into a memorandum and sent it “to a number of members of the administration.”³⁴ Ignatius and his co-authors “were particularly interested . . . in looking for models from the past that were proven ways to deal with problems such as” the 1979 energy crisis.³⁵

In Cutler’s testimony before the same committee, not only did he suggest deButts for chief executive officer of the PRC, but he also proposed Frank Cary, chief executive officer of IBM, as another potential head of the PRC. Cutler and Ignatius liked these two men as candidates for the PRC leadership position because they had both been chief executives of major corporations, and had financial experience – and neither had a direct tie to the energy industry.³⁶ To lead Carter’s Energy Mobilization Board, Cutler put forward John Gardner.³⁷ Cutler favored Carter’s plan as outlined in the president’s July 15, 1979, address to the nation.³⁸

³¹ President Carter nominated deButts to the board of directors of the United States Synthetic Fuels Corporation on September 13, 1980.

³² *Ibid.*

³³ *Synthetic Fuels*, Hearings Before the Committee on Governmental Affairs, United States Senate, Ninety-Sixth Congress, July 17, 18, and 20, 1979.

³⁴ *Ibid.*, 25.

³⁵ *Ibid.*

³⁶ *Ibid.*, 33.

³⁷ *Ibid.*, 32. John Gardner was secretary of Health, Education, and Welfare under President Lyndon Johnson.

³⁸ *Ibid.*, 33.

Walt Rostow, former head of the National Security Council under President Lyndon Johnson, proposed a similar concept in an article published June 1, 1979, in the *Wall Street Journal*.³⁹ Rostow wrote that the nation “should undertake the massive program which will accomplish for the synthetic production of oil and gas what public and private cooperation achieved for synthetic rubber in the early days of World War II.”⁴⁰ *New York Times* columnist James Reston commented on these suggestions in an essay titled “How to Recycle The Past.”⁴¹ Reston reported there existed “a fundamental division within the Carter Administration about facing the financial and also political costs of such a program.”⁴² Some advocated that the energy crisis really was the “moral equivalent of war,” while others believed that the oil crisis was a temporary phenomenon that would quickly pass.

Stepping into the breach created by a lack of presidential leadership, Rep. William S. Moorhead (D-PA), chair of the Subcommittee on Economic Stabilization, opened hearings March 13, 1979, on what became known as the Moorhead Synfuels Bill (HR 3930), or the Defense Production Act Amendments of 1979. This legislation passed the House of Representatives on June 26, 1979, by a vote of 368 to 95. Moorhead designed his bill “to put America in a much stronger defense posture to deal with potential energy shortages stemming from our growing dependence on foreign oil imports. This dependence is universally recognized as a serious and major danger to the national security.”⁴³ In his hearings on the bill, Moorhead stressed that the

³⁹ Walt Rostow, “A New Energy Partnership,” *Wall Street Journal*, June 1, 1979, 20.

⁴⁰ *Ibid.*

⁴¹ James Reston, “How to Recycle the Past,” *New York Times*, June 8, 1979, A31.

⁴² *Ibid.*

⁴³ *United States Code, Congressional and Administrative News, 96th Congress—2nd Session 1980*, vol. 3. (St. Paul, MN: West, 1981), 2023, 2039.

country faced a “major energy crisis in regard to liquid fuels.”⁴⁴ The Department of Defense participated in all of the hearings, emphasizing DOD’s vulnerability to energy shortages and the threat to national security posed by inadequate “mobility fuels” – liquid hydrocarbon fuels such as gasoline, diesel, and jet fuel. The 1973-74 oil embargo, DOD representatives testified, provided the first dramatic example of the nation’s vulnerability to foreign petroleum supplies.

Dr. Ruth Davis, deputy undersecretary of Defense for research and advanced technology, stated that in the collective judgment of DOD senior management, “the only relatively near term solution to [the vulnerability of mobility fuels to supply interruptions] and [the] serious national security problem is for the United States to accelerate the commercial development of synthetic fuels.”⁴⁵ Crude oil imports into the United States had increased more than 152 percent above 1973 levels, according to Davis.⁴⁶ Rep. Harold Runnels (D-NM) had been to South Africa and pointed out that South Africa had “3 years’ supply of oil in the ground,” while the United States was not producing “anything from synthetic fuels.” He slammed the DOE, stating, “That Mickey Mouse Department of Energy . . . can’t even get a drop of oil out of its strategic storage. They forgot to put pumps on it to get it out. Now that’s how smart they are, after spending \$26

⁴⁴ House of Representatives Hearings Before the Subcommittee on Economic Stabilization, *To Extend and Amend the Defense Production Act of 1950*, Serial No. 96-9, March 13, 14; April 4, 25; and May 3, 1979, 1.

⁴⁵ Hearing Before the Subcommittee on Economic Stabilization of the Committee on Banking, Finance, and Urban Affairs, House of Representatives, *National Defense Needs for Energy*, Serial 96-16, June 12, 1979, 22.

⁴⁶ Hearings Before the Subcommittee on Economic Stabilization of the Committee on Banking, Finance and Urban Affairs, House of Representatives, *To Extend and Amend the Defense Production Act of 1950*, Serial 96-9, March 13, 14; April 4, 25; and May 3, 1979, 21.

billion. . . .⁴⁷ The DOD testimony in support of Moorhead's bill resulted in the DOD receiving the preferential right to procure and take delivery of any military fuel(s) produced by any project that received financial assistance under the bill. With this stipulation, the Union Oil project had to supply jet fuel to the DOD from its oil shale project (see Chapter 8).

Moorhead's legislation had four purposes: (1) It identified national energy resources as vital elements in national defense preparedness. (2) It recognized that the country's heavy reliance on imported petroleum from the most politically unstable area of the world—the Mideast—was detrimental to national security. (3) It provided the president with the prerogatives of the Defense Production Act of 1950 (DPA). (4) It amended the DPA to permit a "fast-start" interim synthetic fuels program until the president declared the US synthetic fuels program fully operational.⁴⁸

The Moorhead Bill amended the Defense Production Act to allow government purchase and price guarantees for synthetic fuels, authorizing up to \$2 billion for them.⁴⁹ The original DPA, passed in 1950 under President Harry Truman, allocated quantities of strategic raw materials for defense and the maintenance of national security.⁵⁰ The Moorhead legislation established a national production goal of 500,000 barrels a day of the crude oil equivalent of synthetic fuels, to be attained within five years for national defense purposes. The momentum for getting the Moorhead Bill quickly under way concerned Treasury Secretary Michael Blumenthal,

⁴⁷ Hearings Before the Investigations Subcommittee of the Committee on Armed Services, House of Representatives, *Department of Defense Petroleum Requirements and Supplies*, H.A.S.C. No. 96-33, October 10, 11, 24, 25, 31; November 1, 7, 8, 1979; and February 25, 1980, 23, 24.

⁴⁸ *United States Code, Congressional and Administrative News*, 96th Congress—2nd Session 1980, vol. 3. (St. Paul, MN: West, 1981), 2023, 2039.

⁴⁹ Memorandum from Jim Schlesinger, Stu Eizenstat, and Jim McIntyre for President Carter, File: June 13, 1979, Synthetic Fuels. Staff Offices, Domestic Policy Staff, Eizenstat, Summit-7/78 through Tax Proposals (General), Box 286, Jimmy Carter Library.

⁵⁰ Alonzo L. Hamby, *Man of the People* (New York: Oxford University Press, 1995), 549. *Energy Security Act Conference Report*, Report No. 96-824, 6.

as his memo dated March 14, 1979, to President Carter shows. Summing up the details of the twenty-one-page report accompanying his memo, Blumenthal concluded “the threat to national security and the economic strength of the nation from the growing dependence on foreign oil is [sic] more serious than ever.” Rep. Moorhead’s committee wished to make clear “that assured and reliable domestic energy supplies [were] just as important to a strong national defense as the ability to produce armaments. In fact, the ability to produce and operate weapons systems depends [sic] on the ready availability of energy supplies.”⁵¹

As Carter deliberated over various options for solving energy and inflation problems, his chances for realizing any lasting political success during his presidency dwindled. While conservation appeared to be a possible way to ease the energy shortfall, even Carter had difficulties with his efforts. Contradictions in his energy and economic policies tormented the president during his entire term. The energy policy had initially stressed conservation, solar power, and rigorous air-quality standards. As gas lines grew, though, Carter had been forced to put his environmental concerns on the back burner.⁵² Conservation was never really given serious consideration, beyond being merely one more nonviable add-on option for reducing the energy deficit. In a memorandum dated June 12, 1979, to Jim McIntyre, director of the Office of Management and Budget, and Stuart Eizenstat, from Eliot Cutler, associate director in the Office of Management and Budget, discussed conservation. Cutler dismissed the idea by writing that

⁵¹ *United States Code*, vol. 3, 2025, 2035.

⁵² Jeffrey K. Stine, “Environmental Policy During the Carter Presidency,” *The Carter Presidency*, Gary M. Fink and Hugh Davis Graham, eds. (Lawrence: University Press of Kansas, 1998), 179, 191.

“no matter how compelling the arguments for it, [conservation] was politically unattractive and [could] only be a part of a much broader strategy. . . .”⁵³

Another possible solution to the energy crisis that had special appeal for Carter was nuclear power, which had fascinated him for more than a quarter-of-a-century. During his service in the US Navy between 1946 and 1953, Carter assisted in development of the world’s first nuclear-powered submarines. He had not only a sense of adventure and challenge as the engineering officer of nuclear submarine *Sea Wolf*, but also the opportunity to serve under the distinguished leadership of (then) Captain Hyman Rickover. Carter later admitted that Rickover “had a profound effect on my life—perhaps more than anyone except my own parents He expected the maximum from us, but he always contributed more.”⁵⁴ This naval experience furnished Carter with “a greater scientific background...than any [presidential candidate] before him. His navy work . . . and his extensive experience with Admiral . . . Rickover’s Nuclear Propulsion Division gave him a substantial advantage in that he could bring an engineer’s understanding to the energy crisis.”⁵⁵

Nevertheless, nuclear power was not destined to have a major role in President Carter’s futuristic scenarios on energy independence. It virtually disintegrated from Carter’s realm of possibilities in March 1979, with the near-catastrophic incident at Unit 2 of the Three Mile Island Nuclear Generating Station (TMI) near Harrisburg, Pennsylvania.⁵⁶ Governor Richard Thornburg

⁵³ Memorandum from Eliot Cutler to Jim McIntyre and Stu Eizenstat, June 12, 1979, File: Synthetic Fuels. Box 286, Jimmy Carter Library.

⁵⁴ *The World Book Encyclopedia*, 1988 ed., s.v. “Carter, James Earl, Jr.” (Chicago: World Book, 1986), 252-260.

⁵⁵ James L. Cochrane, “Carter Energy Policy and the Ninety-Fifth Congress.” In *Energy Policy in Perspective: Today’s Problems, Yesterday’s Solutions*, Crauford Goodwin, ed. (Washington, DC: The Brookings Institution, 1981), 547.

⁵⁶ Donald Janson, “Radiation Is Released in Accident at Nuclear Plant in Pennsylvania,” *New York Times*, March 29, 1979, A1.

advised pregnant women and preschool children to stay at least five miles away from TMI on Friday, March 30, and eventually 3,500 of these individuals – 83 percent – left the area.⁵⁷ At some point during this crisis, approximately 144,000 people within a fifteen-mile radius of TMI evacuated – with 51 percent doing so on March 30, which became known as “Black Friday.”

The TMI event resulted in raising critical concerns about the safety of nuclear power, and the future of nuclear power throughout the world, especially in the United States, was in doubt.⁵⁸ Noting the hazardous release of above-normal radiation levels, the October 1979 government report described the occurrence as “the worst accident in the history of commercial nuclear power generation.”⁵⁹ Serious concerns, both nationally and internationally, had been raised about the safety of nuclear power. After the incident, statements by Schlesinger, Carter’s energy secretary, did not bolster public confidence in the administration. Instead, they confirmed just how out-of-touch Schlesinger was with America’s sentiments when he observed that the “historical record” of nuclear power was “excellent.” He contended that the risks were “relatively trivial. . . .”⁶⁰ On the day of the accident, Schlesinger had commented that while he was concerned about the event, “he still believed the benefits of atomic energy outweighed the risks.”⁶¹ An editorial in the *New York Times*, “The Credibility Meltdown,” helped neither Carter nor his plans to stress nuclear power in an upcoming energy talk to the nation and Congress.⁶² After Schlesinger resigned, he said, “Even before the Three Mile Island accident, the U.S. nuclear industry was at a

⁵⁷ Bonnie A. Osif, Anthony J. Baratta, and Thomas W. Conkling, *TMI 25 Years Later* (University Park: Pennsylvania State University Press, 2004), 29. Samuel J. Walker, *Three Mile Island* (Berkeley: University of California Press, 2004), 138.

⁵⁸ *Report of the President’s Commission on the Accident at Three Mile Island, The Need for Change: The Legacy of TMI*, October 30, 1979, Washington, DC, 2. Bonnie A. Osif, 21.

⁵⁹ *President’s Commission*, 1.

⁶⁰ Richard Halloran, “Schlesinger Praises Atomic Power Role,” *New York Times*, March 31, 1979, 7.

⁶¹ “Congressmen Express Shock,” *New York Times*, March 29, 1979, D22.

⁶² “The Credibility Meltdown,” *New York Times*, March 30, 1979, A24.

standstill.” There were no orders for new reactors. Several states had implemented or were contemplating nuclear moratoriums. Schlesinger wrote Carter on August 23, 1979, saying “[T]he industry was having serious doubts about continuing involvement in nuclear energy and the press and public were raising questions about whether the nuclear option was viable.”⁶³

A *New York Times* editorial mentioned the strange coincidence in the timing of the Three Mile Island incident and a just-released movie, *The China Syndrome*, starring Jane Fonda, Michael Douglas, and Jack Lemmon (see Figure 3.1).⁶⁴ This movie about a similar accident was released twelve days before the real-life shocker at Three Mile Island, thus intensifying public phobia about the potential risks involved in the nation’s increased reliance on nuclear power.⁶⁵ Matters were only intensified by a line in the movie script describing the consequences of a nuclear meltdown as rendering permanently uninhabitable an “area the size of the state of Pennsylvania,” eliciting screams from some theatergoers who lived near TMI.⁶⁶

By the film’s third weekend, when there is typically a drop-off in attendance, the eerie convergence of reality imitating art enticed moviegoers. *China Syndrome* revenue remained near the same level as opening weekend. A few weeks after the film’s release, one of the stars,

⁶³ Memorandum from Jim Schlesinger to President Carter, August 23, 1979, File: 9/4/79[1]. Staff Offices, Office of Staff Secretary, Handwriting Files 8/20/79 through 9/8/79, Box 144, James Carter Library.

⁶⁴ *World Book Encyclopedia*, 1988 ed., s.v. “China Syndrome.” When nuclear engineers refer to the occurrence of a nuclear core of a plant becoming so hot as to burn through the floor of the structure and penetrate to the center of the earth, they call it the “China Syndrome.” A core meltdown is second only to an explosion in terms of seriousness in a nuclear accident, according to *New York Times*, March 31, 1979, A1.

⁶⁵ Tom Buckley, “At the Movies/Fonda Tilts Forces of Nuclear Energy in ‘China Syndrome,’” *New York Times*, March 30, 1979, A24.

⁶⁶ Gardiner Harris, “Dangers of Leaving No Resident Behind,” *New York Times*, March 22, 2011, D1, D4. *Film 2 Fact*. www.film2fact.com/2011/03/china-syndrome.html

Michael Douglas, described the irony of the parallels between the movie and what occurred in Harrisburg as “[i]ncredible...I can’t put it together. It’s disturbingly ironic.”⁶⁷



Figure 3.1. *The China Syndrome* movie poster

The day after the mishap, Sen. Gary Hart (D-CO), chair of the Senate Subcommittee on Nuclear Regulation, acknowledged that the “Pennsylvania accident raised ‘serious questions’ about the safety of nuclear power.” Robert C. Byrd (D-WV), Democratic Senate leader, “urged a shift toward greater reliance on coal and transferring research funds from nuclear energy to coal.”⁶⁸ Byrd never missed an opportunity to promote and tout his state’s most valuable and important resource. Furthermore, he did everything he could in his position to enhance the power and prestige of his son-in-law, George Fumich, Jr., assistant secretary of Energy for fossil energy at the time.⁶⁹

⁶⁷ “When Nuclear Crisis Imitates a Film,” *New York Times*, April 4, 1979, C18.

⁶⁸ David Burnham, “Atom Power Curbs Pressed in Capitol,” *New York Times*, April 1, 1979, A1.

⁶⁹ Comment from Larry Lukens to author, August 28, 2011.

Another irony appeared in the prestigious *New England Journal of Medicine* on March 29, 1979. The Physicians for Social Responsibility (PSR) had placed a full-page advertisement to publicize their “Medical Statement on Nuclear Power,” which called for “a moratorium on the construction of nuclear power plants, [and] a phased withdrawal of existing plants.” The ad continued with a brief description about the dangers of nuclear accidents: “[A] single major accident might . . . render an area the size of Pennsylvania contaminated and uninhabitable . . .”⁷⁰

(Figure 3.2)

⁷⁰ “Medical Statement On Nuclear Power,” *New England Journal of Medicine*, March 29, 1979, xxxix.

MEDICAL STATEMENT ON NUCLEAR POWER

As physicians we feel it is our responsibility to alert the public to the unprecedented threat to public health posed by nuclear power. Nuclear power once held the promise of being a safe clean source of energy. Time has shown that this is not true. On the contrary, nuclear power now presents humanity with problems that may well be insoluble.

These include:

1. **RADIOACTIVE WASTE.** The containment of radioactive wastes, a majority of which now come from military reactors producing atomic weapons, some toxic for 1,000,000 years, will be a continual problem and a legacy for future generations. These wastes include strontium 90 which causes leukemia and bone cancer, plutonium which even in microscopic amounts causes lung cancer, and scores of other poisonous radioactive compounds. There is no known method for safely disposing of these wastes. This is not just another form of pollution, but one which will cause cancer and birth defects for our children and our children's children.

2. **THE DANGER OF NUCLEAR ACCIDENTS.** A single major accident might cause acutely 3,300 deaths, 45,000 injuries, billions of dollars in property damage, 45,000 cancers over the next several years, and render an area the size of Pennsylvania contaminated and uninhabitable according to Atomic Energy Commission figures.

3. **NUCLEAR WEAPONS PROLIFERATION.** A nuclear reactor produces in excess of 400 lbs. of plutonium per year. Only ten to twenty lbs. of plutonium are needed to make an atomic bomb. The Indian government has already diverted plutonium from its power plant to build nuclear weapons. As other countries acquire nuclear plants, we must expect that they too will produce nuclear weapons. More than 400 lbs. of plutonium are currently missing from US storage facilities. The possibility of nuclear theft and subsequent blackmail by criminal or terrorist organizations is a real threat at this time, and it will grow as more nuclear plants are built.

BECAUSE OF THESE DANGERS WE CALL FOR NUCLEAR WEAPONS DISARMAMENT, A MORATORIUM ON THE CONSTRUCTION OF NUCLEAR POWER PLANTS, A PHASED WITHDRAWAL OF EXISTING PLANTS, AND A COMPREHENSIVE PROGRAM TO CONSERVE ENERGY AND TO DEVELOP THE ALTERNATIVE SOURCES OF ENERGY WHICH DO EXIST.

Signed by *

Herbert Abrams MD
Sidney Alexander MD
Ronald A. Arky MD
George N. Bedell MD
Hein Caldicott MD
William Caldicott MD
John C. Cobb MD MPH
Oliver Cope MD
Daniel Deykin, M.D.
Herman Fatssets MD
Richard Feinbloom MD
H. Jack Geiger MD

Philip H. Cook Professor and Chairman of Radiology, Harvard Medical School
Head Cardiovascular Section, Lahey Clinic Foundation
Professor of Medicine, Harvard Medical School
Professor of Medicine, University of Iowa
President, Physicians for Social Responsibility
Associate in Medicine, Children's Hospital Medical Center
Assistant Professor of Radiology, Harvard Medical School
Professor of Preventive Medicine, University of Colorado Medical School
Professor of Surgery, Emeritus, Harvard Medical School
Maurice B. Strassman
Professor of Medicine, Boston University and Tufts University Schools of Medicine
Professor of Medicine, University of Iowa
Director Family Health Care Program, Harvard Medical School
Arthur C. Logen Professor of Community Medicine, City College of New York

John Gofman MD PhD
Bennett Gurian MD
Roger B. Hickler MD
Merton J. Kahne MD
Alexander Leal MD
Robert J. Lifton MD
Bernard Lown MD
I. H. Mauss MD
John P. Merrill MD
Lot B. Page MD
Harold Schell MD
Victor W. Sidel MD
David Spodick MD DSc

Professor Emeritus Medical Physics, University of California Berkeley
Associate Professor of Psychiatry, Harvard Medical School
Lamar Scudder Distinguished University Professor, University of Mass. Medical Center
Professor of Social Psychiatry, Massachusetts Institute of Technology
Jackson Professor of Clinical Medicine, Harvard Medical School
Foundations Fund Research Professor of Psychiatry, Yale University Medical School
Winner, Pulitzer Prize
Professor of Cardiology, Harvard School of Public Health
Assoc. Professor Clinical Pediatrics, Cornell University College of Medicine
Professor of Medicine, Harvard Medical School
Professor of Medicine, Tufts University Medical School
Professor of Medicine, University of Iowa
Prof. and Chm. Dpt. of Social Med., Montefiore Hospital
Albert Einstein College of Medicine
Professor of Medicine, University of Mass. Medical Center

*Titles and affiliations for identification purposes only
And 307 others.

Physicians for Social Responsibility (PSR) is a non-profit organization whose purpose is to provide information to the medical community and the general public concerning the hazards of nuclear power and weaponry. We plan to place the above statement in several newspapers and journals and would welcome additional signers, members, and contributions.

☐ I wish to become a member of PSR in the following category:

_____ Practicing Physician	\$25/year
_____ House Staff	\$15/year
_____ Medical Student	\$5/year

☐ I wish to sign the above statement \$5

☐ Additional contribution _____

Name _____ Title _____

Affiliation _____

Address _____

Telephone _____

Send this form and your tax deductible check to:
PSR, PO Box 39, Hanover Street Station, Boston, Mass. 02113

Figure 3.2. Ad appearing in the *New England Journal of Medicine*, March 29, 1979, vol. 300, no. 13, xxxix

TMI had a major ripple effect on the nuclear power industry. J. Samuel Walker, historian of the United States Nuclear Regulatory Commission, writes that the accident had a dual legacy. It forced regulatory and operational improvements while increasing opposition to expansion of

nuclear power.⁷¹ From 1979 through 2008, no additional nuclear reactors were ordered in the United States, and sixty-three reactors were canceled.⁷²

The late-night comedy show *Saturday Night Live* of April 7, 1979, spoofed the, appropriately timed, April Fool's Day – April 1– presidential visit to Three Mile Island – Two Mile Island in the skit – in “The Pepsi Syndrome,” a skit in which an overturned soda can causes a nuclear meltdown (Figure 3.3). The “president,” characteristically overconfident from his training as a naval nuclear engineer, enters the nuclear chamber, only to be exposed to a heavy dose of radiation along with “Violet,” a black maintenance worker portrayed by male comedian Garrett Morris. The two grow to over 100 feet in height, exchange a kiss, become engaged (with Violet replacing Rosalynn Carter as First Lady), and reaffirm their hearty support for the continued construction of nuclear power plants.⁷³

⁷¹ Samuel J. Walker, 244.

⁷² *Annual Energy Review 2008*, (DOE, Energy Information Administration), 275. Bonnie A. Osif, Anthony J. Baratta, and Thomas W. Conkling, *TMI 25 Years Later* (University Park: Pennsylvania State University Press, 2004) , 86.

⁷³ *Saturday Night Live*, Season 4, Episode 16. <http://www.imdb.com/title/tt0072562/episodes> and <http://snltranscripts.jt.org/78/78p.phtml>



Figure 3.3. *Saturday Night Live* "Pepsi Syndrome" opening scene on April 7, 1979

The TMI incident – along with the movie, *Saturday Night Live* skit, and associated news reports about the calamity – doomed further interest in using nuclear power to reduce the nation's dependence on imported crude oil to meet America's energy needs.

Although visions of what could be accomplished with nuclear power were dashed by the near-disaster at Three Mile Island, the president and his advisors still felt the onerous burden of America's growing dependence on crude oil imports. Earlier in the week of the TMI mishap, OPEC oil ministers from Nigeria, Algeria, and Libya made public their intent to add a \$4-per-

barrel surcharge on top of the 9 percent price increase that had already been announced.⁷⁴ The Carter administration referred to the price hikes as “untimely and unjustified,” while acknowledging the NEP “did not deal with oil imports and oil pricing” but assuring the public that these issues would be dealt with in an upcoming presidential speech.⁷⁵

The confluence of events motivated Carter to address the nation from the Oval Office on April 5, 1979. During that talk, he explained that the Three Mile Island incident served as a key reminder that the United States needed to accelerate its energy conservation efforts. The president again cautioned the American people about their excessive dependence on “oil from foreign countries.” To reduce imports, Carter said he would begin “phased decontrol of oil prices” over the next twenty-eight months, reiterating an earlier commitment he had made at the July 1978 Bonn Economic Summit. “In order to discourage excessive consumption of oil and to encourage the movement towards coal,” Carter said that “the U.S. remains determined that the prices paid for oil in the U.S. shall be raised to the world level by the end of 1980.”⁷⁶ To prevent the oil companies from reaping “huge and undeserved windfall profits,” the president wanted a “windfall profits tax . . . with the tax money [to] go into an Energy Security Fund.” His goals for this fund were to protect low-income families from energy price increases, improve mass transit options, and provide money for research and development. For the first time, the president mentioned coal gasification, coal liquefaction, and oil shale as part of his proposed solutions. The

⁷⁴ Burton I. Kaufman, *The Presidency of James Earl Carter, Jr.* (Lawrence: University Press of Kansas, 1993), 138; Anthony J. Parisi, “Nigeria Joins Move for a \$4 Surcharge Above 9% Oil Rise,” *New York Times*, March 29, 1979, A1.

⁷⁵ Richard Halloran, “Administration Calls Oil Rise ‘Untimely’,” *New York Times*, March 28, 1979, D11.

⁷⁶ Note from Kitty for Stu, undated, File: Summit 7/78. Staff Offices, Domestic Policy Staff, Eizenstat, Summit-7/78 through Tax Proposals (General), Box 286, Jimmy Carter Library. Kitty was Katherine P. Schirmer, senior energy advisor to Stuart Eizenstat (Stu), domestic policy advisor to Carter.

concept came across as an afterthought, however, as it appeared near the end of his lengthy oratory.⁷⁷

Following up on this address one month later (May 7, 1979), the president outlined the second part of his National Energy Plan. Referencing his April 5th energy message, Carter restated why he had proposed the windfall profits tax, as well as his intention to use the money to establish an Energy Security Trust Fund. He “brushed aside” environmental concerns with his proposed Energy Mobilization Board that underscored his desire to reduce the “red tape which [was] tying up many needed energy projects.” Although he risked antagonizing environmentalists, he also mentioned “hav[ing] signed an Executive Order to expedite Federal decision-making for certain energy projects, which are deemed to be in the National interest.”⁷⁸ Whether he liked it or not, Carter had no choice but to modify his position. “Solving the nation’s energy problems is essential to our economy and our security. . . . [W]e must not fail in ending the energy crisis.”⁷⁹ By then, the president was far more receptive to the idea of stimulating the development of domestic fuel supplies, an attitude that contrasted dramatically with his earlier strict emphasis on conservation.⁸⁰

From the beginning of 1979, Carter’s political advisors had been sensing a “presidency in deep political trouble.” Many felt he was becoming “indecisive.” Close aides painted a picture “of some key decisions [being] given little aeration . . . of . . . improvisation, of failure to

⁷⁷ *Presidential Documents*, 15 (14), April 5, 1979, 609-614.

⁷⁸ *Presidential Documents*, 15 (19), May 14, 1979, 816-817.

⁷⁹ Gary M. Fink, and Hugh Davis Graham, *The Carter Presidency* (Lawrence: University Press of Kansas, 1998), 192.

⁸⁰ Richard H. K. Vietor, *Energy Policy in America Since 1945* (Cambridge, England: Cambridge University Press, 1984), 337.

anticipate the consequences of certain actions, and of differences among advisors over what . . . the Administration's approach was to be."⁸¹

From early spring 1979, the president was bombarded with disheartening news from his personal pollster, Patrick Caddell. Recent data compelled Caddell to make "yet another attempt to convince Mr. Carter that he was in terrible political trouble, that the nation was suffering a crisis of belief and spirit which would make it difficult for any president to govern, and Caddell advocated for the president to take bold 'breakthrough' actions." Not only was Carter's approval rating slipping again, but Caddell also reported numbers indicating that "for the first time, a third of [the] American people were pessimistic about their own lives."⁸² The results reflected that "almost half of the American people were pessimistic about the long-term future of the country (as opposed to thirty-percent in 1975, when the country had just gone through Watergate and was in a deep recession). . . ."⁸³ The people being polled registered serious doubts that it made any difference who was elected. Americans seemed equally dubious about whether they had any impact on government, or whether politicians even cared about inflation, taxes, or them.

In Caddell's view, among the factors contributing to rising levels of public dissatisfaction were that Americans "tended to look to government for solutions; that society was losing its confidence in the future; and, traditional values were breaking down and were being replaced by a search for fulfillment of the self, immediate gratification, and narcissism." Caddell scheduled a two-hour breakfast with the First Lady to break the news to her initially. Securing Rosalyn Carter as an ally was a wise strategy to force Jimmy Carter to recognize that he could not afford to wait

⁸¹ Elizabeth Drew, "A Reporter at Large/Phase: In Search of a Definition," *New Yorker*, August 27, 1979, 45.

⁸² *Ibid.*

⁸³ *Ibid.*

any longer to give his presidency a new cast – a new sweep, a new toughness, and a new sense of control and direction – without risking failure as a leader – and with that, improve his chances for reelection.⁸⁴

By May 1979, the problem of long lines of cars at gas stations due to purchase restrictions of gasoline had become a significant nuisance to California motorists. Carter again reprimanded citizens on May 15 for refusing “to face the inevitable prospect of energy shortages,” but many still remained convinced “there is no energy shortage and there’s not going to be an energy shortage.”⁸⁵ The gas-line problems quickly spread across the nation.⁸⁶ (Figures 3.4 and 3.5). By Memorial Day weekend, only a few isolated rural locations nationwide had adequate supplies of gasoline. One way states coped was by implementing the new odd-even rationing scheme, which originated on June 20, 1979, in New York, Connecticut, and New Jersey. Other states soon followed.⁸⁷ Drivers whose vehicle license plates ended in odd numbers could purchase gas only on odd-numbered days, while those with plates ending in even numbers could purchase gas only on even-numbered days (see Figure 3.4). Under the New York law, motorists and gas station owners who violated the alternate-day purchasing plan could have been fined \$1,000.⁸⁸ The *Washington Post* reported: “The Automobile Club of New York advised its members, for the first time in history, to stay home for the weekend.”⁸⁹ When the price of gasoline passed \$1.00 per gallon, many stations encountered a unique problem: Most gasoline

⁸⁴ *Ibid.*, 45-73.

⁸⁵ Jimmy Carter, “Energy Remarks at a White House Briefing for Community and Civic Leaders.” <http://www.presidency.ucsb.edu/ws/?pid=32340>

⁸⁶ T. R. Reid, “Few Oases Remain as Gasoline Shortage spreads across nation,” *Washington Post*, June 23, 1979, A6.

⁸⁷ *Gallup Poll, Public Opinion 1979* (Wilmington, DE: Scholarly Resources, 1980), liv.

⁸⁸ “Hours of Waiting to Fill the Tank,” *Time*, July 2, 1979, 19.

⁸⁹ T.R. Reid, “Few Oases Remain as Gasoline Shortage Spreads Across Nation,” *Washington Post*, June 23, 1979, A6.

pumps were not equipped to compute a unit price more than 99.9 cents per gallon. When the stations began pricing above a dollar, most went to half-gallon pricing and some even went to metric pricing, or cents per liter.⁹⁰



Figure 3.4. Monday, June 18, 1979. The gasoline supply problem that plagued the West Coast of the United States during May 1979 reappeared on the East Coast. States like New York, New Jersey, and Connecticut coped with long lines of cars, limits on gas purchases and higher prices. All three states initiated odd-even-day plans in hopes of shortening the long lines. The photograph shows an attendant filling a car at a Texaco station on First Avenue and 37th Street in NYC. (Photo by Brain F. Alpert, in author's possession)

⁹⁰ William K. Stevens, "Liters (and Confusion) Flow at Houston Pumps," *New York Times*, March 4, 1980, A12.



Figure 3.5. In 1979, a gas line formed at the Hess station at 44th Street and 10th Avenue. Sara Krulwich/*New York Times*, November 9, 2012, A17.

Gasoline shortages did play a role in the 1980 election. A rare political pin from the 1980 presidential race, issued by anti-Carterites looks at the crisis from a humorous point of view, mocking the peanut farmer president (see Figure 3.6).



Figure 3.6. This very unusual Jimmy Carter item is a two-and-one-quarter-inch celluloid mirror picturing a peanut on wheels as the answer to the gasoline crisis. (In author's possession)

During this 1979 gasoline crisis, the Senate held two days of hearings on the shortages – Tuesday, May 22, and Wednesday, June 6. At these hearings, Sen. Donald Riegle (D-MI) remarked that the “energy problem is rapidly overtaking inflation as the Nation’s No. 1 economic and political issue.”⁹¹ Riegle observed that “public outrage [was] building” and that the American people “don’t know who to trust.”⁹² There was a general feeling that Carter was not providing leadership on this issue.⁹³ Some of the meeting participants stated that the Department of Energy regulations were “impossible to understand and that it has been even more difficult to

⁹¹ *Gasoline Shortages*, Hearings Before the Subcommittee on Economic Stabilization of the Committee on Banking, Housing, and Urban Affairs, United States Senate, May 22, June 6, 1979, 1.

⁹² *Ibid.*, 93.

⁹³ *Ibid.*, 96.

get any official, within that department, to give explanations on those regulations.”⁹⁴ Joseph Downer, executive vice president of Atlantic Richfield Oil Company, suggested that the United States was currently dependent on oil for 40 percent of its energy, and 50 percent of that supply came from abroad – with OPEC controlling 50 percent of the world’s oil supply. This situation threatened all US economic and security bases.⁹⁵ The committee found four major causes of the 1979 gasoline shortages:

- Iran
- Inadequate gasoline refining capacity
- Government policy
- Hoarding⁹⁶

Deputy secretary of energy, John O’Leary, attributed the gasoline shortage principally to the delayed impact of curtailment of Iranian oil production and to low inventories of US refiners in early 1979. Confusion remained, and Carter directed the DOE to investigate. Their report was issued on July 24, 1979, and attributed the gasoline shortage to a shortfall of 800,000 barrels per day during February through March 1979 in the level of imports necessary to meet demand. The General Accounting Office (GAO), at the request of several members of Congress, prepared and issued a report on September 17, 1979. The GAO found that as a result of the Iranian shut off, the US experienced an average shortfall of crude oil imports of 600,000-700,000 barrels per day during the first four months of 1979. Compensating actions to mitigate this shortfall were not successful, and had a disproportionate effect on gasoline supplies in some areas because of

⁹⁴ *Ibid.*, 9.

⁹⁵ *Ibid.*, 53.

⁹⁶ *Ibid.*, 62.

DOE's allocation and price regulations. No evidence of hoarding was found.⁹⁷ In his article, "The Petroleum Crisis of 1979," Philip Verleger of Yale University was critical of DOE price and allocation regulations.

The Department of Energy, at the time of the gasoline shortage, responded in a confusing manner, trying unsuccessfully to calm the mounting anxiety among motorists. Earlier it had set up an absurdly complex gasoline allocation system. Policymakers first formulated the rules by which companies had to allocate energy products during the Arab oil embargo of 1973-74. These regulations had originally been designed to protect vendors instead of consumers. Despite amendments by regulators, these directives still fell far short of easing the crisis.⁹⁸ Critics charged the DOE with bungling because it had predicted gasoline supplies would be more plentiful in June than in May 1979. Officials later confessed, however, that they had no idea how much gas would be available for purchase during the rest of the month, the summer, or even the year.⁹⁹

In mid-May 1979, probably as a result of recent national events, the first hint surfaced of a Carter administration initiative for a "quasi-governmental corporation" to deal with the nation's growing energy nightmare. A handwritten note dated May 17, 1979, from Stuart Eizenstat, domestic policy advisor, to Katherine P. Schirmer, his senior energy adviser, read:

I am quite convinced Congress & the American people want a Manhattan-type project on alternate energy development. There is almost a desperation on this issue. Our Energy Security Fund creates a potential vehicle. What is lacking is a credible organizational structure. Please

⁹⁷ Joseph A. Yager, "The Energy Battles of 1979," in Crauford Goodwin, ed., *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions* (Washington, DC: Brookings Institution, 1981), 617-618. Philip K. Verleger, Jr., "The U.S. Petroleum Crisis of 1979," *Brookings Papers on Economic Activity*, 2:1979, 463-464.

⁹⁸ "Allocating the Shortage," *New York Times*, July 8, 1979, 30.

⁹⁹ "Nation," *Time*, July 2, 1979, 16.

explore the possibility of a special governmental or quasi-governmental corporation run by a preeminent American. It could be within DOE but must have some visibility. No one will believe we're serious, even with the Security Energy Fund, if it is run by current DOE set-up. Please expedite.¹⁰⁰

Shortly afterward, Charles Duncan, previously deputy secretary of Defense in the Carter administration, was named the new energy secretary. Les Francis, a senior White House aide, wrote to Chief of Staff Hamilton Jordan: "Our biggest political risk in the energy area is that we will continue to look like we don't know what we're doing."¹⁰¹ Eizenstat recognized that the pulse of the nation on energy issues was shifting. On June 15, 1979, a *Wall Street Journal* column mentioned that proponents of synthetic fuels insisted that "new fuel development is 'less politically painful' than conservation." The column further stated that "[o]peration of any program by the much-maligned Energy Department is 'the kiss of death'"¹⁰²

The Louis Harris polling organization determined in early June 1979 that the public mood reflected an increasingly favorable response toward an alliance with business. At that time, 70 percent favored and 15 percent opposed "government and big energy companies . . . work[ing] jointly together on the development of new sources of energy." While the positive figure had increased slightly over the course of the previous year, any improvement was noteworthy because it showed that despite the "rising furor of the public against the oil companies . . . they fe[lt] that the way out of the . . . energy crunch [would] only take place if there [were] a massive joint venture effort by the government and the energy companies." Pragmatism trumped public anger.

¹⁰⁰ Handwritten note from Stu Eizenstat to Kitty Schirmer, May 17, 1979, File: Energy Security Corporation. Staff Offices, Domestic Policy Staff, Eizenstat, Energy Security Corporation, Box 202, Jimmy Carter Library.

¹⁰¹ Memorandum from Les Francis for Hamilton Jordan, July 30, 1979, File: Energy Security Corporation. Staff Offices, Domestic Policy Staff, Eizenstat, Energy Security Corporation, Box 202, Jimmy Carter Library.

¹⁰² "Washington Wire," *Wall Street Journal*, June 15, 1979, 1.

People were not eager to delegate responsibility for the nation's energy future to big oil and natural gas companies, but rather accepted the reality that these companies "ha[d] the professional know-how to do the job."¹⁰³

Carter received a letter from Cliff Garvin, Jr., Exxon board chair, dated June 4, 1979, acknowledging that the president had an opportunity to convince "government, industry, and all interested groups" to deal cooperatively with the energy problem. Garvin eloquently addressed the need to "come together in a renewed sense of national unity. . . . Differences of view on individual issues, no matter how important they may seem from our individual perspectives, should not hinder our common efforts to deal with this serious national problem." Among other proposals, Garvin advocated a national effort promoting the development of synthetic fuels that would require cooperation between industry and government. Carter responded to Garvin's letter on July 2, 1979, by stating, "We are implementing many of the recommendations you have made and will carefully study the others." Garvin pledged "to do all that [he could] to contribute to a satisfactory result."¹⁰⁴

Carter knew well that large price increases by OPEC as well as America's addiction to imported oil exacerbated inflation. To break the inflationary cycle, the nation must find a way to

¹⁰³ Letter from Louis Harris to Richard Moe, June 5, 1979, File: Synthetic Fuels. Staff Offices, Domestic Policy Staff, Eizenstat, Summit-7/78 through Tax Proposals (General), Box 286, Jimmy Carter Library.

¹⁰⁴ Letter from C.C. Garvin, Jr., to President Carter, June 4, 1979, File: 7/2/79[3]. Staff Offices. Offices of Staff Secretary. 6/22/79[2] through Camp David, 7/5/79-7/12/79[1], Box 137. At this time (1979), Exxon was preparing a "white paper" on "The Role of Synthetic Fuels in the United States Energy Future" in which Exxon strongly endorsed the development and production of synthetic fuels. A 1977 Exxon publication stated: "From the standpoint of the nation's energy goals . . . [a] viable shale oil industry would reduce the nation's dependence on foreign sources of oil, would lower our balance of payments deficit, and would create jobs for people who need them." *Developing the Many Sources of Energy*, Exxon Corporation, 1977, 59.

overcome its excessive dependence on imported crude oil, which for 1979 exceeded 45 percent of the total domestic supply.¹⁰⁵

Without offering any direction on these pressing energy issues gripping the country, President Carter departed the nation's capital for the Tokyo Economic Summit on June 23, 1979. Simultaneously, OPEC conducted its own meeting in Geneva, Switzerland, to discuss its favorite topics: oil prices, production rates, and schedules. From almost halfway around the globe, actions of the oil ministers cast a dismal pall on the Tokyo festivities. OPEC decided to raise the price of oil to between \$20 and \$21 per barrel, "up 15% just from last week, 50% since January 1, and 1000% from the \$1.80 price at the start of the '70s."¹⁰⁶

To dampen the mood at the Economic Summit even further, foreign leaders united against President Carter, venting their combined frustration that "the U.S. hadn't yet started on the way toward energy conservation." These leaders expressed doubts as to whether America would make good on Carter's pledge to curb oil imports by one million barrels a day. They remembered 1977, when there had been "another U.S. pledge on conservation that was conveniently sidetracked."¹⁰⁷ The president later admitted that he felt "diminished" at the Tokyo Economic Summit, "where he was the leader of the free world and yet felt less experienced . . . and less competent . . . than his fellow conferees."¹⁰⁸ In his memoir, Carter recalled that "the European countries and Japan had done much more to conserve energy since the oil shocks of 1973 than had the United States. . . ."¹⁰⁹

¹⁰⁵ "Carter at the Crossroads/After a Week of Mulling the Country's Fate, He Speaks Out," *Time*, 23 July 23, 1979, 20. *Twentieth Century Petroleum Statistics, 2010*, DeGolyer and MacNaughton, 53.

¹⁰⁶ "OPEC's Painful Squeeze," *Time*, July 9, 1979, 12.

¹⁰⁷ "Over the Oil Barrel," *Newsweek*, July 1979, 23-24.

¹⁰⁸ Peter Goldman, Thomas M. DeFrank, James A. Doyle, Gloria Borger, and Henry W. Hubbard, "To Lift a Nation's Spirit," *Newsweek*, July 23, 1979, 22.

¹⁰⁹ Carter, *Keeping Faith*, 118.

After the Tokyo Summit, the president flew to Seoul, South Korea, for a brief visit. Then, at Eizenstat's urging, Carter abruptly flew directly back to Washington, skipping a planned three-day Hawaiian vacation. Eizenstat's communication alerted Carter to the increasing severity of the domestic energy problems. The latest complication was a strike of independent truckers over the mandated standards on weight and length that had motivated truckers to take circuitous routes, dramatically increasing the fuel consumed by the trucks.¹¹⁰ Growing gas lines, with incidents of increasing violence, had expanded rapidly from the Northeast to the Midwest. Further, inflation was now accelerating at an annual rate of 13 percent, and the most recent consumer price indices showed an alarming 55 percent increase in gasoline prices since January.¹¹¹

By the time Carter returned from the Tokyo Summit, his approval rating had dropped to twenty-five percent, lower than Nixon's.¹¹² On July 1, 1979, Martin Schramm of the *Washington Post* remarked that Carter's slide in the polls was beginning to plummet. Both major polls, Gallup and Louis Harris, concurred that public opinion of the president had fallen to new lows. Carter's handling of the energy crisis, or lack thereof, caused overwhelmingly negative reviews. The public was placing all of the blame on him. Adding insult to injury, polling data indicated that Sen. Ted Kennedy (D-MA) was preferred 2-to-1 over Carter for president by Democrats.¹¹³

It was increasingly evident that tempers were growing shorter as gas lines grew longer. In the last half of June 1979, over 2,500 angry phone calls about the gas lines had flooded the White House switchboard. The *Wall Street Journal* reported, "Carterites flounder in the energy

¹¹⁰ Memo from Jack Watson to President Carter, June 26, 1979, File: 6/22/79-7/1/79[1]. Staff Offices, Office of Staff Secretary, Handwriting Files, Box 137, Jimmy Carter Library; Memo from Stu Eizenstat to President Carter, June 28, 1979, file: 6/22/79-7/1/79[1]. Staff Offices, Office of Staff Secretary, Handwriting Files, Box 137, Jimmy Carter Library.

¹¹¹ Yager, "The Energy Battles of 1979," *Energy Policy in Perspective*, 623.

¹¹² Drew, 53.

¹¹³ Martin Schramm, "Gas Crisis: Color the White House Blue," *Washington Post*, July 1, 1979, A1.

morass, showing frustration or despair.” The “apparent confusion” was causing a “loss of public confidence” in the administration. As secretary of Energy, Schlesinger received the bulk of the blame.¹¹⁴ He resigned on July 20, 1979.

According to the June 1979 issue of the *Gallup Opinion Index*, the energy issue had moved up to second place in the priority of public concerns. Until this point in the Carter presidency, the high cost-of-living and unemployment had consistently been the first and second issues, respectively, based polling data.¹¹⁵ The general attitude of the voters now was “angrier and uglier,” in the view of Rep. Peter H. Kostmayer (D-PA). His comments, combined with the results of a *Washington Post* phone survey of congressional leaders from a dozen states, indicated that people felt “Carter [was] a nice man, and honest, but they just think he’s not able to do anything. He’s not up to the job. Even the best Democrats talk like they’ve given up on Carter.”¹¹⁶ There existed “a real feeling of anger, [and] frustration.” The public “just wanted somebody to do something.”¹¹⁷

In a memo to the president dated June 28, 1979, Eizenstat described the meeting that he and Vice President Mondale had on the previous day with members of the House. “[W]hen we briefed Members on the Tokyo Summit....[t]hey were almost completely uninterested in the Summit, and spent all of two hours talking about gasoline and related problems,” Eizenstat reported. He continued that the problem of the “worsening short-term domestic energy crisis” was seriously heightened by press reports that the administration was unable to deliver on its existing commitments for petroleum distillate (hydrocarbon solvents produced from crude oil,

¹¹⁴ “Washington Wire,” *Wall Street Journal*, June 29, 1979, 1.

¹¹⁵ “Chief Concerns of Public/Cost of Living and Energy Top List of Most Important Problems,” *Gallup Opinion Index*, Report No. 167, June 1979, 6; “Most Important Problem Facing Nation, 1974-1978,” *Gallup Opinion Index*, Report No. 157, August 1978, 9.

¹¹⁶ “Crisis in Leadership,” *Washington Post*, July 7, 1979, A1; Elizabeth Drew, “A Reporter at Large/Phase: In Search of a Definition,” *New Yorker*, August 27, 1979, 45.

¹¹⁷ *Ibid.*, A9.

e.g., mineral spirits, kerosene) a few months hence (contracts for October 1979). The situation was further compounded by conflicting signals and numbers coming from DOE. The energy nightmare had deteriorated so badly that the “State of Maryland sued DOE for misallocating gasoline,” expecting that several other states were likely to follow suit with this “politically popular” retaliation against the administration.¹¹⁸ This information from Eizenstat compelled the president to alter his plans and return immediately to Washington, after the Tokyo Summit and his subsequent stop in South Korea.

Jody Powell, White House press secretary, and Gerald Rafshoon, Carter’s media advisor, recommended that the president give a speech on energy as soon as possible. Carter agreed, and began preparing a talk to deliver on July 5, that would have been his fifth national address on the energy crisis.¹¹⁹ Powell had indicated to reporters that the president would present ideas on a large, crash synthetic fuels program, emergency gasoline rationing, and possibly new taxes for “gas-guzzler” automobiles. Eizenstat, meanwhile, pushed to delay the speech so he could develop the synthetic fuels program on which he was working. Public opinion specialist Patrick Caddell suggested it would be a serious mistake for the president to present yet another speech devoted solely to energy. Additionally, Caddell thought that the president needed to address the broader questions, which he outlined in a 107-page memorandum. Bowing to pressure from Eizenstat and Caddell, Carter on July 4 cancelled the speech scheduled for the next day without any explanation.¹²⁰ The cancelation and Carter’s subsequent actions are discussed in chapter 4.

¹¹⁸ Memo from Stuart Eizenstat for President Carter, June 28, 1979, Staff Offices, Office of Staff Secretary. 6/22/79 [to] through Camp David 7/5/79-7/12/79[1], Box 137, Jimmy Carter Library.

¹¹⁹ *Presidential Documents*, 1235.

¹²⁰ Yager, “The Energy Battles of 1979,” *Energy Policy in Perspective*,” 623-624; Richard Halloran, “President to Outline Energy Plan on TV,” *New York Times*, July 3, 1979, D12.

The *Washington Post* noted a “genuine political despair, perhaps unmatched in any modern White House, except in those very last days of Nixon.”¹²¹ The pressure to do something on the energy crisis had become overwhelming. In the July 5 issue of the *New York Times* (see Figure 3.7), the New Jersey Automobile Dealers Association purchased a full-page ad, with bold-faced letters, one-and-a-half inches high, that exploded with the message: “We can’t hear you, Mr. President.” The ad continued: “Your silence makes the gas lines more painful.” In the body of the message, the dealers said, “Somebody ought to tell you, Mr. Carter, that America’s biggest problem today is energy. . . . [Y]ou seem to pay attention to everything but.” The ad included a clip-out postcard addressed to the president, asking Carter to tell the sender precisely what was being done to resolve the energy problem.¹²²

¹²¹ Martin Schramm, “Gas Crisis: Color the White House Blue,” *Washington Post*, July 1, 1979, A1.

¹²² Advertisement by New Jersey Automobile Dealers Association, *New York Times*, July 5, 1979, B5.

We can't hear you, Mr. President.

**Your silence makes the
gas lines more painful.**

Somebody ought to tell you, Mr. Carter, that America's biggest problem today is energy. From it stems high prices, loss of dollar value, recession and the ability of OPEC nations and the oil cartel to push us around.

But you seem to pay full attention to everything but.

We want to know exactly what you are doing to get more oil out this week.

We want to know how you plan to increase energy in the next few months.

And what is your plan for those actions which will take six months to a year?

Finally, what are you going to start doing right now about those things which take 10 years or so to complete?

We've lost six good years since the OPECers first tipped their mitt. Three of those years are yours. Please tell us your silence isn't cruel neglect. Tell us about things like the following:

Right now, this week, you and Congress could give the utilities and industry the right to burn clean coal and natural gas. That would end the gasoline shortage.

Within months you could develop clean-air safeguards which let them burn even less-expensive forms of coal.

For added relief, you could enact emergency legislation which would let the pipelines get built for oil and coal sludge.

With all our nuclear know-how, you could start a crash program to make safer neighbors of atomic energy plants.

You could set a target of 1984 for a process to change coal to oil.

You could start the development,

targeted for 1988, of five new forms of power:

1. Low-cost solar energy.
2. Large-scale harnessing of the tides.
3. Harnessing the wind.
4. Modernizing an old power source, river flow.
5. Power from temperature changes.

But, whatever you plan to do, please end that awful silence. Because we can't get off the gas line until you get off the dime.

NEW JERSEY AUTOMOBILE DEALERS ASSOCIATION TRENTON, NJ

Robert Armon
PRESIDENT

Howard J. Wigder
VICE CHAIRMAN

President Jimmy Carter
White House
Washington, D.C. 20500

Dear Mr. President,

Please tell me what you are doing:

1. To give us more gasoline and other energy right now. _____

2. To give us more energy in the next few months. _____

3. To give us more energy in the next 1 to 3 years. _____

4. To give us a total solution to the energy problem by 1988. _____

Sincerely yours,

Name _____

Address _____

City _____ State _____ Zip _____

Figure 3.7. Full-page ad in *New York Times*, July 5, 1979, B5

The public pressure on Carter to do something continued on July 6, 1979, with a full-page ad in the *Washington Post* paid for *Business Week*. In large bold letters, it read “NUTS TO OPEC!” and advocated the use of synthetic fuels (see Figure 3.8). The *Post* advertisement contained a copy of the full-page July 16, 1979, *Business Week* editorial that argued that with the “extortionate price increases imposed by” OPEC, the time for synthetic fuels had finally arrived. To finance such an enormous undertaking, the magazine urged that Congress could not wait any longer and must “establish a federal corporation – call it Synthetic Fuel Corp. – with the authority to finance or own synthetic fuels plants,” a superb prognostication of coming events. Readers were encouraged to write their congressman, urging them to say “Nuts to OPEC!” as well.¹²³ The *New York Times* ran the same ad on July 5, 1979, in the business section.

The *Post* ad was placed strategically in Friday’s “Style Section” to garner a wider audience than the business section would, to put the general readership on notice that OPEC’s recent actions were going to affect their style and standard-of-living significantly. The target audience was female, especially those women who had become accustomed to a certain lifestyle that was now in jeopardy. Readers were encouraged to write their congressional representatives saying “Nuts to OPEC,” because the United States stood “beleaguered by a modern form of tyranny” just as sinister as the two countries the nation had conquered in World War II. The front page of the July 6, 1979, issue of the *Post* announced in a bold headline, above the fold: “World Recession Forecast Following Oil Price Rise.” Carter predicted the OPEC crude price increase would cause the gross national product of the United States to decline by 2.5 percent in 1980 and

¹²³ “Nuts to OPEC!” *Washington Post*, July 6, 1979, E8. “Nuts to OPEC!” *New York Times*, July 5, 1979, D16. “Why the U.S. Needs a Synthetic Fuel Industry,” *Business Week*, July 16, 1979, 118.

inflation to rise by 2.5 percentage points. Since December 1978, OPEC had increased the price of oil an average of more than 60 percent, from \$12.50 per barrel to as high as \$22 per barrel as of July 1979. Carter stated, “We have very serious problems with energy,” the nation was “substantially inconvenienced,” and “It is not easy being President these days.” Had it ever been easy? The nation’s standard-of-living was at stake and, with the president and his aides secluded at Camp David, *Business Week* knew the timing of this ad would enable it to be seen and read at the conference being held at the Maryland presidential retreat.¹²⁴

¹²⁴ Ronald Koven, “World Recession Forecast Following Oil Price Rise,” *Washington Post*, July 6, 1979, A1. “Nuts To OPEC!” *Washington Post*, July 6, 1979, E8. Jimmy Carter, “Hickman Air Force Base, Hawaii Remarks at a Reception,” July 1, 1979, www.presidency.ucsb.edu/ws/?pid=32567

NUTS TO OPEC!

It happened during the bleakest days of World War II. His troops surrounded by a relentless enemy, an American general answered the demand for his unconditional surrender with a famous one-word reply: "Nuts!"

Now our nation stands beleaguered by a modern form of tyranny, more subtle but no less sinister than the one we eventually went on to conquer in the past.

Business Week has been reporting on America's energy needs ever since the first issue fifty years ago. In our opinion, the crisis of the situation has never been more apparent. We urge you to take the time to read this editorial, reprinted from the July 16, 1979 issue of Business Week. And we hope you will write your congressman and join us in saying "Nuts!" to OPEC.

Editorial

Why the U. S. needs a synthetic fuel industry

Synthetic fuel is an idea whose time has finally come for the U. S. The extortionate price increases imposed by the Organization of Petroleum Exporting Countries—50% since the beginning of this year—demonstrate the utter folly of letting the U. S. remain dependent on external sources for a major part of the energy it needs. The only way the nation can free itself from this modern form of tyranny is to develop new ways of making fuel in volume from resources that exist on the North American continent. No matter what the cost, in the long run synthetic fuels will be cheaper than continuing subjugation by OPEC.

The House has passed a bill designed to stimulate production of at least 500,000 bbl. a day of synthetic fuel by 1985. And now President Carter has decided to throw his weight behind synthetic fuels. This is encouraging. But the danger is that the policymakers will settle for a program that is too small and too narrow to serve the nation's needs. The U. S. should be thinking in terms of 6 million-bbl.-a-day capacity—roughly three quarters of the total amount that the U. S. now has to import. Moreover, Congress should be ready to provide more support than just a guarantee to buy a specified amount of synthetic fuel at a specified price. It should be prepared to underwrite the creation of a synthetic fuel industry big enough to be an effective weapon against the oil ministers of OPEC—in the same way that the nation created a synthetic-rubber industry almost overnight during World War II.

A way to carry the risk

To finance such an undertaking on the scale that is required, Congress should establish a federal corporation—call it Synthetic Fuel Corp.—with the authority to finance or own synthetic fuel plants. This agency's franchise should not be restricted to any one kind of fuel. It should permit investment in coal liquefaction, shale oil, gasohol, alcohol, and any other substitutes for petroleum.

The new SRC should have the choice of either owning the plants, which would be managed by private-sector corporations for a fee, or lending money to companies that are willing to build and run their own plants. It should be staffed with competent people from industry—investment bankers, managers, scientists, and engineers—not bureaucrats who failed in other government agencies. Operators of government-owned plants could be given an option to buy—with an incentive provision designed to reward early purchases. This would generate a substantial cash flow to finance a second round of plants, using the latest technology.

Investment banker Felix G. Rohatyn, whose financial ingenuity has helped New York City as well as a great many corporations, has worked out some of the arithmetic of a program designed along these lines. He estimates that the SRC could be started with \$5 billion in equity capital contributed by the government. That would give the corporation the capacity to borrow up to

\$50 billion in the financial markets, if its bonds were guaranteed by the government. The \$5 billion in start-up money could be raised by the windfall profits tax that Congress is about to impose on oil producers.

If the plants were written off rapidly—say, in five years—the SRC could end up having as much as \$100 billion available over the next decade for new plant construction. That would be enough to produce close to the 6 million-bbl.-per-day target.

The debt and interest incurred by the SRC would be paid off from sale of the output of the plants—either to the government itself, principally the Defense Dept., or to private industry. Deals like this have been structured for investments by U. S. companies in Russian industries. It is not a radical new idea.

Rohatyn argues convincingly that ultimately the federal government will have to assume the risk for creation of a synthetic oil industry. This risk ought to be carried in the most direct and uncomplicated way.

A ceiling on OPEC

The cost of synthetic fuel unquestionably will be high. Even after OPEC's latest increase—to \$23.50 a bbl. in the higher-priced countries—it is doubtful that synthetics can compete with petroleum on price. But that is not the point.

No matter what the cost of synthetics, a program that produces 6 million bbl. a day would save the U. S. \$120 million a day in payments for imports (assuming that OPEC's prices average about \$20 a bbl.). That amounts to \$45 billion a year, more than enough to wipe out the crippling deficit in the U. S. balance of payments.

Even more important, a dependable output of 6 million bbl. a day of synthetic fuels—even at \$40 a bbl.—would break OPEC's hold on the fuel supplies of the world. In spite of heavy spending on exploration, the U. S. has been unable to increase its crude reserves for more than a decade. Developing synthetic capacity would reverse the upward trend in imports.

Critics such as Senator William Proxmire (D-Wis.) call the synthetic fuel program the error of 1979. The risks unquestionably are great. There is risk of loss to the taxpayers, risk of corruption and inefficiency, risk of inflationary strains on the cost structure of the nation as fuel prices rise. Despite such potential problems, this program is the only way to check the continuing escalation of oil prices and put a ceiling on what OPEC can charge. It has the added merit of being offered at a time when the U. S. economy is turning down, freeing resources that could be used in building the synthetic fuel plants. It certainly would be better to spend money this way than to put it into one of the make-work programs that inevitably will be proposed in coming months.

The U. S. should have launched a synthetic fuel program in 1974, when OPEC first showed its muscle. Congress should wait no longer.

Business Week 

Figure 3.8. Ad in the July 6, 1979, issue of the Washington Post, E8

Eizenstat believed Carter needed to cast blame on someone for America's mounting troubles, so he urged the president to "shift the cause for inflation and energy problems to OPEC, to gain credibility. . . to offer hope of an eventual solution, to regain our political losses. . . . If we fail to do so, the late hour may foreclose a similar opportunity again."¹²⁵ Later Eizenstat explained that the Middle East situation at that time was a "tinderbox" of instability. From late-1978 through 1979, the Carter administration was beset by a multitude of additional problems. The Iranian revolution followed escalating inflation at home, growing gasoline lines and soaring gasoline prices that began in spring 1979, reports of Soviet combat troops in Cuba over the 1979 Labor Day weekend, and the Soviet invasion of Afghanistan near the end of 1979. With all these events occurring in a twelve-month period, the Washington atmosphere appeared to be ongoing permanent crises, so ascribing blame to OPEC seemed to offer a reasonable explanation.¹²⁶ Eizenstat provided the president with earnest and astute advice, even when it often involved negative news. Over time, the president came to respect and to rely on Eizenstat's political acumen. Eizenstat became chair of the DOE Energy Task Force in April 1979. He began using the group's daily meetings as a way of previewing all forthcoming energy decisions. The White House was now convinced that energy problems represented the single most powerful threat to the president's political survival and it moved policy control out of DOE.¹²⁷

On the legislative end, the Moorhead Synfuels Bill attracted increased attention from the Carter administration, but it was not without detractors. In June 1979, Schlesinger, Eizenstat, and James McIntyre, director of the Office of Management and Budget, recommended to the president that although there were some specific areas of concern, they would "indicate the

¹²⁵ "Nothing Else Has So Frustrated the American People," *Washington Post*, July 7, 1979, A10.

¹²⁶ Author phone interview with Stuart E. Eizenstat, July 12, 1999.

¹²⁷ Steven Rattner, "White House Is Moving to Reduce Policy Role of Energy Department," *New York Times*, July 3, 1979, 1.

Administration's support for the Moorhead Bill." They identified only a handful of minor changes as a condition for their support. The president responded to their suggestions with his written "ok," which does not imply that he ever enthusiastically endorsed the Moorhead Bill – at least not until after his Domestic Summit.¹²⁸ As recently as June 12, 1979, Rep. Stewart McKinney (R-CT) asked pointedly what Carter's position was on the Moorhead Bill and who made energy policy in the Carter administration.¹²⁹ On Moorhead's recommendation, the House then substituted all of the provisions of his H.R. 3930 for what had originally existed as Senate bill S. 932. This legislation was routed simultaneously through the Senate while the Moorhead Bill was running the gauntlet in the House. Senate bill S. 932 was introduced by Sen. William Proxmire (D-WI) in April 1979, and received unanimous consent from the Senate on June 20, 1979. Its dual objectives were to provide federal assistance for the production of energy as well as increase energy efficiency in the United States, and to extend certain provisions of the Defense Production Act of 1950.¹³⁰

Newsday did an exhaustive investigation of the 1979 gasoline shortage, publishing a series of articles from August 26 through September 2, 1979. The three investigative journalists – Brian Donovan, Bob Wyrick, and Stuart Diamond – concluded: "The Carter administration and the major oil companies deliberately took actions that helped cause, worsen and prolong this summer's gasoline shortage."¹³¹ The reporters argued that once the shortage developed, the

¹²⁸ Memorandum from Jim Schlesinger, Stuart Eizenstat, and Jim McIntyre to President Carter, June 13, 1979, Jimmy Carter Library.

¹²⁹ *National Defense Needs for Energy*, 2.

¹³⁰ *Congressional Record—Proceedings and Debates of the 96th Congress/First Session*, vol. 125-Part 13 (Washington, DC: US Government Printing Office, 1979), 16702; *United States Code*, vol. 3, 753, 755.

¹³¹ Brian Donovan, Bob Wyrick, and Stuart Diamond, "The Gas Crunch: How It Happened," *Newsday*, Special Reprint 1979, 2R.

administration could have ended the gas lines “at any time but chose not to”¹³² The oil companies wanted the shortage for financial reasons and the federal government wanted it to reduce consumption. At a press conference on May 4, 1979, in Des Moines, Iowa, responding to a question about convincing the public to conserve energy, Carter answered, “I think that we’re going to have to have, perhaps, a few demonstrable [gasoline] shortages, as is now being faced in California, to show that this is necessary.”¹³³ Energy Secretary Schlesinger had been issuing alarms for more than two years about the nation’s “growing dependency on foreign oil and saying that apparently only a shortage would encourage conservation and convince the public that the long-range energy crisis was real.”¹³⁴

The administration needed a shortage to secure passage of energy legislation. One veteran energy official said, “It [is] frustrating. It [is] difficult to persuade Congress to pass [energy legislation] when there is no outward sign of a shortage.”¹³⁵ When legislation would come before Congress, the special interests would say, “Look around you. There’s no reason to take this serious step now.” Energy legislation would then be dropped from the agenda. In an editorial following the articles, *Newsday* opined that the nation had two energy crises: the first being a shortage of domestic supplies and the second “a crisis of credibility” on the part of government and industry.¹³⁶ The editorial concluded by expressing concern that the public and Congress would lack the ability to deal with the *real* energy crisis without trust in the government and fuel suppliers.¹³⁷ Two years earlier, at a July 1977 question-and-answer session with a group

¹³² *Ibid.*

¹³³ Jimmy Carter, “The President’s News Conference,” May 4, 1979, Des Moines, Iowa. <http://presidency.ucsb.edu/ws/?pid=32289>

¹³⁴ Donovan, “The Gas Crunch,” 2R.

¹³⁵ *Ibid.*, 4R

¹³⁶ *Ibid.*, 19R

¹³⁷ *Ibid.*

of editors and news directors, the editors asked Carter about the record level of gasoline usage in Michigan. Carter responded, “The public is not paying attention” to the energy crisis and voluntary conservation he had encouraged. To get their undivided attention, the president stated “a series of crises are going to be a prerequisite to a sincere desire on the part of the American people to quit wasting so much fuel.”¹³⁸ It remains doubtful if even this would be successful.

Charles DiBona, president of the American Petroleum Institute, testified before the House of Representatives Investigations Subcommittee of the Committee on Armed Services on November 7, 1979, about the current gasoline shortages. He explained that the “rapid increase in demand and the shortfall of foreign crude oil were the basic causes of the gasoline lines on the West Coast in the spring and the East Coast in the early summer of 1979.” The government’s allocation system “exacerbated” the problem. Refiners confronted the dilemma of needing to build fuel oil stocks for the 1979-1980 heating season, while at the same time attempting to satisfy the summer gasoline demand to the best of their ability.¹³⁹

Could the 1979 summer gasoline shortage, and the subsequent long lines to purchase gasoline, qualify as a prerequisite crisis?

¹³⁸ Jimmy Carter, “Interview with the President, Question-and-Answer Session With a Group of Editors and News Directors,” July 29, 1977. <http://www.presidency.ucsb.edu/ws/?pid=7898>

¹³⁹ Hearings Before the Investigations Subcommittee of the Committee on Armed Services, House of Representatives, H.A.S.C., October 10, 11, 24, 25, 31, November 1, 7, 8, 1979, and February 25, 1980. (Washington, DC: US Government Printing Office, 1980), 451.

Chapter 4: The Crisis of Confidence Speech July 15, 1979

What happened upon Carter's return to Washington from the Tokyo Summit on Monday July 2, 1979, still baffles historians more than three decades later. The president had agreed to deliver a speech about energy on July 5. The White House had even reserved television time and Carter's speechwriters had written several drafts of the proposed remarks. The president's senior advisors, however, were unable to reach a consensus about the message. The president and the First Lady had flown by helicopter to Camp David on Tuesday July 3.¹ The next day – the Fourth of July – Carter abruptly canceled the planned address without further explanation. White House Press Secretary Jody Powell called reporters late in the day to say, "The president has asked me to announce that the speech scheduled for Thursday night has been canceled. I have nothing further to say than that."² On July 5, Powell's office added that the president "intends to propose at an early date a series of strong measures to restrain demand for imported oil," and stated that Carter "is in the process of assessing major domestic issues which he believes are important to the country and which include, but go beyond, the question of energy."³ Carter remained at Camp David and, on the spur of the moment, decided to hold a summit with leaders of industry, government, and education.⁴

¹ "Carter at Camp David," *New York Times*, July 4, 1979, A8.

² Keith Richburg, "Carter Cancels Tonight's Speech on Energy Policy," *Washington Post*, July 5, 1979, A1.

³ "Camp David Meetings on Domestic Issues, Statements by the White House Press Secretary on President's Activities," July 5, 1979, www.presidency.ucsb.edu/ws/?pid=32571

⁴ Joseph A. Yaeger, "The Energy Battles of 1979," in *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions*, Crauford Goodwin, ed. (Washington, DC: The Brookings Institution, 1981), 623-624; Richard Halloran, "President to Outline Energy Plan on TV," *New York Times*, July 3, 1979, D12; Gordon Stewart, "Carter's Speech Therapy," *New York Times*, July 15, 2009, A25. Kevin Mattson, *What the Heck Are You Up To Mr. President? Jimmy Carter, America's 'Malaise' and the Speech That Should Have Changed the Country* (New York: Bloomsbury, 2009), 3.

Reflecting the highly erratic nature of Carter's actions, the July 5, 1979, issue of the *New York Post* featured a bold front-page headline: "What the Heck Are You Up To, Mr. President?" (see Figure 3.1). An accompanying editorial commented: "President Carter's shock cancellation of his energy message has left the country floundering without leadership on the most critical crisis since the depression." The scathing criticism continued, with the paper observing that Carter had previously made four major speeches on energy and yet has: "DONE NOTHING to set up a genuine energy program . . .," "DRAGGED HIS FEET on relaxing stringent environmental restrictions . . .," "FLOUNDERED completely by failing to set up a national synthetic fuel board . . .," "DONE NOTHING to pressure the oil companies to build refineries . . .," "IGNORED under pressure from militant environmentalists [that nuclear power plants are an important and viable option]," and "FAILED to implement a comprehensive standby rationing program" (emphasis in the editorial).⁵

⁵*New York Post*, July 5, 1979, sec. 1, 26, quoted in Mattson, 5.

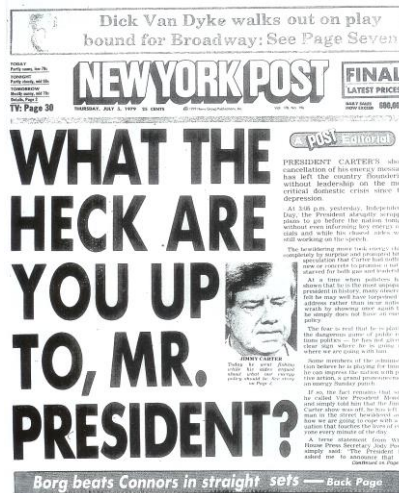


Figure 4.1. *New York Post*, July 5, 1979

Carter had convened a domestic summit with his top advisors at Camp David from July 4 through July 15, 1979. In the reshaping of the presidency that occurred both then and afterward, White House aides acknowledged that “Rosalynn was a critical factor” because she “grasped what was [happening] in the country earlier than the president did.” Carter later said, “The decision not to make the original, scheduled energy speech was made by me and Rosalynn.”⁶ Caddell strongly influenced Carter’s decision to organize the Camp David Domestic Summit, as evidenced in a memo to Carter encouraging the president to strive for a “transforming leadership” style, instead of one based on “transactional leadership.” Caddell challenged Carter to “engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality.” In one of his notes to the president, Caddell suggested that the

⁶ Interview with Jimmy Carter, Miller Center Interviews. Carter Presidency Project, vol. 19, November 29, 1982, 23, 66.

administration needed to “get tough” with OPEC.⁷ He had no support for this decision except from Caddell, because most of his senior staff was “aggravated.” The American people, Carter said, “were aggravated every time [I] went on T.V. They were not interested. It turned them against the energy policy when I spoke to them instead of attracting them to it.”⁸

At the Camp David Domestic Summit, the president included leaders from business, labor, academia, and religion, in addition to some surprise visits to and by ordinary citizens. Deputy chief speechwriter Gordon Stewart writes that this gathering included “[s]ome 130 V.I.P.s from Gov. Bill Clinton to Walter Cronkite The great and wise talked and talked, and the president took careful notes.”⁹ Carter was intent on finding a panacea for all ailments afflicting his presidency, including “the converging traumas of inflation, recession, and the energy crisis.”¹⁰

While the president was at the Camp David Domestic Summit, his economic advisors officially announced what many had already suspected: the United States was in an inflationary recession. During the mysterious series of meetings and visits taking place at the presidential retreat, Carter had what he considered to be a productive and fruitful ten-plus days with his invited guests.¹¹ One of the president’s major goals for this conclave, although barely mentioned, was to confront his political reputation for difficulty in making decisions – his proclivity to be “wishy-washy.” This indecisiveness was partly responsible for the nation slipping into a swamp of disconnected problems. Now that the Carter administration was at the

⁷Drew, *New Yorker*, August 27, 1979, 45-73; Terrence Smith “Reshaping of Carter’s Presidency: 16 Days of Shifts and Reappraisal/President’s Wife and His Pollster Backed the Decision to Press for a New Sense of Control and Direction,” *New York Times*, July 22, 1979, 30.

⁸ Interview with Jimmy Carter, Miller Center Interviews. Carter Presidency Project, vol. 19, November 29, 1982, 23, 66.

⁹ Stewart, “Carter’s Speech Therapy,” *New York Times*, July 15, 2009, A25. *Congressional Quarterly Weekly Report*, 37 (28), July 14, 1979, 1393.

¹⁰ Peter Goldman, Thomas M. DeFrank, Eleanor Clift, and Rich Thomas, “Carter’s Secret Summit,” *Newsweek*, July 16, 1979, 19.

¹¹ Carter, *Keeping Faith*, 123-125.

thirty-month mark, a convergence of ideas at the retreat might provide an opportunity for creative revival to assist the president in renewing his commitment to the American people while also discovering their anxieties, and at the same time assuring them of their elected leaders.¹² Carter appeared at his most vulnerable and open – trying to grasp where he had failed the electorate – and possibly, what was wrong with him.¹³ The president manifested his mood when he described the current times as a “malaise” of confusion, pessimism, and distrust that had roots much deeper than gasoline or double-digit inflation. The period had started with the assassination of President Kennedy, worsened with Vietnam and Watergate, and now caused Americans to distrust their institutions and leaders.¹⁴ Those who met with the president came away with praise and hope for Carter. His humility won them to his side. Those who had counseled past presidents were at first astonished, but then fascinated by this effort to lead by learning, to make necessary changes from a cram course on national attitudes.¹⁵

When the president finally came down from the mountain, he and his aides had prepared a thirty-three-minute speech, which he delivered from the Oval Office on Sunday July 15, 1979, at 10 p.m. EDT. During the speech, viewed by an estimated 100 million people, the president

¹²“Carter at the Crossroads/After a Week of Mulling the Country’s Fate, He Speaks Out,” *Time*, July 23, 1979, 20.

¹³ Hugh Sidey, “A Man Searching for Consensus/The Presidency,” *Time*, July 23, 1979, 22.

¹⁴ “Carter at the Crossroads,” 24.

¹⁵ Sidey, “A Man Searching for Consensus,” 22.

gestured frequently with a clenched fist to dramatize his points “in what would eventually become known as the *Malaise Speech*.”¹⁶ For his other recent talks to the American public, viewership had declined precipitously to only thirty million, from a previous high of over eighty million, so the *Malaise Speech* marked a welcome resurgence in public interest.¹⁷

The message was actually two speeches in one. The first part focused on the listlessness gripping the nation, and the second half provided details of the president’s energy plan that would significantly reduce dependence on foreign crude oil and increase domestic supplies. Carter began by describing what he learned during his time at Camp David. He offered quotes such as “[t]his from a southern Governor: ‘Mr. President, you are not leading this Nation—you’re just managing the Nation.’” Another comment that Carter thought worth repeating was “we are confronted with a moral and a spiritual crisis.” A labor leader offered a succinct summary: “The real issue is freedom. We must deal with the energy problems on a war footing.”¹⁸ Recalling that precisely three years earlier on the exact same date he had delivered his acceptance speech at the 1976 Democratic National Convention, the president drove home the point that he was “determined to reform the nation’s energy habits ‘even if it costs me another term[.]’” This, of

¹⁶Terence Smith, “Carter, Urging Nation to Rally on Energy, Orders Oil Import Limit, Research on Fuels/A Six-Point Program/President Says Democracy Faces a Severe Threat—Criticism Noted,” *New York Times*, July 16, 1979, A1. Carter did not utter the word *malaise* during this speech. Sen. Robert F. Kennedy did use the word *malaise* in a presidential campaign speech on March 18, 1968, at the University of Kansas:

“It is at root, the root of all of it, the national soul of the United States. The President [Lyndon Johnson] calls it “restlessness.” One cabinet officer . . . and others tell us that America is deep in a malaise of spirit: discouraging initiative, paralyzing will and action, and dividing Americans from one another, by their age, their views and by the color of their skin and I don’t think we have to accept that here in the United States of America.” Remarks by Robert F. Kennedy at the University of Kansas, March 18, 1968: www.jfklibrary.org/Historical+Resources/Archives/Reference+Desk/Speeches/RFK/RFKSpeech68Mar18UKansas

Also see Thurston Clarke, *The Last Campaign* (New York: Henry Holt, 2008), 45. Additionally, an editorial appearing on the morning of July 15, 1979, in the *Washington Post* stated, “The President has made malaise a household word.” *Washington Post*, July 15, 1979, E6. Gordon Stewart estimates that one hundred million people watched the speech (Stewart, “Carter’s Speech Therapy”).

¹⁷ “Capital Speech Viewed By About 60 Million,” *New York Times*, July 17, 1979, 15.

¹⁸ *Presidential Documents*, July 20, 1979, 15 (29), 1235-1236.

course, is what eventually came to pass, for many reasons, including the hostage crisis and Reagan's ending question in the televised debate, "Are you better off than you were four years ago?"¹⁹

In the second half, Carter presented "a six-point package of energy proposals" he believed would reduce the nation's oil imports by 4.5 million barrels per day by 1990.²⁰ The word *energy* was repeated thirty-seven times in his speech. The president used his proposed solutions to the energy crisis as a rallying point to jolt the American people out of their malaise. He viewed energy as "the immediate test" of the country's ability to unite, and "the standard around which we would rally."²¹ Carter wanted to set the United States "on a war footing" with respect to the energy problem. He then intensified the message: "On the battlefield of energy, we can win for our nation a new confidence, and we can seize control of our common destiny." As a student of history, Carter hoped that by couching America's response to the energy crisis in terms of "war," he could muster the same support that citizens had previously demonstrated toward earlier presidents during periods of armed conflict.²² Presidential speechwriter Gordon Stewart believed Carter's statement about the battlefield of energy was the central argument of the speech, after which "the policy steps fell into place."²³

The six energy proposal points included halving the nation's dependence on imported oil by 1990, and implementing import quotas for 1979 and 1980, limiting foreign net imports to 8.2

¹⁹ Hedrick Smith, "Part Homily, Part Program/President Returns to Populist Rhetoric of '76 Race as He Seeks 'a War Footing' on Energy Problems," *New York Times*, July 16, 1979, A1.

²⁰ Terence Smith, "Carter, Urging Nation to Rally," A1.

²¹ Author's phone interview with Gordon Stewart, June 19, 2009. *Presidential Documents*, 15 (29), July 15, 1979, 1235-1241; *Presidential Documents*, 15 (29), July 16, 1979, 1244.

²² *Ibid.*

²³ Stewart, "Carter's Speech Therapy."

million barrels a day.²⁴ Passionately, Carter asked “for the most massive peace-time commitment of funds and resources in our nation’s history to develop America’s own alternative sources of fuel—from coal, from oil shale, from plant products for gasohol, from unconventional gas, from the sun.” Congressional support would be essential for any mandate whereby utilities would be expected to reduce their use of oil by 50 percent during the coming decade, and make the switch to alternative fuels. Carter also encouraged Congress to create the Energy Mobilization Board (EMB) to facilitate timely completion of key energy initiatives, and enact a bold conservation program to accompany gasoline rationing.²⁵

The president’s third initiative centered on the development of alternative sources of energy and formed the United States Synthetic Fuels Corporation, which Carter referred to in the speech as the Energy Security Corporation. The six-point Carter plan is summarized below:

1. Limit oil imports to less than 8.5 million of barrels per day beginning immediately, with the goal of reducing these to 4.5 million barrels per day by 1990.
2. Establish an import quota of 8.2 million barrels per day for 1979.
3. Develop alternative fuels such as coal and oil shale. Create an Energy Security Corporation to spend \$88 billion to develop synthetic fuels.
4. Ask Congress for legislation requiring utilities to cut their use of oil 50 percent within a decade.
5. Create an Energy Mobilization Board to cut through red tape, bottlenecks, bureaucracy, and roadblocks.
6. Establish conservation programs.²⁶

²⁴ The 8.2 million barrels per day of net imports was 300,000 barrels per day below the 8.5 million barrels per day Carter agreed to at the June 1979 Tokyo Summit.

²⁵ *Presidential Documents*, 15 (29), July 15, 1979, 1235-1241; *Presidential Documents*, 15 (29), July 16, 1979, 1244. *Congressional Quarterly Almanac*, 96th Congress, 1st Session....1979, vol. 35 (Washington, DC: Congressional Quarterly, 1980), 640; *Congressional Quarterly Almanac*, 96th Congress, 2nd Session....1980, vol. 36 (Washington, DC: Congressional Quarterly, 1980), 23.

²⁶ David Howard Davis, “Energy: President Carter’s Speeches of April 5 and July 15,” Issue Brief Number IB79051, Library of Congress, Congressional Research Service, December 31, 1979.

Responses by mail and telephone to White House staff offices supported Carter's message by a margin of three-to-one, as the following comments illustrate:²⁷

The President's six-point energy program is good, long overdue and warrants the support of the American people. If his program is forcefully executed, America will be on the road to energy independence, free from coercive pressures....The President's speech was forceful, the goals it set are both necessary and attainable. We can assure the President that American workers will do their part, as they have always done when the nation was in trouble. They will accept their fair share of the sacrifice that must be forthcoming from everyone. (George Meany, AFL-CIO president)

It is reassuring that the President understands the real crisis facing the nation goes beyond single issues like energy or inflation. I welcome his clear signal of his intention to exercise strong national leadership and the sense of urgency he brought to domestic policy. (Vernon E. Jordan, Jr., National Urban League president)

The President's speech is exactly the type of bold, innovative leadership this country needs. We can no longer place the blame on anybody else. Each of us must help by keeping a sign before us which reads, "What are you doing to save energy today?" (Dona O'Bannon, National Association of Women Business Owners, director)

We now have an energy policy in words and intent with the directions clearly marked out. From my point of view and, I think, the point of view of our company, we regard most of those directions as being very important for this nation to accomplish. (Thornton F. Bradshaw, Atlantic Richfield Corporation president)

While eagerly awaiting further details of your energy program, we applaud and support your stated determination to lead the nation toward greater energy independence by increasing production of domestic energy resources and by encouraging

²⁷ Richard Pious, *Why Presidents Fail* (New York: Rowman & Littlefield, 2008), 102.

conservation. In these efforts you can depend on the continuing support of Gulf Oil Corporation. (Jerry McAfee, Gulf Oil Corporation, chair and CEO).

The investment of resources and of purpose envisaged by the President's message is, we believe, on a scale and with an impact commensurate with the unparalleled menace posed by an oil cartel seeking to make the United States, its economy and its foreign policy hostage to the price and availability of oil. It is a comprehensive and necessary program which we hope and expect will be equal to the task. (Jack J. Spitzer, B'nai B'rith president).²⁸

The White House planned a three-pronged announcement of Carter's energy plan, according to presidential speechwriter Gordon Stewart. The July 15th address was the first. The remaining two pieces were delivered in the Monday July 16, 1979, White House Fact Sheet on the President's Import Program and the president's July 16, 1979, remarks at the Annual Convention of the National Association of Counties in Kansas City, Missouri. Taken as a whole, they provided the essential details of the proposed energy plan.²⁹ The twenty-eight page White House Fact Sheet gave a detailed look at the president's program, accompanied by legislative specifics on how the import savings were to be achieved.³⁰ Carter's remarks in Kansas City expanded his address from the previous night. He outlined the priorities for present oil supplies, these being emergency services, food and shelter. As mentioned, Carter announced the oil import quota for 1979 at 8.2 million barrels per day, 400,000 barrels per day below what the nation used in 1977, reflecting a 5 percent decrease. Importantly, Carter reiterated that his proposed Energy Security Corporation "will not be – will not be" another federal agency. It will be outside the

²⁸ Walter Mondale Papers, Minnesota Historical Society, United States Energy Security Briefing Books, July-August 1979.

²⁹ Stewart, "Carter's Speech Therapy."

³⁰ *The White House, Fact Sheet on the President's Import Reduction Program*, Press Report, July 16, 1979, Deputy Press Secretary Rex Granum files, Box 63, folder "7/1/79-7/16/79," Jimmy Carter Library.

federal government and bureaucracy, he stressed, free to use independent business judgment to meet its production goal of 2.5 million barrels of oil equivalent per day. He emphasized that the energy crisis had forced the nation to confront its “deepest fears and divisions,” and the goal of an energy secure America will rebuild the strength of the United States as well as the confidence of the American people.³¹

The House and Senate were already trying to launch something closely akin to the Energy Mobilization Board (EMB) even as Carter asked for it in his July 15th speech. Carter described EMB as very similar to the “War Production Board of World War II.” Congress would have granted EMB the responsibility and authority to cut through burdensome local, state, and federal government rules and procedures to accelerate construction of synthetic fuel plants. But in June 1980, the House rejected a bill to create the proposed board after concerns surfaced that EMB would trample states’ rights and ignore federal and state environmental laws.³²

As Schlesinger recalled, President Carter had shown very little, if any interest whatsoever, in synfuel programs or technologies until the second half of 1979 because he was innately sympathetic to the concerns of environmentalists. A prescient remark was overheard in Congress about this time: “Tell President Carter to get aboard because the synfuels train is leaving the station.”³³ Up until the time of the president’s trip to Tokyo, Schlesinger recollected that the Energy Department was still bouncing around various proposals and ideas regarding

³¹ Jimmy Carter, “Kansas City, Missouri remarks at the Annual Convention of National Association of Counties,” July 16, 1979. www.presidency.ucsb.edu/ws/?pid=32597

³² *Congressional Quarterly Almanac*, 96th Congress, 1st Session.... 1979, vol. 35 (Washington, DC: Congressional Quarterly, 1980), 640. *Congressional Quarterly Almanac*, 96th Congress, 2nd Session.... 1980, vol. 36 (Washington, DC: Congressional Quarterly, 1980), 23.

³³ Walter A. Rosenbaum, *Energy, Politics, and Public Policy*, 2nd ed. (Washington, DC: Congressional Quarterly, 1987), 35.

synthetics.³⁴ Carter was not only ambivalent, but he was also getting a lot of mixed signals. In the *Wall Street Journal*, the naysayers voiced serious qualms about both the environmental impact and political costs. “Even synthetic advocates concede[d] that the technology pose[d] problems,” said Department of Energy official Robert Hanfling. “These are not nice plants. . . . These are big dirty plants. Everybody wants these plants – but wants them someplace else The technologies are essentially well-known. . . . What has been lacking is the national will.” Regarding the awesome magnitude of the endeavor, Hanfling observed that “building a synthetic fuels industry from a ‘standing start’ is every bit as challenging as putting a man on the moon in 10 years.”³⁵ But, private industry appeared all but committed to the project. By late November 1979, Garvin of Exxon had “put in the strongest terms yet Exxon’s decision to make synthetic fuels a major part of its business.” He also called for the government to provide “modest economic incentives” to assist private industry in developing synthetic fuels, which he believed offered “the best hope.”³⁶

Prompted by soaring world prices for crude oil and shortages caused by the turmoil in Iran, Carter and Congress were finally ready to establish a synthetic fuels industry. “Recent developments in the Middle East have aggravated the strategic and economic danger that has always marked our heavy dependence” on OPEC, Sen. Henry “Scoop” Jackson (D-WA) stated,

³⁴ Interview with James Schlesinger, Miller Center Interviews, Carter Presidency Project, vol. 22, July 19, 1984, 43, Jimmy Carter Library.

³⁵ Rich Jaroslovsky, and Dennis Farney, “Energy Enigma: Synthetic Fuel Plans Stir Doubts on Costs, Environmental Impact,” *Wall Street Journal*, July 12, 1979, 1.

³⁶ “Exxon Moves Closer to Stressing Projects for Synthetic Fuels,” *Wall Street Journal*, November 29, 1979, D14.

continuing with, “Synthetic fuels will ultimately lead us away from highly unstable foreign sources of energy.”³⁷

Leaders in the president’s own Democratic Party, such as Sen. William Proxmire (D-WI), objected. Proxmire felt Carter’s synthetic fuel plan was “much too ambitious, much too costly and might prove to be counterproductive.” Proxmire made it known that his Banking, Housing, and Urban Affairs Committee was “unanimous” in favoring “a more cautious and deliberate strategy.”³⁸ Business people and economists alike questioned the wisdom of paying \$30 to \$40 per barrel for synthetic fuel products when conventional oil could still be acquired for less.³⁹ Moreover, this “mammoth synfuels industry” came with environmental and social burdens that would be a hardship for the people of Colorado, Wyoming, and Montana. Water would be a critical resource needed in large quantities to develop a synfuels industry, but it was already in short supply in the regions most likely to be producing synthetic fuels.⁴⁰

By late summer 1979, a team of outside consultants from three different firms had been engaged by the Senate Budget Committee and was ready to offer an evaluation of the synfuels proposal. The combined report recommended a “go-slow approach instead of the \$88 billion crash program” the president proposed. All three consulting firms recommended the “careful evaluation of new technologies so that successive plants could benefit from the mistakes and successes of the first group of plants.” Even after being reminded that the current oil situation created pressures akin to OPEC having “a gun at our head,” the consultant from Booz, Allen, &

³⁷ Jaroslovsky, and Farney, “Energy Enigma: Synthetic Fuel Plans Stir Doubts on Costs, Environmental Impact,” *Wall Street Journal*, July 12, 1979, 1.

³⁸ Warren Weaver, Jr., “Synthetic Fuel Plan Under Fire; Scope Troubles Key Senators,” *New York Times*, August 8, 1979, D1.

³⁹ “Impact of Dozen-Digit Spending/Rather Like Building a New Saudi Arabia in the U.S.,” *Time*, July 30, 1979, 55.

⁴⁰ John M. Berry, “Synthetic Fuels Bandwagon,” *Washington Post*, June 21, 1979, C1, C3.

Hamilton still responded with thumbs down to the rushed synfuels program. “I don’t believe we would get all that much more production 10 years from now with a crash program,” he stated, than would be attained from the slower approach favored by the consultants.⁴¹

Another analysis, *A Review of Cost Estimation In New Technologies: Implications For Energy Process Plants*, published in July 1979 by the Rand Corporation at the behest of DOE, reached similar conclusions. “[A]ny crash effort to build a synthetic-fuel plant in the United States would cost billions of dollars more than the initial estimates and crowd out other investments that would bolster industrial productivity and help control inflation.” The Rand report stated that in reviewing the actual costs of energy process plants (synthetic fuels plants), the figures averaged 2.53 times their initial estimates. In an interview, Edward Merrow, director of Rand Corporation’s energy policy program, said that a threefold cost overrun was “not uncommon” and in some situations final expenditures had risen to five times initial estimates. Factors impacting primary calculations include plant and process uncertainty, estimation methodology, project organization, and exogenous effects (for example, shortages of labor, materials, and services and regulatory changes) on expenses. Merrow, as senior author of the Rand report (with coauthors Stephen W. Chapel and Christopher Worthing), “told the Energy Department that any attempt to create by 1990 a synthetic-fuel production capacity in excess of one million barrels a day might not be successful[,]” although the administration and House had approved a goal twice that level.⁴²

⁴¹ John M. Berry, “Go-Slow Plan Recommended for Synfuels,” *Washington Post*, September 6, 1979, D10.

⁴² Edward Cowan, “Synthetic Fuels Costs Called High,” *New York Times*, July 11, 1979, D7. Edward W. Merrow, Stephen W. Chapel, and Christopher Worthing, *A Review of Cost Estimation In New Technologies: Implications For Energy Process Plants*, R-2481-DOE, July 1979 (Santa Monica: Rand, 1979), vi, 87.

Despite warnings about the likelihood of any short-term success in the synfuels endeavor, Carter's attitude about synfuels shifted dramatically as a result of events at the Camp David Domestic Summit in July 1979. Just a few days after the Malaise Speech, a Gallup poll indicated that Carter's approval had rebounded to 32 percent from a low of 28 percent for the June 29 – July 2 period.⁴³ A survey by the New York based polling firm of Roger Seasonwein Associates showed that after the July 15 address, Carter's approval rating increased nine percentage points to 30 percent from 21 percent.⁴⁴

As part of the catharsis during and after the Domestic Summit, a surge of confidence emboldened Carter to suggest that all his top aides submit their resignations. Such a move gave him the opportunity for a “fresh start,” picking and choosing those whom he wanted to have onboard for the balance of his term. On the Tuesday morning following the Sunday night Malaise Speech, the president “demanded the resignations of his top 34 Cabinet and senior aides.” According to Schlesinger, this shake-up was intended to impart the image that Carter was in charge, but the housecleaning ended up creating exactly the opposite effect.⁴⁵ The sudden turn of events culminated in the ousters of four cabinet secretaries – James Schlesinger (Energy), Michael Blumenthal (Treasury), Joseph Califano (Health, Education, and Welfare secretary), and Brock Adams (Transportation) – along with Attorney General Griffin Bell.⁴⁶ To the American public, these firings rekindled the impression of Carter's ineptness, and they did not enhance the president's standing with a Congress that viewed the resignations with disbelief. Logic failed to

⁴³“Slight Upturn Found in Carter's Approval Rating,” *Gallup Opinion Index*, Report No. 169, April 1979, 1; Interview with Schlesinger, Miller Center, 50.

⁴⁴ Keith Richburg, “Carter's rating Rose Nine Percent after Speech,” *Washington Post*, July 17, 1979, A15.

⁴⁵ *Ibid.*, interview with James Schlesinger.

⁴⁶ “Carter's Great Purge,” *Time*, July 30, 1979, 10.

explain why Carter, having finally gotten the nation's attention on energy, abruptly switched course and changed the subject.⁴⁷

The briefing books for the President's Program for United States Energy Security, prepared by the Office of Management and Budget in September 1979, outlined the main components of the Energy Security Corporation (ESC), a title which served as a reminder of the importance of energy to national security. The ESC, as conceived, would be an "independent, Congressionally-chartered" entity receiving "billions of dollars in revenues from the Windfall Profits Tax" and "exempt from most of the restrictions which apply to federal agencies." The initial ESC budget proposed by the president was \$88 billion. In hindsight, Schlesinger opined that the \$88 billion figure came out of nowhere, and was not determined with any forethought or prudence. The president had initially intended to commit only \$15 to \$20 billion for these programs, a level Schlesinger considered preposterously low.⁴⁸

Early ESC directives made clear the corporation would "*not* be in the energy production business [but r]ather . . . will have a mandate to assist the development, by the private sector, of synthetic fuels and unconventional natural gas."⁴⁹ According to the author's interview with Katherine (Kitty) Schirmer Cochrane, who was actively involved in all of the early discussions on synfuels as senior staff member for energy under Eizenstat, "The Administration wanted to have a federal program to kick-start a commercially viable synthetic fuels industry. It was also highly desirable to have minimum federal government interference in the marketplace." This goal was to be accomplished primarily by loan and price guarantees. Another justification for the

⁴⁷ Drew, *New Yorker*, August 27, 1979, 65, 68.

⁴⁸ Interview with Schlesinger, July 19, 1984, 44-45.

⁴⁹ Attachment to memorandum from Eliot R. Cutler to Hamilton Jordan, September 21, 1979, File: Energy Security Corporation—The President's Program for U.S. Energy. Chief of Staff, Jordan, Energy, Department of, through Federal Deposit Insurance Corporation, Box 45, Jimmy Carter Library.

corporation's intended independence was to "assure it the flexibility necessary to develop synthetic fuel resources on a very rapid and efficient schedule."⁵⁰

The ESC was to supplement, but not supplant, the marketplace in "the development of 1.75 million barrels per day of oil substitutes from coal, oil shale, biomass, and unconventional gas by 1990," although the goal was subsequently bumped up to two million barrels. Synthetic fuel technologies were expected to compete economically with imported oil by the 1990s. Unless government incentives were provided earlier, the administration recognized that private firms would, on their own, be content to wait until the 1990s to engage in the new technologies. Because of "the desire to provide for our national security by insulating the United States from foreign political pressures and to slow down increases in world oil prices," the government needed to enlist private industry to become more aggressively involved in the mission, a goal the ESC could facilitate.⁵¹

Among the reasons deterring private companies from participating in synthetic fuel endeavors on their own were the possibility that oil prices would not continue to escalate rapidly, as well as the uncertainty of future world oil and gas production levels. Also, there were technical risks associated with development of the new technologies into large-scale plants suitable for replication. The financial expenditures were mind-boggling, since each plant would cost billions of dollars. This level of expense meant a disproportionately large share of any single company's assets would have to be at risk. There was also a time gamble involved in the seven-to-ten years required for planning, designing, and building each commercially sized synthetic fuels

⁵⁰ Author interview with Katherine Schirmer Cochrane, July 14, 1999.

⁵¹ Memorandum from Eliot R. Cutler for Hamilton Jordan, September 21, 1979. File: Energy Security Corporation—The President's Program, Chief of Staff Jordan, Energy, Department of, through Federal Deposit Insurance Corporation, Box 45, Jimmy Carter Library.

plant. There was the added hurdle of the obstacles involved in meeting federal, state, and local regulatory requirements – “red-tape” had to be cut.

The long-standing promise was that as the price of oil continued to increase, at some point the price of synfuels would become feasible. According to National Petroleum Council data, however, every time there [was] an OPEC price increase, “the projected costs of shale oil and crude oil from coal ha[d] managed to jump a few dollars higher.” This situation is the very reason no synthetic crude plants of any size had ever been built in the United States, and only minimal funding had been expended on “research and development in synthetics.”⁵² One of the few isolated incidents of appropriations made for synfuels development occurred in 1944. Congress passed the Synthetic Liquid Fuels Act appropriating \$85 million for the Interior Department. This appropriation was to conduct laboratory research and for the construction and operation of synthetic fuels demonstration plants that would test various synthetic fuels technologies but not produce commercially significant quantities of outputs. The technologies included coal hydrogenation, gas synthesis from coal, gasoline from coal, and oil from shale. The oil industry had opposed this act, and as a result, caused the program’s gradual demise, until it was eventually discontinued early in the Eisenhower administration.⁵³

According to Hill Bonin, a lobbyist with Gulf Oil, the risks of developing a new synthetic fuels industry would have been prohibitive without government help: “If a project fails, ‘you’ve got a \$1 billion to \$2 billion white elephant on your hands.’” Another executive from Gulf Oil, William King, shared this attitude, saying “the government will have to provide ‘front-end

⁵² Spencer Rich, “As Oil Price Rises, So Does Cost of Synthetic Crude,” *Washington Post*, June 1, 1979, A1, A4.

⁵³ Crauford D. Goodwin, “Truman Administration Policies Toward Particular Energy Sources.” In *Energy Policy in Perspective: Today’s Problems, Yesterday’s Solutions*, Goodwin, ed. (Washington, DC: The Brookings Institution, 1981), 148.

money' for industry [because t]hings like loan guarantees aren't worth a damn."⁵⁴ For oil companies, there was the fear that if they invested these huge sums to build commercial-sized plants, "the Saudis [would] cut the guts out of the market by lowering the price for conventional crude. Keep in mind any time the Saudis want to[,] they can break the bank," King said. The Middle East countries could easily afford to charge ridiculously low prices for oil being imported into the country for the express purpose of putting any synfuels industry that the United States created out-of-business.⁵⁵

This was not an unrealistic fear. In 1980, the Saudis opposed US efforts to fill the strategic petroleum reserve, fearing that Saudi Arabia would lose control over oil pricing.⁵⁶ At the end of May 1980, Saudi Arabian Oil Minister Shiek Ahmed Zaki Yamani warned that oil prices could "collapse" because of the "current oil glut." Crude oil from Saudi Arabia was then priced at \$28 per barrel. Yamani signaled that any effort by the United States to develop a synthetic fuels industry would be met by a "collapse" in oil prices to such an extent required to render any synthetic fuels effort uneconomic.⁵⁷

Part of the urgency in getting the ESC underway was that the time required to develop any full-scale facility meant that the Carter administration needed to "begin immediately to lay the foundation for the expansion of the synthetic fuels industry in order to have this new energy source available in the 1990s." The magnitude of a synfuels development scale was virtually without precedent, which is why Carter compared it to the space effort and the Manhattan Project.

⁵⁴ Jaroslovsky and Farney, "Energy Enigma," *Wall Street Journal*, July 12, 1979, 17.

⁵⁵ Rich, "As Oil Price Rises," *Washington Post*, June 11, 1979, A4.

⁵⁶ "Saudis Reject Idea of Oil Stockpiling," *New York Times*, March 5, 1980, D14, and "Saudis Oppose Oil Stockpiling," *Los Angeles Times*, March 5, 1980, OC2.

⁵⁷ "Yamani Sees Possible Oil Price Clash," *New York Times*, May 30, 1980, E1, and "Saudi Minister Predicts Collapse of Oil Prices," *Los Angeles Times*, May 29, 1980, A2. Comment from Larry Lukens to author in e-mail of August 28, 2011.

Developing synthetic fuel and unconventional gas production with a capacity for producing 1.75 million barrels per day required “capital investments in excess of \$110 billion” (in current 1979 dollars), and would “involve the construction and operation of between 20 to 40 large coal synthetic or oil shale plants—[with] a typical plant . . . produc[ing] 50,000 barrels of oil and oil equivalent per day, consum[ing] about 4 to 6 million tons of coal per year, employ[ing] thousands of laborers in construction and operation, and cost[ing] well in excess of \$2 billion each.”⁵⁸

Because it would be outside the federal bureaucracy, the ESC would be able to recruit and retain top-caliber professional talent in the areas requiring financial and technical expertise, compensate them at private industry standards, and be unencumbered by normal contracting procedures of the federal government. The corporation would be governed by a seven-person board of directors for a limited life of twelve years, with an annual limitation on administrative expenses of \$35 million (adjusted for inflation). By imposing this cap, the administration was also setting a limit on the number of employees at 300.

A major rationale for grabbing the initiative for synfuels development can be attributed to the realities expressed in Eliot Cutler’s memo of June 12: “We need to seize leadership on alternative energy development—as we have on decontrol and the tax—in order to avoid not only serious political damage, but also the possibility that genuinely bad and very expensive investment decisions will be made by a Congress in panic.”⁵⁹ The congressional actions that Cutler alluded to included the Moorhead Bill, although there were others that were less visible. At least forty of these bills were pending in either Senate or House legislative hoppers by midsummer, as gasoline lines prompted everyone to get on the synthetic fuels bandwagon and

⁵⁸ Attachment to memorandum from Eliot R. Cutler to Hamilton Jordan, September 21, 1979.

⁵⁹ Memorandum from Eliot Cutler to Jim McIntyre and Stu Eizenstat, June 12, 1979.

people began to fear “that prices were going to \$2 a gallon”⁶⁰ Timely action and strong forceful leadership were needed, as expressed by Anne Wexler of the White House staff in her August 4, 1979, memorandum to the president: “[D]uring the recess, Congressmen will hear concerns about home heating oil and gas lines and that syn-fuels [*sic*] are too far in the future. As quickly as they became advocates for syn-fuels [*sic*], they could return as advocates for energy conservation and more help for the poor.”⁶¹

Within ten days of Carter’s address to the nation, the Senate Committee on Energy and Natural Resources held two full-day hearings on the proposed synthetic fuel legislation.⁶² John M. Deutch, acting undersecretary of the Department of Energy, testified before the committee for the administration. Deutch noted that the corporation would be headquartered in the District of Columbia, but as a federally chartered corporation, it would be as independent as possible so it could operate as a private concern with a minimum amount of constraints normally associated with federal agencies. Internal management of the Energy Security Corporation, including compensation and staffing, would be set by the corporation itself. In his published statement, Deutch wrote:

The Corporation will be located outside the Executive branch, independent of any government agency. It will be managed by a seven-person Board of Directors. . . . Compensation for the chairman and public members of the Board and for other officers and employees of the Corporation would be set by the Board. No statutory limits would be set on salary and other compensation. The Board would determine the internal structure of the Corporation, and the Board or the chairman would determine the size of the Corporation’s staff, subject to the limits set by the annual operation budget.⁶³

⁶⁰ Ward Sinclair and Richard L. Lyons, “Fed by Gasoline Lines, A Synthetic Fuel Fever Is Sweeping Capitol Hill,” *Washington Post*, June 12, 1979, A14.

⁶¹ Memorandum from Anne Wexler for President Carter, August 4, 1979, File: Trip to Kentucky, 7/31/79[2] through Trip to Baltimore, MD, 8/6/79[1], Box 141, Jimmy Carter Library.

⁶² *Synthetic Fuels Legislation*, Hearings Before the Committee on Energy and Natural Resources, United States Senate, July 23, 24, 1979, Publication No. 96-88.

⁶³ *Ibid*, 284-287.

But, with little more than a year remaining before the president faced reelection, Carter was still plagued by a public that did not identify with the administration's energy program. In an August 14 memo, Jack Watson, a senior White House official, said that "the public's frustration and skepticism regarding energy issues [are directed] toward you, with all that that implies both politically and substantively." In handwritten comments on the bottom of his typed memo, Watson implored the president to develop a "solid, well-explained and specific program" to present to the American public. In the president's succinct and brusque forty-five-word handwritten response, however, Carter communicated a tone of desperation for overdue action:

To Jack & Ham-
We seem to be going backward from more specifics to generalities. Let Fritz, Charles, Al, Jack, Ham, Stu, Pat, Larry & someone develop a plan & act. Kirbo can help with oil co. support, etc. Enough W. H. memos.

J.C.⁶⁴

Interestingly, one of the relationship changes that became apparent, compared with earlier in the Carter administration, was that the president no longer seemed to be functioning as an island. He demonstrated reliance on a broad assembly of his most trusted aides to collaborate on the action plan. Also significant is his recognition that they needed to enlist the support of oil companies and others, instead of operating in a vacuum.

Yet were these evolutionary changes taking place within the Carter presidency sufficient to win the support, confidence, and trust of the American people?

⁶⁴ Memorandum from Jack Watson to President Carter, August 14, 1979, File: 8/16/79[1]. Staff Offices, Office of Staff Secretary, Handwriting Files, 8/8/79 through 8/16/79[2], Box 142, Jimmy Carter Library. "Ham" was presidential advisor Hamilton Jordon.

Chapter 5: Trying to Recapture the Initiative

In the Senate, the Energy Committee continued to meet regularly to incorporate Carter's July 15th proposals into the S. 932 legislation. The final version of the Energy Security Act, as signed into law, consisted primarily of S. 932 and H.R. 3930 combined.

Carter's energy program represented one of the highest priorities for his administration. Charles Duncan, Schlesinger's successor at DOE, received presidential orders to spearhead the efforts. Duncan, previously deputy secretary of Defense, was viewed as both a Carter loyalist and an effective leader who could accomplish a difficult task. He traced his roots in the energy sector to an early position as a chemical engineer with Humble Oil (forerunner to Exxon/Mobil). Although the cabinet changes had not been officially announced until after July 15, 1979, Duncan indicated that Carter had telephoned him while Duncan was on a July Fourth vacation. In that conversation, the president told Duncan that he (Carter) wished to make some changes at DOE, and that he wanted Duncan to become secretary of Energy. Carter invited Duncan to join him at Camp David on Monday, July 9, to discuss impending personnel changes. In anticipation of this meeting, Duncan composed a list of reasons why he felt it would be better for him to remain at the Department of Defense. When he shared them with the president, Duncan recalled that Carter responded, "Don't you think I've already thought of all these?" At this point, Duncan felt compelled to accept the new position.¹

In a handwritten note to Duncan on Monday August 6, 1979, Carter ordered him to take the initiative.

¹Author interview with Charles Duncan in Houston, TX, October 13, 1999.

8-6-79

To Charles Duncan

You have the lead on this. We are all eager to move together. Make assignments through Hamilton to others.

J.C.

Cc Ham²

Also part of the administration's senior staff changeover was the return of John C. Sawhill, a familiar figure from his prior position as the nation's energy chief in 1974.³ He came at Duncan's request to assist him as deputy secretary of Energy. Sawhill had just concluded a successful capital fund campaign for New York University, where he had served as president for more than four years. He was most receptive to making a career change.⁴

While preparing to leave office and before Duncan was sworn in on Friday August 24, 1979, Schlesinger wrote a memorandum to the president regarding unfinished DOE business. Many in the administration still held the view that conservation was a viable option. Schlesinger questioned whether the topic had received sufficiently serious consideration. "Your proposals for a US commitment to synthetic fuels has [sic] raised the question of whether the Administration has tapped fully the potential for conservation, which is a less costly answer to reducing reliance on foreign oil and can be implemented more quickly." To diffuse the opposition, DOE was

² Handwritten note from President Carter to Charles Duncan, August 6, 1979, File: Energy Coordination (2). Chief of Staff, Jordan, Defense through Energy Coordination, Box 44, Jimmy Carter Library.

³ Sawhill signed the *Project Independence Report*, November 1974, issued by the Federal Energy Administration.

⁴ Note from Rick Hutcheson to Secretary-Designate Duncan, August 7, 1979, File: Energy Coordination (2). Chief of Staff, Jordan, Defense through Energy Coordination, Box 44, Jimmy Carter Library; Sloane, Leonard, "Sawhill Speaks Out on Energy Crisis," *New York Times*, August 18, 1979, 27.

pursuing “[a] number of conservation initiatives that could be proposed in answer to criticisms or as an Administrative answer to the proposals of Senator Kennedy and others.”⁵

In the East Room of the White House at Duncan’s swearing-in ceremony, the president stressed that fifteen years ago, Americans did not “think much about the problems that might arise from the energy question or the energy situation.” Yet in 1979, it had become a “burning issue for every person,” and the country’s “energy security is threatened.” About half the oil the United States used came from foreign countries, making it imperative that this country increase the production of synthetic fuels. In his comments, Duncan added that the nation must “utilize the genius of American technology” to increase supplies in an environmentally sound manner. Duncan added, “The energy problems directly impact all Americans. They affect the very fabric of our economic structure.”⁶

The legislative history of the Energy Security Act reflected sentiments from several sources vouching that conservation, if given careful attention, could reduce energy use by 30-40 percent. As of 1980, initiatives to improve residential energy efficiency had barely been tapped, with approximately 30 percent of US housing stock completely uninsulated. Conservation and limits were concepts that appeared historically incompatible with the impatient American character, in addition to other difficulties: problems in identifying appropriate conservation measures, finding reliable retrofitters conveniently located nationwide and achieving economies-of-scale to maximize energy savings with individual decisions made by homeowners across the country. In addition, government incentives were inadequate, and the payback period for homeowners to realize net economic savings was too long (up to ten years for some heating

⁵ Memorandum from Jim Schlesinger to President Carter, August 23, 1979, File: 9/4/79[1]. Staff Offices, Office of Staff Secretary, Handwriting Files 8/20/79 through 9/8/79, Box 144, Jimmy Carter Library.

⁶ Department of Energy remarks at the swearing in of Charles W. Duncan, Jr., as secretary, August 24, 1979. www.presidency.ucsb.edu/ws/?pid=32787

applications, or twenty years for solar heating systems). Americans expected faster resolution of their problems, particularly those involving energy.⁷

In a letter to the *New York Times* in early November 1979, Eizenstat referenced several conservation initiatives that President Carter had already signed into law to refute criticisms that not enough had been accomplished. These included an array of tax credits for home and industry conservation efforts, the availability of home energy audits by utility firms, mandatory standards for achieving greater efficiency in autos and major home appliances, and a \$900-million program to weatherize schools and hospitals. Still awaiting passage were measures to subsidize loans for homeowners wanting to make conservation investments, initiatives to expand coverage for free utility audits, expansion of existing solar tax credits to include new homes, establishment of a national solar and conservation bank to help homeowners undertake energy-saving investments, and tripling federal funds to enhance and refurbish public transit systems.⁸

An early communication between Carter and Duncan was a memorandum titled “Enactment of the President’s Energy Program.” Carter realized time was of the essence. “We have less than five months to gain Congressional enactment of a program which is at least as complex as that which the last Congress took two years to enact only in part. It can be done, but it will require intense work, cooperation and discipline.”⁹ As part of the hurry-up strategy, the administration sought to modify pending legislation in Congress (H.R. 3930 and S. 932) to meet the president’s timetable. According to Carter’s weekly legislative report at the end of August 1979, the synthetic fuels program was already in jeopardy because, following passage of the

⁷ *United States Code, Congressional and Administrative News, 96th Congress—2nd Session 1980*, vol. 3 (St. Paul, MN: West, 1981), 1892, 1838.

⁸ Stuart E. Eizenstat, “Letters,” *New York Times*, November 4, 1979, E20.

⁹ Attachment to note from Rick Hutcheson for Secretary-Designate Duncan, August 7, 1979, File: Energy Coordination (2). Chief of Staff, Jordan, Defense through Energy Coordination, Box 44, Jimmy Carter Library.

Moorhead Bill, the inclination was “to bargain in conference for whatever the Senate produce[d].” A final caveat warned, “We suspect the [Senate Energy] Committee is leaning against the ESC as a funding mechanism in favor of the traditional authorization/appropriations process. This would be a disaster for the program.”¹⁰

On July 23-24, 1979, at Senate Energy Committee hearings on the proposed synthetic fuels legislation, John Deutch, acting undersecretary for the Department of Energy, testified that the Carter administration wanted a corporation outside the executive branch, independent of any government agency. No statutory limits were to be placed on salary and other compensation for either the board or the employees of the corporation. These payments would be subject to limits set by the corporation’s annual operating budget, initially established at \$35 million per year.¹¹ Deutch, Larry Lukens of DOD, and Bowman Cutter, Office of Management and Budget executive director for budget, were the three primary architects of the proposed synthetic fuels legislation the White House sent to Congress. Drafting sessions, usually held at the Old Executive Office Building (EOB), would at times last several hours. The team focusing on the Energy Mobilization Board (EMB) consisted of a different group of senior officials.¹²

In a significant compromise gesture, Carter told leaders of the Senate Energy Committee on September 11, that he had agreed to “slow down his synthetic fuels program.” The president was willing to accept a two-stage synfuels strategy in place of the \$88-billion crash program he

¹⁰ Memorandum from Frank Moore to President Carter, August 31, 1979, Staff Offices, Office of Staff Secretary, Handwriting Files, 8/20/79 through 9/8/79, Box 144, Jimmy Carter Library.

¹¹ *Synthetic Fuels Legislation*, Hearings Before the Committee on Energy and Natural Resources, United States Senate, Ninety-Sixth Congress, First Session, Publication No. 96-88 (Washington, DC: US Government Printing Office, 1980), 286-294.

¹² Phone interview with John Deutch by author on January 14, 2011, and emails from Larry Lukens to author on June 19, 20, 2011.

had proposed just two months earlier.¹³ Carter knew from his aides that he did not have sufficient congressional support to ensure passage of his initial program, since Congress was hesitant to commit and spend \$88 billion all at one sitting.

Secretary Duncan subsequently addressed a letter to the chair of the Committee on Energy and Natural Resources, reiterating “ESC’s task was to stimulate the private sector, not to intrude upon it.” Duncan mentioned that the president had made known “his willingness to accept deletion of any provision that inferred the ESC be given the authority to own or operate synthetic fuel plants.” With regard to criticisms about the rushed program versus a more gradual, step-by-step strategy, “The Administration favors an approach which defines long-term goals, but which approaches these goals with phased authorities and appropriations.”¹⁴

Even with these concessions, the Carter administration was thwarted in its attempts to get the ESA signed into law by the end of the first session of the 96th Congress in December 1979. It would not be until June 1980, following intense wrangling in conference committee meetings, that the president would sign finally the Energy Security Act.

On October 13, 1979, when the drive for synfuels was going full-throttle and considered by the administration to be America’s best hope for resolving the energy crisis, the president listened to a question about energy on a radio call-in show. Carter himself diluted much of the synfuels campaign effort when he stated that conservation (rather than synfuels) would be “[o]ur No. 1 reliance on correcting the energy problem” As an afterthought, he added, “As a last resort we’ll have to have some additional supplies of energy.”¹⁵

¹³ Jerry Knight, “Carter Agrees to Slow His Plan for Synthetic Fuels,” *Washington Post*, September 12, 1979, A1.

¹⁴ Letter from Charles Duncan to Sen. Henry M. Jackson, September 21, 1979, File: Energy Security Corporation through Environment-Conservation (Land and Water), Box 202, Jimmy Carter Library.

¹⁵ Steven R. Weisman, “President Stresses Fuel Conservation/Focus in Radio Call-In Shifts from Earlier Accent on Synthetics,” *New York Times*, October 14, 1979, 1, 22.

During these negotiations, the political situation in Iran exploded. After enormous pressure from Henry Kissinger (former secretary of State), David Rockefeller (chair and CEO of Chase Manhattan Bank in New York City), and John McCloy (prominent New York City attorney and counselor to presidents), Carter had agreed to permit the deposed Shah of Iran to fly into New York City on Rockefeller's private Gulfstream jet for cancer medical treatment on Monday, October 22, 1979. In Iran, this action fueled rampant anti-American sentiments, and erupted in with a Tehran protest of over one million people in Tehran.¹⁶ On Sunday, November 4, 1979, Iranian students attacked and overwhelmed the US Embassy there, taking sixty-six Americans hostage. President Carter's approval rating, as measured by Gallup, soared in the month following the crisis – from 32 percent before the hostages were taken, to 61 percent afterwards. It was the sharpest one-month leap in presidential popularity since Gallup started polling in 1938, and 77 percent approved of the way that Carter was handling the Iranian situation.¹⁷ Eventually, however, this hostage ordeal would drag on for 444 days and sound the death knell for Carter's reelection.

By early November 1979, the White House remained uncertain about whether the upcoming vote in the Senate on the Energy Security Corporation would have a favorable outcome. To influence the upcoming vote, Carter, on November 2, directed Eizenstat to contact several wavering senators, using a number of "Talking Points for Senate Energy Committee Bill" to persuade them to vote for it. "The program needs a single business focus with talented (and well paid) people running it who[m] industry will trust and can relate to. The corporation needs to be free from the red tape and administrative complexities that hamstring current agency

¹⁶ David Farber, *Taken Hostage* (Princeton, NJ: Princeton University Press, 2005), 127.

¹⁷ Tim Mathews, "America Closes Ranks," *Newsweek*, December 17, 1979, 42. "Survey Finds Carter's Popularity Has Risen Sharply in Iran Crisis," *New York Times*, December 10, 1979, A22. "A *Newsweek* Poll: How Americans See the Crisis," *Newsweek*, December 17, 1979, 45.

practice.” Eizenstat took an aggressive stance. He tried to reassure the senators that the corporation would be small, having “a maximum annual administrative budget of \$35 million,” and was intended to “provide financial assistance to the industry [rather than] get Government into the business.”¹⁸

The Senate debated two versions of S. 932: the “Synthetic Fuels Corporation Bill” reported by the Energy and Natural Resources Committee, and the “Energy Financing Act,” reported by the Banking, Housing, and Urban Affairs Committee. The administration favored the Energy Committee’s version, as it closely duplicated the president’s proposed Energy Security Act. To ensure passage of the “Synthetic Fuels Corporation Bill,” the White House dispatched Vice President Walter Mondale to the Senate, where his ballot might be needed as a tie-breaker. The results, however, showed a clear victory for the measure proposed by the Energy Committee, with the Banking Committee version going down in defeat 57 to 37.

The legislation now known as the Energy Security Act created the United States Synthetic Fuels Corporation, the new name for what the president had originally referred to as the Energy Security Corporation. When the Senate Energy Committee reported its version of the Energy Security Act on Monday, November 5, 1979, it had changed the corporation’s name to the United States Synthetic Fuels Corporation – subsequently known by shortened forms: Synthetic Fuels Corporation, Synfuels, Synfuels Corporation, or simply SFC. The corporation was a *sui generis*, special-purpose federal entity created exclusively for the development of a synthetic fuels industry. During the House debate, then Rep. Albert Gore, Jr. (D-TN), referred to the corporation as an entity unlike anything else Congress has ever created.¹⁹ SFC’s responsibility

¹⁸ Memorandum from Eliot Cutler to Hamilton Jordan, July 30, 1979, File: Energy Coordination (2). Chief of Staff, Jordan, Defense through Energy Coordination, Box 44, Jimmy Carter Library.

¹⁹ *Congressional Record*, June 26, 1980, H 5723.

was to provide financial assistance to the private sector for developing the commercial production of synthetic fuels by private industry.²⁰

The United States Senate finally approved the Energy Committee proposal on November 8, 1979, by a vote of 65-19, enacting “[a]n ambitious and expensive program to create a new American synthetic fuels industry to reduce reliance on foreign oil imports.” With passage, Carter had one of his few major successes, as the Senate had earlier defeated the third effort in two days to eliminate the proposed Synthetic Fuels Corporation. Victory had been achieved by the industrious efforts of secretary Duncan, who offered private congressional briefings as his final sales ploy, as well as rumors that circulated about a “possible new disruption in Iranian oil exports.” ESA’s passage was bittersweet, though, amidst the student takeover of the American Embassy in Iran. The unfolding situation, with Americans still held as hostages, undoubtedly made the senators wary about cutbacks in the president’s proposals.²¹

Even after Carter’s legislation passed the Senate, it still had to endure scrutiny and compromise from the conference committee. Reconciling the Senate and House bills did not come easy. Reflecting this legislative logjam and leadership void, the president’s synthetic fuels bill had not even reached the conference committee four weeks after its passage. A turf war between the Senate’s Energy and Banking Committees caused the stalemate. Each group wanted to control the conference agenda. Meanwhile, the White House tried to put a positive spin on published accounts of these holdups, indicating “a few months’ delay at the beginning may be

²⁰ *Congressional Record*, vol. 126 (12), June 16-21, 1980, 15687-15717.

²¹ Richard D. Lyons, “Duncan Paints Dark Oil Picture/Precariousness of Supply Cited at Briefings,” *New York Times*, November 10, 1979, 29. “Carter’s Proposed Synthetic-Fuels Unit Survives Two Attempts to Kill It in Senate,” *Wall Street Journal*, November 9, 1979, 10.

only a minor setback.” The total picture, though, was of a president “unable to inspire any sense of urgency in Congress on one of the critical issues of his Administration.”²²

Prospects for passage grew remote as the 96th Congress approached the end of its first session. Both the House and Senate had passed different versions of two key energy measures: a synthetic fuels program and creation of the Energy Mobilization Board. With Christmas break rapidly approaching, it was unlikely that House-Senate conferees could iron out their differences on these two bills before the recess.²³ Failure to complete these major energy measures meant that Carter had to anticipate entering the coming campaign season without achieving anything of substance to resolve this major issue. The sense of disappointment was especially heavy because the administration found itself behind its own timetable for end-of-the-year objectives, initially expecting to have all of the president’s energy legislation passed before January 1.²⁴

The EMB never made it through Congress. The states, particularly those in the West, lobbied vigorously to prevent its passage. They feared their laws would be trumped by federal laws and the EMB would have the power to supersede any rules and legislation the states would enact. In the Carter memo titled “EMB Talking Points,” reference was made to EMB amendments in the House bill as well as the Senate bill that “would give the [EMB] Board power to override the substance of Federal, State and local law.” The White House had not asked for this, but acknowledged that the EMB needed a “strong Board with power to expedite and cut through red tape at all levels of government.”²⁵

²² Warren Weaver, Jr., “Energy Program Lags in Congress,” *New York Times*, December 4, 1979, D1, D7.

²³ “Carter Energy Bills’ Passage Unlikely Before Yule Recess,” *Wall Street Journal*, December 7, 1979, 12.

²⁴ Memorandum from Eliot Cutler to Hamilton Jordan, July 30, 1979, File: Energy Coordination (2).

²⁵ Memorandum from Stu Eizenstat for the President, February 21, 1980, File: Energy Mobilization Board. Staff Offices, Domestic Policy Staff, Eizenstat, Energy Issues Papers through Energy Reorganization, Box 201, Jimmy Carter Library.

With time fading for meaningful action in 1979, the energy situation remained confused, handicapped by a dearth of presidential leadership. Duncan worked hard on the ESA but was hampered by Carter's short attention span. Schlesinger later observed that much of the lengthy delay in passing the energy legislation could certainly be accounted for by this deficiency. Despite the president's intelligence, Carter was often lacking in political skills and indifferent to the larger political process. Carter waffled many times on important issues. Spreading himself too thin, he would easily be distracted while trying to make progress on thirty-plus fronts simultaneously.²⁶

The huge size of the conference committee, with fifty-three members, made it difficult to merge a long and involved Senate bill with an almost entirely different House version. The chair of the Senate conferees, Sen. Bennett Johnston (D-LA), pleaded with House members to put their amendments in writing for conference meetings. Often, House committee members found the Senate bill inadequate, which certainly was not the attitude needed to reach any sort of compromise.²⁷ Not only were there animosities between the two rival committees, but problems also existed among individual members from different political parties.²⁸

Resistance to the administration's conservation efforts continued, both domestically and abroad. Duncan received a lackadaisical response when he addressed the International Energy Agency outside Paris, and urged the twenty-member group to adopt stricter conservation quotas. He was met with shrugs of indifference, the same response Duncan experienced a month earlier when he encouraged a meeting of American governors to reduce energy usage. Earlier in the year, one of the administration's conservation efforts involving a gasoline rationing bill was

²⁶ Interview with James Schlesinger, Miller Center Interviews, Carter Presidency Project, vol. 22, July 19, 1984, 33, 40, Jimmy Carter Library.

²⁷ Warren Weaver, Jr., "Delays Loom for Fuel Bill," *New York Times*, December 12, 1979, D7.

²⁸ *Ibid.*

derailed. Various legislators expressed concern that the needs of voters in western states and rural areas were not being considered. Even after the bill was rewritten to appease the interests of bickering factions, its passage was not assured. When the president gathered US governors at the White House in November to urge conservation in “all forms of energy, rather than gasoline alone,” there was squabbling. Some felt their states were given too great a share of the burden in the conservation measures. For example, Texas, with no mass transit, depended on gasoline for people to get around within the state, so conservation measures in this state would hit especially hard.

A recent decline in demand for gasoline, “off 5 to 10 percent,” diluted the impact of repeated calls for conservation. This drop may have been due more to a bad economy and price increases than presidential pleas for penny-pinching. John F. O’Leary, a former deputy secretary of Energy, stated, “[T]here is no evidence that calls to volunteerism have any lasting effect on conservation The half life of voluntary cooperation is six weeks.” Beyond that time frame, O’Leary observed, people see that their neighbors are not fully compliant, and then “everyone develops a feeling of inequitable treatment, so people go back to their old habits.”²⁹

In his New Year’s message, Carter emphasized national security, a common presidential goal. The president now urged quicker action on the Synthetic Fuels Corporation legislation. Carter also saw the Energy Mobilization Board as “a vital measure in the effort to eliminate unnecessary red tape in the construction of needed energy facilities.”³⁰

In a break from tradition, Carter sent Congress the text of his 1980 State of the Union address several days in advance. He wanted legislators and the public to be aware already, as

²⁹Weaver, *ibid.* Richard D. Lyons, “Resistance to Carter’s Energy-Saving Bids,” *New York Times*, December 12, 1979, D7.

³⁰*Presidential Documents*, 16 (4), January 21, 1980, 114-129; *Presidential Documents*, 16 (4), January 23, 1980, 194-200.

they listened to “vital areas of concern.” In his speech, the president emphasized a return to energy security, responsible government, strong defense, and world peace. In particular, he stressed that because of the many proposals still pending, he had no intention of adding anything significant to the administration’s agenda during the final year of his first term.

Carter delivered his State of the Union address on January 23, 1980. He began rather solemnly by acknowledging: “This [*sic*] last few months has not been an easy time for any of us. . . . The 1980’s have been born in turmoil, strife, and change.” Over half of the speech was devoted to the spreading Soviet military presence in other countries and the threat that expansion represented to US security. The president used this context to urge Congress to act promptly on the synthetic fuels legislation.³¹

After his 1979 State of the Union message, the president had been sharply criticized for hardly mentioning the energy topic. But, his 1980 address contained many explanations of how energy issues impacted the US economy. Carter wanted swift passage of the windfall profits tax on crude oil. There was an unprecedented sense of urgency. The president recognized his chances for reelection hung in the balance, only nine-and-a-half months remained in his term for any meaningful accomplishments.³²

Despite Carter’s clear charge, when the Senate-House Conference Committee resumed after a six-week holiday hiatus, the meeting quickly ended after ninety minutes of arguing about matters that had previously been agreed upon, such as the amount of money to commit to the organization, the length of its limited life, and production goals. Conference uncertainties led two of the participants to wonder whether the wrangling might go on all year, thereby demonstrating

³¹ *Ibid.*

³² *Ibid.*

the chronic lack of leadership that continued to plague these efforts into the new decade.³³

Increased activity by corporate lobbyists became a major new influence. The audience included several hundred corporate lawyers and political lobbyists, each looking after the interests of their benefactors. Observers speculated that the creation of a government synthetic fuels program would create an “energy industrial complex.”³⁴

In February 1980, Eizenstat gave a memorandum to the president to guide his conversations with conference committee members. Eizenstat wrote, “[W]e all recommend that you follow these talking points closely. A delicate balance is required if this statement is to be useful in prompting speedy action rather than delaying further progress because of Congressional pique.” Carter’s relations with Congress, as well as his instinctive communication tactics, warranted constant nurturing by his aides. At the time of this communication, Carter’s frustration becomes evident with his admonishment to the committee that they have a “great responsibility for the future of our nation” and “[t]hey must get on with the job” of getting this legislation to the president’s desk as soon as possible. Carter recalled the lengthy delays that “bogged down” his past energy legislation, and did not want a repeat. Unfortunately, that is exactly what happened.³⁵

When the president met with the SFC conference committee, he stressed both the nation’s security and economic well-being. Carter chastised members for their “business-as-usual approach to finishing work on the remaining issues,” challenging them “to set and stick to a firm

³³ Richard D. Lyons, “Synthetic Fuels Plan Hits Snag,” *New York Times*, January 30, 1980, D9.

³⁴ David Ignatius, “Firms Lobby for Funds for Their Pet Projects on Synthetic Fuels,” *Wall Street Journal*, February 25, 1980, 1.

³⁵ Memorandum from Stu Eizenstat for the President, February 21, 1980, File: Energy Mobilization Board. Staff Offices, Domestic Policy Staff, Eizenstat, Energy Issues Papers through Energy Reorganization, Box 201, Jimmy Carter Library.

schedule” His tone emphasized the great responsibility the committee bore for the nation’s future security.³⁶

Carter’s lobbying efforts had some impact, because on Tuesday, March 4, 1980, the Senate-House Conference Committee finally broke a three-month deadlock. Members agreed to create a new corporation with authority to spend \$20 billion over the next four years to develop synthetic fuels.³⁷ It established a seven-member board of directors of the Synthetic Fuels Corporation with a twelve-year life (just as the ESC was originally set up) to produce the synthetic-fuel equivalent of 500,000 daily barrels of oil by 1987 – increasing to two million barrels by 1992. After its first four years, once certain conditions were met, the corporation would have an additional \$68 billion available for expanded production of synthetic fuels. Normal government contracting procedures, federal pay scales, and bureaucratic red tape would not apply to the corporation.³⁸ The administration, along with conference committee members and other members of Congress, had established ambitious production goals. They realized that attaining them would require unusually high financial commitments. Therefore, “establishment of an independent Federal entity of limited duration” would help them reach the production targets faster. For such aggressive purposes, an ordinary agency would not suffice. No government entity, mired in typical red tape and bureaucratic procedures, could develop a commercially viable synthetic fuels industry within a decade.³⁹

³⁶ *Ibid.*

³⁷ As enacted, the SFC had \$20 billion to commit during the first four years of its existence. During the fourth year, the corporation had to propose and submit to Congress a comprehensive strategy to achieve the national synthetic fuel production goals. If approved by a joint resolution, an additional \$68 billion would be made available under the act.

³⁸ “Energy Conferees End Deadlock, Backing Synthetic-Fuels Agency,” *New York Times*, March 5, 1980, 1.

³⁹ Robert C. Pozen, “Synthetic Fuels Corporation—Investment Bank or Government Agency?” *The Business Lawyer*, vol. 36 (3), April 3, 1981, 953-954.

That is why the Energy Security Act established the SFC to be “free of many of the constraints placed on such departments and agencies.”⁴⁰ Congress envisioned the corporation functioning “much like a private corporate entity such as a bank or other financial institution.”⁴¹ Conferees expected the United States Synthetic Fuels Corporation to “be fully operational within nine months of enactment and not later than fifteen months after enactment.”⁴² With the president signing the bill on Monday June 30, 1980, nine months would be March 1981, and fifteen months would be September 1981.

During committee meetings, the structure of the corporation presented an impasse. The Senate had passed a complex and intricate bill with provisions for the corporation based on the assumption that Congress was merely exercising its power of incorporation. In every other respect, however, the corporation was not treated as an instrument of government.⁴³

By contrast, the House passed a simple and short bill. It did not, however, envision creation of a corporation responsible for making grants for synthetic fuels projects. The House conferees wanted more governmental control of the corporation, since they realized it would allocate billions of tax dollars that would be funneled to project sponsors. At the final meeting, senators suggested eight amendments placing restraints on the corporation, yet they were still earnestly trying to keep it a legal entity independent of government.⁴⁴

⁴⁰ *Energy Security Act Conference Report*, Report No. 96-824, June 19, 1980, 203.

⁴¹ *Ibid.*

⁴² *Energy Security Act Conference Report*, Report 96-824, June 19, 1980 (Washington, DC: US Government Printing Office, 1980), 192.

⁴³ Pozen, “Synthetic Fuels Corporation,” 954-955.

⁴⁴ *Ibid.*

The conference committee devoted more than 3,500 staff hours to the legislation. Prior to the last meeting, staff members worked twenty days straight, often from 9 in the morning until midnight. Most sacrificed Christmas vacation, as well as Easter and Memorial Day recesses.⁴⁵

During these drafting sessions, the committee “guarded against interim or recess appointments to the Board [SFC], by requiring that the Board consist only of those who have been appointed by the President by and with the advice and consent of the Senate.”⁴⁶ The committee also restricted the president’s authority to dismiss directors, who did not serve at the pleasure of the president and could be removed only for neglect of duty, or malfeasance in office.⁴⁷ The legislation also specified that all contracts and financial instruments of the SFC “shall be general obligations of the United States backed by its full faith and credit.”⁴⁸

The Energy Security Act, therefore, created an entity that was a hybrid between a government agency and a financial institution. It was a legally chartered corporation, governed by a board of directors, and subject to the Davis-Bacon Act regarding wage protection of workers. The corporation must have an inspector general who reported to Congress. It was also subject to the Freedom of Information Act and the Sunshine Act. In addition, other requirements imposed by Congress shaped SFC in the mold of a federal agency.⁴⁹

The Senate proceeded to consider the S. 932 conference report, the Energy Security Act, on June 19, 1980. Sen. Henry Jackson (D-WA) introduced the report, urging the Senate to set aside its typical indecision and recognize the hazard to America’s national security represented by

⁴⁵ *Compilation of the Energy Security Act of 1980, and 1980 Amendments to the Defense Production Act of 1950*, Committee on Banking, Finance and Urban Affairs, House of Representatives, Committee Print 96-17, Part I, September 1980, 405-406.

⁴⁶ *Ibid.*, 409.

⁴⁷ *Ibid.* Section 116 (a)(3) of the ESA.

⁴⁸ *Energy Security Act*, Section 131(c).

⁴⁹ Pozen, 954. The Davis-Bacon Act ensured that workers on federally financed projects received the prevailing wage rates.

the ongoing energy situation. One of the central ideas behind Senator Jackson's position was that the American people, while waiting in endless gasoline lines, would cry, "Well, that Senator simply voted for more research and development." Jackson implored the chamber, "Is it not time we produced? Is it not time we get something done in the midst of this crisis? I think the public has the right to call upon the U.S. Senate to produce, and produce here and now, by adopting this legislation."⁵⁰

The conference had been long and difficult, Sen. Bennett Johnston (D-LA) acknowledged, due to the magnitude and complexity of the problems and policies presented by the legislation. "[I]t takes this country a long time to get aroused . . . it takes the sleeping giant a long time to awaken . . . it takes us a long time to mobilize [T]he sleeping giant is at last beginning to awaken."⁵¹

Sen. Jennings Randolph (D-WV) reminded his colleagues about the failed efforts of the Synthetic Liquid Fuels Act of 1944, with which he was involved as a member of the House. Once World War II concluded, there remained no sense of urgency, no leadership to champion the program. He noted that the \$95 billion spent in 1980 for petroleum imports ended up overseas in the hands of unstable and unfriendly nations. He urged passage of the Energy Security Act, since it represented a relatively smaller expenditure of \$88 billion. Randolph invoked the name of President Abraham Lincoln and tried to arouse the nation's patriotic spirit as he compared the energy crisis to the Civil War.⁵² Rep. Jim Wright (D-TX), House majority leader, declared this legislation "to be the single most important bill upon which this Congress will have an opportunity to act this year [1979]. It may be the most important bill upon which we

⁵⁰ *Congressional Record*, vol. 125 (24), November 5-13, 1979, 30976.

⁵¹ *Ibid.*, 30977.

⁵² *Congressional Record*, vol. 126 (12), June 16-21, 1980, 15700-15701.

will act during this decade [the Seventies].”⁵³ Without exception, the legislators who spoke in favor of synthetic fuels used national security as their primary rationale.⁵⁴

On Thursday, June 19, 1980, the Senate voted 78-12 in favor of the Energy Security Act. Fifty-two Democrats and twenty-six Republicans supported the legislation, while a sole Democrat and eleven Republicans voted against it. Support was generally broad, despite the fact that the favorable outcome was heavily weighted by Democrats.

Only a week passed before the House of Representatives began its debate on the Energy Security Act on June 26, with Representative Moorhead introducing the legislation. Although early involvement with the bill may have clouded his objectivity, Moorhead urged passage of the conference report by stressing that it would solve the nation’s energy crisis, create thousands of high-paying and skilled new jobs, and make America militarily defensible again.⁵⁵ Moorhead quoted the president of France, Valéry Giscard d’Estaing, into the record, “I [Giscard d’Estaing] am now convinced that on the day the United States will really move in the production of synthetic fuels, there will be a major change in the world situation.”⁵⁶

Rep. John Dingell (D-MI) spoke passionately in favor of the legislation. He elaborated for history the detailed modifications imposed by the conference committee during its long debate over the preceding seven months. To Dingell, SFC was a “Federal agency,” and an “instrumentality of the Federal government,” rather than “a non-Government entity.” In his lengthy remarks, Dingell sought to clarify statements that reinforced the need for congressional

⁵³ *Compilation*, 325.

⁵⁴ *Congressional Record*, vol. 126 (12), 15694.

⁵⁵ *Ibid.*, 16889-16890.

⁵⁶ *Compilation of the Energy Security Act of 1980, and 1980 Amendments to the Defense Production Act of 1980*, Committee on Banking, Finance and Urban Affairs, House of Representatives, Committee Print 96-17, Part I, September 1980 (Washington, DC: US Government Printing Office, 1980), 324.

oversight of SFC.⁵⁷ His comments were noteworthy because most SFC advocates had stressed the importance of the SFC being an independent, autonomous, federal corporation – free from bureaucratic red tape, cumbersome contracting procedures, and limitations of federal wage scales. The administration and congressional leaders felt these liberating attributes were essential to expedite the commercial production of synthetic fuels for the nation’s security. This argument over the corporation’s exact status lasted more than eight months “because of the refusal of the House to create a federal entity with almost no Congressional or other controls.”⁵⁸ The Senate conference committee members in their final meeting had already offered eight amendments transforming the corporation from a nongovernment entity into a federal agency. Unfortunately, these amendments were drafted in haste, creating ambiguity that would come back to haunt the corporation.⁵⁹ This disparity about whether the SFC would be truly independent eventually became one of the prime factors in its demise. Congress was willing to grant the authority, but not to yield the power.

Rep. Albert Gore, Jr. (D-TN), who would become vice president of the United States, voiced his strong support for the bill when he said, “Twelve years from now, when the Synthetic Fuels Corporation closes up shop, I am confident that those of us who supported this bill will look back with pride in the knowledge that we helped put America on the road back to energy security.”⁶⁰ Unbeknownst to him at the time, however, it would be less than half that long before SFC would shut its doors forever.

When the final House vote was taken on Thursday, June 26, 1980, the Energy Security Act passed by a vote of 317-93, with 232 Democrats and 85 Republicans voting in favor. They

⁵⁷ *Ibid.*, 16915-16919.

⁵⁸ *Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation*, May 28, 1981, House Report No. 97-123, 16.

⁵⁹ *Congressional Record*, vol. 126 (13), June 23-27, 1980, 16918.

⁶⁰ *Ibid.*, 16920.

overshadowed the 28 Democrats and 65 Republicans who opposed, though there was definitely bipartisan support.⁶¹

It had taken almost a full year for Carter to get his July 15, 1979, proposals passed by Congress. In 1979, energy was the number one issue before Congress, and as such, politicians on both sides of the aisle were trying to make a name for themselves. The American people demanded action and Congress and the public believed that synthetic fuels were the panacea for the nation's energy crisis. Most of the delay had to do with a power play between the Senate leadership of Senators Jackson and Nunn, to name a few, and the House leadership of Moorhead, who tried to use his seat on the Armed Services Committee to advocate having the DOD lead in the synthetic fuels program. The White House and the Senate pushed for the Synthetic Fuels Corporation concept. Ultimately, a compromise was reached whereby the Energy Department was given authority under the Defense Production Act to fund one or more projects during the interim "fast track" program before the SFC was declared operational by the president. It was during this "hurry-up" period that the Union Oil Parachute Creek and Colony/Tosco oil shale projects were funded. In both cases, the United States Air Force, via the Department of Defense, had right of first refusal on the end product.⁶²

The signing ceremony occurred on Monday, June 30, 1980, at 4 p.m., just in time to make the national network news. Orchestrated for maximum pomp and circumstance, the event was held on the White House South Lawn with an impressive list of sixty-six guests. At the ceremony, President Carter thanked congressional leaders for their hard work and identified this legislation as the "keystone" of the nation's energy policy. He indicated that the energy problem

⁶¹ Ira Shapiro in *The Last Great Senate: Courage and Statesmanship in Times of Crisis* argues that the 1977-1980 Congresses represented the last period when both political parties and leaders placed politics aside and passed legislation that was beneficial for the nation. Ira Shapiro. *The Last Great Senate: Courage and Statesmanship in Times of Crisis* (New York: PublicAffairs, 2012).

⁶² Email from Larry Lukens to the author, March 17, 2012.

was a “clear danger to our lives and livelihood.” When he mentioned that the Energy Security Act gave the country “the weapons to wage and win the energy war,” Carter added alliteration to his arsenal of wartime metaphors. The president also equated the legislation with jobs, stating that “at least 70,000 a year would be created by the Act.” Carter wove a series of historical highpoints together, virtually wrapping the flag around the legislation. “We are the same Americans who just 10 years ago put a man on the moon. We are the generation that dedicated our society to the pursuit of human rights . . . justice . . . & equality.” He noted: “We have the knowledge, wisdom & skill derived from more than two centuries of overcoming obstacles. We have the will & power of a mature nation and the vision & determination of a young people.” The president reminded the United States that in “just a few days we will celebrate the birthday of our declaration of political independence. I can think of no more fitting birthday present than this declaration of energy security—energy independence which I am proud to sign for you today.”⁶³ Carter added, “It is a great day for America.”⁶⁴

The industry Carter had succeeded in “jump-starting” would be enormous. Synthetic fuels plants were capital intensive. A commercial coal gasification facility designed to produce 125,000 thousand cubic feet per day of gas represented an investment of at least \$1.2 to \$1.5 billion, and if the size is increased to produce 290 Btus per day (50,000 barrels of oil equivalent), the cost rose to \$4.4 billion.⁶⁵ A coal liquefaction plant capable of producing 100,000 barrels per day of synthetic crude oil was estimated to cost \$5 billion. An oil shale facility designed to

⁶³ Memorandum from Gretchen Poston to the president, June 30, 1980, File: 6/30/80[1]. Staff Offices, Handwriting File, Material from Presidential Trip to the Summit [6/19/80-6/27/80](1) through [6/30/80-not submitted-DF], Box 193, Jimmy Carter Library. Jimmy Carter, “Energy Security Act Remarks on Signing S. 952 Into Law.” www.presidency.ucsb.edu/ws/?pid=44684

⁶⁴ Jimmy Carter, “Energy Security Act Remarks on Signing S. 952 Into Law.” www.presidency.ucsb.edu/ws/?pid=44684

⁶⁵ 1 Mcf = 1,000 cubic feet of gas. Btu = British thermal unit. 1 cubic foot of natural gas yields approximately 1,030 Btus.

produce 50,000 barrels per day required an investment of at least \$4.2 billion. Only fifty-two industrial corporations in the United States had total assets of as much as \$5 billion.⁶⁶ President Carter declared June 30, 1980, to be “Energy Independence Day.”⁶⁷

Four days later, the Aspen Institute for Humanistic Studies issued *Options for Fueling America’s Transportation* to remind the country of its continuing vulnerability to an oil cutoff. The authors concluded that because the nation relies on imports for almost half its oil needs, a “grave” threat to national security had been ignored by government and other planners. There existed a “high potential for supply interruptions,” with the United States as inadequately prepared as it had been in 1973. An interruption this time could very well result in a depression in the Western world. For planning purposes, the authors argued, the country could “reasonably project a probability of one or more supply interruptions, higher prices and the possibility of a permanent constriction in the world oil supply.” Promoting the development of a synthetic fuels option, which they strongly suggested in the report, would play a role in the least-cost energy strategy. Then Sen. Bill Bradley (D-NJ) said at a news briefing that the issues of energy security still had not made a significant impression on the American public, despite the 1973 oil embargo and the Iranian revolution. The chances of an interruption in crude oil supplies seemed more likely than either a Soviet invasion of Europe or a nuclear exchange by the major powers.⁶⁸ With all the confusion over SFC’s exact identity, whether it was “fish or fowl,” tensions within Congress and the SFC’s relationship with members of Congress were exacerbated from the beginning.

⁶⁶ Howard D. Johnson, “Financing Synthetic Fuel Projects: An Overview,” *University of Pittsburgh Law Review*, vol. 43, 1981-1982, 103.

⁶⁷ *Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation*, May 28, 1981, House Report No. 97-123, 16.

⁶⁸ Robert Hershey, “Warning by Energy Group,” *New York Times*, July 4, 1980, D2. Aspen Institute for Humanistic Studies, An Energy Committee Workshop, *Options for Fueling America’s Transportation* (New York: Aspen Institute, 1980), 1, 10, 37

Carter had everything in place. The major obstacle for him, besides follow-through, was communicating the seriousness of the energy problem to average Americans. If he could not, then they were unlikely to support the president's policies.⁶⁹ Could he succeed?

⁶⁹ Aspen Institute, 45.

Chapter 6: The Sawhill Era

The Energy Security Act of 1980, and 1980 Amendments to the Defense Production Act of 1950, generated an enormous amount of interest on the part of members of Congress and their staffs, as well as the public. The chair of the House Subcommittee on Economic Stabilization of the Committee on Banking, Finance and Urban Affairs, Rep. William S. Moorhead (D-PA), assembled and printed a compilation of the act and the amendments, consisting of three volumes approaching 2,300 pages in length. Such a congressional publication is rare.

With the Energy Security Act now the law of the land, what should have been an easy job, finding and nominating a chair, became difficult rather quickly. This included, as well, six additional individuals to become directors of the SFC board. The directors would have part time positions with staggered terms.

A search for the most suitable candidates had been initiated by the White House in early 1980. By April 25 of that year, Katherine (Kitty) Schirmer, energy advisor to Eizenstat, had reviewed a résumé book with abbreviated summaries of the “most talented prospects to head up the SFC.” Although it was still three months before the legislation was enacted, and none of the executives was aware they were being considered, Schirmer sent Eizenstat a memo commenting on several of the *Fortune 500* candidates whose names were circulating. She encouraged Eizenstat to broaden the hunt: “The list is too narrow and does not tap into the range of expertise that the Corporation will need to thread the energy technology, investment, and political needles.”¹

¹ Memorandum from Kitty Schirmer to Stu Eizenstat, April 25, 1980, File: Synthetic Fuels 2/79 through 6/80. Staff Offices, Counsel, Cutler [Stealth], 8/80 through Taxes – Morgan Stanley & Company, 2/79-11/80, Box 112, Jimmy Carter Library. Schirmer’s emphasis.

But, the administration had difficulty filling the chair's position. The White House had hoped to make a choice known by the time the bill was signed at the end of June 1980.² Several business executives declined the opportunity, and the remaining candidates aroused little enthusiasm.

In late July 1980, the name of Fletcher L. Byrom, chair of the Koppers Company of Pittsburgh, Pennsylvania, was leaked to the press as the future SFC head. The Koppers Company was a producer of chemicals and mineral-processing machinery, as well as the sponsor of one of the first domestic pilot plants that produced gasoline from coal. Byrom indicated that he was honored to be under consideration, but said that he "had no recent contact, even indirectly, with administration recruiters." At the same time, information surfaced that Deputy Energy Secretary John Sawhill was "the only person . . . to have been eager for the job . . . [but was] out of the running now."³ There are indications that Sawhill was the person most responsible for advocating his availability and desire for the position. It was convenient for Sawhill that DOE secretary Duncan had entrusted Sawhill with the responsibility of providing the names of possible candidates to fill the top SFC spot.

Six days after the trial balloon, Byrom announced "he had asked that his name be removed from consideration as chairman of the new United States Synthetic Fuels Corporation."⁴ Meanwhile, Sawhill had distributed his own biography to reporters. He was viewed as a compromise candidate in a search that had "become somewhat embarrassing to the Carter

² Rich Jaroslovsky, and Richard E. Rustin, "Carter Choice To Be Synthetic-Fuels Czar Nears After Several Top Executives Refuse," *Wall Street Journal*, August 19, 1980, 4; "Synfuels Snag," *Wall Street Journal*, July 11, 1980, 1.

³ Robert D. Hershey, "Koppers Chief May Head Synthetic Fuels Agency," *New York Times*, July 23, 1980, D1.

⁴ Robert D. Hershey, "Koppers Chief Bars Fuels Post," *New York Times*, July 29, 1980, D1, D4.

Administration,” in the words of a *New York Times* feature story.⁵ At least four people had said they were not interested in the position, even though it was expected to pay somewhere in the range of \$150,000 to \$300,000 per year.⁶

The White House considered several other possible candidates besides Byrom and Sawhill. These possible nominees, all with impressive resumes, were: Bill May, retired chief executive officer of American Can Company; Jack Fishwick, president of Norfolk and Western Railroad; Bill Donaldson, retired dean of the Yale School of Organization and founder of the investment banking firm, Donaldson, Lufkin & Jenrette; Ben Heineman, president of Northwest Industries; Peter McColough, chairman and chief executive officer of Xerox; Frank Cary, chairman of IBM; Thornton Bradshaw, president of Atlantic Richfield Company; Tom Murphy, chairman and chief executive officer of General Motors Corporation; Robert McNamara, former Secretary of Defense. The White House wanted an accomplished individual who possessed the industry experience and business qualifications to lead the SFC – these were criteria of great importance.⁷

By the end of August 1980, a senior administration energy official, “disgusted” by the lengthy delay, labeled the White House staff work on the nomination “disgraceful” and indicated “tactical bloopers” had been made in approaching too many executives who were not interested in “changing jobs under any conditions.”⁸ Also, election-year politics played an increasing role in the selection process.

Finally, on September 10, 1980, Carter nominated Deputy Secretary of Energy John Sawhill for consideration as SFC chair. Although press reports indicated that Sawhill was the

⁵ *Ibid.*

⁶ *Ibid.*

⁷ Memorandum to the President from Jack Watson and Arnie Miller, Chairmanship of the Synthetic Fuels Corporation, August 31, 1980. Jimmy Carter Library.

⁸ Jaroslovsky and Rustin, “Carter Choice To Be Synthetic-Fuels Czar Nears.”

avored choice of Eizenstat, Sawhill's selection was viewed as a compromise.⁹ *Newsweek* noted that although Sawhill's nomination was well received by industry officials and politicians, the "energycrat was at best a second choice."¹⁰

At his announcement, Carter again stressed that the SFC was the "cornerstone of . . . the national energy policy . . . [It was] the main instrument in cutting down the intolerable overdependence of [the nation] on imported oil from, primarily, the OPEC nations."¹¹ The president reiterated that this dependence threatened the country's economic life as well as its national security. The SFC was by no means a small undertaking.

Edward Cowan, *New York Times* columnist, noted that Sawhill had "the right credentials for the job, a combination of experience in Government and the private sector," even though he lacked the *Fortune 500* credential important to the administration. In addition, Sawhill, who considered himself an Independent, had served under Democratic as well as Republican presidents. He had a track record as an "impressively cool policy planner and crisis manager." Previously, at age 38, he had been president of New York University, the largest private university in the country; a consultant at McKinsey & Company; and a vice president with Commercial Credit Company. He had earned doctorates in both economics and finance.¹²

According to Duncan's reflections and Sawhill's own admission, Sawhill had "lobbied" vigorously for the nomination. There was some confusion on the level of compensation for the chair, ranging from a low of \$150,000 to a high of \$300,000 per year. Even at the \$150,000-

⁹ Robert D. Hershey, "Sawhill Synthetic Fuel Chief," *New York Times*, September 11, 1980, D1. In an author phone interview with John Deutch on January 14, 2011, Deutch indicated that at first Sawhill was not interested in the SFC job. However, as it became a reality, Sawhill's interest surged and he campaigned aggressively for the chair position.

¹⁰ "Sawhill's Synfuel Empire," *Newsweek*, September 22, 1980, 70.

¹¹ "Synthetic Fuels Corporation Remarks Announcing the Nomination of John C. Sawhill to Be Chairman of the Board of Directors," September 10, 1980. www.presidency.ucsb.edu/ws/?pid=45025

¹² Edward Cowan, "A Crisis Manager/John Crittenden Sawhill," *New York Times*, September 11, 1980, D6.

level, the chair's position would be the second-highest-paying government job in the nation's capital, behind only the president.¹³ The post was a seven-year term, not retractable by a different president. Although Senate confirmation was a prerequisite, both the chair and the SFC were exempt by statute from civil service and several other laws normally restricting government agencies. Years later, Sawhill indicated that he very much wanted to be chair, as he had grown tired of bureaucratic procedures, federal contracting laws, and the glacial pace of DOE decision making. Achieving independence from the red tape and restrictions complicating his every move at DOE appealed to Sawhill. He wanted a challenge with a considerable amount of freedom, one that also allowed him the chance to make a substantial contribution to the nation's future. Rather than merely reading history, he wanted to make history. Sawhill had been seeking an opportunity that would utilize his corporate, government, and academic experiences.¹⁴ This new synfuels entity was expected to be the "catalyst for an industry on which more money [would] be spent than on the space program, the interstate highway system, and the Marshall Plan combined."¹⁵

Following "an arduous search," President Carter announced the remaining six SFC board nominees on September 13, 1980:¹⁶

- Lane Kirkland, president of the AFL-CIO
- Cecil Andrus, secretary of the interior
- Frank Savage, vice president of Equitable Life Insurance's Investment Management Department
- Frank Cary, chair of IBM
- Catherine Cleary, former chair of the First Wisconsin Trust Company of Milwaukee and adjunct professor at the University of Wisconsin's School of Business Administration

¹³ Author interview with Charles Duncan in Houston, Texas, October 13, 1999.

¹⁴ Author interview with John C. Sawhill in Washington, DC, July 14, 1999.

¹⁵ Jaroslovsky and Rustin, "Carter Choice," and Hershey, "Sawhill," and Rich Jaroslovsky, "Sawhill Is Named Synthetic-Fuels chief by Carter," *Wall Street Journal*, September 11, 1980, 2; author interview with Sawhill. Remarks at Signing of Energy Security Act: www.presidency.ucsb.edu/ws/?pid=44684 and Labor Day Remarks for Representatives of Organized Labor: www.presidency.ucsb.edu/ws/?pid=44973

¹⁶ Jimmy Carter, "Statement on the Nomination of Six Persons to Be Members of the Board of Directors of the Synthetic Fuels Corporation," September 13, 1980. www.presidency.ucsb.edu/ws/?pid=45043

- John deButts, retired chair and chief executive officer of AT&T¹⁷

Cary and deButts had been mentioned previously in the memorandum that Cutler *et al.* had written in April 1979, as well as in subsequent congressional testimony. Kirkland would represent labor on the board. Savage had investment experience – plus, he was an African American. Cleary brought gender diversity. Andrus would speak for environmentalists. All in all, the nominees displayed a broad spectrum of capable, knowledgeable, and experienced individuals.

The Senate Committee on Energy and Natural Resources held SFC nomination hearings on September 18 (Thursday) and 24 (Wednesday), 1980.¹⁸ Sawhill provided the most extensive, in-depth comments, viewing the SFC as an “investment bank” and a “catalyst” to jump-start the nation’s synthetic fuels effort. His remarks stressed the mission’s urgency, with phrases such as “expedited procedures,” “nation cannot wait,” “stepping up the pace,” “urgency of moving forward expeditiously,” “timeliness of executive decisions,” “feel a sense of urgency,” and “ambitious goals.” Sawhill thought that the legislation provided for “flexibility” and “latitude” in SFC operations. To convince the private sector the corporation was not “simply another Government bureaucracy,” the SFC needed to attract the “highest caliber of professional expertise,” mostly from the private sector.¹⁹ Committee members likewise expressed concern that this effort start as soon as possible, worrying that if it took until 1981 for the board to be put in place, then the nation could experience another “energy disaster” in the interim.²⁰

¹⁷ *Ibid.*

¹⁸ “Synthetic Fuels Nominations,” *Hearings Before the Committee on Energy and Natural Resources*, United States Senate, Ninety-Sixth Congress, Publication No. 96-130.

¹⁹ *Ibid.*, 4, 5, 9.

²⁰ *Ibid.*, 11-12.

Secretary Andrus focused on his commitment to the environment, saying the experience of the last decade had convinced him that the country needed “**both** more energy and a decent environment.” He did not foresee an “energy versus environment” confrontation, nor did he think one was necessary.²¹ Andrus acknowledged that before becoming an SFC board member, he would have to resign as secretary of the Interior. The other nominees indicated their strong support of the SFC and its mission to the Senate Committee.

Yet what emerged also in the hearings was the continued disorganization, disarray, and lack of candidate preparation urgency on the part of the White House. On September 24, 1980, Sen. Henry Jackson (D-WA) read into the record a letter dated that day from Michael Cardozo, deputy counsel to the president, to Jackson stating that Frank Cary had asked that his nomination to serve as a director be withdrawn. In his accompanying letter, Cary wrote, “Yesterday, I was shocked to learn that all of the quantitative details of my own financial life, and my wife’s as well, would have to be made public. . . . I object to this requirement and had I known it, I would never have allowed my name to be submitted.”²² Jackson later read another letter he had received from Cardozo, dated the previous day, stating that Carter’s six nominees (including Cary) were to serve in a part-time capacity. Even Cleary did not know her appointment was for two years until September 23, but these details about directors, terms, and serving capacity were all spelled out in the Energy Security Act.²³ Such issues compounded the embarrassment of the administration over delays associated with the SFC launch. Had the White House even read the ESA?

Carter’s remaining nominees encountered political problems on Capitol Hill. With the president’s declining prospects for reelection and the looming presence of Sen. Edward Kennedy

²¹ *Ibid.*, 39. Emphasis by Andrus.

²² Letter from Frank T. Cary to G. William Miller, September 23, 1980, File: Synthetic Fuels, 7/12/80. Staff Offices, Counsel, Cutler [Stealth], 8/80 through Taxes – Morgan Stanley & Company, 2/79-11/80, Box 112, Jimmy Carter Library.

²³ “Synthetic Fuels Nominations,” 31, 68.

(D-MA) as a potential candidate, partisan politics assumed a more important role in the confirmation process. Republicans on the Senate Energy Committee called for Senate confirmation of Sawhill and three other board members, with one of these approved for only a one-year term. This move would allow Carter's Republican presidential opponent, California Gov. Ronald Reagan, to nominate his choices for four of the seven seats the following year if he were elected. The presidential winner would be able to fill the remaining three positions after his inauguration, and the fourth within a year, or a majority of the board. Therefore, the winner would be in a position to appoint a majority of the board. The Democrats on the Senate Energy Committee rejected this "genuine goodwill offer," which in turn prompted the Republicans to mount a major battle on the Senate floor to block confirmation of the entire slate.²⁴

With the White House determined not to concede anything to the Republicans, it became clear Sawhill could be blocked unless Carter were reelected. If Reagan won, however, White House dawdling could mean the end of the Synthetic Fuels Corporation altogether.²⁵ The Republicans knew that by employing every imaginable delay tactic, from requests for voluminous information to threats of filibuster, they could potentially doom the SFC organization before it achieved any momentum. With the presidential election only weeks away, Reagan's aides made it clear that if he were elected, he would not endorse any "giveaway program like the synfuels program."²⁶ Sawhill's strategy focused on winning industry support as he tactfully tried to get the SFC moving, apparently thinking it would be more difficult to stop a moving train than one stalled at the station. Yet by the end of September, Sawhill still had not won Senate confirmation.

²⁴ "Synthetic Fuels Agency Nominees Face Senate Delay; IBM Chairman Withdraws," *Wall Street Journal*, September 25, 1980, 5. Robert Hershey, "G.O.P. Senators Plan Fuel Board Fight," *New York Times*, September 26, 1980, D1.

²⁵ "The Synthetic Fuel Nominee Who May Never Serve," *Business Week*, September 29, 1980, 38-39.

²⁶ *Ibid.*

Sawhill's nomination should have had strong support in Congress, as he was recommended by the likes of Senate Majority Leader Robert Byrd (D-WV) and House Speaker Thomas P. O'Neill (D-MA). Sawhill had been confirmed by the Senate three times before (as deputy federal Energy administrator, then administrator, and then deputy Energy secretary).²⁷ One Senate aide remarked that Sawhill was "clearly the most comfortable candidate on any list."²⁸

The Senate Energy Committee approved Carter's six board nominees in a 12-to-6 partisan vote on Thursday, September 25, 1980. Sen. Lowell Weicker, Jr. (R-CT), was the sole Republican to vote with the majority. The remaining Republicans vowed a fight on the Senate floor.

On Wednesday, October 1, 1980, the Senate moved to take up the nominations. During the debate, Sen. Mark Hatfield (R-OR) filibustered, peeved that the White House had rejected efforts to delay confirmation for two members of the board. The Republican proposal was for the Senate to confirm four board members and delay adding additional members until after the presidential election.²⁹ If Reagan were elected, then he would be able to nominate candidates of his choosing.

Sen. Gary Hart (D-CO) opposed the confirmation for a different reason. Hart had asked the White House to nominate another director from a Western state to the SFC board. He thought that region would be most affected by the initiatives of the SFC. Since Cecil Andrus from Utah was already a nominee, Hart wanted the vacancy created by the withdrawal of Frank Cary to be reserved for a second representative from the West to reflect the interests of these constituents.

²⁷ Hershey, "Sawhill Synthetic Fuel Chief," D1.

²⁸ Jaroslovsky, "Sawhill Is Named Synthetic-Fuels Chief by Carter," 2.

²⁹ *Congressional Record—Proceedings and Debates of the 96th Congress/Second Session*, vol. 125 (22) (Washington, DC: US Government Printing Office, 1981), 28769-28787.

“No State in the Union would have to bear more of the responsibility for the development of the synthetic fuels industry than the state of Colorado.” Hart beseeched the White House for a pledge from the president that such an appointment be made.³⁰

But, the White House was reportedly preparing to accept the Republican proposal. Before nominations were called up on October 1, the compromise collapsed when Hart said he would filibuster the nominations unless Carter agreed to name a Westerner to replace Cary. With the president out-of-town campaigning, the White House was not able to make a commitment in time.³¹ A *New York Times*/CBS News Poll, made available on September 30, 1980, showed independent voters deserting presidential candidate John Anderson for Reagan, a situation that demanded Carter’s immediate attention.³²

The Iran hostage crisis also continued to weigh heavily on Carter. In a 1982 interview, he admitted that it “gnaw[ed] at your guts no matter what good, other things were going on. . . . [T]hat’s the way the hostage thing was for me for fourteen months. . . . [I]t was always there. It was painful”³³ Lord Carrington, the British foreign secretary, was in Washington during the last weekend in September. He “was struck by the high degree of tension in the Administration.”³⁴

Senior White House staff members were occupied with the Iranian hostage negotiations, the upcoming presidential election, and the third drawdown of the Chrysler Corporation loan guarantee.³⁵ During autumn 1979, Chrysler was on the brink of bankruptcy. Treasury secretary

³⁰ *Ibid.*

³¹ *Congressional Quarterly, Almanac. 96th Congress, 2nd Session/1980, 1980, 482.*

³² Hedrick Smith, “Poll Shows Shifts Aiding Reagan,” *New York Times*, October 1, 1980, 1.

³³ Interview with Jimmy Carter, Miller Center interviews, Carter Presidency Project, vol. 19, November 29, 1982, 53, Jimmy Carter Library.

³⁴ Bernard Gwertzman, “U.S. Said to Act to Prevent Attack by Iraq From Oman,” *New York Times*, October 4, 1980, 4.

³⁵ Interview with Jeffrey Lipkin, former vice president and general counsel at SFC, November 9, 1999.

G. William Miller had estimated that if a Chrysler bankruptcy occurred, it could cost taxpayers “two billion seven hundred and fifty million dollars and result in the loss of between seventy five thousand and a hundred thousand jobs within two years.”³⁶ The Carter administration agreed to provide a \$1.5-billion-loan guarantee to Chrysler. And in the midst, the sense of energy urgency had disappeared—crude oil supplies had reached near-record levels as of September 26.

When it became obvious to Sen. Majority Leader Byrd that Sawhill’s nomination was not going to be approved, Byrd moved to “order retaining the status quo of all nominations not acted upon prior to [the] Election Day recess.”³⁷ Sen. Hart indicated that he would have allowed the Sawhill nomination to pass, but delayed the others. After Byrd withdrew the nominations, Hart, as he was leaving the floor, remarked to Sawhill, who was on the floor, “Sorry, John. I support you as chairman, but this is something I had to do.”³⁸ Later, when asked to comment, Hart speculated that the president and his staff were too preoccupied at the time by concerns about the reelection campaign and that they had on this occasion and others exhibited “an attitude of stubbornness.”³⁹

Sen. George McGovern (D-SD) speculated that Hart’s friendship with Sen. Kennedy (and Carter’s visceral dislike of Kennedy) may have contributed to Carter’s reluctance to call Hart to discuss Hart’s concerns about an additional Western representative on the SFC board.⁴⁰ An example of the growing animosity between Carter and Kennedy occurred in the *Los Angeles Times* full-page ad shown in Figure 6.1, which appeared at the time of a Carter visit to Los Angeles, and represents the gasoline thrown on the relationship by Kennedy in addressing Carter

³⁶ John Brooks, “Annals of Finance, The Kicker,” *New Yorker*, January 7, 1985, 45. In an author interview with Jeffrey Lipkin on November 9, 1999, Lipkin indicated the Carter White House was working around-the-clock on the hostage situation and the Chrysler bailout.

³⁷ *Congressional Record*, vol. 125 (22), 28769-28787.

³⁸ Author interview with John Sawhill in Washington, DC, July 14, 1999.

³⁹ Author email communication from Sen. Gary Hart, August 11, 1999.

⁴⁰ Author interview with Sen. George McGovern, September 2004, Dallas, Texas.

presidential supporters, and focusing on Carter's "Crisis of Leadership." The display makes specific reference to Kennedy: "The polls show that Senator Ted Kennedy is the leading choice among Democrats everywhere."⁴¹ This ad provides an explanation for the June 12, 1979, alleged blunt statement by Carter (spoken twice) at a White House dinner for some sixty members of Congress: "If Kennedy runs, I'll whip his ass."⁴² (See Figure 6.1)



Figure 6.1. "I'll whip his ass," campaign pins. Author's collection.

⁴¹ *Los Angeles Times*, March 2, 1979, F34.

⁴² "Carter Reported to Say He Would Beat Kennedy," *Washington Post*, June 13, 1979, A3. This quotation was widely reported and never denied by Carter.

WE'RE SORRY PRESIDENT CARTER.

President Carter's announced appearance tonight at the Democratic National Finance Council dinner in Los Angeles prompts us to focus on our country's **CRISIS OF LEADERSHIP**.

We are Democrats who supported Mr. Carter and believe him to be a hard-working and decent man. He has tried his best to be a good President. It pains us to say that he has not succeeded.

- He has neither listened nor led.
- We fear continued inflation, the threat of recession and even the shadow of a full depression.
- He has not addressed the problems of young Americans. (Among Black and Chicano alone there are 40% unemployed). The cities continue to rot. Yet he wants to increase the military budget by 12.5 billion dollars.
- He has responded poorly to the needs and aspirations of women.
- The elderly and the infirm remain neglected.
- We are still without an effective energy policy.
- It's impossible to understand what our foreign policy is from one day to the next.
- And there is more, much more.

As a result of this **CRISIS OF LEADERSHIP**, Americans everywhere are feeling more isolated, less connected to each other and to their government.

And so, with the Presidential primaries less than a year away, we ask ourselves: In whose hands should the leadership of our nation rest?

The polls show that Senator Ted Kennedy is the leading choice among Democrats everywhere. If ultimately he chooses not to run there are other gifted leaders who remain committed to the progressive principles of the Democratic Party.

The freedom to challenge the leadership of the President overwhelms us. On this day, therefore, we declare ourselves—

DEMOCRATS FOR CHANGE—1980.

CHAIRPERSONS

(Titles for informational purposes only)

Wallace Albertson, President, California Democratic Council Joyce Easton Ashley Ted Ashley Rev. Edgar R. Edwards, Immanuel United Church of Christ Rev. William Graves, Phillips Temple CME Church	Norman Lear Manuel Lopez, Mexican-American National Organization (MANO) Sol Marcus, Vice President, Board of Public Workers, City of Los Angeles Sally Martinez, Chair, Lat Migrants for Political Action Frederick M. Nicholas, Attorney	Justin Ostro, Gen'l. Vice President, (NATL) International Association of Machinists & Aerospace Workers Clark Parker Jon Peters Lee Rich Henry Rogers	Erich Segal, Author Stanley K. Sheinbaum, Regent, University of California Paula S. Siegel, 1977-78 Southern Women's Chair, California Democratic Central Committee Carl Tamek, Former General Manager, Dept. of Water & Power	Abigail Van Buren (Dear Abby) The Honorable Madine Waters, Assemblywoman Shirley Wechsler, National Vice President, Americans for Democratic Action Harold Williams Leo Wyler, Democratic National Finance Council

DEMOCRATS FOR CHANGE—1980

(Titles for informational purposes only)

Alice Adams Merv Adelson Rae Allen Frank Amaro Julie Amorosi Arlis Anagnos, President, Save Cyprus Council Carolyn Anagnos Maxwell Arnold Bud Austin Mario F. Avila	Father John Banahan Joel Barnes Clark Bertrand Paul Belous Allen & Marilyn Bergman Lynn Beyer Tony Bill Aaron Black Paul Bogart Joan D. Beyer Eileen Brennan	Gerald & Lenore Breslauer Stephen Brockelman Dr. William Burke Donald & Barbara Burnett John Carmel Lillian G. Carson Ralph Carson Anthony B. Caruthers Mattie Caruthers

Continued on page 5, Part II.

We will soon run another ad in these pages. Please let us hear from you by completing the coupon below:

I agree that a change is needed in the White House and I am interested in:

DEMOCRATS FOR CHANGE—1980

P.O. Box 67007 • Los Angeles, California 90067 • (213) 475-5789

☐ Please keep me informed.

Name: _____
Address: _____
City/State: _____ Zip: _____
Phone: _____

THIS AD PAID FOR BY DEMOCRATS FOR CHANGE—1980.
THIS AD NOT AUTHORIZED BY ANY CANDIDATE.

Figure 6.2. Ad emphasizing President Carter's lack of presidential leadership by Democrats for Change—1980, with Sen. Ted Kennedy's name (*Los Angeles Times*, March 2, 1979, F34)

Carter first executed Executive Order 12242, which formally assigned responsibilities to the Departments of Energy and Defense to carry out the “fast-start” program until SFC became fully operational, with such determination to be made by the president. The “fast-start” provisions of the act were inserted due to the imperative need for developing a synthetic fuel industry, and because this program was “a matter of the highest national priority.” Carter said he would “take all the appropriate steps to assure that the SFC is able to begin full-scale operation at the earliest practical time.”⁴³

Unable to have his nominees confirmed, Carter announced recess appointments on Sunday, October 5, 1980. Carter was urged to do so by two senators – Byrd and Jackson. No member of the House of Representatives did the same, as they had a different interpretation of Section 116 of the ESA, which precluded the president from making recess board appointments.⁴⁴ Carter stated, “The Synthetic Fuels Corporation can now begin immediately its work to design, build, and operate plants which will convert coal, shale, tar sands, and other American natural resources into synthetic fuels. This corporation is the cornerstone of our national energy policy.”⁴⁵

The national sense of urgency surrounding the energy crisis, however, had dissipated almost overnight. Gasoline lines had evaporated, high gas prices and fears of running out of fuel while driving had caused gas consumption to decrease, and ample crude oil supplies were available.⁴⁶

⁴³ Jimmy Carter, “Synthetic Fuels Statement on Signing Executive Order 12242,” September 30, 1980. www.presidency.ucsb.edu/ws/?pid=45172

⁴⁴ Jimmy Carter, “Statement on the Recess Appointments of Five Members of the Board of Directors of the Synthetic Fuels Corporation,” October 5, 1980. www.presidency.ucsb.edu/ws/?pid=45217

⁴⁵ *Ibid.*

⁴⁶ “Gasoline Gauges Rest on Full,” *Time*, July 28, 1980, 60.

Sawhill and the other four board members wasted little time in getting the SFC up and running. The board of directors' first meeting was held at the DOE in its DC headquarters in the Forrestal Building on October 8, 1980, with an overflow audience of about one hundred. It lasted fifty minutes. All five directors attended, as well as nominee Cecil Andrus. Several times during the session, Sawhill stressed the importance of speed, using the phrases "accelerating production," "time pressure," and "expeditious action." He pointed out the deadline of December 30, 1980, as set by the act, for the issuance of the first SFC solicitation for synthetic fuel projects. By-laws were approved, as well as the Office of the Vice President-Finance. The board set the time and dates of future meetings for the remainder of 1980, including the board consensus to have a meeting in Colorado to become familiar with oil shale projects. Sawhill said that he would obtain a compensation study for board use in determining the permanent salary and fringe-benefit structure. Board members agreed that the maximum permitted federal salary of \$69,630 per annum was inadequate to attract the requisite talent to meet SFC-mandated production goals.⁴⁷

At the Monday, October 27th board meeting in the Washington, DC, Madison Hotel, all members plus Andrus were present at 10 a.m. The chair discussed with the board the draft solicitation for projects. Sawhill again stressed speed when he commented on the importance of moving quickly in issuing a solicitation, a point underscored by the expanding Iran/Iraq war. Sawhill stated:

[T]he solicitation should provide the Corporation with maximum flexibility in order to carry out its business with the private sector in much the same fashion as any other institutional lender. A solicitation issued by the Corporation . . . should

⁴⁷ Peter Behr, "If Pattern Holds, Some Synfuels Officials Will Be Paid Top Dollar," *Washington Post*, October 26, 1980, A3. Section 117(b) (2) reads, "The Board of Directors shall fix the compensation of individual office positions and categories of other employees of the Corporation . . ." *United States Synthetic Fuels Corporation Original Minute Book*, vol. 1, 10/8/80; 10/27/80; 11/17/80; 12/22/80. Minutes of the October 8, 1980, board meeting. National Archives, College Park, MD, Acc. 56-86-0064.

attract business and avoid suggesting to the synthetic fuels industry and to the financial community that the Corporation has any intention of imposing narrowly delineated requirements, as are now typical of solicitations issued by government agencies. The Corporation . . . must convey the message that it recognizes that project sponsors are best able to define and develop their projects and should not be subject to burdensome submission requirements.⁴⁸

During the closed portion of the meeting, Sawhill discussed compensation levels with the board. He made the point that the chair's salary would effectively set the ceiling for all senior-officer salary levels. If any exceeded Executive Level 1, the board must make a recommendation to the president of the United States, who in turn could approve or not approve. Sawhill stated that an annual salary of \$175,000 had been suggested for his position. The board discussed whether this amount was adequate to attract the best available talent from the private sector, and concluded that it was. At that point, Sawhill revealed he had a candidate for the position of vice president-administration, at a suggested salary of \$95,000, subject to presidential review.

The board also received a brief report about the compensation study undertaken by the human resources consulting firm Towers, Perrin, Forster, & Crosby (TPF&C) to recommend an appropriate "salary structure, grades and range for SFC based on [TPF&C's] understanding of SFC's particular needs."⁴⁹ Eight days later, Sawhill sent Carter a memorandum required by the act about compensation levels for the chair, board members, and certain officers. The recommended salary level for the chair was \$175,000, with compensation for nonemployee board members to be set at \$10,000 per annum and \$300 per attended meeting, in addition to reimbursement for travel expenses. The board viewed the \$175,000 figure as the "minimum level necessary to recruit high-level corporate officers from the private sector (e.g., general counsel, chief financial officer)." This memo was forwarded to the director of the Office of Management

⁴⁸ *Ibid.*, Minutes of October 27, 1980, 3.

⁴⁹ Towers, Perrin, Foster, & Crosby, "U.S. Synthetic Fuels Corporation, Cash Compensation System," December 17, 1980, 1. In author's possession.

and Budget, James McIntyre, who in turn recommended that Carter approve (or not disapprove) the salary levels. McIntyre was instructed to “inform Sawhill” of the president’s approval.⁵⁰ Salaries of the top three highest-paid SFC officers appeared in the *Washington Post* under the headline “Some Area Executives and Compensation.” Sawhill’s pay, as well as that of the other two SFC officers, compared favorably to the compensation of officers of nongovernmental corporations. It was significant that a federal entity would be listed with publicly held companies.⁵¹

Referring to the act and in consultation with the board, TPF&C concluded that SFC possessed the following characteristics: It was a highly professional organization similar to an investment banking firm advising and involved with extremely complex financings, and it required a staff of highly trained and qualified individuals in finance, law, and engineering.⁵² The recommended salary levels for 1981 ranged from a high of \$240,000 for the chair and chief executive officer to a low of \$8,800 for a mail/supply clerk.⁵³

The compensation levels and ranges recommended by TPF&C erupted into a firestorm on Capitol Hill, which quickly spread to the general public. Carter later said when he talked to committee or subcommittee chairs about bills before their respective committees and for which they were responsible, “they [the committee chair] wouldn’t have the slightest idea in God’s

⁵⁰ Memorandum from Lloyd Cutler to Jack Watson, October 9, 1980, File: Synthetic Fuels 7/12/80. Staff Offices, Counsel, Cutler [Stealth], 8/80 through Taxes-Morgan Stanley & Company, 2/79-11/80, Box 112, Jimmy Carter Library.

⁵¹ “Some Area Executives and Compensation,” *Washington Post*, June 1, 1981, WB22.

⁵² TPF&C, 5.

⁵³ *Ibid.*, Exhibit A. The chair’s range was \$160,000 to \$240,000. The mail/supply clerk’s range was \$8,800 to \$13,200.

world what was in the bill.”⁵⁴ Further, Carter was “surprised to realize that the members of Congress hadn’t really paid any attention to the bill.”⁵⁵

The elevated salary levels were subsequently rescinded by President Reagan, yet they permanently tainted the reputation of the corporation. With the chair’s salary set at \$175,000, those of the senior vice president/general counsel and the chief financial officer were set at \$150,000; the vice president of planning at \$140,000, and the vice president of administration at \$95,000. Many people viewed the act as allowing salaries above federal pay-scale level to attract high-caliber talent thought necessary to achieve legislated objectives within the short time-frame specified.⁵⁶ Still, several members of Congress interpreted the ESA in such a way that these levels exceeded the original intent of Congress. The top level for federal executive salaries, primarily cabinet members, was a modest \$69,630. The annual salary of the US president was \$200,000, the vice president \$62,500, and members of Congress \$60,663. John Deutch later commented that when Sawhill set his salary at \$175,000, exceeding the compensation levels of senators and representatives by more than two times, Congress was in shock. The intent of the act was to pay high salaries, but not at that level.⁵⁷

Following Carter’s loss to Reagan, budget director McIntyre recommended on November 19, 1980, that Carter approve these salaries while still president, which he subsequently did. McIntyre wrote, “Secretary Miller [Treasury], Jack Watson [White House chief of staff], Lloyd Cutler and I concur in these recommendations.”⁵⁸ Previously on October 9, Cutler had written Watson asking for latitude in setting the salaries, as Cutler was “convinced that for the Synthetic Fuels Corporation to achieve its objectives [as specified in the Act], the salary of the [chair

⁵⁴ Interview with Jimmy Carter, Miller Center Interviews, 27, Jimmy Carter Library.

⁵⁵ *Ibid.*

⁵⁶ See David Howard Davis, *Energy Politics*, 3rd ed. (New York: St. Martin’s Press, 1982), 256-257.

⁵⁷ Phone interview by author with John Deutch on January 14, 2011.

⁵⁸ Cutler to Watson.

would] have to be significantly above \$150,000, primarily in order to attract first-class lawyers, financial and technical people who [would] be paid less than the chairman.”⁵⁹ On February 25, 1981, Reagan sent a memorandum to the SFC that specifically “disapproved,” pursuant to the ESA, the corporation’s salaries and benefits for its officers, as previously established by Carter’s board.⁶⁰

Despite language to the contrary in the act, compensation and benefits became a major source of irritation with Congress. The administration’s intent was to free the SFC from the federal government’s noncompetitive salaries. The legislation provided for flexibility in this area. David Howard Davis noted that salaries for senior people were anticipated to be in the vicinity of “\$100,000 to \$200,000 per year.”⁶¹ The only surviving board member today, Frank Savage, recently commented that he had no problem with the proposed compensation levels. He knew, as had Cutler, that to meet the statutory goals of the act, attracting and hiring highly qualified individuals from the private sector was a prerequisite.⁶²

Once these SFC salary levels appeared publicly in print, and were no longer a mere concept, congressional reactions of jealousy and outrage came swiftly. The response to seeing these published salaries was something along the lines of: “No one person in the employ of the federal government, save for the president of the United States, is permitted to earn more money than us – we are too important!” Members of Congress had not anticipated that the section of the ESA addressing compensation would be used to justify salaries well in excess of their

⁵⁹ *Ibid.*

⁶⁰ *Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation*, Committee on Government Operations, House Report No. 97-123, May 28, 1981, 39-40.

⁶¹ David Howard Davis, 256-257.

⁶² Phone interview with Frank Savage, October 19, 2009. Catherine Cleary is still alive but her advanced age precludes her from recalling any matters pertaining to the SFC.

own compensation. By paying at the announced levels, the SFC opened itself up to congressional scrutiny and, with the economy in the doldrums, to public ridicule.

Meanwhile Sawhill, especially cognizant of the requirements Congress had written into the act, moved with haste to meet them. On November 30, 1980, during the nationally televised NBC program *Meet the Press*, Sawhill confirmed he was “spending my time and my effort trying to get the Corporation up and running so that we can have an effective synthetic fuels program.”⁶³ Sawhill considered it “vital to the Nation and had been too long delayed.” Journalist Edward Cowan referred to Sawhill as “a crisis manager” in the *New York Times*. With extensive experience in the private sector, the federal government sector, and higher education arena, Cowan wrote that Sawhill was the right person for the position of SFC chair.⁶⁴

The corporation had to issue its first solicitation for synthetic fuel projects by the end of December 1980, and the salary ruckus did not make preparations for the solicitation any easier. The SFC did manage to meet the deadline, with the first solicitation issued on Friday, November 21. This “Initial Solicitation for Proposals for Financial Assistance for Synthetic Fuels Projects” was a mere two-and-one-half pages in length. Its message to industry was direct and to the point: “We have the mandate, directive, authority, and money, so give us your best shot!”⁶⁵ The energy industry was aghast by the request’s brevity and minimal requirements, which was rare for federal government solicitations that were typically quite lengthy and complex.⁶⁶

Congress had legislated certain dates for the first solicitation to stress the urgency of getting the nation’s synthetic fuels industry going to lessen risks of increased dependence on imported crude. To underscore the emergency, Congress amended the Defense Production Act of

⁶³ Transcript of *Meet the Press*, November 30, 1980, 1-2.

⁶⁴ Edward Cowan, “A Crisis Manager,” *New York Times*, September 11, 1980, D6.

⁶⁵ Larry Lukens, vice president – projects for SFC, interview on October 14, 2008.

⁶⁶ *Ibid.*

1950 (DPA) to provide for a “fast start” interim assistance program using existing federal departments and agencies to hasten the development and production of synthetic fuels for defense needs. The ESA directed Carter to put this program into effect immediately. Congressional conferees believed no time should be lost during the period between ESA enactment and the president’s declaration that the SFC was operational.

Sawhill focused on building an organization with the capabilities to meet ESA goals and demonstrate to the private sector that the SFC would be different from a normal governmental agency. Sawhill began an intensive recruiting effort in the New York City financial industry. He wanted a “small, lean staff” of experienced managers from Wall Street, prestigious national law firms, and major financial institutions. Sawhill relied heavily on his longtime friend Martin Lipton, senior partner of the New York law firm Wachtell, Lipton, Rosen & Katz. Lipton had agreed to assist Sawhill as a \$1-a-year consultant. Lipton’s primary role was to identify people on Wall Street whom the SFC should consider for half-a-dozen vice-presidential jobs with a \$140,000 salary limit.⁶⁷ Lipton later observed that Sawhill “was a hard charger in everything that he did and had very ambitious plans for SFC.”⁶⁸ Sawhill was compelled to hire the best and the brightest and these individuals were located generally in New York City, necessitating above government level compensation. He was permitted to pay the necessary level under the ESA to attract and maintain these highly qualified and experienced people.⁶⁹

The 1980 presidential election reflected the public’s desire for change in leadership. Governor Reagan overwhelmed President Carter in the Electoral College by 440 votes (489 to 49), with a popular vote margin of 8.4 million votes. Reagan’s coattails delivered control of the

⁶⁷ Robert Hershey, “Reagan Said to Back Synthetic Fuels Unit,” *New York Times*, November 10, 1980, D4.

⁶⁸ Email correspondence from Martin Lipton to author, September 13, 2009.

⁶⁹ Andy Pasztor, and Rich Jaroslovsky, “Synfuels’ Boss Sawhill Vows a Business Like Bureaucracy,” *Wall Street Journal*, October 28, 1980, 37; Robert Hershey, “Reagan Said To Back Synthetic Fuels Unit,” D4; *Energy Security Act, Conference Report* (No. 96-824), 205. ESA, Section 117(b) (2).

the Senate to the GOP as well. The Reagan administration believed the voters had given them a mandate to reduce taxes, cut spending, and strengthen defense.

Despite early resentments about the SFC's future expressed by Reagan aides during the campaign, their public position after the election was that "the new Administration [was] likely to let the Corporation move full-speed ahead."⁷⁰ Sen. James McClure (R-ID), incoming chair of the Senate Energy Committee, told Reagan aides that he supported the SFC, and hoped Reagan would "go forward" with the synfuels program.⁷¹ Other key congressional leaders and many energy officials opined that the SFC "should be preserved in more or less its present form."⁷² Future prospects for Sawhill and the other directors appeared less certain.⁷³ Sawhill used the media as a vehicle to communicate his stance on the SFC to the Reagan transition team members, who were equally indirect in their messages. They, too, relied on the press to relay signals regarding their intentions for Sawhill. While Sawhill was eager to be regarded as a member of the Reagan team, that group considered him far too independent. They thought it unlikely that he could be reined in from an aggressive pursuit of the goals he had helped establish for the corporation.⁷⁴

At a board meeting on November 17, 1980, the board of the SFC elected its first three top officers, at salaries ranging from \$95,000 to \$150,000. John (Jack) McAtee of the New York law firm Davis, Polk, & Wardwell was elected senior vice president and general counsel at the \$150,000 level. Alexander (Cheves) Haskell, director of policy development at IBM, was named vice president for planning at \$140,000 per year. Robert Harris, executive vice president of the

⁷⁰ Robert Hershey, "New Senate Energy Chief Sees No 'Radical Change' on Issues," *New York Times*, November 26, 1980, D6.

⁷¹ *Ibid.*

⁷² Rich Jaroslovsky, "U.S. Synfuels Firm's Retention by Reagan Seems Likely: Its Chief Is Under the Gun," *Wall Street Journal*, December 5, 1980, 12.

⁷³ Hershey, "Reagan Said to Back . . .," D4.

⁷⁴ Author interview with Susan Roberts Battarbee, November 4, 1999.

Urban Institute, was elected vice president for administration and treasurer at \$95,000 per year.⁷⁵

These were excellent choices on the part of Sawhill. He had identified forceful and competent individuals who could accomplish the mandated SFC goals.

Following the 1980 election, the Carter White House made overtures to Reagan asking for his help on the Senate Synfuels nominations. The White House had indicated concerns about the SFC on November 17, 1980, when McIntyre, Eizenstat, and others outlined for Carter a strategy covering issues for the remainder of the congressional session. The staff of Sen. Howard Baker (R-TN), slated to become the new Senate majority leader, believed it would be “impossible to confirm a majority of the Synfuel’s Board” and were even “pessimistic [about whether] John Sawhill [could] be confirmed as Chairman.” Baker was not opposed to the nominations he saw as “worth pursuing.” The White House staff advised Carter, “We should push Byrd and Baker hard on confirmation of a quorum of the Synfuels Corporation Board.”⁷⁶

White House efforts continued, with a November 19, 1980, memorandum to the president from Watson, Eizenstat, and others advising Carter to “ask the Governor [Reagan] for his help in getting confirmation of John Sawhill, an Independent, and at least 3 of the other nominees for the Synfuels Board. This would make a quorum.”⁷⁷ With that minimum number, the president would be able to declare the SFC fully operational. Reagan and Carter met on Thursday, November 20, at Carter’s invitation. Reagan did not take notes during this hour-long meeting and

⁷⁵ “Synthetic Fuels Appointments,” *New York Times*, November 18, 1980, D2, and *Synthetic Fuels Corporation Oversight*, Hearing Before a Subcommittee of the Committee on Government Operations, House of Representatives, Ninety-Seventh Congress, First Session, February 19, 1981, 90. Sawhill’s wife had worked for the Urban Institute as well.

⁷⁶ Memorandum from Al McDonald, Frank Moore, Jim McIntyre, Stu Eizenstat, and Anne Wexler to President Carter, November 17, 1980, File: Memoranda to the President, [11/17/80-11/25/80], Box 40, Jimmy Carter Library. President Carter’s emphasis was added by underlining these comments as he reviewed the document.

⁷⁷ Memorandum from Jack Watson, Al McDonald, Frank Moore, Stu Eizenstat, and Jim McIntyre to President Carter, November 19, 1980, File: Memorandum to the President, 11/25/80. James McIntyre Collection, Memoranda and Correspondence File, Memoranda to the President [9/2/80-12/31/80] through Personal Incoming Correspondence [7/10/78-4/21/80], Box 40, Jimmy Carter Library.

asked few questions, leaving Carter with the impression that Reagan was not interested in the SFC or other matters on the agenda.⁷⁸

According to reports, Sawhill maneuvered furiously to keep his job.⁷⁹ He hoped to build sufficient momentum so that both he and the SFC could survive in the Reagan administration. Sawhill expected to have the SFC declared fully operational by Carter at the beginning of 1981. Trying to appease “influential Republican lawmakers,” Sawhill told the Energy Department that it “would be ill-advised” to commit to any major synthetic fuels projects until the new Congress and administration made their views known. Sawhill sensed reluctance on the part of the new administration to give DOE funds for synthetic fuels projects. Nevertheless, the Energy Department, with the administration’s support, continued analysis of nine synthetic fuels projects under consideration for possible financial assistance. A spokesperson said that “conditional commitments” of approximately \$4.5 billion could be made by January 1981. “A strong message” was sent to DOE by the Carter administration to allocate “big bucks before the transition process” was over.⁸⁰

Sawhill’s appearance on NBC’s *Meet the Press* on November 30 “puzzled some Reagan energy aides,” as they had yet to meet with him. Sawhill did not say anything to “put him at odds” with the incoming administration, yet Reagan advisors wanted Sawhill “to keep a low profile until a final decision” had been made on the chair’s position.⁸¹ Sawhill desperately wanted to keep his job.

⁷⁸ Jimmy Carter, *Keeping Faith* (Fayetteville: University of Arkansas Press, 1995), 586-588.

⁷⁹ Rich Jaroslovsky, “U.S. Synfuels Firm’s Retention by Reagan Seems Likely,” *Wall Street Journal*, December 5, 1980, 12.

⁸⁰ Andy Pasztor, “Energy Agency Urged to Delay Spending on Synfuels Until Reagan Takes Office,” *Wall Street Journal*, November 25, 1980, 2.

⁸¹ Transcript of *Meet the Press*, November 30, 1980, 1-2. Jaroslovsky, “U.S. Synfuels Firm’s . . . “

Sawhill argued that SFC would have “an effective role” in the Reagan administration in spite of Reagan’s earlier suggestion that he might abolish the corporation. He believed the incoming president “favor[ed] anything that would increase domestic production.”⁸² The decontrol of American energy prices so they would rise to the prevailing levels outside the United States was a Sawhill recommendation.⁸³ For all intents and purposes, his position paralleled the new administration’s stance – the keystone of the Reagan energy policy was use of the free-market system, with no “onerous constraints.”⁸⁴ But, Reagan conservatives believed that government intervention in corporate affairs violated fundamentals of the free-enterprise system. To them, the SFC represented both a blatant intrusion into what market forces should be allowed to accomplish unfettered, and a reckless squandering of taxpayer dollars, in an effort by the government to go into the energy business.

The interregnum was a busy time for Sawhill and the SFC. He hired staff as quickly as he could, at salaries competitive with the private sector. While nominees for the chair and board positions had been difficult to find, this was not the case with staff positions or officers. At its inception, Synfuels was viewed as the “hot” and “exciting” place to work in DC. There was anticipation of action, high visibility, and lucrative compensation. Employees were getting in on the ground floor of a brand-new, quasi-federal entity with \$88 billion to spend for development of a new industry. They would have the ability to help the nation solve its energy crisis.⁸⁵ By statute, the number of corporation employees was set at 300 full-time staff, with administrative expenses capped at an inflation-adjusted \$35 million annually.

⁸² “The White House News Summary,” December 1, 1980. White House News Summary Notebooks, Jimmy Carter Library.

⁸³ *Ibid.*

⁸⁴ Wayne King, “Energy Shift on Reagan Urged,” *New York Times*, November 26, 1980, D6.

⁸⁵ Author phone interview with Bryant L. Young, former SFC staff member, August 16, 1999.

Business reporter Bill Paul wrote, “Wall Street [was] eagerly gearing up for what promise[d] to be one of the biggest investment opportunities of the 1980s—synthetic fuels.”⁸⁶ Likewise, industry was brimming with anticipation over the jackpot that would be made available. The synfuels program was viewed as “one of the biggest bonanzas in American business history.” The potential for \$88 billion had touched off an “industrial gold rush.”⁸⁷

As expected, Washington lobbyists for the synfuels industry wasted little time before moving into action. This new enterprise was “starting life with its nose firmly in the government trough,” as lobbyists urged formation of a trade association specifically for the fledgling business.⁸⁸ It quickly evolved into the National Council on Synthetic Fuels Production, which opened an office on Pennsylvania Avenue one block from the White House. Approximately \$600,000 to \$700,000 had been budgeted for the first year of operation. This new association was founded months before the SFC legislation was even signed by Carter. Walter Flowers, a former Alabama congressman, headed the group. Before Flowers had been offered the \$80,000 per-year job, retiring Rep. William Moorhead had been the first choice as executive director. Annual dues ranged from \$5,000 to \$15,000.⁸⁹

With the announcement of a major financial commitment by the federal government to develop synthetic fuels based on Carter’s outline in his “Crisis of Confidence Speech,” three major national industry periodicals began weekly publication: *The Synfuels Report*, with a \$250 annual subscription and circulation about 1,000, *Synfuels Week* with circulation approaching 1,000 and a \$197 annual fee, and *Synfuels* with circulation around 1,600 with annual fee of \$375.

⁸⁶ Bill Paul, “Wall Street Is Gearing Up for ‘Synfuels’ Seen as Big Investment Prospect of 1980s,” *Wall Street Journal*, August 22, 1980, 6.

⁸⁷ “Synthetic Fuel Plan: A Boon for Business,” *New York Times*, August 25, 1980, D1.

⁸⁸ David Ignatius, “Washington Glasses Raised High in Toast to Newest Industry at Government Trough,” *Wall Street Journal*, June 25, 1980, 25.

⁸⁹ *Ibid.*

The London-based *Financial Times* added a section on converting coal to gas and liquid synthetics to its *International Coal Report*. In 1980, two paperback books came out: *The U.S. Synthetic Fuels Program* and *Synfuels Handbook: Including the YELLOW PAGES of Synfuels*. The *National Journal* reported on June 23, 1979, in an “Energy Focus” article that “synfuels fever has spread across Capitol Hill, with Senators and Representatives of both parties agreeing that crash programs are needed to create a synthetic fuels industry to extract oil from coal and shale.”⁹⁰

Indicative of the “synfuel contagion” gripping Washington, a just-graduated twenty-two-year-old political science major from the University of Georgia, looking for a job in DC, decided to start a weekly news publication in his garage, and focused his energy and acumen on this \$88 billion behemoth. William (Bill) Rankin named his publication *The Synfuels Report*. He secured a post office box in Washington, DC, and was on his way. Researching at the Library of Congress, he was able to generate a list of possible subscribers. He sent several promotional letters describing the in-depth reporting that his weekly publication provided and his superior ability to “out report” the other two weeklies. Rankin did his own research, reporting, and writing. In the view of one congressional committee attorney, his diligence and hard work produced the best and most useful of the three papers, frequently with “breaking news.” Rankin would park himself either inside or outside House and Senate Committee offices to get the latest news on the SFC.⁹¹ In mid-1983, he sold his weekly to Pasha Publications, where it folded Rankin’s paper into *Synfuels Week* and Rankin became editor.

⁹⁰ Richard Corrigan, “Congress Has Synfuels Fever,” *National Journal*, June 23, 1979, vol. 11, no. 25, 1050. Robert Hershey, “Synthetic Fuel Spawns a Trade Group,” *New York Times*, September 22, 1980, D1.

⁹¹ Phone interview by author with Edith Holleman, counsel to the Subcommittee of the Committee on Government Operations, House of Representatives, December 6, 2011.

Washington was awash with meetings and conferences on the ESA. *Synfuels Week*, one of a half-dozen or more concerns holding synfuels informational meetings, held its first business conference on synthetic fuels in Washington, DC, on October 6-7, 1980 – with a \$425 fee that included meals, but no hotel room. Corporations ran ads touting the benefits of synfuels.⁹² ARCO (Atlantic Richfield Corporation) and Cities Service Company placed full-page display advertisements touting the benefits of synthetic fuels from coal (see Figures 6.2 and 6.3), while Tenneco Corporation placed an ad promoting shale oil (see Figure 6.4).

Some insist coal is good. Some insist coal is bad. We insist it's not that black or white.

Those who insist that coal is good point out that we have over 200 billion tons of economically recoverable coal in this country – enough to last us for at least three centuries at current consumption rates.

And, they further point out, that although this represents 90% of our domestic energy resources, coal currently supplies less than 20% of all our energy production.

It's true, that with greater usage, coal could give us as much as one-half of the new energy we'll need between now and the year 2000 – enough to help loosen the dangerous ties that bind us to expensive and insecure foreign oil.

But those who insist that coal is bad point to abandoned mines which scar the landscape and allow acid water to seep into streams.

And to the fact that coal contains ash and sulfur which, if not removed, can pollute the air when burned.

Still, we believe that these days the advantages of coal outweigh its disadvantages. Because these days we have extremely tough environmental laws.

Laws that require the restoration of mined lands and the protection of air and water resources. Laws that ensure that coal mine areas are properly restored and that newly constructed or converted power plants remove sulfur and particulates from their stack gases.

Of course, environmental controls are expensive. But because of the current high price of foreign oil, the cost of using coal is still less than half the cost of using oil.

And when we consider that coal can also be converted into transportation fuels such as gasoline and diesel fuel – reducing even more our dependence on foreign oil – it seems obvious that we ought to reassess our old prejudices against this most abundant of all fossil fuels.

At least Atlantic Richfield thinks so.

There are no easy answers.

ARCO 

Atlantic Richfield Company

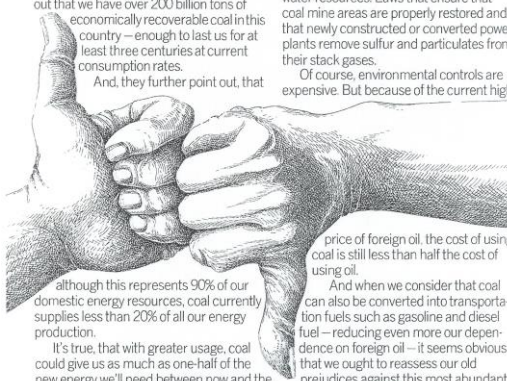


Figure 6.3. ARCO ad touting benefits of synthetic fuels from coal (*New Yorker*, October 13, 1980, 103)

⁹² Hershey, "Synthetic Fuel Spawns a Trade Group."

America's Coal . . . The power, the promise, the problems

America's abundant coal reserves could someday help reduce our dependence on precarious foreign energy sources.

Our known recoverable coal reserves total 218 billion tons and as much as 1.79 trillion tons may ultimately be recoverable.* The technology is available today to convert each ton of coal into 2.5 barrels of badly needed crude oil, giving the U.S. a potential domestic supply of about 4.5 trillion barrels of oil equivalent, more than the total oil reserves of the entire world.

Several methods for converting coal to oil or gas are under study, and two processes being developed by Cities Service and others are very promising.

Rocket engine technology

One process being developed jointly with Rockwell International is called "fluid hydrocracking" which means simply that coal is very rapidly heated to high reaction temperatures in the presence of hydrogen through rocket engine technology. Lighter materials such as gasoline, heating oil and gas are now being produced from coal in a unit processing slightly less than 1 ton per hour. A 250-ton-per-day pilot plant is planned for the near future.

While many of the technological problems have been overcome, financial and environmental roadblocks have not.

The initial investment in a coal liquefaction plant is almost prohibitive considering the risks involved. A commercial plant producing 50,000 barrels of liquid fuel per day would cost at least \$1.5 billion. And each day we delay adds some \$300,000 to \$500,000 to the cost.

Government must share risk

The huge investment requirements and inherent risks make it necessary for the government to support the early modular demonstration plants which will prove the technological and environmental cost.



Cities Service Company
Part of the solution

*U.S. Bureau of Mines estimate.
For more information contact: Public Affairs Division, Cities Service Company, 110 W. 10th St., Tulsa, OK 74103.

facture. With access to the technologies developed by those efforts, private companies could move to commercial production as economics permit.

Government can help best by sharing the initial risk.

Any significant coal conversion would also require a tremendous increase in the country's coal production. One synfuel plant producing 50,000 barrels per day would require at least 20,000 tons of coal each day. To meet a goal of 2 million barrels per day from coal before the year 2000, the coal industry would have to expand its current production by about 50 percent just to satisfy coal conversion plants.

Potential domestic coal reserves (U.S. Geological Survey)



Dedicated policy required

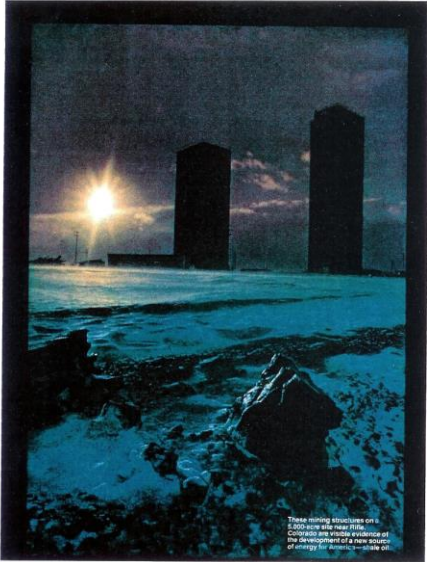
Expanding coal production fast enough to meet such a demand is severely inhibited by overly stringent environmental and safety regulations. And over 70 percent of the low-sulfur coal is located on federal lands, some of which may be declared wilderness and permanently withdrawn from development. No new leases have been offered on government owned coal lands in seven years.

Environmental regulation is possibly the most serious deterrent to synthetic fuels development. Twelve major pieces of legislation currently on the books can delay or prohibit the growth of a strong synthetic fuels industry.

Other problems encountered by prospective synfuel plant builders include delays and costs in obtaining permits and site approvals, water shortages in the West, land reclamation costs, labor problems in the coal industry, transportation costs and worker relocation. And, without clear and consistent national objectives and an energy policy, there are critical uncertainties about future government actions that could make approved projects uneconomical.

None of the problems facing coal liquefaction and gasification is insurmountable. But an unprecedented spirit of cooperation between government and industry must evolve if coal is to become a significant fuel source before the end of this century. The stakes are too high to do otherwise.

Figure 6.4. Cities Service ad promoting coal for synfuels (New York Times, November 17, 1979, D7)



Another Tenneco Venture.

Digging an "oil mine."

We're opening a whole new world of energy beneath the high country of western Colorado.

Locked underground in a thick layer of shale rock 1,500 feet beneath these tall towers are more than a billion barrels of recoverable oil. Getting it out won't be easy. And it won't be cheap. It will take a capital investment of more than \$2 billion—and there's no guarantee that this huge investment will pay off. It will require prices at least as high as today's imported oil for the project to be economically successful. But Tenneco, in partnership with Occidental Petroleum Corporation, is making a determined effort to unlock this new source of energy for America.

The shale rock must be heated to about 1,000°F before it will release its oil. Some competitive plans call for conventional mining of the shale and heating it in giant vessels on the surface. Our project involves the creation of huge combustion chambers underground.

About 25 percent of the shale rock will be mined. Carefully engineered explosions will break up the remaining shale into pieces of "nutblock" rock that fill chambers the size of 25-story buildings. These chambers will then be sealed and ignited at the top so that carbon contained in the rock will burn. As the flame develops (much as tobacco burns in a pipe) with air pumped in at the top and sucked out at the bottom the heat releases the hidden oil, which drains to the bottom and is piped off.

It will require the creation and operation of 100 of these underground chambers a year, plus processing the mined shale on the surface, to reach our goal of more than 60,000 barrels of oil a day by the late 1990s. At that point, it will be the largest underground mine in North America—and it should produce well into the next century.

But this is only the beginning. It is estimated that at least a billion barrels of recoverable oil rest within the shale areas of Colorado, Utah and Wyoming—enough to keep America running for 150 years at present rates of oil consumption. A worthy national objective.

Although energy contributes more than two-thirds of Tenneco's income, we continue to provide other basic needs, like food, autos, five components, farm and construction equipment, ships, packaging, chemicals, and insurance.

That's Tenneco today, growing in energy ... and more.

Tenneco Oil Company, Tenneco Gas, Tenneco Chemical, Tenneco Equipment, Tenneco Services, Tenneco Insurance, Tenneco International, Tenneco Marine, Tenneco Nutrition, Tenneco Packaging, Tenneco Shipbuilding, Tenneco Tobacco, Tenneco Transportation, Tenneco United States, Tenneco World.

Tenneco

These mining structures on a 5,000-acre site near Rifle, Colorado are visible evidence of the development of a new source of energy for America—shale oil.

Figure 6.5. Tenneco ad touting the benefits of shale oil (*New Yorker*, November 3, 1980, 70-71)

The Executive Committee of the Ad Hoc Coalition on Synthetic Fuels hosted a reception in honor of House and Senate members and conference committee staff on June 19, 1980, funded by four American natural resources companies: Ashland Oil, C. E. Lummus, Tosco, and Tenneco. These firms had significant investments in synthetic fuels projects.⁹³

Lawmakers were “desperate to respond” to recent pricing actions of the Organization of Petroleum Exporting Companies (OPEC) and also to reduce the nation’s reliance on imported oil.⁹⁴ Additional evidence of this contagion was the publication in July 1979 of *Helping Insure Our Energy Future: A Program for Developing Synthetic Fuel Plants Now* by the Committee for Economic Development (CED), an independent research and educational organization of two hundred business executives and educators. This report presented a statement about the direction of the national game plan by the Research and Policy Committee of the CED:

⁹³ Ignatius, “Washington Glasses Raised.”

⁹⁴ *Ibid.*

The cut-off of oil from Iran, the Three Mile Island accident, the gasoline lines of 1979, and the resulting public demand for action have only reinforced our belief that there is a critical need to increase domestic supplies. At last a consensus is emerging that the United States must free itself from excessive dependence on often insufficient sources of imported oil.⁹⁵

The CED believed that synthetic fuels would “play an important role in overall U.S. energy strategy,” and that the country needed these synthetic fuels plants as soon as possible.⁹⁶

Within the temporary office space located on DuPont Circle in Washington, Sawhill and the growing SFC staff were hard at work. Besides hiring qualified people, the SFC focused its efforts on the legislated mandate for the first solicitation of synthetic fuels projects to be issued within six months of the enactment date of June 30, 1980. The corporation beat this deadline by over a month, issuing the solicitation on November 21, 1980. Responses to this “Initial Solicitation for Proposals for Financial Assistance for Synthetic Fuels Projects,” a mere two-and-one-half pages, were due on Monday March 31, 1981, at the close of business. Sixty-one firms in twenty-four states indicated a desire to participate. Of these proposals, nineteen were for coal liquefaction, seventeen coal gasification, fourteen oil shale, eight for production of oil from tar sands, and three producing other fuels.⁹⁷

As for his personal agenda, Sawhill continued to lobby hard for his job, but it was an uphill battle. One corporation official commented, “We’re getting word from the people on the [Reagan] transition team, unofficially, that the decision has been made and Sawhill isn’t going to get it.” Another SFC official said, “The decision by the Reagan people is probably going to be

⁹⁵ Committee for Economic Development, *Helping Insure Our Energy Future: A Program for Developing Synthetic Fuel Plants Now* (Washington, DC: Committee for Economic Development, July 1979), ix.

⁹⁶ *Ibid.*, x.

⁹⁷ Martin Crutsinger, “61 Firms Seek Subsidies for Synfuel Development,” *Washington Post*, April 2, 1981, D3.

made on politically pragmatic grounds, and those are the grounds that don't favor Sawhill.”⁹⁸

The transition team viewed Sawhill as an independent thinker without any allegiance to the incoming administration. What they wanted was someone who had team loyalty, who could be counted on to scale down and eventually phase out the SFC.⁹⁹

In addition to his appearance on *Meet the Press*, Sawhill gave several public speeches on behalf of the SFC and synthetic fuels. He courted “support for himself” wherever and whenever he could, in a no-holds-barred effort to keep his job.¹⁰⁰ After a speech in Southern California, he sought an audience with drugstore magnate Justin Dart, a key member of Reagan’s “kitchen cabinet.” Success was not forthcoming. Some departing Carter administration officials felt that Sawhill was saying and doing everything he believed Reagan administration officials wanted to hear and see in order to keep this “plum” of a job.¹⁰¹

As 1980 ended, press reports did not favor Sawhill but did seem to view the SFC in a positive light. Edward Noble, a real-estate developer from Atlanta with roots in the Oklahoma oil business, headed the Reagan SFC transition team. Noble was a large financial backer of the conservative Heritage Foundation, which was very supportive of Reagan and paid the salaries of several SFC transition team members.¹⁰² Noble and everyone else knew that Sawhill wanted the job. The chair’s position offered benefits that Sawhill desired and had established for himself – challenge, power, autonomy, visibility, stability, lucrative compensation, a chauffeured car, and a personal chef/major domo.¹⁰³ The General Services Administration (GSA) provided vehicles to

⁹⁸ Rich Jaroslovsky, “U.S. Synfuels Firm’s Retention by Reagan Seems Likely: Its Chief Is Under the Gun,” *Wall Street Journal*, December 5, 1980, 12.

⁹⁹ Author phone interview with Susan Roberts Battarbee, transition team member, November 4, 1999.

¹⁰⁰ Jaroslovsky, “U.S. Synfuels Firm’s Retention by Reagan.”

¹⁰¹ *Ibid.*

¹⁰² Battarbee interview.

¹⁰³ Author phone interview with Bryant L. Young, former SFC employee, August 16, 1999, and phone interview with Jeffrey Lipkin, former SFC vice president and general counsel, November 6, 1999.

the SFC – new Chrysler K-cars. The Carter administration had directed the GSA to purchase only Chrysler automobiles in an effort to help the company survive, having provided more than a billion-dollar-loan guarantee to Chrysler.¹⁰⁴ Trying to get as much positive visibility on the Hill and in the DC area, Sawhill hired Joan Braden, as a lobbyist, at an annual salary of \$62,000. Braden, the wife of local radio personality Tom Braden, was mother of the brood on which the hit television show *Eight is Enough* was based, also a renowned party-giver, and former State department employee.¹⁰⁵

In mid-December 1980, the *Philadelphia Inquirer* published an in-depth seven-part series on the nation's energy dilemma by investigative journalists Donald L. Bartlett and James B. Steele.¹⁰⁶ These articles earned the reporters a finalist slot for the 1981 Pulitzer Prize for national reporting. The series was reprinted into a special forty-page newspaper supplement. The authors had crisscrossed the nation for more than a year, delving into America's energy policies and programs. They found a national energy policy run "amok," with no controls or oversight, but neither any real evidence of a comprehensive national energy policy.¹⁰⁷

The authors titled the supplement "Energy Anarchy: How a Fumbling Government Ensures an Oil Crisis." Four of the seven reports (articles two through five) concerned synfuels. In part two, Bartlett and Steele reported on the billions of tax dollars wasted on synthetic fuel.

Interview with Isabel Sawhill, widow of John Sawhill, in Washington, DC, March 27, 2008. Ms. Sawhill's recollection is that the name of the "personal chef/major domo" was "Ricardo," and he had worked for John Sawhill at New York University. Ricardo designed the SFC logo used throughout its existence. Ms. Sawhill also recalled that Congress had significant issues with the position that Ricardo occupied.

¹⁰⁴ The Chrysler K-cars were compact-to-midsize front-wheel-drive cars with four-cylinder engines. They were Chrysler's response to its federal bailout and the 1973 and 1979 energy crises: low-weight and high MPG autos. They sold well and saved Chrysler financially. "The K Car: Variations on a Theme Helped to Save Chrysler," *New York Times*, January 29, 1984, AUTO 17. The slogans used in the first set of ads: "The New Chrysler Corporation: The American Way to Beat the Pump" and "America's Not Going to Be Pushed Around Anymore," *New Yorker Magazine*, October 20, 1980, 12-15.

¹⁰⁵ "Braden Gets Lobby Job," *Washington Post*, November 30, 1980, SM2.

¹⁰⁶ Donald L. Bartlett, and James B. Steele, "Energy Anarchy," *Philadelphia Inquirer*, December 7-13, 1980.

¹⁰⁷ *Ibid.*, 1.

They specifically addressed the SFC when they wrote that the government's "grand multibillion-dollar giveaway will do nothing to end America's dependence on hostile foreign oil production in the 1980s but it will please some powerful constituencies."¹⁰⁸ An SFC salary of \$175,000 is mentioned. The reporters hit the nail on the head with the comment, "For politicians in Congress, Democrats and Republicans both, it [the SFC] means concrete examples – albeit meaningless ones – of their efforts to solve the nation's energy problems."¹⁰⁹ Nevertheless, the outgoing Carter administration remained "enthusiastic" about the SFC.¹¹⁰

After intense pressure from leading Republican senators on the Senate Energy Committee, Reagan decided to keep the corporation, but not as a high-priority agenda item. Rather, it was viewed as a way for Reagan to repay his major financial backers with chair and board appointments. Headhunters for the incoming Reagan administration had been hired to find a new SFC chair. Leading contenders for chair included Frank Zarb, former head of the Federal Energy Administration under President Ford; Paul MacEvoy, former member of President Ford's Council of Economic Advisors; and Edward Vetter, unpaid energy advisor to Gov. William Clements of Texas. Noble exhibited interest as well.¹¹¹ The *Dallas Morning News* had reported on January 31, 1981, that Vetter had been recommended by Clements for the SFC post.¹¹² However, in communication from the former governor to the author, Clements indicated that he did not suggest Vetter for the job, believing that Vetter "would not be a good chairman for the

¹⁰⁸ *Ibid.*, 12.

¹⁰⁹ *Ibid.*

¹¹⁰ *Ibid.*

¹¹¹ "Transition Notes," *Washington Post*, December 24, 1980, A3. "Consultant Seen Replacing Sawhill," *New York Times*, February 3, 1981, D19.

¹¹² Polly Ross Hughes, "Dallasite Sought for Synfuel Post," *Dallas Morning News*, January 31, 1981, 9B, 12B.

Synthetic Fuel Corporation. . . . He would be an awful successor to Mr. John Sawhill,” and Clements “would not recommend [Vetter] for dog catcher.”¹¹³

Since Carter had made recess appointments to the SFC board, the Carter White House seriously considered whether to reappoint the same individuals, since the 96th Congress had adjourned *sine die*. The conclusion of Cutler, counsel to the president, was that no new appointments needed to be made. Third parties could continue to rely on the actions “of the board, its chairman, and its members because they [were] at a minimum de facto officers acting under color of authority.”¹¹⁴

As the new year of 1981 began, Sawhill continued aggressively to expand the corporation. Robert Blakely, managing director of Morgan Stanley, began work as vice president-finance and chief financial officer of the SFC at an annual salary of \$150,000. Blakely intended to recruit his staff from both major investment banks and major commercial banks. An industry executive commented that the SFC “may be successful in its recruiting efforts because salary levels [were to be] significantly higher . . . than at other government agencies.”¹¹⁵

Ronald Reagan assumed office on Wednesday, January 20, 1981. Simultaneously, the fifty-two American hostages held for over a year in Iran were released and flown to Germany. A great weight had been lifted from the shoulders of all Americans. The next day, according to Larry Lukens, vice president of projects for SFC, the board and officers received a letter from

¹¹³ Letter from Gov. William P. Clements, Jr., to author, March 22, 2010.

¹¹⁴ Memorandum from Lloyd Cutler to Jack Watson, December 24, 1980, File: Synthetic Fuels, 7/12/80. Staff Offices, Counsel, Cutler [Stealth], 8/80 through Taxes—Morgan Stanley and Company, 2/79-11/80, Box 112, Jimmy Carter Library.

¹¹⁵ “U.S. Synthetic Fuels Corp. Taps Blakely of Morgan Stanley,” *Wall Street Journal*, January 8, 1981, 24.

Reagan. This letter asked for the resignation of Sawhill and the board and “ordered” all SFC officers of the SFC to lower their salaries immediately to the level of cabinet members.¹¹⁶

John Sawhill died on May 18, 2000, due to complications of diabetes. While he was at the SFC, few, if any, employees knew of his condition. This knowledge explains why he had a specific lunch of fresh fruit and cottage cheese most days in the SFC conference room, prepared by Ricardo, the corporation’s “major domo.” In 1996, *George* magazine published an article, “The Perfect President Discovered,” based on a survey by the polling firm Blum & Weprin Associates of eight hundred people from across the United States. The survey asked respondents to design their ideal president. With answers in hand, the executive-search firm Russell Reynolds Associates tracked down the individual who came closest to matching the model presidential profile. John Sawhill came out as number one, due primarily to his professional accomplishments in business and government and his ability to treat issues individually, not from a predetermined conservative or liberal point-of-view.¹¹⁷

President-elect Reagan and his advisors formed several transition teams to advise him on the proper course of action with many governmental departments and agencies. The United States Synthetic Fuels Corporation had a Reagan transition team of thirteen members and two consultants. The incoming administration also created an Industry Advisory Committee (IAC) of twelve members. The IAC did not overlap the SFC transition team, which had issued two reports during the interregnum: an interim report in early December 1980 and a final one later that

¹¹⁶ If the recess-appointed chair and directors had been confirmed by the Senate, then, by statute under Section 116 (b) (3) of the ESA, they could be removed from office by the president only “for neglect of duty, or malfeasance in office.”

¹¹⁷ David Stout, “John Sawhill, Ex-N.Y.U. Chief Who Led Conservation Group, Dies at 63,” *New York Times*, May 20, 2000, B11. The “Perfect President” citation in the obituary is incorrect. The correct citation is “The Perfect President Discovered,” *George*, November 1996, 140-143.

month.¹¹⁸ During the Reagan years, these reports were closely held and not subject to Freedom of Information Act requests, as they were prepared before Reagan assumed office. During a hearing before the Senate Subcommittee on Government Management in July 1983, Edward Noble and Vic Schroeder were asked, under oath, about these reports and did not specifically address the contents, replying that they were confidential communications to President-elect Reagan. The men referred to both reports as a single entity. Noble testified, “I won’t say what is in the report, but I wrote the report.” Schroeder stated, “It is difficult to talk about something you can’t talk about. We took an oath stating that the report was our personal property and the personal property of the president of the United States.”¹¹⁹

In its stages, the transition team divided its study into two categories: (1) the advisability of an early termination of the US Synthetic Fuels Corporation and (2) its continuation as envisioned by the Energy Security Act of 1980 (ESA). The interim report noted that the SFC was in an “embryo state” with neither a budget nor a complete set of corporate policy guidelines. The team recommended that “a strong Board of Directors, clear on this corporation’s philosophy and direction and in some agreement on strategy and goals, is critical.” This early report did not reference, specify, comment, or even suggest any philosophy, direction, strategy, or goals. Such specifics did not seem to occur to this transition group. The team implied, though, that these ideas should follow the policies of President-elect Reagan – which included limited government, allowing free market principles to operate.¹²⁰

¹¹⁸ “Transition Team Interim Report: SynFuels Corporation,” December 3, 1980, and “Transition Team Final Report,” December 19, 1980. Files of Deputy Director Public Affairs, Robert Garrick, Ronald Reagan Presidential Library.

¹¹⁹ *Oversight of the Management of the U.S. Synthetic Fuels Corporation*, Hearings Before the Subcommittee on Oversight of Government Management of the Committee on Governmental Affairs, United States Senate, Ninety-Eighth Congress, July 27 and 29, 1983, 7, 19.

¹²⁰ “Transition Team Interim Report: SynFuels Corporation,” *supra*.

The final report was more forthright in its analysis and recommendations. It began with the underlined declaration, “We recommend the termination of the U.S. Synthetic Fuels Corporation within two years.” Why? Because “the Corporation, as handed to the incoming Administration[,] is a ticking time bomb set to explode in 1984.” The SFC, if kept alive, could be “plagued by horrendous cost overruns, on the order of 150 to 250 percent,” and possible loan commitments and cash outlays very well exceeding budgetary allocations by billions of dollars. The team worried that the public might get the impression that the Reagan administration had “sold out to the oil industry.” Presciently, the report observed that “there may well be scandals associated with the malpractice of unscrupulous operators or consultants, without one drop of commercial synfuels being produced by 1984.” The team urged that the financing, development, and production of synthetic fuels be left in the private sector, with very limited, if any, federal assistance. They also recommended that a strong, project-oriented chair in combination with an entirely new slate of “low-profile, competent, private sector Board Members representing as near as possible the President’s own economic philosophy” be nominated post-haste and confirmed within the first thirty days of the Reagan administration. Importantly, the report cautioned the president-elect when it cited the ESA in writing: “Any Director may be removed from office by the President only for neglect of duty or malfeasance in office.”¹²¹

The final report pointed out “significant weaknesses” in the ESA:

1. The Act overestimated the SFC’s ability to meet the stated production targets of 500,000 barrels of synthetic oil per day by 1987 and 2.0 million barrels per day by 1992.
2. Certain language permitted the SFC to conduct up to two synthetic fuel projects in the Western Hemisphere outside the United States. Such an action would have exposed the US government to the risk of diplomatic confrontation.

¹²¹ “Transition Team Final Report: SynFuels Corporation,” 1.

3. Environmental laws would likely stall the development of commercial-sized pilot plants, let alone full-fledged multiplant extraction and processing efforts.

4. The ESA permitted the SFC to commit or enter into joint ventures. Government ownership of such projects would be incompatible with the principle of free enterprise, in which risk capital should come from the private, rather than the public, sector.

5. The SFC was authorized to build three corporation-owned facilities. This ability would have been “highly questionable” because the private sector had refused federal assistance to build these plants.¹²²

The transition team acknowledged the importance of making the country energy self-sufficient. The members believed that substantial conventional reserves of oil and gas remained untapped. In the interest of long-range US security, the private sector on its own was in the best position to provide the energy sources, whether conventional or alternative.

The report did comment on SFC leadership by arguing that the attitude and policy of the existing management (Sawhill and others) was “to move as fast as possible on all fronts.” Sawhill read the legislative intent to mean “get on with it.” He was rapidly taking “major steps” to hire personnel and consultants. The chief planning officer, Cheves Haskell, had developed charts and systems for four-, five-, and twelve-year plans. In short, the SFC was running at a “rapid pace.” The team opined that the type of organization-building going on within the SFC was “indicative of a bureaucratic framework.” They believed this condition to be a “serious flaw” that would handicap the SFC “in preparing for an expeditious and economical accomplishment” of the goals outlined in the act. To gain control of the SFC for Reagan, action had to be taken “immediately” to avoid severe consequences. Since the existing chair and board were Carter recess appointments, Reagan had to fire them immediately and then quickly nominate a new

¹²² *Ibid.*, 5-6.

board whose policies and economic philosophy would parallel those of President-elect Reagan. The chair had to be selected on the basis of competence and absolute integrity, and be a “projects oriented” individual with “hands-on experience” in the development of large ventures.¹²³

The Industry Advisory Committee recommended the Reagan administration “move ahead with synthetic fuels.”¹²⁴

During his first full day in office, Reagan dismissed hundreds of Carter administration holdovers and demanded that his (Reagan’s) cabinet help him cut the federal budget. As mentioned above, the SFC board was included in this action.¹²⁵ The Reagan people considered Sawhill “too independent” and “somewhat arrogant.”¹²⁶ The sentiment was that Sawhill would be “shoveling money out the door,” an approach inconsistent with the free market as well as federal budget reduction-in-spending emphases being promoted by Reagan.¹²⁷

During the early part of Reagan’s first term, the White House and Congress struggled over the decision of what to do with the SFC. “Right now, the Corporation is nothing but a blank slate. . . . [W]hat it becomes depends on the kind of people nominated to the board,” offered one of Reagan’s energy advisors.¹²⁸ Various names continued to circulate, with Vetter’s appearing most often.

With a new administration assuming the levers of power, the Synfuels Corporation was about to enter into “Wonderland,” or maybe even “The Twilight Zone.”

¹²³ *Ibid.*, 10, 11, 12, 30.

¹²⁴ *Oversight of the Management of the U.S. Synthetic Fuels Corporation*, 5.

¹²⁵ Steven Weisman, “Reagan Moves Fast to Swear in Staff and Drop Holdovers,” *New York Times*, January 22, 1981, 1, B7; “5 Energy Board Resignations,” *New York Times*, January 31, 1981, 34; *Oversight of the Energy Security Act*, House Report No. 97-123, 62. The recollection of Frank Savage is that he never submitted a resignation letter; rather, he received a letter in the US mail from Reagan accepting Savage’s resignation. Savage had been proud to serve on the board and strongly believed in the mission of the SFC and Sawhill. Author phone interview with Frank Savage, October 19, 2009.

¹²⁶ Battarbee interview.

¹²⁷ Andy Pasztor, “Synfuels Work May Be Curbed by White House,” *Wall Street Journal*, February 2, 1981, 4.

¹²⁸ *Ibid.*

Chapter 7: The McAtee Era

During his leadership, Sawhill hired several senior officers, such as John (Jack) McAtee, a Republican and a partner at the Wall Street law firm of Davis, Polk, & Wardwell. Martin Lipton was instrumental in persuading McAtee to agree to join the corporation as SFC's senior attorney.¹ The board approved McAtee as senior vice president and general counsel of the corporation on November 17, 1980. Upon Sawhill's resignation, McAtee became acting chair of the SFC.² Sawhill had anticipated Reagan's acceptance of his resignation (despite hoping otherwise), as well as those of the other board members. On January 12, 1981, Sawhill had designated McAtee as acting chair when Sawhill was "absent or disabled."³

During his 118 days as acting chair of the Synthetic Fuels Corporation, McAtee testified before four congressional committees – three in the House and one in the Senate. Many hours of staff work were needed to prepare for each hearing. Afterward, several hours more were required to provide written answers and information/data to the congressional committees. On March 26, 1981, McAtee testified before two different committees, one in the morning and the second in the afternoon.

1. *Synthetic Fuels Corporation Oversight*. Hearing before a Subcommittee of the Committee on Government Operations, House of Representatives, Ninety-Seventh Congress, February 19, 1981.

2. *DOE Budget Review and Policy Implications*. Hearings before the Subcommittee on Fossil and Synthetic Fuels of the Committee on Commerce Energy and Commerce, House of Representatives, Ninety-Seventh Congress, March 26, 1981.

¹ Letter from Martin Lipton to the author dated July 29, 2011.

² Sawhill, on January 12, 1981, had written a memorandum for the Corporate Records designating McAtee as the vice president "who, in the absence of the Chairman, shall act in the place and stead of the Chairman of the Board and exercise the appropriate powers and duties of such." *Synthetic Fuels Corporation Oversight*, Hearing before a Subcommittee of the Committee on Government Operations, House of Representatives, Ninety-Seventh Congress, First Session, February 19, 1981, 85.

³ *Ibid.*

3. *Department of the Interior and Related Agencies Appropriations for 1982*. Hearings before a Subcommittee of the Committee on Appropriations, House of Representatives, Ninety-Seventh Congress, March 26, 1981.

4. *Department of Energy Fiscal Year 1982 Authorization (Fossil and Environment; Nuclear; Synthetic Fuels Biomass; and Research and Defense Programs)*. Hearings before the Subcommittee on Energy Research and Development of the Committee on Energy and Natural Resources, United States Senate, Ninety-Seventh Congress, April 3, 1981.

McAtee had no prior experience in testifying before Congress. He was a novice, unfamiliar with the mechanics of Congress. The first hearing soon after Sawhill's departure was not a pleasant experience for anyone involved. McAtee was a quick study, however. The next three appearances were not contentious, but the questions were difficult and at times challenging and complex, resulting in intricate answers.

Interestingly, the only public acknowledgement of appreciation for the accomplishments of Sawhill and the first board came from Sen. John Warner (R-VA) during the April 3, 1981, hearing. Reagan had announced his intention to nominate Edward Noble to be SFC chair the day before. Warner stated he was "highly supportive" of the objectives in the SFC legislation. Putting aside the controversial issue of salaries, Warner noted that Sawhill "deserves recognition for what he did in a very short time, as well as other members of the Board and officers of the corporation."⁴ By that time, the Synthetic Fuels Corporation had received, in response to its first solicitation, sixty-one proposals requesting financial assistance. Much staff work would be involved in analyzing these proposals, completed on a "fast-track" basis to meet the act's production goals. McAtee's objective was to have as much done as possible in preparation for the new board members once they were confirmed. All decisions rested with the incoming board, but that did not prevent current SFC officers and staff from proceeding. In the testimony,

⁴ *Department of Energy Fiscal Year 1982 Authorization (Fossil and Environment; Nuclear; Synthetic Fuels Biomass; and Research and Defense Programs)*, Publication No. 97-21, March 23, April 1, 3, 29, and 30, 1981, 621.

McAtee stressed one of the major principles guiding the SFC was that the private sector would create the synthetic fuels industry by its decisions on facilities, technologies, management of project construction, and substantial financial investments in the plants. The corporation would supplement and encourage the private sector rather than interfere with it.⁵

In his statement before this Senate subcommittee, McAtee gave a succinct summary for the existence of the Synthetic Fuels Corporation. The oil shocks of 1973-1974 and 1979 had offered three lessons to the country that had not been acted upon:

1. There was a shortage of energy that could be consumed in a liquid form or gaseous form. It was not a shortage of energy sources.
2. Reliance on imported oil imposed a grave threat to the nation's security because of the exposure to oil-supply interruptions.
3. The inability to counter price and production actions by the oil-producing nations threatened the economy.⁶

He then reminded the subcommittee that SFC would create a commercially viable private-sector synthetic fuels industry that would do much to alleviate these issues. Additionally, there would be significant long-term employment and productivity benefits for the country.⁷ Because of the enormous size and risks involved with synthetic fuel plants, Congress had created the corporation to share the dangers associated with developing this private industry. In doing so, Congress felt compelled to depart from its usual method of conducting federal business – thus, the forging a special mission-oriented, limited-life, federal corporation to carry out the synthetic fuels program. With time being of the essence, and to circumvent the bureaucracy and delays

⁵ *Ibid.*, 623, 624.

⁶ *Ibid.*, 624, 625.

⁷ One estimate was that for every worker in an oil shale mine, there would be seven additional support personnel/jobs added (a ratio of 7 to 1): spouses, children, teachers, utility workers, construction workers, city employees, service industry employees, etc. Phone interview by the author with Pierre de Saint Phalle, SFC assistant general counsel, also from Davis, Polk, & Wardwell, on July 28, 2011.

often characterizing other federal programs, Congress established a corporation free of many of the typical constraints placed on departments and agencies of the Executive Branch. For example, because the SFC was established outside the civil service realm, many regulations such as those governing federal procurement did not apply. The Synthetic Fuels Corporation was permitted to pay salaries above government levels. Also, under section 153 of the act, the SFC was established as an off-budget entity to permit the board to make reasonable and credible financial commitments to private industry for projects requiring long lead times free of the uncertainty that complicates the annual federal budget process. The corporation was to function not as a federal agency, but rather like a private corporate entity such as a financial institution, with the powers of the SFC vested in its board of directors.⁸

McAtee considered SFC officers and staff as implementers of policies set by Congress and the previous SFC board. Since there was no board of directors, the corporation was not in a position to make policy recommendations to Congress or the administration. The SFC could, however, continue its work to be in a position to brief the new board once it was nominated by the president and confirmed by the Senate.⁹

During its first six months of existence, the SFC had performed those actions normally associated with starting up any new organization: obtaining office space (leasing space in the DC law firm building of Arnold & Porter), assembling staff, adopting by-laws, approving a system of organization, obtaining funding and banking facilities in cooperation with the Treasury Department, completing senior executive staffing, interpreting the statute and intent of Congress, and refining the project-selection process needed for implementing the statutory mandate enabling the new board of directors to evaluate projects submitted to the Synfuels Corporation.

⁸ *Department of Energy Fiscal Year 1982 Authorization*, 626, 627.

⁹ *Ibid.*, 628.

SFC employees met with members of Congress and their staffs, as well as governors, local officials, industry representatives, prospective project sponsors, environmentalists, and other interested groups to receive their recommendations.¹⁰ The corporation had held two public meetings during January 1981 – one in New York City on the 19th, and the other in Denver on the 28th. The purpose of these well-attended meetings was to acquaint prospective project sponsors and other interested parties with the SFC, provide attendees an opportunity to meet corporation staff, and discuss the initial solicitation and various forms of financial assistance available under the act.¹¹

The first policies had been developed to ensure that the paramount role of private enterprise was preserved and that private companies, not the SFC, would make the basic technical and business judgments such as which technologies to employ and where to locate facilities. Importantly, these policies were designed to guarantee that Synthetic Fuels Corporation would *not* become a bureaucracy, but rather a highly professional organization able to negotiate financial assistance agreements with the private sector quickly, effectively, and efficiently – and to expose carefully the credit of the United States to accelerate private development of a commercially viable synthetic fuels industry.¹² As of April 1981, SFC employed about ninety people, of whom approximately one-half were categorized as professionals. During the March 26, 1981, afternoon hearing before the House Energy and Commerce Subcommittee on Fossil and Synthetic Fuels, McAtee specified that the corporation would recruit the professional staff largely from the private sector and compensate at levels required to hire and retain the specialized professionals needed to analyze the large, complicated, first-of-a-kind projects and to negotiate

¹⁰ *Ibid.*, 628, 629.

¹¹ *Department of the Interior and Related Agencies Appropriations for 1982*, Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, Part 7, 9.

¹² *Ibid.*, 629.

the financial assistance agreements. To the maximum extent practical, employees would be compensated within ranges set forth in federal schedules.¹³

In his morning testimony on March 26 before a House Appropriations Subcommittee, McAtee provided more detail on the salary ruckus that had been going on in DC. By this date, all but one of the SFC officers had agreed to lower their salaries to Level 1 of the Federal Executive Schedule (cabinet level). The focus on salaries had distracted the corporation and its employees from the core mission of creating a commercially viable synthetic fuels industry. Committee members expressed concern that the SFC might lose highly qualified people over compensation. McAtee, however, hoped not, anticipating it would be worked out. One committee member remarked, “I thought the attractive salary was to attract the people with the expertise [needed]. . . . I think you need high salaries in order to attract the appropriate people.”¹⁴

Sen. Pete Domenici (R-NM) correctly pointed out to McAtee that Congress had given the corporation two conflicting goals: maximization of production while also requiring maximum technology diversity. Only Congress could do something like this. Such a dilemma did not make the job of achieving the goals any easier, but rather considerably more difficult.¹⁵

Referring to the list above, the last three hearings had been businesslike, conducted in a professional manner, with a seriousness of purpose and a good exchange of communication. The February 1981 hearing was chaired by Rep. Toby Moffett (D-CT), described by one writer as

¹³ *DOE Budget Review and Policy Implications*, Hearings Before the Subcommittee on Fossil and Synthetic Fuels of the Committee on Energy and Commerce, House of Representatives, Serial No. 97-6, March 19, 24, 25, 26, and May 6, 1981, 330. *Department of the Interior and Related Agencies Appropriations for 1982*, Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, Part 7, March 26, 1981, 66.

¹⁴ *Department of the Interior and Related Agencies Appropriations for 1982*, 61.

¹⁵ *Department of Energy Fiscal Year 1982 Authorization*, 611.

“the scrappy Lebanese Democrat from Connecticut.”¹⁶ This hearing was mean-spirited, acrimonious, vicious, demeaning, and filled with public grandstanding by Moffett. He used the salary issue as an excuse to attack the SFC and bludgeon McAtee into anger. It quickly became apparent that Moffett did not like the corporation and its employees, despite his “yea” vote on the ESA. McAtee has since stated that Moffett wanted a project constructed in his district and the jobs it would provide – he wanted some of that \$88 billion. Moffett felt that the SFC was ignoring Connecticut.¹⁷ According to staff attorney Edith Holleman, this perception on the part of McAtee is “totally untrue.”¹⁸

It had all started earlier with a letter, dated November 24, 1980, from Moffett as subcommittee chair, addressed to “John” and signed “Toby.” (Moffett had crossed out the formal salutation of “Chairman Sawhill” and written “John.” Moffett always did this with people he knew.) Like others, Moffett had read and heard about the large salaries SFC had been offering its officers. He wanted his subcommittee to examine the pay of McAtee (\$150,000), Haskell (\$140,000), and Harris (\$95,000), to be sure that “the enormous sums of federal monies authorized” by the act “are spent in a proper and effective manner.”¹⁹ Moffett wrote that while he did not question “the qualifications or the competence” of these individuals, he did consider “these salaries to be excessive and well above the level which should be paid by a government-funded operation.”²⁰ Moffett emphasized that the salaries of SFC officers were “more than double the salary of Cabinet officers.”²¹ Continuing, Moffett argued there appeared to be little

¹⁶ “Why Is Rep. Toby Moffett Saying Those Nasty Things About the SFC? Asks Rep. Wright,” *Energy Daily*, May 8, 1981, 3-4.

¹⁷ McAtee interview.

¹⁸ Communication from Edith Holleman to author, December 2012.

¹⁹ *Synthetic Fuels Oversight*, 144.

²⁰ *Ibid.*

²¹ *Ibid.*, 145. Emphasis by Moffett. The salaries for cabinet officers and other top government officials ranged from \$67,000 to \$69,000 per annum.

basis in fact for SFC to pay high salaries to attract qualified individuals to the corporation. He offered two examples of people employed by the federal government at the time the letter was written who had left highly lucrative law-firm partnerships to work for (a) President Carter with a salary of \$59,080 and (b) the Department of Energy at \$52,750. Moffett added two other individuals, one working at the Federal Deposit Insurance Corporation for \$52,500 and the other at the Pension Benefit Guaranty Corporation for \$50,112. At the end of the letter, the congressman attacked Sawhill: “Given appropriate leadership, I am confident that the Synthetic Fuels Corporation is equally capable of attracting well qualified people at comparable salaries [the ones that Moffett had provided as examples] to meet the challenges facing the Corporation in fostering a new energy industry.”²² To be sure that Sawhill sensed Moffett’s concern, Moffett argued that the corporation required the support of all sectors of the country, and that these SFC salary levels only “endangered” such support.²³

McAtee recalls that he and SFC employees had been working with Moffett’s staff, specifically subcommittee counsel Edith Holleman, to address the concerns raised in the letter. The communications had been cordial and forthcoming.²⁴

Since Sawhill had “resigned” and McAtee had been designated to act in case of Sawhill’s “absence,” McAtee went to Capitol Hill on Thursday, February 19, 1981, to testify before Moffett’s subcommittee in a three-hour nonstop inquisition. McAtee approached his job with the congressional mandate of urgency clearly in mind – time was short and of the essence – as well as an investment banker’s commitment to act and not dither. The country needed to get this industry up and running as soon as possible, as both the nation’s security and economy demanded it.

²² *Ibid.*

²³ *Ibid.*

²⁴ McAtee interview.

Members in the hearing focused on compensation levels received by the officers. McAtee bore the brunt of the criticism and responded accordingly. The hearing rapidly deteriorated into a yelling contest. The committee could not understand how McAtee could justify his \$150,000 compensation, compared with the annual \$69,630 salary of Treasury Secretary Donald Regan, who was the former CEO of Merrill Lynch. Why should SFC officials be paid more than twice the salary of cabinet members? How could McAtee justify these levels of compensation when President Reagan had very recently referred to “sacrifices, tightening the belt, cutting back on food stamps, and providing a variety of people in the low-income brackets with severe cutbacks in a wide range of programs?”²⁵ McAtee’s answer:

I cannot judge what I am worth. However, I will tell you that to come down here at this outrageously high salary of \$150,000 is as a percentage of sacrifice probably greater than the people who are making sacrifices that you are pointing out. It is less than half of my last year’s income, and probably it is a smaller percentage of that which would be projected for future years.

It is a major sacrifice to my family. I live in Connecticut. My family will not move. It is a royal pain in the neck.

But it is worth it.²⁶

Later in the hearing, McAtee, with levity and a sense of humor but with a seriousness of purpose, added in response to a question about sacrifices and whether he had violated the act:

I can tell you that taking this job which I love, because I am dedicated to this cause, is a substantial sacrifice. . . .

I will take into consideration whether I personally should waive the excess. I would have anyway. . . . Whether that has involved a violation of law [salaries above government levels] is something else again. I do not think that it is a violation of law.

I am with you 2 billion percent [in making sacrifices]. . . . but I do not think what went on . . . can fairly be categorized as a violation of law.²⁷

²⁵ *Synthetic Fuels Corporation Oversight*, 31.

²⁶ *Ibid.*

²⁷ *Ibid.*, 46-47.

Moffett had voted in favor of creating the SFC. The Democrats almost uniformly supported the creation of the corporation proposed by Carter. The nation was in the middle of the Iranian hostage crisis and a related oil/gasoline shortage which ran up prices at the pump. The public *demand*ed that something be done – anything. There were lines at gasoline stations and this did not please Americans: the response by Carter and Congress – investment in synthetic fuels. However, by the time that Reagan assumed office, the fuel crisis had eased, and the price of gasoline had dropped significantly. Synthetic fuels could not be produced at a competitive price, and it turned out that the technology was immature. These technological shortcomings led the staff of Moffett’s committee, and others, to conclude that the public investment to develop synthetic fuels would be enormous, and they would not be cost-competitive for decades, compared with pumping oil out of the ground. Moffett’s staff convinced him that synthetic fuels would become cost-competitive when there was an actual – as opposed to a political – shortage of oil. At this point, his staff argued, the energy industry would make the investment itself because it would be in its interest to do so. Additionally, because of technological difficulties, it appeared that billions of dollars, if not more, in subsidies would be necessary to keep the SFC’s projects alive. The SFC, to Moffett’s staff, looked like a bottomless pit of unending subsidies for very little in return. The staff knew from experience that a subsidy, once given, was almost impossible to remove. There were also environmental issues, particularly with oil shale development. The financial argument was much stronger than the environmental one at that time, as well as more appealing to the Republicans.²⁸

In a recent conversation, Moffett indicated that he changed his mind about the corporation as a result of his staff. They had argued against it and convinced Moffett of the

²⁸ Email from Edith Holleman to the author, April 18, 2012.

inherent dangers of “socialized free enterprise,” and that the SFC was not the best vehicle for energy independence.²⁹ Moffett used the salary issue to attack the corporation.

Moffett’s subcommittee prepared a report on the hearing that he had held and related documents.³⁰ The Committee publication was issued in late May 1981 and, according to press reports, mostly written by subcommittee counsel Edith Holleman. The publication of this report ruffled the feathers of Rep. Jim Wright (D-TX), House majority leader, and “the synthetic fuels industry’s most influential champion in the House.”³¹ Wright, having been provided a draft copy, became so concerned by the report that he tried to have the Democratic committee members join the Republican committee members to reject the report, either in whole or in part. Wright knew that the release of the report would cause adverse publicity for the SFC at a time when the Reagan administration was reevaluating the future of the federal synthetic fuels program. It would provide license to the administration to cut off funding or severely restrict the SFC activities.³²

Due to the tone and direction of Moffett’s questioning, McAtee became concerned that Congress might repeal or amend the compensation section of the law. He believed the future board needed the flexibility to pay qualified and capable professionals above government compensation levels to attract them to the SFC. These individuals were a prerequisite to do the job mandated by the act and subsequently direct it out of business. The corporation had a limited life of twelve years in which to accomplish its goals. To reiterate, Congress **did not** envision the Synthetic Fuels Corporation becoming another federal bureaucracy. Specifically, Congress determined that attainment of the production goals required a commitment by an independent federal entity of limited duration to facilitate the “expeditious achievement of synthetic fuel

²⁹ Author phone interview with Rep. Toby Moffett (D-CT), August 9, 2011.

³⁰ *Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation*, House Report No. 97-123, May 28, 1981.

³¹ “Battle Looms on Synfuels Corp. Report,” *Oil Daily*, May 8, 1981, 1-2.

³² *Ibid.*

production from domestic resources.”³³ The *Energy Security Act Conference Report* stated: “In order to expedite the achievement of the highly important national objectives . . . and obviate the delays that often beset programs administered by the departments and agencies of the Executive Branch [specifically DOE], this entity [the SFC] is established free of many of the constraints placed on such departments and agencies.”³⁴

McAtee stressed that he wanted to focus on his job at the SFC and not on his salary. In fact, he admitted he did not see what was wrong with his pay level. His interpretation of the act was that it provided for the salaries in question and if Congress had a problem with that, then Congress could change the legislation.³⁵ The committee members and McAtee were talking past each other. Neither heard what the other was saying. At one point, McAtee testified that he did not believe Congress intended a hiatus in the leadership and work of the corporation. In other words, the SFC must continue on a fast-track mission, as the urgency was too great. McAtee was prepared to act with or without a board.

At the end of the hearing, with tempers frayed, the committee asked McAtee for information that necessitated a legal opinion. McAtee responded that he would get to address the question, but that doing so would involve engaging the services of an outside law firm. The SFC staff was busy working on solicitations and did not have the time to commit to addressing Moffett’s concern, thereby requiring the services and fees of an outside law firm. Moffett replied, “What do you mean spend the money?” They exchanged ideas, with Moffett and McAtee agreeing that an in-house analysis, not entailing any outside expenses, would suffice.³⁶

³³ *Energy Security Act Conference Report*, Report No. 96-824, 186.

³⁴ *Ibid.*, 203.

³⁵ *Synthetic Fuels Corporation Oversight*, 33.

³⁶ *Ibid.*, 142.

But wait – this was not the end, by any means. Holleman, counsel to the subcommittee, asked McAtee for additional information, and McAtee replied, “Put it [Holleman’s inquiry] in your memo.” Moffett, having had about all he could stand, said, “Wait 1 second. I am going to ask that you show a little more respect for the subcommittee. . . . I am going to ask that you do not interrupt the Chair. You do not dictate to the staff with statements like, ‘Put it in your memo.’”³⁷ As counsel, Holleman was sitting on the dais with the subcommittee members. McAtee later stated that he had not meant any slight to the staff. He had been communicating with Holleman prior to the hearing on a professional and cordial basis. He believed that Moffett had overreacted.³⁸ In a recent conversation, Holleman related that Moffett frequently let her prepare questions for him, and at times, let her ask questions of witnesses. Often, witnesses exhibited impatience at this practice, and McAtee was no different. She had become used to such reactions.³⁹

News of the SFC salaries and Moffett’s hearing quickly spread throughout the country. *Chicago Sun-Times* columnist Mike Royko penned a scathing satire of the hearing in his February 25, 1980, column titled “Reagan aide’s troubles, \$150,000 sacrifice.” Referring to McAtee as a “Reagan aide” undoubtedly caused consternation at the White House. Acknowledging that it’s tough to scrape by on \$10,000 to \$30,000 a year, Royko wrote that with McAtee’s testimony it now appeared “that the \$150,000-a-year family might be the country’s best concealed pocket of misery.”⁴⁰ Royko mocked McAtee for referring to his salary as “outrageous.” Royko took McAtee’s comments and penned an artfully worded satirical essay. Being “concerned” about the sacrifice McAtee was making to work at the SFC in DC, Royko offered eight suggestions to help

³⁷ *Ibid.*

³⁸ McAtee interview.

³⁹ Author phone interview with Edith Holleman on August 4, 2011.

⁴⁰ Mike Royko, “Reagan’s Aide’s Troubles, \$150,000 Sacrifice,” *Chicago Sun-Times*, February 25, 1981, 2.

McAtee get by: (1) Dry clean his clothes rather than getting new ones, (2) “ask the missus if she can stretch an extra winter’s wear out of the mink coat,” (3) ask the kids to get another season out of the ski togs, (4) brown bag his lunch, (5) select and attend only those DC parties that have a sit-down dinner or a buffet and quietly slip some food into his pockets for a midnight snack or breakfast, (6) cut back on private club memberships, (7) form a car pool, and (8) do not give to his alma mater but instead write them that he is short this lifetime as he is making only \$150,000 per year.⁴¹ If all else fails, Royko wrote, he knew that generous Chicagoans would send McAtee their food stamps.⁴²

McAtee had attempted to add levity to a hearing that had quickly developed into a shouting match. The Synfuels Corporation had followed the law. The officers wanted to do their jobs as professionally and timely as possible and then return to the private sector. The allure was to do something for the country, to help reduce the nation’s addiction to imported crude oil, to get in on the ground floor of an exciting, and brand-new quasi-government entity, and to build something from scratch. In late 1980 and early 1981, the United States Synthetic Fuels Corporation was a stimulating place to work, with an atmosphere much like the dawn of FDR’s New Deal. The early SFC employees had an opportunity to be present at the creation.⁴³

On May 28, 1981, the House Government Oversight Committee issued its report, *Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation*, based on a five-month investigation and the earlier one-day hearing.⁴⁴ This publication began with a background of the legislation and its congressional approval, reading in part, “Congress overwhelmingly endorsed the legislation creating the Synthetic Fuels Corporation, a unique

⁴¹ *Ibid.*

⁴² *Ibid.*

⁴³ Author interview with McAtee. Author interview with Saint de Phalle.

⁴⁴ *Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation*, May 28, 1981, House Report No. 97-123.

hybrid government entity free of a number of the restraints and controls normally imposed upon a government agency”⁴⁵ The Committee considered it “a risky, untried experiment. Congress nonetheless determined it was necessary to meet the perceived energy crisis.”⁴⁶ Prior to approval of the act, Congress had extended deliberations over the nature of this new undertaking. As finally approved, the corporation “unquestionably remained a very free-wheeling special federal entity.”⁴⁷ However, Congress, as would become apparent, did not fully grasp what it had authorized.

Moffett’s investigation was “triggered by – but not limited to – the initial personnel decisions of the [SFC] board.”⁴⁸ The Committee interpreted the board personnel action as “failing to abide by the stated Congressional intent that the SFC officer and employee compensation be held ‘to the maximum extent feasible’ to comparable federal pay scales.”⁴⁹ It’s one thing to write into the legislation flexibility to pay salaries necessary to attract the caliber of talent needed to meet the act’s mandated goals, and entirely another to see that compensation in print. To pay individuals more than what congressional members make, sometimes double, was a situation Congress could not countenance.

The Committee report provided a road map of the board’s early actions. Congressional members exhibited their displeasure about the SFC’s first months, focusing on the excessive paychecks, and wrote a letter, dated February 23, 1981, to President Reagan asking him to rescind those salaries. Responding quickly two days later, Reagan sent a memorandum to McAtee that

⁴⁵ *Ibid.*, 2.

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*, 3-4.

⁴⁸ *Ibid.*, 9.

⁴⁹ *Ibid.*

“specifically disapproved” of the compensation, terms, benefits, and conditions of employment of the officers.⁵⁰

Once McAtee received this memorandum from the president disapproving of the salaries, the first move by SFC officers was to give the memo to the outside law firm of Arnold & Porter. In early March 1981, the firm provided an opinion letter to SFC officers stating that while the president had the right to review salaries, that prerogative did not extend to any nonsalary compensation such as long-term employment commitments, the retirement program, or officer termination benefits.⁵¹

Nevertheless, five of the six officers in question who were receiving salaries in excess of \$69,630 signed a statement stating that in order to “be respectful of and responsive to President Reagan’s” February 25, 1981, memo to McAtee, they would, as of February 25, 1981, accept lowered salaries of \$69,630 each, “pending a review by the incoming Board of Directors of the appropriate level.”⁵² The one officer who refused to sign the letter, vice president of planning, A. Cheves Haskell, continued to receive his \$140,000 salary.⁵³

The Arnold & Porter report provided a detailed comparison of SFC with Consolidated Rail Corporation, Communications Satellite Corporation, Student Loan Marketing Association, Federal National Mortgage Association, Corporation for Public Broadcasting, Federal Home Loan Mortgage Corporation, National Corporation for Housing Partnerships, National Railroad Passengers Corporation, US Railway Association, and the US Postal Service.⁵⁴ The Committee noted that the SFC was “not like other quasi-governmental corporations such as Conrail, Comsat,

⁵⁰ *Ibid.*, 39-40.

⁵¹ *Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation*, May 28, 1981, House Report No. 97-123.

⁵² *Ibid.*, 43.

⁵³ *Ibid.*

⁵⁴ *Ibid.*, 105-107.

the Student Loan Marketing Association or the Federal National Mortgage Association.”⁵⁵ The Committee members found the most significant differences to be that the SFC had no stockholders, no private funds were involved, the corporation was not-for-profit, and its directors were all appointed by the president with Senate confirmation.

Congress had mandated the following restrictions on the corporation. No other quasi-government corporation was so controlled.

1. The SFC board must hold its meetings in public.
2. The compensation of the board must be set by the president.
3. The board and the president must approve any officer and employee compensation exceeding specified federal levels.
4. The number of full-time professional employees must not exceed three hundred and names and compensation of persons employed or under contract at rates exceeding \$30,000 annually must be revealed.
5. The federal financial disclosure provisions would apply to officers and employees.
6. The Davis-Bacon Act would be applicable.
7. An inspector general with wide-ranging powers would be appointed to make recommendations to the SFC and Congress.
8. The basic provisions of the Freedom of Information Act would apply to the SFC.⁵⁶

Congress did exclude the corporation from the Administrative Procedure Act (APA), which establishes the process that federal and independent agencies must use to implement rulemaking and standards setting, and to reach other administrative-level decisions. The result of this omission was that the SFC is not required to establish or follow any defined rules in carrying out its business.⁵⁷

The Committee struggled over the exact status of the SFC. Was it a government agency or not? They argued that it was “essentially a government agency.”⁵⁸ The report enumerated its operational powers to prove this point:

⁵⁵ *Ibid.*, 5.

⁵⁶ *Ibid.*, 5-6.

⁵⁷ *Ibid.*, 6.

⁵⁸ *Ibid.*, 7.

- A. It has the right to use the US mail on the same terms as other government agencies.
- B. It has the right of eminent domain.
- C. It can be represented by the attorney general of the United States.
- D. It can obtain information from other federal agencies.
- E. It must publish its solicitations in the Federal Register.
- F. Ownership rights to patents, royalties, and inventions are vested in the US government.
- G. When building its own construction projects, the SFC is deemed to be a federal agency.
- H. Its financial obligations are backed by the full faith and credit of the US government.⁵⁹

The Committee members had strong words for the SFC and its people. The former chair (Sawhill) and the board were “lax in their adherence” to the act, both in spirit and in letter.⁶⁰ The officers remaining, after Reagan had dismissed Sawhill and the board, continued this behavior pattern. Testimony at the hearing led the Committee to observe that these officers seemed to believe the SFC mission was of such importance to the country that they (the officers) could at their discretion dispense with compliance of the law to get the SFC moving on a path to meet the statutory goals.⁶¹ Specifically, members argued that by his remarks before the subcommittee, McAtee suggested that he considered himself “empowered to exercise his own discretion in deciding when the President had tarried too long and jeopardized the synfuels fast track.”⁶² Should the process become “unacceptably” slow, McAtee would make decisions about which proposals would receive “SFC financing and on what terms.”⁶³ McAtee interpreted the intent of Congress promptly to get this corporation up and running, as time was short before another energy crisis developed and the nation must be prepared.

Trust became the major focus and the Committee expressed serious concerns about whether early SFC actions had permanently tainted the corporation. Congress had placed great

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*, 10.

⁶¹ *Ibid.*

⁶² *Ibid.*, 58.

⁶³ *Ibid.*

reliance and faith in the few controls contained in the act, as well as in the integrity and probity of those who would lead the SFC.

The analysis by the Committee focused on five areas:

1. The compensation packages for the SFC board, officers, and employees.
2. The procedures surrounding the first solicitation of synthetic fuels projects.
3. The assumption of certain powers by the general counsel upon resignation of the chair and board.
4. SFC contracting practices.
5. SFC implementation of the act's provisions regarding public access to information about SFC activities.⁶⁴

The compensation levels, listed first, started the process that caused the other four items to be investigated. Members of Congress did not want anyone working for the federal government to make more than they did. Further, despite the legislation, the SFC was not managed by a board of seven but rather a board consisting of 542 members – 435 representatives, 100 senators, and then the seven board members. Most members of Congress felt entitled to a say in the disposition of the \$88 billion.

The report spent a majority of the time examining the salary issue and any legislation relating to it. The act's operative section was 117(b) (2):

The Board of directors shall fix the compensation of individual officer positions and categories of other employees If the Board of Directors determines it is necessary to fix the compensation of any officer position or category of other positions at a rate in excess [of the rates in the federal Senior Executive Level], the Board may transmit to the President its [salary] recommendations Such recommendations shall become effective . . . unless the President has specifically disapproved such recommendation[s] and notified the Board of Directors.⁶⁵

Attempting to understand this section, the Committee referenced the Conference Report that accompanied the legislation:

⁶⁴ *Ibid.*, 10-11.

⁶⁵ *Energy Security Act*, Section 117(b) (2).

The Conferees intend that, to the maximum extent practicable, the rates of compensation of the Corporation's officers and employees will be fixed within the range of compensation in effect for Federal officers and employees under the Executive Schedule and General Schedule.⁶⁶

The subcommittee members concluded that Congress meant for a government corporation with no outside funding sources or stockholders to keep a "tight rein on the compensation of both its officers and employees," and that such salaries would not exceed the Senior Executive Service level (i.e., cabinet).⁶⁷ Congress had been told that to achieve the corporation's mandated goals, SFC must have the flexibility to pay private market salaries to attract the required talent. After all, who would go to work for a company with a limited life of only twelve years?

The Committee also investigated other early actions of the Synthetic Fuels Corporation. Among these was implementation of the first solicitation for projects by the corporation. The issue was that subcommittee members felt the SFC had not followed the law in issuing the call, which was too short and easy to comply with compared to other federal solicitations. Again, disagreement was over matters of urgency and speed.

The Committee focused on McAtee's assumption of the SFC chair's role and powers. Sawhill had met with President-elect Reagan on Friday, January 9, 1981, and given the president-elect a letter offering the entire board's resignation.⁶⁸ Members noted that on Monday, January 12, 1981, Sawhill had assigned to McAtee the right to act as chair in the event of Sawhill's absence.⁶⁹ Committee members argued that the timing of this action seemed suspicious since Sawhill had that authority when the bylaws had been approved on October 8, 1980, yet had only

⁶⁶ *Oversight of the Energy Security Act*, House Report 97-123, 14-15.

⁶⁷ *Ibid.*, 15.

⁶⁸ *Ibid.*, 66.

⁶⁹ *Ibid.*

exercised it “three days *after* . . . Sawhill offered his resignation to President-elect Reagan.”⁷⁰

The Committee’s argument was that if President Reagan had intended for the SFC to continue business as usual, he would have left the old board in place until such time as he had nominated replacements.

The Committee found that the SFC mission had been delayed and remedial actions would be required by the new board (yet to be nominated). “The damage caused by the ill-advised actions of the former board and the officers of the Synthetic Fuels Corporation is not irreparable, however.”⁷¹ The report added, “The efficient and effective development of a synthetic fuels industry, which is the task of the Synthetic Fuels Corporation, is one of the most difficult mandates ever given to a Congressionally created body.”⁷² To further confuse the situation, members admitted that as soon as the ESA was passed, the production goals established in the act “could not be achieved,” and that the path of the SFC had not been an easy one and never would be.⁷³ They urged the new directors, along with the officers and employees, to become “fully aware of their responsibility to Congress and the American public to carry out the Energy Security Act in an open, fair and public manner to the fullest of their ability.”⁷⁴

Not even a year had passed since SFC enactment before it was becoming a target of Congressional investigations and endless hearings.

In mid-February 1981, the *Dallas Morning News* reported that Reagan administration officials said it was 80 percent likely that Edward Noble – Tulsa oil man, Atlanta real-estate developer, Heritage Foundation supporter, and transition team head – was to be nominated SFC chair, “one of the highest paying jobs in the federal government,” as well as being a “coveted

⁷⁰ *Ibid.* Emphasis in the original.

⁷¹ *Ibid.*, 96.

⁷² *Ibid.*

⁷³ *Ibid.*

⁷⁴ *Ibid.*, 97.

post.”⁷⁵ The article mentioned that Lane Kirkland, an original board member, was expected to be reappointed, but this action did not happen. Further, the reporter stated that Vetter, energy advisor to Texas Governor Clements, would not be appointed.⁷⁶

On April 2, 1981, President Reagan announced his intention to nominate Noble as SFC board chair.⁷⁷ Interestingly, on the day he was nominated, Noble commented to the *Atlanta Constitution* that he was not concerned about his salary, “[b]ut I consider salaries as a way to attract good people.” In the *Tulsa World*, Noble stated, “The salaries for the vice presidents should . . . be reduced, as long as qualified people from private industry could be attracted to the corporation.” Noble had run unsuccessfully for one of the U.S. Senate seats from Oklahoma in 1980 and, during the campaign, had criticized the corporation: “I am opposed to another attempt . . . to waste another \$20 billion a year of taxpayers’ money supporting, for the most part, inefficient methods.” He argued in favor of tax incentives for the free enterprise system because companies that gambled on synfuels would lose their money and not the taxpayers.⁷⁸ With the *Tulsa World* salary comments, it is apparent that he had yet to talk with the White House. Noble emphatically remarked that he was “a private sector advocate and I believe in the free market place.”⁷⁹ The *Tulsa World* praised Noble’s nomination opining that Reagan had “found a very able man to run a *very dubious* Government project,” (emphasis added) and that even though it was easy to acknowledge Noble’s abilities, it was “difficult to find many nice things to say about the Synthetic Fuels Corp., a hastily-contrived Government monster conceived in panic by the

⁷⁵ Carl P. Leubsdorf, “Tulsa Oilman Likely for Post,” *Dallas Morning News*, February 15, 1981, 1A. “Tulsa Oilman Is in Line To Head Synfuels Corp.” *Washington Post*, February 17, 1981, A3.

⁷⁶ Leubsdorf, *ibid*.

⁷⁷ “Nomination of Edward F. Noble to Be Chairman of the Board of Directors of the United States Synthetic Fuels Corporation,” April 2, 1981. www.presidency.ucsb.edu/ws/?pid=43636

⁷⁸ “Tulsa Oilman Noble Named Synfuels Head,” *Tulsa Tribune*, April 3, 1981, 1D.

⁷⁹ John Maynard, *Atlanta Constitution*, April 3, 1981, 16-D. “Noble Nominated as Synfuels Head,” *Tulsa World*, April 3, 1981, 1-A.

Carter administration on the proposition that Bigger Government is the answer to energy problems.”⁸⁰ Noble’s résumé consisted of: president and board member of Noble Affiliates Inc., (oil and gas exploration and contract drilling), owner of Tulsa Auto-Crane Co., director of Noble Inns Corporation, and developer of the Lenox Square Shopping Center in Atlanta, Georgia. Experience in government or construction of enormously complex and expensive plants was severely lacking.⁸¹

Reagan nominated Robert A. G. Monks (chair of the board of the Boston Co., Maine), Victor Schroeder (Atlanta real-estate developer and Noble’s partner), V.M. Thompson, Jr. (Noble’s friend, and chair and CEO of Utica Bankshares of Tulsa), and C. Howard Wilkins (of Wichita, Kansas, and CEO of venture capital firm Maverick) on May 8, 1981.⁸² The *Washington Post* reported that two other potential candidates were Robert Six, chair of Continental Airlines, and Donald Santarelli, a Washington attorney.⁸³ Reagan did not nominate Six, but he did nominate Santarelli on June 5, 1981, to the SFC board.⁸⁴ No reason has been found as to why Six was eliminated. Santarelli’s nomination was delayed due to the actions of Republican senators from Western states who insisted that “Westerners should be picked for the last seats.”⁸⁵

Some critics questioned whether the Reagan nominees had the stature and appropriate business experience that would qualify them to undertake such an ambitious project. A strong argument could be made that the Synfuels Corporation was not a high priority – or even a priority – for Reagan based on the overall caliber of these nominees, the time it took Reagan to nominate

⁸⁰ “New Boss for Synfuel,” *Tulsa World*, April 4, 1981, 16-A

⁸¹ *Tulsa Tribune*, April 3, 1981, 1D, 5D.

⁸² “Nomination of Four Members of the Board of Directors of the United States Synthetic Fuels Corporation,” May 8, 1981. www.presidency.ucsb.edu/ws/?pid=43794

⁸³ “Executive Notes,” *Washington Post*, May 9, 1981, A2.

⁸⁴ “Nomination of Donald Eugene Santarelli to Be a Member of the Board of Directors of the United States Synthetic Fuels Corporation,” June 5, 1981. www.ucsb.edu/ws/?pid=43906

⁸⁵ *Congressional Quarterly*, 97th Congress, vol. 37, 1st Session . . . 1981, 1982, 459. Nothing is mentioned about the elimination of Six.

them, and his delay in declaring the SFC operational. As Robert Hershey of the *New York Times* observed, “The Reagan Administration seems to have become almost casual about synthetic fuels”⁸⁶ A member of the SFC/Reagan transition team commented that the White House had no use for the SFC organization from the outset, but political necessities kept the corporation lingering until 1986.⁸⁷ It appears that Reagan used the SFC appointments to reward his supporters without regard to their qualifications. *Prima facie* evidence occurred with the nomination of former Rep. Tom Corcoran (R-IL) to the board. Corcoran had lost a primary challenge to Sen. Charles Percy (R-IL) and could not run for another term in the House of Representatives. Once confirmed, the new position of vice chair was created with an annual salary of \$83,300.⁸⁸ Reagan declared the SFC operational on February 8, 1982 – 589 days after it was signed into law. Members of the ESA conference committee expected it to be operational within nine months of enactment (180 days), and not later than fifteen months after enactment (450 days).

The Senate Committee on Energy and Natural Resources held Noble’s confirmation hearing on Wednesday, May 13, 1981. Noble testified about the importance of developing crude oil from synthetics, while not emphasizing synthetic gas. Noble believed that the nation possessed sufficient natural gas reserves, but was lacking in supplies of crude oil, thus explaining the attention to synthetic crude oil. Noble stated that the nation was “importing almost half of [its] petroleum needs,” and that the SFC was “the largest investment bank or venture capital corporation ever conceived.”⁸⁹ With the SFC as a catalyst, the United States would be able to

⁸⁶ Robert Hershey, *New York Times*, May 12, 1981, D1.

⁸⁷ Author phone interview with Susan Roberts Battarbee, November 4, 1999.

⁸⁸ Kenneth Noble, “Washington Watch,” *New York Times*, December 1984, D2. “Synthetic Fuels Post,” *New York Times*, December 15, 1984, 41.

⁸⁹ *Hearing Before the Committee on Energy and Natural Resources*, United States Senate, Ninety-Seventh Congress, First Session, May 13, 1981, Publication No. 97-16, 20, 14.

develop a synthetic fuels industry that would in turn lessen the country's "dangerous dependence on foreign oil," thereby making a "significant contribution toward national energy security."⁹⁰ He promised the senators that the Synthetic Fuels Corporation would "have an effective, lean, competent, project oriented organization."⁹¹ Noble said he would have three initial policies while pursuing the overall ESA production goals: (1) communicate effectively with the industry, Congress, the administration, state and local authorities, and the public, (2) keep administration costs to a minimum, consistent with the act, and (3) insure that the financial, technical, and environmental variables are equitably considered in the project review process.⁹² Noble would "adhere to the philosophy of the President that currently viable commercial ventures should be left in the private sector."⁹³ The committee chair, Sen. James McClure (R-ID), commented that there had never been a similar action whereby Congress had "so openly set aside such a large sum of money with such little congressional oversight embodied in the legislation," yet McClure cautioned Noble that it may not "remain as open-ended and free as it is now."⁹⁴

Attempting to appease the anger that Congress and the administration had over the high salaries granted by Carter, Noble offered to work the first two years of his seven-year term for \$1 per year.⁹⁵ Noble's tone at his confirmation hearing did not impart the same sense of urgency that had been exhibited in either Sawill's confirmation hearing or by McAtee at his "inquisition."

⁹⁰ *Ibid.*, 13.

⁹¹ *Ibid.*, 14.

⁹² *Ibid.*, 15.

⁹³ *Ibid.*, 14.

⁹⁴ *Ibid.*, 15.

⁹⁵ Annual reports of the United States Synthetic Fuels Corporation, fiscal years 1981-1985. In author's possession.

Noble testified that achieving the production goals of the act would be “hard,” and that the private sector had an important role to play following the initial start-up efforts of the corporation.⁹⁶

The Senate confirmed Noble as chair of the Synthetic Fuels Corporation on Thursday May 14, 1981. Sen. John Warner (R-VA) swore Noble in on Tuesday May 26, 1981. McAtee submitted his resignation on May 27, effective May 29. The vice president of finance/chief financial officer also submitted his resignation May 27, effective immediately. The vice president of projects resigned around this time as well.⁹⁷ The vice president for administration resigned effective June 24.⁹⁸ For all intents and purposes, the SFC decks had been cleared in anticipation of Noble and his team instituting a “change in focus at the troubled organization.”⁹⁹

On the day that Noble was sworn in as SFC chair, McAtee wrote a letter of congratulations. McAtee acknowledged the “enormity of the task” that lay ahead of him and wished him the best of success. Since Noble had expressed his intentions to have Schroeder as his number two officer, McAtee felt it best to resign to provide Noble a free hand to build his own management structure. In his last paragraph, McAtee outlined for the new chair what the SFC had been doing the past five months in preparation for the new board. These included:

- Developed proposed project selection criteria
- Developed proposed disclosure policies
- Analyzed and participated in the negotiations of DOE projects, as submitted and approved under the DPA “fast track” program (Colony, Union, and a very minor bit with Great Plains) that would be transferred to the corporation

⁹⁶ *Hearing Before the Committee on Energy and Natural Resources*, United States Senate, Ninety-Seventh Congress, First Session, May 13, 1981, Publication No. 97-16, 14, 18.

⁹⁷ Larry Lukens was the vice president of projects. He had been on special assignment to the SFC from the US Navy, where he was an active-duty lieutenant commander. When Noble assumed leadership of the SFC, Lukens informed Noble that he planned to retire upon completing twenty years of service in July 1981. Lukens asked if he could stay on at the SFC until that time, and Noble graciously consented. Larry Lukens comment, August 30, 2011.

⁹⁸ U.S. Synthetic Fuels Corporation Time Line, July 17, 1985, 18. In author’s possession.

⁹⁹ Joanne Omang, “Controversial Ex-Chief Quits Synfuels Unit,” *Washington Post*, May 29, 1981, A2.

- Analyzed the more than sixty proposals received as a result of the first solicitation
- Studied and analyzed the best ways to implement anticipated modifications in the solicitation process
- Within the restriction inherent in the transition phase, prepared for the implementation of the decisions of Noble and the new board.¹⁰⁰

McAtee assured Noble that he would be pleased to work with him in any manner for a smooth transition. Noble “reluctantly” accepted the resignation and thanked McAtee for his efforts in keeping the corporation on track and moving forward “during the very difficult period.” He took McAtee up on his offer to help make for a smooth transition by asking McAtee to “consult” with him until July 31, 1981.¹⁰¹

Santarelli, whom Reagan had nominated on June 5, 1981, withdrew his nomination on June 15, 1981, with no reason given.

By early 1982, SFC goals had shifted from achieving massive production to making a political point. Noble “just want[ed] to get enough plants started to demonstrate to [OPEC] that the technologies work[ed] and that the product won’t blow the U.S. bank book.”¹⁰²

Thus began the Noble Era. Would matters become any better? They could hardly get much worse.

¹⁰⁰ Letter from John McAtee to Edward Noble, May 26, 1981, National Archives, Synthetic Fuels Corporation, MA2 RG56, Acc. 56-8200064, vol. 5, 1 of 2.

¹⁰¹ Letter from Edward Noble to John McAtee, May 27, 1981, National Archives, Synthetic Fuels Corporation, MA2 RG56, Acc. 56-8200064, vol. 5, 1 of 2.

¹⁰² Joanne Omang, “The Synthetic Fuels Party Has Gone Flat,” *Washington Post*, February 7, 1982, A16.

Chapter 8: The Noble Era

President Reagan had issued his first National Energy Policy Plan in July 1981, titled: *Securing America's Energy Future*. The report addressed the efforts of the Carter administration by tartly reporting that its “regulatory emphasis was overwhelming” and “relied heavily on Federal intervention,” which was labeled as “sterile.” Government energy policy and planning were thought to be counterproductive because it lacked the insight and knowledge to guide energy policy, which Reagan believed should be determined by the market-place. The first principle of Carter’s April 1977 National Energy Plan’s advocated that “the energy problem can be effectively addressed only by a Government that accepts responsibility for dealing with it comprehensively.”¹ Carter wanted to extend the intrusiveness of federal authorities into decision making by private industry, private institutions, and private citizens. Reagan’s strategy moved to deemphasize and reduce government involvement in energy and as a policy issue. *Securing America's Energy Future* stated:

Public spending for energy-related purposes is secondary to ensuring that the private sector can respond to market realities. Even then, Federal spending should be considered only in those promising areas of energy production and use where the private sector is unlikely to invest. This will not stifle innovation. On the contrary, the history of venture capital shows that risk-taking will always be done privately when financial resources are available – in the hope of greater financial gains. The collective judgment of properly motivated technical innovators, businessmen, and consumers is generally superior to any form of centralized programming. In most cases, however, using public funds to subsidize either domestic energy production or conservation buys little additional security and only diverts capital, workers, and initiative from uses that contribute more to society and the economy. . . .

¹ *National Energy Plan*, April 1977, 26.

When individual choices are made with a maximum of personal understanding and a minimum of governmental restraints, the result is the most appropriate energy policy.²

Conservation and environmental issues were addressed. Conservation, as an energy resource, would be approached with the same strategy of market-oriented public policy as were other energy resources. Energy conservation occurred in response to various forces at work in the marketplace. Environmental concerns would have the same market-oriented approach. Reagan's national energy policy was committed to achieving an adequate supply of energy at reasonable costs with an environmentally acceptable mix of energy supplies, while minimizing federal control.

The Reagan plan commented on synthetic fuels in five paragraphs, almost a full 8 ½ x 11 page, out of a total of thirty-five pages. Within those five paragraphs, there were nine instances in which the terms "private investment," "private sector," "private investors," "private corporate planning," and "private enterprise" were used. The SFC was referenced as providing "potential support" through "minimal outlays." The growth climate of synthetic fuels will be provided by decontrol of fuel prices, revitalization of the economy, and removal of regulatory uncertainties, and not by any actions of the SFC.³ The Reagan plan sought to increase the influence of private market forces on the development and production of synthetic fuels. Furthermore, no accommodation was made to the Rockefeller Republicans (i.e., the moderate/liberal branch of the party). Noble had been put on notice that the White House emphasized the private sector over anything the SFC wanted to do.

In a relaxed and casual fashion, the Senate Energy and Natural Resources Committee held a confirmation hearing for Schroeder, Wilkins, Thompson, and Monks' nominations to the

² *Securing America's Energy Future: The National Energy Policy Plan*, July 1981, contained within *Reagan on Energy*. Lawrence S. Paulson (The Oil Daily: New York, 1981), 2, 3, 4.

³ *Securing America's Energy Future*, 2, 3, 11.

SFC board on Thursday, September 10, 1981. The Senate confirmed them the next day. On Wednesday, October 28, 1981, the four nominees were sworn into office. Immediately following this ceremony, the board met and elected officers: Schroeder as president and chief operating officer, Edward Cox (President Richard Nixon's son-in-law) as general counsel and secretary, Dwight Ink as vice president-administration and treasurer (effective November 9, 1981), and Charles Cowan as vice president-projects.⁴

If Noble did not get the message, he had another opportunity two years later in October 1983, when Reagan issued his second *National Energy Policy Plan*, in which he stated that the US energy situation was “significantly better than it was in 1981.” The 1983 issue made no reference to or mention of the SFC. There was continued emphasis on the idea to “minimize federal control and involvement” in the national energy policy. The record from the previous 1981 report demonstrated “clearly” that economic efficiency in achieving an adequate supply of energy at reasonable costs did not result from federal intervention and control. Government intervention in the free market did not work because it was incapable of dealing with all the various factors in a system as complex as the nation's energy. Government intervention created rigidities that prevented and discouraged free-market forces from having the flexibility either to respond to continuously changing conditions or to develop technological and economic breakthroughs.⁵

By the time the 1985 plan was published, Reagan would write that the state of our energy health was good and the future promising: Crude prices had declined, energy was being used

⁴ Ryan Lizza of the *New Yorker* writes that President Reagan “treated the recently disgraced Nixon with deference, which helped start Nixon's late-career return to respectability . . .” This “deference” certainly exhibited itself with the appointment of Edward Cox as SFC general counsel. Cox had interviewed extensively for a position in the Reagan administration. Ryan Lizza, “Let's Be Friends,” *New Yorker*, September 10, 2012, 55.

⁵ *The National Energy Policy Plan*, Department of Energy, October 1983, 1, 2.

more productively, and energy production was at an unprecedented height. This new health was a testament to the ingenuity and imagination of the American people and American businesses. Regulation had been reduced. Confidence was restored in the marketplace, rather than government, to make key economic decisions about energy. Conservation contributed much and would do more, but government outlays were not required and would hamper any conservation efforts. Compulsory efficiency standards were opposed. Energy and environmental goals could be met simultaneously, with minimal government intrusion. President Reagan expressed confidence that the American people had learned from the lessons of the past that government was the problem and not the solution – and that the citizens, the country’s technology, and free markets had met the energy challenges and successfully overcome them.⁶ No mention or reference was made in the report to either the SFC or synthetic fuels.

Before Reagan’s declaration of “operational” status for the SFC in February 1982, Noble provided his perspective on the current plans for the corporation. In an in-depth interview with Becky Tallent, a staff writer for the *Oklahoman*, Noble, demonstrating his reluctance, stated that his goal was to get the United States out of the synthetic fuels business: “Developing synthetic fuels technologies, getting the private sector to take over those technologies, and getting out of business is the philosophy behind” the SFC. Exposing as few of the taxpayers’ dollars as possible while proving the economic viability of synthetic fuels technologies represented his two major goals. To Noble, the term *synthetic fuels* were a misnomer because tar sands, coal, and oil shale are fossil fuels as well. Many of the technologies for converting these “other” fossil fuels had been known for years, but the country had not invested the capital to develop them. OPEC had the power, Noble admitted, to lower their prices for crude oil to the point of severely

⁶ *The National Energy Policy Plan*, Department of Energy, 1985, iv.

handicapping the development of a synthetic fuels industry, but that potential should not stop the building of this industry.⁷ Toward the end of the interview, Noble had an insightful observation:

I think Congress created this originally with a lot of concern for defense and national security; but a lot in haste also from gasoline lines which could have been that their own allocations had problems. We want to make this a responsible program.⁸

At the conclusion, he reiterated he wanted to structure the SFC in such a manner that it could prove the economic viability of synthetic fuels, and then the private sector could step in and continue without government assistance.⁹

Noble did not get support even for this limited vision.

The Heritage Foundation, a conservative think-tank to which Noble was a major financial supporter, argued persuasively over an extended period of time against the SFC and its mandate. Milton Copulos, policy analyst at Heritage, did not and could not support another government entity interfering with the private market: “It would appear . . . to make sense to eliminate the creation of yet another agency, and simply allow industry to develop synthetic fuels on its own.” Because the government-chartered corporation had no stockholders, nor any need to make a profit, the potential for bureaucratic abuse was considerable. By selecting some technologies over others, the SFC would be giving preferential treatment to those selected at the expense of others, when in fact the others might be better in the long-run. The corporation acted in place of the market selection process. Funded by the “windfall profits tax,” the industry would

⁷ Becky Tallent, “Ed Noble’s Goal: Get the U.S. Out of Synthetic Fuels Business,” *Oklahoman*, November 29, 1981, 40.

⁸ *Ibid.*

⁹ *Ibid.*

be in essence providing financing for its competition.¹⁰ The SFC put the federal government in direct competition with the private sector in producing energy and was “pre-emptive.”¹¹ Copulos summarized Heritage’s opposition this way:

In the final analysis, there is a certain irony to be found in the fact that the solution to an energy crisis largely created by federal red tape, and by federal departments, should be thought to be found in the creation of even more red tape and federal agencies. This irony is further enhanced by the fact that this proposal is coming at a time when there is a growing public antipathy towards the increasing growth of the federal government. It is perhaps an unconscious recognition of this irony which has led to the stiff opposition these programs have encountered in Congress this year [1979-80].¹²

Within the newly established Reagan administration, there was certainly “considerable sentiment to abolish the SFC.” Reagan was committed philosophically to open marketplace competition, free of federal interference, for all energy technologies. The massive SFC subsidies contradicted this basic principle. In addition, the financial assistance was specified for straightforward commercial ventures that should be permitted to stand or fall on merit. But, Reagan faced strong support for the SFC from powerful Senators Pete Domenici (R-NM) and James McClure (R-ID), both of whom helped draft the legislation.¹³

When Noble came to the SFC, he had already written the Transition Team report recommending immediate termination of the SFC. Heritage also had strong opposition to the corporation’s continued existence. Noble had candidly testified at his confirmation hearing that he had suggested SFC termination to Reagan because Noble had “the feeling that the Corporation had the potential for having a lot of mischief . . . and I [Noble] questioned the need of synthetic

¹⁰ Milton R. Copulos, “Synfuels: Approaches to Development,” *Heritage Foundation*, August 31, 1979, 10.

¹¹ Milton R. Copulos, “Energy Update,” *Heritage Foundation*, November 1, 1979, 8-9.

¹² *Ibid.*

¹³ Milton R. Copulos, “Reagan’s Fading Energy Agenda,” *Heritage Foundation*, 5-7

fuels very strongly.”¹⁴ When Reagan nominated him to the SFC board, Noble admitted that he had changed his mind.

Edith Holleman, counsel to Rep. Toby Moffett’s (D-CT) House Environment, Energy, and Natural Resources Subcommittee, was very involved and familiar with the corporation’s intricacies. She observed that Noble was a loyal Republican brought in by Reagan to shut down the SFC. Noble had no Washington or congressional experience, and as a result, he found it extremely difficult to work in the political environment. It literally made him sick, especially before any hearings on the Hill. He found that what presidents want often cannot be accomplished because Washington is full of many different power centers and voices. And the SFC, which had bipartisan support, was not important enough to Reagan – who was facing multiple serious economic and social problems – to waste much, if any, political capital on it.¹⁵

Ralph Bayrer, vice president of projects for the SFC, writes that Noble’s initial inclination was to shut the SFC down. However, after “being well briefed, he concluded that the country could benefit” from the SFC, and he decided to go against what he wrote in the transition report, the arguments by Heritage, Stockman’s forceful statements, and the policy of the White House.¹⁶ Noble decided to forge ahead with building the SFC. To that end, he, along with his staff, developed a plan and a time-table for the corporation to meet its objectives.

¹⁴ *Oversight of the U.S. Synthetic Fuels Corporation*, S. Hrg. 98-243, 6.

¹⁵ Email from Edith Holleman to author, July 23, 2012.

¹⁶ Memorandum to author from Ralph Bayrer, July 17, 2012.

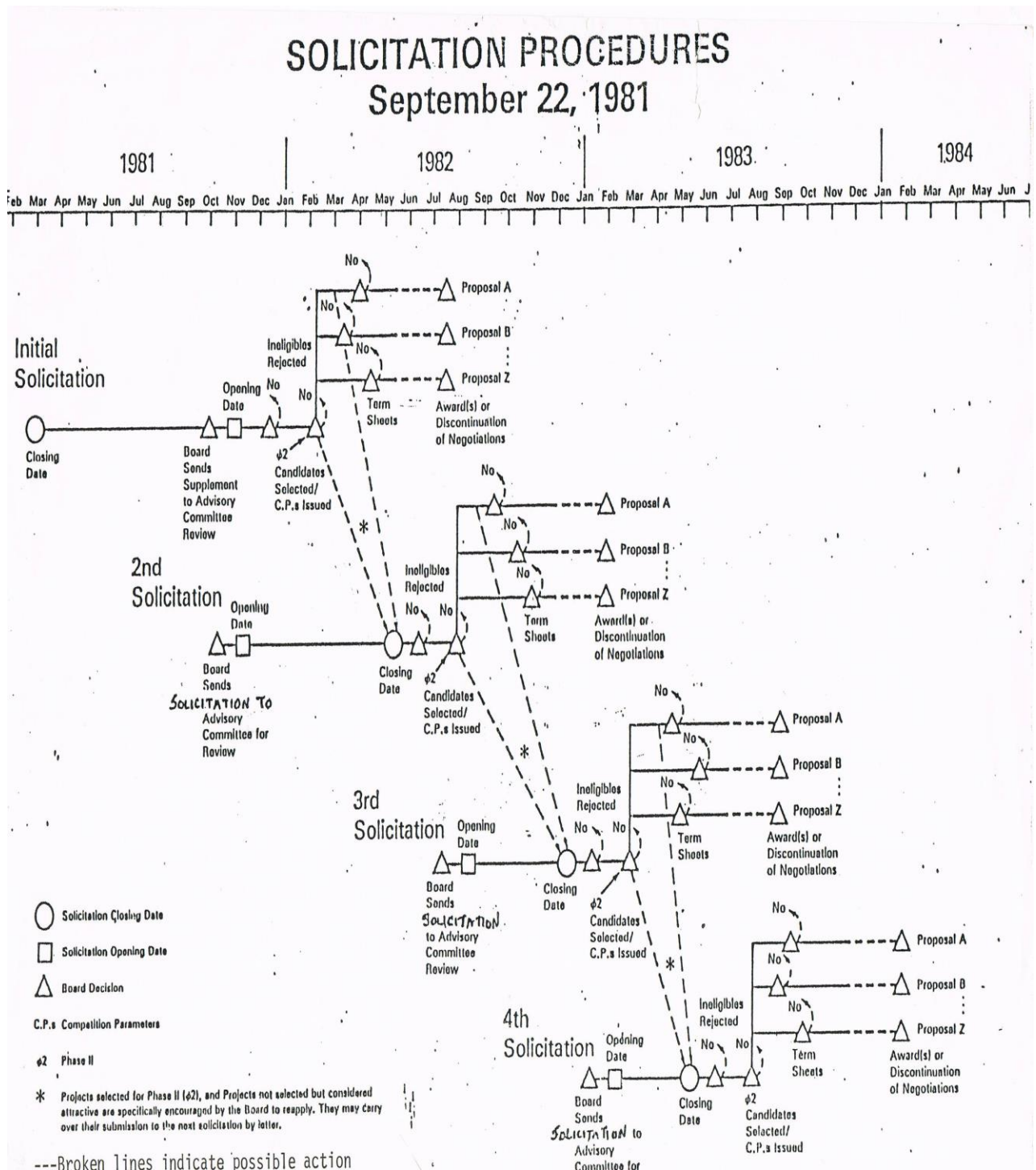


Figure 8.1. Synthetic Fuels Corporation Planning and Timetable Chart (author's possession)

Ralph Bayrer's views receive some support from Noble's later statements. Near the end of his tenure, Noble wrote an essay outlining his strategic vision for the SFC, "National Security Implications of the Development of Synthetic Fuels," which appeared in the 1985 issue of the *Oklahoma Law Review*. As head of the SFC transition team for the incoming Reagan administration, Noble wrote, he had recommended immediate abolishment of the corporation because "of the enormous potential for abuse in its unnecessarily large \$88 billion program." The team's report did outline "valid national security reasons" for the construction of probably a half-dozen synthetic fuels plants of a commercial nature, representing a scaled-back SFC. Asked by Reagan to be SFC chair, Noble said he agreed because he recognized the importance of the plants to national security. In Noble's opinion, this was also the "basic reason" the Reagan administration agreed to continue the program. The essay concluded by advocating for six plants that would provide technical and economic knowledge to reduce the lead times required in the building of synthetic fuels plants from eight to ten years down to three or four years. This effort would provide the country with a "permanent insurance policy against ever again being held hostage by foreign producers."¹⁷

Prior to the SFC being declared operational by Reagan, Noble held a briefing and retreat session on October 19 and 20, 1981, to educate the new board about the corporation's history and the issues that it confronted. The staff had prepared a three-volume compendium of materials. The sessions on both days lasted well over eight hours each, with staff members from all departments making presentations.

¹⁷ Edward E. Noble, "National Security Implications of the Development of Synthetic Fuels," *Oklahoma Law Journal*, vol. 38, 821-824.

In mid-January 1982, the chair held additional staff briefings for the board on strategic matters. In these meetings, the board learned that the costs of producing synthetic fuels were “highly uncertain” because:

- Basic engineering costs and performance data were uncertain
- Pioneer plants encountered unexpected and unanticipated problems
- Environmental/socioeconomic factors were unpredictable
- Tax and financing details were undefined and variable.¹⁸

Based on oil prices at the time and lacking financial assistance, none of the potential projects for synthetic fuels appeared competitive. The primary factor impacting prices for synfuels was world oil prices. Synthetic fuels investments, as of the January 1982 date, did not appear to yield an adequate rate of return on investment.¹⁹

The briefing addressed the SFC Operational Objectives by assisting the private sector, via the federal government, in establishing a commercially viable synthetic fuels industry. Market forces ordinarily were the best determinants of the rate and direction of investment; however, the special needs for synfuels suggested a more active role for the government. These positive features included reduced crude oil imports beyond economic returns generated to project sponsors, “insurance” to protect the country from unnecessary, unexpected, or manipulated jumps in crude oil prices, mitigation of governmental risks to synthetic fuels projects, and reduction of risks associated with pioneer projects. The corporation would be able to assist by providing a premium price for synfuels to reflect the national benefits gained from import reduction.²⁰

Noble and the board quickly discerned the attitude of the Reagan administration toward the corporation and the difficulty of their task during a presentation made by Secretary of Energy

¹⁸ “Summary Version, U.S. Synthetic Fuels Corporation, Staff Briefing for the Board on Strategic Matters, January 18, 1982,” National Archives 2, RG56, Acc. 56-82-0064.

¹⁹ *Ibid.*

²⁰ *Ibid.*

James Edwards at the first board meeting in December 1981. The emphasis by Edwards was on the private sector making the investment choices and decisions, not the SFC or federal government, which were to get out of the way as soon as possible.²¹ The DOE attached importance to the SFC mission, the critical component of which was “to provide American industry with the opportunity of obtaining a broad base of early commercial production experience in synthetic fuels.” This goal would help industry improve the capabilities and posture of the nation to respond to changing prices and circumstances in the world market. “The importance of the information – learning – know-how obtained through . . . initial production efforts cannot be underestimated. It is essential if we [the United States] are to have a strong and vital synthetic fuels industry based upon private sector initiative and investment.” Private investors and American industry would be able “to make informed decisions on when to invest and on which resources and synthetic fuel technologies constitute the best investment.”

With five board members confirmed and sworn in, the corporation waited for the president to declare it “operational.” Finally, on Monday, February 8, 1982, almost twenty months after the SFC was created by Congress to manage one of the government’s largest energy programs, President Reagan did so.²² “[H]aving determined that the United States Synthetic Fuels Corporation is established and fully operational” as defined by statute, he issued Executive Order 12346.²³ This action ended months of speculation about what the administration planned for the corporation. Even though “open for business,” the SFC experienced an identity crisis, as Noble received conflicting signals from the White House on whether to stop, start, move forward,

²¹ Minutes of a Board Meeting of the Board of Directors of the United States Synthetic Fuels Corporation, December 11, 1981. National Archives Two, RG56, Acc. 056-86-0064, vol. 4.

²² “Synthetic Fuels Corp. Officially Operational,” *Oklahoman*, February 10, 1982, 57.

²³ Ronald Reagan, “Executive Order 12346,” www.ucsb.edu/ws/?pid=42021

or turn around.²⁴ As previously mentioned, the ESA conferees had expected the SFC to be “fully operational within nine months of enactment [June 30, 1980] and not later than fifteen months after enactment.”²⁵ What had changed? The sense of urgency expressed in the act had ebbed, and synfuels were now passé.

Noble slowed the SFC’s activity level and visibility by a considerable amount. Noble’s limited goal was to prove to OPEC that the United States could build and operate one or two synthetic fuels plants. By doing this, he believed the oil-exporting nations would be deterred from raising the posted price of crude to inordinately high levels.²⁶ The *Wall Street Journal* reported: “The Reagan Administration’s doubts and Mr. Noble’s repeated promise to be tightfisted with federal funds have only added to the gloom. The principle of government support has survived, but the originally envisioned pace has not.”²⁷

In testimony before the House Energy, Environment and Natural Resources Subcommittee on Thursday, September 17, 1981, Noble called for a “lean and mean organization that would do its job and go out of business.”²⁸ Of paramount importance was a stable government policy platform, in perception as well as in fact, on which industry could depend as it risked its capital on long-term investments. Noble acknowledged there had been start-up problems with the SFC, demonstrating that the corporation’s success depended on strong and sustained leadership.²⁹

During the hearing, Rep. Moffett (D-CT) quoted Noble as having said during a speech in South Carolina that he was going to do his “darnedest to see that this job [developing a synthetic

²⁴ Author phone interview with Patrick Murphy, November 3, 1999.

²⁵ *Energy Security Act Conference Report*, Report No. 96-824, 192.

²⁶ Author phone interview with Jeffrey Lipkin, November 9, 1999.

²⁷ Christopher Conte, “On the Back Burner/Synfuel Plans Delayed By Stable Oil Prices and Plentiful Supplies,” *Wall Street Journal*, December 28, 1981, 1.

²⁸ *SFC Oversight: Goals of the Reagan Board of Directors*, September 17, 1981, 4.

²⁹ *Ibid.*, 7.

fuels industry] is done without this monstrous second phase.”³⁰ When asked if he did indeed consider the second phase “monstrous,” Noble answered in the affirmative, explaining he wanted to do the job and go out of business as soon as possible to save the taxpayers “a lot of money.”³¹ By statute, the second phase occurred after June 30, 1984, the due date for the comprehensive strategy report to Congress outlining the corporation’s plans to achieve the national synthetic fuels production goal as established in the act. If approved, the SFC would receive an additional \$68 billion to meet production goals.³²

Noble’s tenure at the SFC helm lasted 1,727 tumultuous days. During this period, thirteen officers resigned and six new board members replaced those who chose to resign.³³ For about seven and one-half months in 1984, the board of directors lacked a quorum, which thereby meant it was unable to conduct business. During the life of the SFC, such a stagnant situation occurred over 26 percent of the time. In the SFC 1984 annual fiscal report, Noble wrote, “The lack of a Board quorum weakened the Corporation’s credibility with project sponsors, and the intense and raging debate in the Administration and Congress about the continued existence of the Corporation and the size of its program further undermined industry commitment to synthetic fuels.”³⁴ Once it was declared operational, the corporation became an afterthought in the White House. Noble did manage to get a “bone” thrown his way every now and then. To attend the first meeting of the Cabinet Council on Natural Resources and Environment, Noble had to plead

³⁰ *Ibid.*, 7-8.

³¹ *Ibid.*, 8.

³² *Energy Security Act*, Subtitle C.

³³ This latter number includes an individual whom President Reagan had announced he would nominate to the board of directors, but within ten days of Reagan’s announced intention, this person withdrew his name from consideration. “U.S. Synthetic Fuels Corporation Time Line,” July 17, 1985 (in author’s possession).

³⁴ *1984 Annual Report, United States Synthetic Fuels Corporation*, 1.

with the White House to be included, which he eventually was.³⁵ Noble enjoyed the proximity to power, being in the Cabinet Room with Reagan, and came away with the impression that his (Noble's) presence made a "real contribution" and that he (Noble) stood ready to provide additional assistance if called upon.³⁶

For several months in early 1982, Noble expressed concerns to presidential advisor Edwin Meese that the SFC had been unable "to keep and retain qualified people in key positions." Meese engaged in several discussions with Noble on the matter, "consistently" indicating that he would not endorse, nor would he take to the president, the recommendation of a salary above the current maximum level. Board member Bob Monks accompanied Noble to his meeting with Meese to discuss the difficult question of paying a senior SFC employee above the US civil-service pay grade. The absurdity of this situation was that the person in question was Vic Schroeder, SFC president, who was married to Noble's personal secretary. Meese pretended that Noble's issue was a vitally important public concern – when in reality what Meese wanted was money from the Noble Foundation, one of the major backers of the conservative Heritage Foundation. Noble used all his "money" power to "demand" an audience with the president, and Meese accommodated Noble on this one request.³⁷ Monks later speculated, in a tongue-in-cheek manner, that this meeting probably cost Noble a \$1-million donation.³⁸ Noble's expensive meeting on May 7, 1982, at 11:47 a.m., lasted all of ten minutes in the Oval Office with Reagan and Meese – with no press. Instructions to the president were to "welcome Ed Noble and sit for

³⁵ Letter from Francis X. Lilly to Kenneth Cribb, July 22, 1981. Ronald Reagan Library, Domestic Policy Council.

³⁶ *Ibid.*

³⁷ Meeting with Ed Noble, briefing memorandum from Craig Fuller, May 6, 1982. Ronald Reagan Library. Email from Bob Monks to the author June 3, 2012.

³⁸ Email from Bob Monks to author, September 23, 2011.

the 10 minute discussion and photographs.” Meese, approving the salaries, responded to Noble’s request on May 13, writing curtly, succinctly, and formally:

The President has asked me to advise you that he has determined that he will take no action to prevent the adoption of the salaries authorized by your Board in its resolution of March 26, 1982. The resolution authorizes a salary of \$135,000 for the President of the Corporation, and a salary of \$108,000 for the Vice President of Engineering and Technology.

It is understood that these are the only salaries that will exceed Level I of the Executive Schedule ³⁹

Meese implied, but Noble was unable to comprehend, “And don’t come back!”

During the first several months of his leadership, Noble formed a Synthetic Fuels Study Panel consisting of “ten outstanding experts” – five selected from scientific and technical disciplines and five from economics or financial areas.⁴⁰ An additional participant was the rapporteur. No panel member was affiliated with the SFC. The panel was encouraged to offer an independent outside perspective on economic and technical issues as part of broad input to the SFC’s planning and development efforts.⁴¹ Due to a division of opinion, two reports were issued: one by the majority (all engineer/technical types) and the second, the minority report, issued by all four economists. The majority report recommended the SFC continue to provide financial support for the development of synthetic fuels, despite the fact that industry appeared to be abandoning it. National security concerns, the majority wrote, were sufficient reason for continuing the SFC.⁴²

³⁹ Memorandum from Edwin Meese to Ed Noble, May 13, 1982. Ronald Reagan Library.

⁴⁰ Edward Noble, letter to Dr. Eric Leber, December 21, 1981, contained in *Proposed Fiscal Year 1983 Budget Request*, Publication No. 97-70, February 9, 10 and 23, 1982, 531. The final number of participants was twelve. Two of the original ten dropped out, and two were added. Preliminary list of participants from *Proposed Fiscal Year 1983 Budget*, 528.

⁴¹ *Department of the Interior and Related Agencies Appropriations for 1983*, House of Representatives, March 1982, 446.

⁴² Martha Hamilton, “U.S. Role in Synfuels Questioned,” *Washington Post*, June 1, 1982, D7, D10.

The four economists stressed deregulating natural gas and abolishing the windfall profits tax on crude oil. If private industry only would invest in synthetic fuels with government assistance, their reasoning went that this would be a clear signal that the idea of diverting resources into synfuels was inefficient and those financial resources of private industry would be more efficiently utilized in industries not seeking government assistance – let the free market work. Diverting capital into the synfuels industry, when private investors were not able to make sufficient rates of return without government incentives, was inefficient and costly to the growth of the United States.⁴³ Fully one-third of the study group concluded that “the desirability of a Synthetic Fuels Corporation can be seriously questioned.”⁴⁴

The split within the advisory panel reflected the split in Congress over the synfuels debate, and this grew increasingly tense with the termination by Exxon of the Colony Oil Shale Project. The division in the study group produced increased efforts to abolish or reduce the funding of the SFC. Rep. Tom Corcoran (R-IL) said that many see the Colony experience as proving that “Exxon’s interests are not necessarily consistent with the American public’s interests and that the government must therefore shoulder the burden of building a synthetic fuels industry.” Corcoran made an attempt to divert, without success, synfuels funding into housing, and he ended by observing, consistent with the Reagan administration’s thinking, that “if synthetic fuels are too risky for Exxon, they are too risky for the American taxpayer.”⁴⁵ Several years later, one of the panel members noted it was obvious the SFC had no use for either of the recommendations.⁴⁶ It is unclear why Noble decided to undertake this unless it was to

⁴³ Hamilton, *Washington Post*, June 1, 1982, D7, D10. *Congressional Record – Senate*, June 17, 1982, 14219-14220. *Congressional Record – Senate*, July 16, 1982, 16669-16670.

⁴⁴ *Congressional Record*, June 17, 1982, 14219.

⁴⁵ Hamilton, *Washington Post*, D7.

⁴⁶ Email from panel member Randall Holcombe to author, April 6, 2011.

demonstrate to the White House that he was doing something, even though he did not like the publicity or recommendations.

By the end of 1982, the SFC had a full board of seven members: Edward Noble, Victor Schroeder, Victor Thompson, Robert Monks, John Carter, Howard Wilkins, and Milton Masson. Two years later, in 1984, the Synfuels Corporation had lost five of them: Monks, Wilkins, Masson, and Carter resigned voluntarily, while Thompson was forced out. Monks had been described as a “controversial” board member who clashed repeatedly, as did Carter and Wilkins, and with Noble over the way the SFC was being run. Monks, as well as Wilkins and Carter, wanted more action and less talk, in the mold of a Rockefeller Republican.⁴⁷ Monks had outlined his view of the function of the SFC in his December 1982 speech at the Brookings Institution.

The Reagan-appointed directors . . . do not believe that it’s appropriate for a central financing authority to set specific criteria be it resource base, process-technology We believe that each and all of these are more properly determined by the private market. We believe the appropriate function of the SFC is to use its statutory flexibility to provide “financial assistance,” to increase return on investment in synthetic fuel projects so as to compete successfully with other investment opportunities for energy companies who would be logical sponsors. . . .

The SFC represents a rather unique way of trying to insist that the public interest be interpolated into the dynamism of the private sector.⁴⁸

Monks stressed that the corporation was designed to perform a simple function and not constitute part of the permanent federal apparatus. That function was to use the strength of the private sector and its capacity to achieve results according to the criteria of profitability as the most effective means of achieving a national objective. The corporation was an “experiment in mixing the public and private sectors in a country that has traditionally wallowed in their being

⁴⁷“The Synthetic Fuels End Game,” *Science*, vol. 223, no. 4633, January 20, 1984, 260.

⁴⁸ Robert A. G. Monks, “Executive Leadership Forum on Energy and National Security,” Speech given at the Brookings Institution on December 15, 1982.

adversaries – and may no longer continue to do so.” The SFC was to use the “great power of business to advance the public good.”⁴⁹ Noble was unable to comprehend this idea. He was always waiting, as it were, for Godot.

The White House eventually did nominate three new directors: Eric Reichl, engineering consultant and former president of Conoco Coal Development Company, on April 18, 1984, and then former Rep. Thomas Corcoran (R-IL) and Paul MacAvoy, dean of the Graduate School of Management at the University of Rochester, six months later on October 10. The president made recess appointments of these directors on Wednesday, November 28, and they were sworn in on Thursday, December 13, 1984. Senate confirmation hearings were held on Friday, May 3, 1985, and the three new board members were confirmed on Thursday, June 13, 1985. Now the corporation was back in business with a quorum.

The lack of a board quorum during Noble’s leadership was a demonstration of benign neglect on the part of the White House. Schroeder resigned his position as chief operating officer on August 18, 1983 (effective August 26), but remained on the board. The voluntary resignation of Monks became effective January 6, 1984, and Wilkins announced his intention to resign on February 2, 1984. Masson’s resignation became effective February 17, 1984. Board member Thompson’s forced board resignation occurred April 27, 1984, the day after Thompson resigned as SFC president. With that exit, the board lost its quorum. Then John Carter left voluntarily on May 16, 1984. The White House delay in nominating new board members to be confirmed by the Senate only added to the perception of the SFC as a nonentity, verifying the White House did not consider the SFC a priority.

⁴⁹ *Ibid.*

The corporation's senior officer ranks suffered high turnover, as well. During the SFC's six-year existence, eighteen officers resigned. With such elevated attrition levels on both the board and officer levels, continuity of leadership and direction presented a severe challenge. Additionally, corporations seeking business with the SFC found that ability constrained, as there was no continuity in the rules and guidelines.

While this shuffleboard transpired, President Reagan began the slow process of dismantling the corporation with an announcement Monday, May 14, 1984, of proposed legislation to reduce SFC funding by \$9.5 billion.⁵⁰ Reagan wanted the remaining undesignated funds of \$4.6 billion to be limited to those projects whose products would not cost significantly more than the market price of competing fuels. In his transmittal of this legislation to Congress, Reagan argued that the energy markets had changed substantially for the better since 1980, with imports declining 33 percent and prices declining more than 25 percent, the Strategic Petroleum Reserve holding stable at almost 400 million barrels, and energy conservation efforts of the American people far exceeding expectations. As a consequence of these major changes, presumptions on which the SFC had been created were now at variance with marketplace realities. Developing a commercial synthetic fuels industry at the pace envisioned by the ESA would require enormous direct budget outlays that would not be offset by any economic benefits. In short, the deficit would increase substantially.⁵¹

Public and congressional perceptions of the SFC were not enhanced when Sen. William Proxmire (D-WI) bestowed his "Golden Fleece Award" on the corporation in April 1982. In

⁵⁰ President Ronald Reagan, "Announcement of Proposed Legislation to Reduce Funding for the National Synthetic Fuels Program," May 14, 1984. www.presidency.ucsb.edu/ws/?pid=39927

⁵¹ President Reagan, "Message to the Congress Transmitting Proposed Legislation to Implement the National Synthetic Fuels Program," May 25, 1984. www.presidency.ucsb.edu/ws/?pid=39969

announcing the dubious honor, Proxmire stated that it was for spending over \$44,000 on a study that recommended increasing top salaries to as much as \$190,000.⁵²

During Noble's SFC leadership, the Long Island newspaper *Newsday* published a seven-part series titled "Synfuels: The Fading Promise." These articles, appearing from November 28 through December 5, 1983, were written after exhaustive research by investigative journalists Brian Donovan, Bob Porterfield, and Joseph Demma.⁵³ Each of these reporters indicated in phone interviews with the author having received very favorable feedback as a result the series, with several comments that the *Newsday* report was the nail in the coffin for the SFC.⁵⁴

Due to overwhelming interest in the articles, *Newsday* published a special report reprinting the series. The newspaper had become interested in the SFC after reading about a synthetic fuel program seeking financial assistance from the corporation – the First Colony Project proposing to convert peat from the North Carolina coast into methanol, a gasoline additive.⁵⁵ One of the investors in this endeavor was William J. Casey, director of the Central Intelligence Agency (CIA) and a resident of Long Island, New York. His involvement piqued the interest of the three journalists, as all indications were that the project had a high risk of failure and would contribute little, if anything, to the nation's energy security.⁵⁶ SFC staff had opined that this venture was economically "unpromising" and would not add to America's energy capability.⁵⁷ This peat-to-methanol project had sought \$465 million in subsidies. Rep. John Dingell (D-MI) became so provoked by the First Colony Project and its SFC request that on

⁵² <http://old.taxpayer.net/awards/goldenfleece/1980-1985.htm>

⁵³ Brian Donovan, Bob Porterfield, and Joseph Demma, "Synfuels: The Fading Promise," *Newsday*, November 28 through December 5, 1983.

⁵⁴ Author phone interviews with the three reporters: Brain Donovan on January 12, 2010; Bob Porterfield on January 20, 2010; Joseph Demma on February 8, 2010.

⁵⁵ "First Syncorp Funds Awarded to Project Backed by Casey," *Washington Post*, April 14, 1983, A18.

⁵⁶ "Synfuels: The Fading Promise," Special Report, *Newsday*, December 1983, 35.

⁵⁷ Martha A. Hamilton, "Synfuel Chief Backs Peat Plan With Noted GOP Investors," *Washington Post*, December 22, 1982, A1.

January 13, 1983, he wrote the US General Accounting Office requesting an assessment of the First Colony situation.⁵⁸

The GAO report, issued in November 1983, did not provide a positive review of the First Colony Project, nor of the processes the SFC staff had used to evaluate the proposal. The board had initially rejected the project. At that time, SFC staff had concluded, “Commercial experience with peat resources would not . . . appear to add significantly to the nation’s capability to expand synthetic fuels production rapidly or at a large scale in the future.”⁵⁹ The staff position did not change with the later application, which the sponsors resubmitted in June 1982. This application had better success as it progressed through staff analyses. One SFC planning officer reported “he was told to ‘water down’ negative reports on peat [and] to put peat in a more favorable light.”⁶⁰ Nevertheless, the GAO found several issues of concern, from the question of Noble’s authority to sign a letter of intent without the proper authorization to the contradictory internal reports by the SFC and the identity of project sponsors. Specifically the GAO report stated, “This project has had considerable publicity because the Energy Transition Corporation [one of the partners in the Peat Methanol Associates partnership] is owned by four former officials of the Ford administration and one current official of the Reagan administration.”⁶¹

After the initial findings of the *Newsday* assignment, the newspaper’s editors approved a much broader and more in-depth investigation by the three reporters. Donovan, Demma, and

⁵⁸ “Circumstances Surrounding the First Colony Peat-to-Methanol Project,” *United States General Accounting Office*, November 10, 1983, GAO/RECD-84-32.

⁵⁹ Hamilton, A16.

⁶⁰ “A Fading Promise,” 3.

⁶¹ “Circumstances Surrounding the First Colony Peat-to-Methanol Project,” 17. The officials in question were Frank Zarb, former head of the Federal Energy Administration; Charles Robinson, former Deputy Secretary of State; William Turner, former US representative to the Organization for Economic Cooperation and Development; Robert Fri, former head of the Energy Research and Development Administration; and William Casey, head of the CIA.

Porterfield worked for over nine months, spending weeks in DC, visiting six states, analyzing thousands of documents, and interviewing scores of experts.⁶² The *Newsday* report presented a scathing assessment of the synthetic fuels effort undertaken by the SFC. Their conclusion was that despite good intentions, this federal program was troubled by financial and environmental problems, conflicts of interest, and the prospect of enormous expenditures of taxpayer dollars for questionable – if any – returns.⁶³

The best intentions of Congress to demonstrate to the American people that their leaders were doing something to address the energy crisis came unglued. Investigators argued that the corporation lacked strong leadership and a vision of how to achieve the ESA's mandated production goals. The Synthetic Fuels Corporation became entangled in allegations of mismanagement and self-dealing among some of its officials.

Three outside directors (John Carter, Howard Wilkins, and Robert Monks) became de facto leaders of the non-management board members. They considered the SFC and their SFC board positions important and believed speed was critical to develop this industry for the nation's benefit. In nomination hearings before the Senate Energy and Natural Resources Committee, each nominee had strongly supported the SFC purpose and goals. Carter testified that synthetic fuels "must play an important role" in the country's future energy supply.⁶⁴ Wilkins described the SFC as "a remarkable special purpose, limited function entity." The challenge was "enormous" but achievable.⁶⁵ Monks similarly praised the legislation, stating that ESA establishment of the SFC was "exquisitely crafted," providing for flexibility in implementation to

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ *Carter, Masson, and Richard Nominations*, Committee on Energy and Natural Resources, United States Senate, August 12, 1983, Publication No. 97-91, 12.

⁶⁵ *Schroeder, Wilkins, Thompson, and Monks Nominations*, Committee on Energy and Natural Resources, United States Senate, September 10, 1981, Publication No. 97-47, 12.

carry out congressional objectives for the board and executive officers. Monks believed that a successful synthetic fuels industry was essential to the economic success and national security of the United States.⁶⁶ Sen. Henry Jackson (D-WA) told the nominees, “You have a terrible responsibility. You may be more important than the Federal Reserve.” Wilkins added that the nominees were “anxious to get cracking and start moving” as soon as possible.⁶⁷ Urgency was the operative word again, after a bungled start.

Carter, Wilkins, and Monks were the most active outside directors, with Monks having an office at the SFC. They agreed on the importance of the corporation and believed in its mission. Unfortunately, they had also concluded the SFC was being run as a “family business.”⁶⁸ Schroeder and Noble were friends and had been real-estate partners in Atlanta. Additionally, Schroeder had married Noble’s secretary of twenty-six years, Kathryne, who also worked for the SFC. And Noble had hired several more of his Atlanta employees at the Synthetic Fuels Corporation, with Charles Cowan, a senior officer of the SFC, being one of them.

Sparks began to fly several days before Sen. William Cohen’s (R-ME) July 1983 committee hearings. On July 19, columnist Jack Anderson of the *Washington Post* wrote an article listing the stock holdings of Monks and his wife, and suggesting that Monks might have several conflict-of-interest issues with companies presenting proposals to the SFC.⁶⁹ As if this accusation by inference were not enough, an extensive front-page article appeared in the *Energy Daily* of July 18, 1983. The large-type headline read: “Fight For Power In Boardroom At The Synthetic Fuels Corp.”⁷⁰ The author of this piece, Kennedy Maize, provided readers with a

⁶⁶ *Ibid.*, 17-18.

⁶⁷ *Ibid.*, 23.

⁶⁸ Milton, “Synfuels Corp. Officials Wrestling . . .,” A23.

⁶⁹ Jack Anderson, “Synfuels Board’s Holdings Are Questioned,” *Washington Post*, July 19, 1983, C15.

⁷⁰ Kennedy Maize, “Fight For Power In The Boardroom At The Synthetic Fuels Corp.,” *Energy Daily*, July 18, 1983, 1, 4.

gripping drama about control within the SFC. “A bitter boardroom power struggle rages,” Maize wrote. Monks was described as a timid “rich-and-preppy Maine Republican” afraid to confront Schroeder. One SFC staffer opined: “Monks doesn’t have the guts to try a frontal assault on Schroeder.” Despite the ties of Monks with Vice President George H. W. Bush and the Republican connections of Wilkins, Noble “has the ear of the White House, which is the real locus of power.”⁷¹ Maize did not leave matters there. He opined that Monks wanted Schroeder’s job, but that Monks backed off when he realized his opportunity had lapsed. Monks then turned to backing Wilkins, but once again discovered that support was lacking among board members. Allegedly, Monks had wanted to be appointed secretary of Energy following Reagan’s election, but the White House torpedoed that idea. Being ignored by Noble and Schroeder, Maize writes, Monks turned to his mentor, Senator Cohen. Maize’s tone was as if Monks were a child running to his mother for help. Maize viciously attacked Monks in the article.⁷² In summation, there was too much infighting and back-stabbing.

The congressional hearing that became the tipping point for the corporation took place on July 27 and 29, 1983, in Sen. William S. Cohen’s (R-ME) Governmental Affairs Subcommittee on Oversight of Government Management.⁷³ Cohen had recommended his Maine friend Monks for the SFC board. Monks had urged Cohen to hold a public hearing on recent SFC activities. Cohen believed that the development of a domestic synthetic fuels industry must remain a top national priority. Disturbing questions had been raised about the SFC, however, ranging from allegations of extravagance and vote-trading to a polarized and paralyzed board of directors, unable to carry out statutory responsibilities. Bayrer has described the Cohen hearings, as

⁷¹ *Ibid.*

⁷² *Ibid.*

⁷³ *Oversight of the Management of the US Synthetic Fuels Corporation*, Subcommittee on Oversight of Government Management of the Committee on Governmental Affairs, United States Senate, July 27, 29, 1983, S. Hrg. 98-243.

orchestrated by the senator, as “a major event that proved to be a body blow to the corporation.” The “enemies” of the SFC blew these out of proportion. The entire hearings, Bayrer writes, were a “self-absorbed power play by Monks, who after harming the SFC moved on to other endeavors.”⁷⁴

Cohen voted “yea” in June 1980 for passage of the ESA. Since creation of the SFC, he had watched keenly its activities and discussed its problems with several of his Senate colleagues. In preliminary remarks at his hearing, Cohen reiterated his belief that the development of a viable synthetic fuels industry should remain a top national priority. Congress had given enormous latitude and freed the SFC from the standard ties that typically bound federal agencies. In essence, Congress had gambled that the SFC board would be “competent, bold, decisive, and efficient, and could be trusted to invest billions of [taxpayer] dollars wisely in synfuels projects” that would help the United States become energy self-sufficient and no longer subject to the whims of Middle East leaders and OPEC. But, Congress never intended for the corporation to be “immune from public scrutiny and accountability.” In fact, “vigorous” congressional oversight was all the more essential because normal statutory safeguards and guidelines were lacking. The hearings examined how well the SFC met the test of congressional confidence and whether or not the high level of expectations had been successfully met. The primary focus was on operation of the SFC board and on the economy and efficiency of the corporation’s administrative procedures.⁷⁵

⁷⁴ Memorandum from Ralph Bayrer to author, July 17, 2012.

⁷⁵ *Oversight of the Management of the U.S. Synthetic Fuels Corporation*,” Hearings before the Subcommittee on Oversight of Government Management of the Committee on Government Affairs, United States Senate, S. Hrg. 98-243, July 27 and 29, 1983, 2.

Within ten minutes after the hearing began, Jim Bowden, a senior SFC officer who was also present, noticed that Noble and Schroeder became visibly agitated and very anxious.⁷⁶ Cohen expressed concern about SFC senior officers, with Noble, Victor Schroeder, Kathryn Schroeder, and Cowan all having worked with Noble earlier in Atlanta. The transition team report to President-elect Reagan had recommended immediate SFC termination as soon as Reagan took office. Noble testified in the congressional hearing that he had written the report, but stated he had changed his opinion regarding the SFC. Noble never offered an adequate explanation for his abrupt turnabout, now wanting to keep the corporation going. He believed strongly in private-sector initiatives, while at the same time advocating the use of federal assistance to develop the domestic synthetic fuels industry. He did not favor providing assistance for the development of synthetic natural gas; rather, he thought the nation had a severe shortage in domestic production of crude oil. Cohen did take Noble and other SFC officers to task about their slow pace in making federal financial assistance available to develop the industry. In response, they offered to the committee excuses and obfuscations, but no substantive explanations.

SFC leaders knew going into this hearing that it was going to be contentious. In preparation for a grilling, the SFC held “extensive rehearsals” and “mock hearings.” An unidentified corporation staff member played the role of Chairman Cohen. Briefing books were compiled as well. As a further precaution, the SFC purchased five copies of Cohen’s recent book, *Roll Call: One Year in the United States Senate*, to read as groundwork for the hearing.⁷⁷

⁷⁶ Author interview with Jim Bowden on October 28, 2010.

⁷⁷ *Ibid.*, 54-55.

One senator commented to SFC officers present at the hearing that they (SFC personnel) had displayed “an usually high level of paranoia.”⁷⁸

The staff had also been directed to monitor major newspapers in Maine for any comments Cohen might make about the SFC, as well as any pertinent articles. As matters developed, an extensive front-page article, in large type, did appear in the weekend issue of the *Bangor Daily News* on July 23-24, 1983, titled “Monks, Cohen allied in synfuels power struggle.”⁷⁹ Noble and his supporters, in preparing for what would turn out to be an acrimonious hearing, took the offensive against Monks. By suspicious coincidence, several days before Cohen’s hearing, Jack Anderson published his column detailing the stock holdings of Monks and his wife. A few days later, an industry publication, *Energy Daily*, reported that Monks had lost out in a power struggle with Noble. As a result, Monks had turned to his political friend and mentor, Senator Cohen, to mount a counterattack.⁸⁰ In the *Bangor Daily News* story, Day, the writer, cites the *Energy Daily* article as stating there existed a “bitter boardroom power struggle” between Monks, Wilkins, and Carter on one side and Noble and Victor Schroeder, president of the SFC, on the other. The main issue sparking the acerbic atmosphere centered on the competency of Victor Schroeder as president.⁸¹ The *Energy Daily* article’s feisty tone added fuel to an already volatile situation, quoting Monks describing Schroeder as a “failure.” For over three years, the fledgling SFC had floundered, taking no material steps to develop a domestic synthetic fuels industry, according to what Monks stated.⁸²

⁷⁸*Ibid.*, 57.

⁷⁹ John S. Day, “Monks, Cohen Allied in Synfuels Power Struggle,” *Bangor Daily News*, July 23-24, 1983, 1, 3.

⁸⁰*Ibid.*, 1, 3.

⁸¹*Ibid.*, 3.

⁸²*Ibid.* Kennedy Maize, “Fight For Power In The Boardroom At The Synthetic Fuels Corp.,” *Energy Daily*, July 18, 1983, 1, 4.

What convinced Cohen to hold hearings were allegations that Schroeder had offered his help in providing a business introduction for another SFC board member in return for that board member's favorable vote on Schroeder's reorganization plan for the Synthetic Fuels Corporation. Milton Masson had sought Schroeder's assistance in obtaining personal consulting contracts with a subsidiary of Mobil Oil Company. In return, Masson stated that he would vote in favor of Schroeder's reorganization plan. This conversation took place late one evening in a New York City hotel room prior to an SFC board meeting. Present were Schroeder, Masson, and Donald Thibeu, executive assistant to the SFC chair., who testified about the conversation. At the Cohen hearing, Thibeu appeared in accordance with a subpoena, delivered to him by then staff director Susan Collins. Today, in 2013, she is a US senator from Maine. Thibeu indicated he wanted to be subpoenaed due to the nature of his testimony implicating Schroeder in the vote-trading scheme. Thibeu stated in an interview with the author that he stands by his testimony today and would not change anything about it.⁸³

Monks, Carter, and Wilkins had been having issues with Schroeder for quite some time. When this suspected vote trading came to their attention, however, they decided they must act. In April 1983, they wrote a letter to Noble, as SFC chair and chief executive officer, expressing their concerns over the leadership and integrity of Schroeder as the corporation's preside. The three board members observed that Schroeder had taken a long series of unprofessional, incompetent, and possibly illegal actions during his time as president.⁸⁴ The unsigned letter hand-delivered to Noble by two of the writers bore their respective initials at the end: "Respectfully Submitted, JBC, HW, RAGM."⁸⁵

⁸³ Author interview with Donald Thibeu in Austin, Texas, on April 14, 2009.

⁸⁴ Day, "Questionable Action . . .," 2.

⁸⁵ *Oversight Hearing . . .*, 202.

During the hearing, Cohen focused on this letter, querying Noble and Schroeder about it. Both provided evasive responses on the grounds that the letter was not signed – or, as Schroeder replied, it was just a blank piece of paper with some typing on it.⁸⁶ Noble’s reaction was that this unsigned but initialed letter hand-delivered to him by two of the initializers “offended” him, or more accurately, insulted him.⁸⁷ Noble ignored the letter and its recommendation – the immediate termination of Schroeder as SFC president. He did not give a copy to Schroeder. Noble and Schroeder stonewalled Cohen’s committee.

Cohen and the committee also exhibited significant interest in the testimony and report of Robert E. Coughlan of Santa Fe, New Mexico. In December 1982, Schroeder had engaged Coughlan’s consulting services to analyze the “formal and informal operating procedures and associated communication practices relating to interactions between and among the President and Chairman and other members of the Board of Directors of the Corporation.”⁸⁸ Coughlan interviewed all the directors as well as several officers and senior assistants to Noble. Why Schroeder had to go to Santa Fe to engage a consultant is not evident. Following his report, Coughlan went to work for the Energy and Minerals Department of the State of New Mexico.⁸⁹

While Coughlan found a unity of purpose among the directors in attaining corporation objectives, he also uncovered a “serious communications void at the Board level, particularly between the outside and inside Directors.”⁹⁰ For an organization of SFC’s size and scope, several board members strongly felt that the corporation did not have a specific operational plan setting forth goals, creating timetables, and assigning responsibility. The report did provide three recommendations, based on Coughlan’s interviews and research:

⁸⁶*Ibid.*, 49.

⁸⁷*Ibid.*, 56-57.

⁸⁸*Ibid.*, 82-94.

⁸⁹*Ibid.*, 89.

⁹⁰*Ibid.*, 83.

1. A special informal meeting of the board of directors be convened before the January 1983 board meeting to address management and communication concerns, with specific attention paid to development of corporate goals and milestones, a specific outline for the development of the mandated comprehensive strategy, assignment of board responsibilities, and, most important of all, “a frank, in-depth, and unstructured exchange [concerning board and] management matters.”⁹¹
2. A secretariat to be installed within the chair’s office to be the hub and focal point for all official communications leaving or entering the SFC.⁹²
3. A communications task force be created for ninety days to address the communications improvements that are so “urgently needed.”⁹³

The SFC implemented only the second proposal, for a secretariat. This position was not placed in the chair’s office, however, but rather in the president’s – Schroeder’s. With respect to the first suggestion, Coughlan, due to concerns about violating the Sunshine Act, provided Schroeder with an alternate recommendation centering on the creation of several ad hoc board committees – Executive, Policy, and Planning. Neither Schroeder nor the board undertook any action. Coughlan had stressed to the board, via Schroeder, the importance of establishing “the resoluteness of purpose and certainty of approach of the Corporation” to eliminate or at least mitigate industry doubts about the SFC’s commitment to large-scale synthetic fuels projects.⁹⁴ Coughlan believed in the necessity of the synthetic fuels option for the nation’s benefit and the importance of the SFC. During his testimony, Coughlan stressed the importance of a “management audit.”⁹⁵

When asked what recommendations or suggestions he would offer to improve the Synthetic Fuels Corporation, Coughlan replied that since he, as an outsider, had not achieved any real success, he would ask the Office of the SFC Inspector General (IG) to look at the

⁹¹ *Ibid.*, 191.

⁹² *Ibid.*, 192.

⁹³ *Ibid.*, 83, 84, 191-192, 212, 213.

⁹⁴ *Ibid.*, 85.

⁹⁵ *Ibid.*, 88.

management, planning, scheduling, and policy development of the Synthetic Fuels Corporation.⁹⁶ The IG, nominated by the president and confirmed by the Senate for a term of seven years, reported to the board of directors and Congress. Held in high regard by the committee, the IG had the authority to undertake such an assignment without threat of retribution. The IG could be removed from office only by the president of the United States and then only for neglect of duty or malfeasance in office.⁹⁷

SFC Inspector General S. Kenric Lessey was called to testify, as well as Deputy Inspector General Robert Gambino and two more IG staff members. Cohen and other subcommittee members wanted information on “Project Indigo,” plus an internal SFC audit of travel and relocation costs and employee expense accounts. Project Indigo was the name assigned to a survey undertaken by the IG’s office to “determine industry’s perceptions of the Corporation’s activities.” The objective was “to identify the strengths and weaknesses in the methods and procedures utilized by the SFC to conduct its business.”⁹⁸ The survey covered the period from December 1980 through December 1982.

During these twenty-four months, the corporation experienced insufferable growing pains. First, the Carter-nominated board was not confirmed by the Senate, but instead given recess appointments by Carter. Then Ronald Reagan was elected president, and immediately dismissed the recess-appointed board. Next, the general counsel became acting chair, igniting consternation on Capitol Hill. Reagan did not nominate a new chair or other board members until well into his first year of office. Finally, Reagan did not declare the SFC operational until February 9, 1982. Turmoil in the senior management ranks bordered on the absurd, resulting in lack of continuity. The same was true of the board. The staff stayed in place, with very modest

⁹⁶ *Ibid.*, 88.

⁹⁷ *Energy Security Act of 1980*, Section 122.

⁹⁸ *Oversight Hearing* . . . , 95, 214.

changes. These employees worked long hours to get the corporation up and running, but lacked an overall sense of purpose or direction from senior management and the board. Most, if not all of the individuals who signed on to work for the SFC during this early era came with a dedication to assist in meeting the statutory and mandated goals established by the ESA. They wanted to help their country achieve a reduced dependence on imported crude oil from foreign sources. Slowly their dreams were quashed by bungling senior management and an even more inept Congress. As Senator Cohen succinctly stated:

On the one hand you had the administration that was, let's say, lukewarm at best about synthetic fuels. You had a director of OMB [Stockman] who is quite vocal in opposition to it. You had the Chairman [of the SFC] who was on record, at least quoted in the papers that I read, as saying he recommended [abolishment] of the Corporation, the man who was put in charge of it.⁹⁹

Bluntly, the first twenty-four months of the SFC's existence were marked by utter chaos and confusion: no regular communications, no consistent policies, and no dependable direction. The SFC was an entity in search of both a leader and a mission.

The Project Indigo Report did not position the corporation in a favorable light, noting "almost complete agreement among the respondents that the decision-making process at the SFC was too slow." It stated the corporation had "inordinate difficulty in making decisions," and those that had been made were done at a glacial pace.¹⁰⁰ When Congress authorized the SFC, the operative word of the day was "speed." Congress knew that to do what Carter demanded and what the American people needed, the nation's domestic synthetic fuels effort had to be accomplished outside normal snail's-paced government procedures. The Department of Energy was to be avoided at all costs.

⁹⁹ *Ibid.*, 97.

¹⁰⁰ *Ibid.*, 219, 220.

This complaint about procrastination was not new to corporation officers. Sen. James McClure (R-ID), head of the Senate Committee on Appropriations, had written a scathing report specifically addressing SFC delays in which he asserted that “greater progress can be made” in awarding financial assistance. “Slow progress” by the Synthetic Fuels Corporation had resulted in many projects being withdrawn, McClure noted, as well as project sponsors dropping out. The report commented as well on the “inadequate communication” of SFC staff to the SFC board of directors.¹⁰¹ Outside directors of the SFC were concerned about their personal liability if it could be determined that they took actions without due diligence, or with improper or inadequate information from staff.

The Indigo report also provided comments on the SFC staff components – including the Projects Office, Office of Technology and Engineering, Office of Finance, Office of the General Counsel, and Communications – with observations on data required from project sponsors and negotiations. The overall tone of these remarks was a lack of leadership, unnecessary delays, no clear lines of responsibility and accountability, overly burdensome requests, inability to reach a decision within a reasonable time span, virtually no communication with industry, and no skilled and talented “deal makers” at the SFC. What became apparent in the Indigo Report was the perception by several board members that the corporation was operating without a specific plan that would set forth goals with timetables.¹⁰²

Cohen’s committee commenced an inquisition into Schroeder’s business expenses and salary at the corporation, inquiring about these issues specifically during the July 1983 hearing. SFC president Victor Schroeder had seen his SFC pay increase from \$69,000 to \$135,000 per

¹⁰¹ *Explanatory Statement of the Committee on Appropriations, United States Senate, on the Department of the Interior and Related Agencies Appropriation Bill, 1983, December 1982, Publication: H.R. 7356, 69-71.*

¹⁰² *Oversight Hearing . . .*, 86, 221-227.

year. Kathryn Schroeder, Victor Schroeder's wife, had been hired at \$32,000. In the process of moving to Washington, Schroeder had undertaken a complex financial maneuver that resulted in the SFC paying \$19,500 of Schroeder's \$305,000 Washington home purchase price as a moving expense, while at the same time compensating Schroeder \$1,500 per month because his Atlanta home remained unsold.¹⁰³ The SFC had reimbursed Schroeder for the real-estate broker's commission paid by Schroeder. Having the purchaser of a house rather than the seller pay the real-estate agent's commission was an unusual occurrence, or as Cohen stated, "Almost rare."¹⁰⁴ There were other rather odd expenses surrounding Schroeder's DC house purchase that came to light at the hearing. One in particular had to do with a payment to Schroeder of more than \$4,500 to cover the mortgage-interest differential between his DC house and his Atlanta home that remained unsold. Several of Schroeder's actions generated a substantial amount of mistrust on the part of the committee.

The primary issue the committee wanted to explore was that 1983 nocturnal conversation at the New York Hilton beginning late on Wednesday, March 23, and ending early Thursday. Schroeder and Masson had met in a room in the hotel reserved by the SFC, with Thibeau also present. What transpired remains the subject of debate. The allegation was that Masson agreed to vote for Schroeder's proposed SFC reorganization plan (amend the by-laws and establish a new position of vice president for the corporation) as well as reconsider a project in which Schroeder was interested at the upcoming board meeting. In return, Schroeder allegedly agreed to contact a business associate at the Mobil Land Development Corporation to provide an introduction for Masson in hopes of providing business to Masson.¹⁰⁵

¹⁰³ James S. Day, "Questionable Action by Synfuel Officials Revealed," *Bangor Daily News*, July 28, 1983, 1. *Oversight Hearing . . .*, 101-107.

¹⁰⁴ *Ibid.*, 101.

¹⁰⁵ *Ibid.*, 110.

In his testimony, Thibeu stated that Schroeder and Masson came to an “understanding” by which Masson would vote in favor of Schroeder’s reorganization proposal at the board meeting, and in return Schroeder would make phone calls on behalf of Masson. Thibeu stated that “anyone in the room would have come to [that] conclusion.” In addition, Thibeu had offered to take a polygraph test to substantiate his version of what had transpired.¹⁰⁶ Thibeu reported this hotel-room exchange to his boss, SFC chair Ed Noble, due to Thibeu’s concern about the possibility of “vote trading.” In his testimony, board member Howard Wilkins testified that he considered the private Hilton discussion “an irregular activity in a public corporation.” Wilkins continued by observing that Schroeder rarely consulted other board members about policy and that Wilkins felt the SFC was being “run as a family corporation with one stockholder,” which was surely not the intent of either Congress or the ESA. In addition to Kathryn Schroeder working for Noble as a high-priced assistant, Victor Schroeder had bypassed requirements for competitive bidding for contracts. Investigators for the Senate Governmental Affairs Subcommittee found that Schroeder had awarded fifty-one consulting contracts without competitive bidding, with some of them going to his former business associates. Eugene Rawls received \$103,000 to redecorate the SFC offices. John Carbonell got \$21,000 for a six-page communications study. Both Rawls and Carbonell were from Atlanta.¹⁰⁷

In September 1983, Cohen’s subcommittee issued a sixty-two page report on the July hearings and investigation. Allegations that the SFC was deficient in promoting effective management of federal programs, high ethical standards among government officials, economical procurement of goods and services, and prudent spending of tax dollars had a basis in fact and were impeding the SFC’s ability to fulfill its statutory mandate. The subcommittee reported that

¹⁰⁶ *Ibid.*, 115, 118, 121.

¹⁰⁷ Howard Kurtz, “Synfuels President Under Fire,” *Washington Post*, August 9, 1983, A1, A5.

the corporation had a “troubled past, marked by management failures, a lack of planning and slow decision making.” However, the subcommittee endorsed the continuation of the Synthetic Fuels Corporation based not on its past performance, but on its progress [the resignation of Victor Schroeder as president] and promise. The last sentence of the report stated: “The Subcommittee urges the Corporation to move boldly forward.”¹⁰⁸ The board, at Noble’s recommendation, elected Schroeder president. Schroeder had worked in Atlanta for Noble and was Noble’s friend.

At the end of the two-day Cohen Senate subcommittee hearings, Schroeder came under enormous public pressure to resign his SFC positions. On Thursday, August 18, 1983, Schroeder left as the \$135,000-per-year SFC president, effective the following Friday, August 26. He remained as a director. Swiftly responding to this development, Cohen commented that Schroeder’s decision “reflects [Schroeder’s] concern for the best interest of the corporation.” The Senate hearings demonstrated that the board was “so polarized that it was in danger of becoming paralyzed and that Mr. Schroeder no longer enjoyed the confidence of three of the board members [Howard Wilkins, John Carter, and Bob Monks].”¹⁰⁹

Following Schroeder’s departure, Noble commenced a search for a new president. The SFC engaged the services of a New York consulting firm to conduct a nationwide talent search, while also naming a four-member search committee. The corporation paid \$41,667 to the consulting firm for its services. The only candidate offered the position, an oil industry executive, turned the board down. After this rejection, Noble decided to extend the job to fellow board member and friend Victor M. Thompson (a Democrat) at an annual salary of \$135,000, giving Thompson the distinction of being the highest-paid federal official after President Reagan,

¹⁰⁸ *Oversight of the Management of the U.S. Synthetic Fuels Corporation*, A report prepared by the Subcommittee on Oversight of Government Management of the Committee on Governmental Affairs, United States Senate, S.Prt. 98-100, September 1983, 11, 58.

¹⁰⁹ Robert Hershey, “Schroeder Resigns Fuel Post,” *New York Times*, August 19, 1983, D1, D3.

whose salary was \$200,000 per annum. Thompson assumed this office on Thursday, March 1, 1984. Simultaneously, the Securities and Exchange Commission (SEC) charged that the bank formerly headed by Thompson, Utica Bankshares Corporation of Tulsa, Oklahoma, violated federal securities laws in 1982 by overstating its profits.¹¹⁰

In April, Thompson disclosed to the SFC board, which was unaware of the SEC probe, his failure to report a stock action to either the board or the SFC's ethics officer. Thompson had attempted to sell his Utica Bank stock in the fall of 1982 to a "wealthy Texan oilman" seeking millions of dollars in financial assistance from the corporation for a tar sands project. Thompson resigned as president on Thursday April 26, 1984, and from the board on Friday April 27, 1984, having been president for 56 days and on the board for 960 days.¹¹¹ Thompson's resignation as a director left the board lacking a quorum and therefore unable to conduct any business.

Thompson's issues did not escape the attention of Congress, especially Rep. John Dingell (D-MI). In a hearing on April 3, 1984, before Dingell's House Subcommittee on Oversight and Investigations, Thompson endured more than two hours of combative questioning.¹¹² Dingell attacked Thompson, telling him to his face in front of committee members and the public:

. . . you should retire from your present position, both as a member of the Board and as the Chief Officer of [the] Corporation at your earliest convenience, . . .

. . . your performance this morning, your answers to the questions, your impeccably bad memory, bring me irretrievably to the firm conclusion that you are either incompetent to serve in this capacity or you are ethically unsuited to perform the responsibilities.

¹¹⁰ Michael Isikoff and James Rowe, "Violations Cited at Bank of New Synfuels Chief," *Washington Post*, March 1, 1984, A1, A31.

¹¹¹ Michael Isikoff, "Chief of U.S. Synfuels Corp. Resigns," *Washington Post*, April 27, 1984, A1, A27.

¹¹² Michael Isikoff, "Dingell Says Synfuels Chief Should Quit," *Washington Post*, April 4, 1984, F1, F4. *Synthetic Fuels Corporation*, Hearings Before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, House of Representatives, April 3 and June 27, 1984, Serial 98-149.

. . . you are not the man that we want to run a corporation that disperses very large sums of money. Certainly, I could never trust you to remember what you had done or why. That in and of itself disqualifies you.

. . . [federal] filings . . . done in such a cavalier fashion, with regard to matters which are required by law, indicates either a carelessness or a deliberate intention to deceive, under circumstances which I think that we can no longer sustain your presence there.¹¹³

Attacks on Thompson did not end in the hearing room. Dingell, during a break, publicly described Thompson as “too incompetent” and “too unethical” to retain his SFC post as president that he had held for one month and three days. He had embarrassed his friends and the SFC. Thompson replied that he was “new to the ways of. Washington.”¹¹⁴ Nothing like a “baptism by fire.” Dingell’s committee did not let up on Noble, accusing him of “paranoia” in spending \$145,000 tax dollars on a security system for its Washington, DC headquarters, \$4,680 for three “security sweeps” to check the SFC offices and a private home for electronic bugging devices, and a computerized telephone system which printed lists of every number, local and long-distance, that SFC employees dial (explanations for this latter invasion of privacy were severely lacking and weak). The paranoid factor was reflected by the staff of the committee when it wrote that there persisted an attitude on the part of board members, officers, and employees that “all Members of Congress and Federal bureaucrats are the enemy.” The committee report stated that there appeared “to be a part of the SFC’s secrecy syndrome – the obsession for finding ways of keeping” information from the public. This hearing was another “assault on Synfuels.”¹¹⁵

Upon his resignation, Thompson refused to take responsibility and commented that it was ironic he had violated the SFC’s standards when he was required by the SEC to keep the SEC

¹¹³ *Synthetic Fuels Corporation*, Oversight Hearing, 99.

¹¹⁴ Jim Gipson, “Quit Synfuels Post, Thompson Urged,” *Tulsa Tribune*, April 3, 1984, 1A, 4A.

¹¹⁵ “Synfuels Wasteful, Panel Charges,” April 4, 1984, 11D. *Synthetic Fuels Corporation*, Hearings before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, House of Representatives, Ninety-Eighth Congress, April 3 and June 27, 1984, Serial No. 98-149, 111-126.

probe confidential.¹¹⁶ Thompson addressed Dingell's behavior in his resignation letter, writing, "After experiencing the event chaired by Congressman Dingell, it is abundantly clear why people are reluctant to give their time, knowledge and experience to foster a more efficient and stronger government." Thompson further commented he would not have taken the SFC presidency had he "remotely suspected" the scathing criticism and personal attacks that ultimately ensued. He was disappointed that his fellow directors (Noble, Schroeder, and Carter) did not offer an ounce of support even though they knew that Thompson was "trustworthy and honest, possessing a strong sense of commitment and integrity."¹¹⁷

Previously, Dingell had been angered in a January 1984 hearing when it became apparent that the corporation kept documents in "safe houses" to prevent them from being subpoenaed. This subject subsequently became a highly charged political issue. Dingell and other Democrats accused the corporation of using the "safe houses" to hide material from Congress. Such was not the case, but the Dingell faction twisted the facts to suit a purpose – to make the Reagan administration appear to be hiding something. These houses were "designed to provide the SFC staff access to highly proprietary technical data, from which a project's claims could be verified. These materials went far beyond what would be needed in the Corporation's permanent files, and the project sponsors would have been very anxious if this material had to be released for all to see."¹¹⁸ Former general counsel Jeffrey Lipkin recently commented that "leaving technology papers in a [safe house] was not a big deal and was consistent with industry and venture capital practice." It was Washington's politicization of such issues as "safe houses" that prompted

¹¹⁶ Ralph Marler, "Vic Thompson Resigns, but Synthetic Fuels Group Still Drawing Criticism," *Tulsa World*, April 28, 1984, 1.

¹¹⁷ Ralph Marler, "Thompson Resigns From Synfuels Posts," *Tulsa World*, April 27, 1984, 1.

¹¹⁸ Ralph Bayrer, email to author dated February 25, 2011.

Lipkin to leave DC.¹¹⁹ Normally, for government projects, this was not done and information could be requested by the Freedom of Information Act (FOIA).

During Dingell's subcommittee hearings on SFC activities, a staff member on the investigations subcommittee of Dingell's House Energy and Commerce Committee was found dead unexpectedly in Baltimore Harbor on Thursday, May 3, 1984. Thomas Dougherty, the deceased, had been the principal investigator in a staff inquiry into the plagued US Synthetic Fuels Corporation. Dingell referred to Dougherty as an "extremely valuable" staff member of "excellent character and reputation." The suspicious nature of Dougherty's death and his importance to the investigation of the SFC, prompted the *Washington Post* to assign investigative reporter Michael Isikoff, who had been following the corporation, to write the initial article about the death. Subsequently, the medical examiner stated that the aide "probably drowned." Dougherty had been the lead investigator in a House subcommittee probe of the SFC and its president, Victor Schroeder, who did resign shortly after the hearings. At the time, there was no indication Dougherty's passing was connected to his SFC investigation work.¹²⁰ This unexpected and unexplained death caused consternation for Dingell and the SFC. The circumstances of the staffer's passing were strange. At the next subcommittee hearing following the death, Dingell was less aggressive with Thompson than in a previous session and Dingell admonished the SFC general counsel to advise Thompson only of his constitutional rights.¹²¹

A rumor also spread that the SFC had been shredding documents to keep them from Congress. Subsequently, sources at the corporation confirmed that some documents had been shredded in December 1983, prior to early 1984 clashes with Congress. The items being

¹¹⁹ Jeffrey Lipkin, email to author dated February 24, 2011.

¹²⁰ Martin Weil and Michael Isikoff, "Body Believed to Be Missing Hill Employee Is Found in Baltimore," *Washington Post*, May 4, 1984, A12. "Around the Region: Drowning Seen Cause of Hill Prober's Death," *Washington Post*, May 5, 1984, B2.

¹²¹ Jeffrey Lipkin, email to author, March 9, 2011.

shredded, according to the source, were part of routine housecleaning of so-called “SODA” papers, weekly summaries of daily staff activity prepared for senior executives and directors.¹²²

Shortly after Thompson’s resignation, the *Washington Post* published a scathing editorial stating that SFC affairs “had gone from bad to ludicrous.” The sad state of the corporation was the responsibility of the White House and President Reagan, who had nominated the directors. The *Post*, however, remained in favor of the SFC by stating in the editorial, “But its purpose remains as valid today, and as relevant to national security, as it was five years ago [when it was established].”¹²³

Attacks on oil tankers in the Persian Gulf by Iran and Iraq during spring 1984 added to the growing unease in the United States about the possibility of another energy crisis. The *Post* responded with a second SFC editorial on May 21, 1984. The editors attacked the Reagan administration for asking Congress to revoke most of the funds previously extended to the corporation, referring to it with these words: “That unfortunate and mismanaged enterprise is becoming the great symbol of the muddle and inconstancy of American energy nonpolicy.” The editorial added: “Synfuels Corporation has been so abused by poor appointments and poor judgment . . . that it is no longer capable of the job.” The piece ended by calling synthetic-fuel subsidies production “a kind of insurance” against higher energy prices and Middle East vagaries.¹²⁴

The saga continued on Wednesday, May 16, 1984, with the abrupt resignation of board member John Carter. The SFC already lacked a quorum and Carter’s resignation left the

¹²² Michael Benjamin, “Synfuels Corp. Looking Inside for New President,” *Washington Post*, February 16, 1984, A17. *Synthetic Fuels Policy*, Hearings Before the Subcommittee on Fossil and Synthetic Fuels of the Committee on Energy and Commerce, House of Representatives, October 4 and 5, 1983, and January 25 and June 18, 1984, Serial 98-137, 260-280.

¹²³ “The Synfuels Fiasco,” *Washington Post*, April 29, 1984, B6.

¹²⁴ “A Footnote on Synfuels,” *Washington Post*, May 21, 1984, A18.

corporation with only two of its seven directors still in office.¹²⁵ Carter had become disenchanted with the SFC and the way it was being run.

A few days prior to Carter's departure, Noble announced he expected the Reagan administration would "save his troubled agency shortly by nominating four new members to fill vacancies on its board of directors."¹²⁶

Unfortunately, no sense of urgency for the Synfuels Corporation existed at the White House. Reagan announced in April 1984 and in October 1984, three nominees to the SFC board – Reichl, Corcoran, and MacAvoy. Reagan made recess appointments on Wednesday, November 28, 1984. The Senate did not hold nomination hearings on these three until early May 1985. On November 29, Noble held a press conference trying to do an end run around the White House to reassert his control over the embattled corporation. Noble announced he was proposing Norman Callner, vice president of the synthetic fuels subsidiary of Houston Natural Gas Company, as an SFC board member – as well as Callner becoming the new president and chief operating officer of the corporation. Noble also announced several other proposed senior-management changes. He approved a \$675-per-day interim management-consulting contract for Callner until the newly reconstituted board could meet to approve Callner as president at \$135,000 per annum. At the press conference, Noble told reporters he had met with Callner and Schroeder as well as the three new board members, all of whom had been "very approving" of Callner being elected president and chief operating officer. At the time, according to several government and industry officials, these moves by Noble were viewed as attempts to maintain control over the corporation before the reconstituted board met in full session.

¹²⁵ Michael Isikoff, "Another Director Quits Post at Synfuels Corp.," *Washington Post*, May 17, 1984, A18. Robert Hershey, "Fuel Board Member Resigns," *New York Times*, May 17, 1984, D4.

¹²⁶ Michael Isikoff, "Synfuels Board Seeks Nominees; Congress Balks," *Washington Post*, May 10, 1984, D3.

New board member Tom Corcoran immediately put an end to Noble's proposed action.¹²⁷ Following White House direction, Noble appointed Corcoran as SFC acting vice chairman in December 1984. Corcoran was paid a presidential cabinet-level salary of \$83,300 to be the liaison for Congress, state, and local governments, the news media, and the synfuels industry.¹²⁸ Previously, Corcoran was a Republican representative from Illinois, but had lost in a recent Senate primary to Sen. Charles Percy (R-IL). Ironically, Corcoran had voted against the ESA. With the incoming Congress, he would soon be without a job. The Reagan administration nominated Corcoran to the board to fulfill a political obligation to him by providing a salary.

More importantly, Corcoran's availability had come along at the right time for the White House. The administration had concluded that Noble and his Atlanta "comrades" had significantly changed their attitudes toward the Synfuels Corporation – from shutting it down as soon as possible (the Noble-authored Transition Report) to expanding it aggressively. Due to this concern, the White House, by way of David Stockman, approached Tom Corcoran to join the board and take the lead, through a full-time position, in shrinking the corporation as the administration wanted. Reichl and MacAvoy were nominated to the board to bring significant and respected engineering expertise to the SFC (Reichl) and superb academic and management capability (MacAvoy). Such skills had been lacking at the SFC for some time.¹²⁹

These trials and tribulations raised larger questions within the Reagan administration about the synfuels program itself. Reagan, in May 1984, had submitted a proposal to Congress to rescind \$9 billion from the SFC budget due to a dramatically improved energy outlook.

As a consequence of these major changes, the presumptions that underlie the current synthetic fuels program have proven at variance with the realities of

¹²⁷ "The Federal Triangle, Synfuels Chief Trys [sic] Power Play," *Washington Post*, November 30, 1984, A17. *Synfuels Week*, December 3, 1984, 1, 6. *SynFuels*, December 7, 1984, 1, 2.

¹²⁸ Michael Isikoff, "Synfuels Aide Picked," *Washington Post*, December 17, 1984, A14.

¹²⁹ Author telephone interview with Tom Corcoran on March 18, 2011.

the market place. It is now apparent that developing a commercial synthetic fuels industry as envisioned by the Energy Security Act of 1980 would require enormous direct budget outlays that would not be offset by any economic benefits.

Proceeding down the path set by current law would thus result in the inefficient use of billions of dollars. It would greatly distort the market place for synthetic fuels, possibly creating an industry that would be permanently dependent on government subsidies, not the commercially-viable industry envisioned by Congress in 1980.¹³⁰

Sen. Jim McClure (R-ID) was concerned about this statement and the impact on the SFC.

Because the corporation was a favorite of McClure, he wrote Stockman asking for clarification.

More importantly, however, McClure asked Stockman to provide the administration with a “Specifications for Synfuels Compromise” that had to be agreed to in order to undo the logjam on Reagan’s legislation and nominees being held hostage in McClure’s Committee on Energy and Natural Resources. Stockman, replying to Sen. McClure, described the statement as having two fundamental objectives: (1) to achieve major budget savings by curtailing SFC funds, and (2) to force congressional debate about the efficacy of the SFC versus free markets. He agreed to the compromise.¹³¹ Reagan’s recess appointments on November 28 permitted the corporation to conduct business. McClure held confirmation hearings on May 3, 1985, with Senate confirmation on June 13, 1985.

With support remaining for the SFC in Congress, legislation passed rescinding only \$5.37 billion of the \$9 billion requested. The administration did support this, keeping the eventual elimination of the SFC in its sights. Noble did not support any reduction in funding and, in fact, wrote notes of appreciation to those members of Congress who were able to limit the rescission amount. He expressed his “personal thanks” for their support in reducing the amount to be cut –

¹³⁰ Ronald Reagan, “Message to the Congress Transmitting Proposed Legislation to Implement the National Synthetic Fuels Program,” May 25, 1984. www.presidency.ucsb.edu/ws/?pid=39969

¹³¹ Letter from David Stockman to Sen. James McClure, September 25, 1984. Letter from Sen. Jim McClure to David Stockman, September 21, 1984. Ronald Reagan Library. Domestic Policy Council.

not a good way to win friends at the White House. Noble prepared a memorandum to Craig Fuller, assistant to the president for cabinet affairs, outlining Noble's concerns about the proposed legislation and the reasons to maintain the SFC budget. Noble distributed this memo to members of Congress as well, attempting to build support for his position.¹³²

Budget Director Stockman had been an opponent from the start. He had written a scathing piece titled "Why the Senseless Rush to Synfuels?" for the December 1979 *Reader's Digest*. Stockman argued that the federal government wanted to lock the nation into a program "with no clear goal and a hodgepodge of products and processes, only a few of which may prove practical." Worse still, he suggested, the choices would not be made by efficient market processes, but rather by bureaucrats. These same "functionaries" may sincerely have believed they knew more about energy than the individuals actually involved in the energy industry, but Stockman didn't think that was the case. He concluded by saying that "the market must be allowed to decide when the time for full-scale synfuel production has arrived. And that time has not come."¹³³ In his Senate confirmation hearing before the Committee on Governmental Affairs, Stockman reaffirmed his opposition to the Synfuels Corporation. Once again, he advocated for the free market, with the government's primary function limited to "support for research into the basic science questions essential for the development of synthetic fuels," a need the private sector was unable to fulfill adequately in the nation's "capital-constrained economy" due to very long lead-times in any payback on investment.¹³⁴

With almost daily turmoil inside the Synfuels Corporation, combined with a worldwide oil glut undermining the economics of synfuels plants and production, Congress had chopped

¹³² Letter from Ed Noble to members of Congress, July 9, 1984, and memorandum to Craig Fuller from Ed Noble, May 17, 1984. Ronald Reagan Library, Domestic Policy Council.

¹³³ David Stockman, "Why the Senseless Rush to Synfuels?" *Reader's Digest*, 92-96.

¹³⁴ *Nomination of David A. Stockman*, Hearing Before the Committee on Governmental Affairs, United States, January 8, 1981, 12, 13, 36, 41, and 167.

\$5.37 billion from the SFC budget in October 1984.¹³⁵ Despite the cuts, the SFC still had \$8 billion available for synthetic fuels projects. Noble then moved forward with many of the large projects before the SFC. But, Corcoran's directive from the White House was to "reevaluate" the SFC's existing program, with the eventual goal of significantly scaling back activities of the Synfuels Corporation.¹³⁶ With Corcoran's arrival, responsibility for SFC press conferences moved from Ralph Bayrer to Corcoran. The end game was to have Congress eliminate all funding for the Synfuels Corporation, thereby putting the SFC out of its misery by killing it.

On Friday, May 3, 1985, the Senate Committee on Energy and Natural Resources held a hearing on the nominations of Tom Corcoran, Eric Reichl, and Paul MacAvoy to the board of directors of the United States Synthetic Fuels Corporation.¹³⁷ Prima facie evidence that the SFC was not a high priority, or even a concern, of the Reagan administration can be established by a review of the nomination process for these three men. Reagan nominated Reichl on April 18, 1984, and Corcoran and MacAvoy on October 10, 1984. All three received recess appointments to the board on November 28, 1984. They were sworn into office on Thursday, December 13, 1984. Although their nominations had been transmitted to the Senate as of January 3, 1985, their confirmation hearing was not held until May 3, 1985. Senate confirmation occurred on Thursday, June 13, 1985 – over a year's time lapse for Reichl and about eight months for Corcoran and MacAvoy. No sense of urgency existed, but rather continued benign neglect.

At the May 1985 confirmation hearings, the committee and the incoming board members used the phrase "newly reconstituted Board of Directors" to describe the SFC's reformed operating procedures.

¹³⁵ Michael Isikoff, "Inside Synfuels Corp.: New Battle for Authority Shapes Up," *Washington Post*, November 21, 1984, A13

¹³⁶ *Ibid.* Corcoran phone interview by author.

¹³⁷ *Corcoran, Reichl, and MacAvoy Nominations*, Hearing Before the Committee on Energy and Natural Resources, United States Senate, S. HRG 99-67, May 3, 1985.

In 1984, Congress enacted compromise legislation reducing SFC funding authority by 49 percent, to \$5.7 billion. It also rescinded the mandated production goals as related to the board's decisions on selecting projects. After the recess appointments by Reagan, this reconstituted board met with a quorum in Washington, DC, on Thursday, December 13, 1984 – for the first time in over eight months. Noble had originally wanted to forge ahead with the projects under consideration, setting schedules and procedures. Corcoran, taking a slow and deliberate approach as directed by the White House, thought the corporation should address not only congressional legislation affecting the SFC but also the proposals from the Reagan administration: The board should “evaluate the program and its objectives,” Corcoran said, before it “can seriously look at organization and direction.”¹³⁸

In other words, the White House wanted Synfuels to slow down and go out-of-business as soon as possible.

This new board moved swiftly to reevaluate the SFC situation in light of reduced funding and to (re)define the corporation's direction.¹³⁹ The board also formed the Comprehensive Strategy Committee, with Corcoran as chair and four other board members. Corcoran, by becoming vice chair of the corporation and chair of this new committee, assumed leadership of future SFC strategy. The corporation was mandated to submit a comprehensive strategy by June 1984. This report arrived at Congress a year late. Its purpose was to outline a proposed action plan to achieve the national synthetic fuels production goals. The report had to be approved by joint resolution of Congress and signed by the president before the additional \$68 billion could be released.¹⁴⁰

¹³⁸ *Synfuels Week*, December 3, 1984, 6.

¹³⁹ *Ibid.*, 9.

¹⁴⁰ *Energy Security Act, Conference Report*, Report No. 96-824, 36-42, 209-210.

Already behind schedule, at the January 1985 board meeting, this Comprehensive Strategy Committee recommended and the board adopted a four-page Statement of Objectives and Principles. It would have a direct effect on the projects finally funded.¹⁴¹ This document presented the board's views "on the energy/economic environment for synfuels," stating that "[m]arket forces" would be used in making project decisions."¹⁴² The statement made clear that the best synfuels options for the "SFC to assist are not necessarily those that are . . . profitable . . . or most favored by sponsors seeking SFC support."¹⁴³ The board believed that "a large synfuels industry is not likely to be needed before the end of the century."¹⁴⁴ The corporation should focus instead on establishing and proving synthetic fuels technology with research, development, and demonstration/pilot plants instead of commercial-scale production plants. The federal government should not be involved in the production of synthetic fuels, the board thought, but rather in developing and proving the technology. The new objective was to establish a national synthetic fuels capability that would allow private industry to expand production whenever economics or national interests dictated.

Moving along rapidly, the board adopted a Phase I Business Plan in February 1985. This plan defined the resource-technology combinations that would have the highest priority in SFC project development, the assistance process, and deliberations.¹⁴⁵

At the March 1985 board meeting, Corcoran received majority approval for "significantly less" in SFC commitments than the approximately \$8 billion that was then appropriated.¹⁴⁶

¹⁴¹ *SynFuels*, January 18, 1985, 3-5.

¹⁴² *Synthetic Fuels Policy*, Hearing Before the Subcommittee on Fossil and Synthetic Fuels of the Committee on Energy and Commerce, House of Representatives, April 24, 1985, serial No. 99-20, 161-164.

¹⁴³ *Ibid.*, 163.

¹⁴⁴ *Ibid.*, 162. *SynFuels*, January 18, 1985, 3-5.

¹⁴⁵ *Corcoran, Reichl, and MacAvoy Nominations*, 9.

¹⁴⁶ *SynFuels*, March 22, 1985, 1.

Corcoran argued that the large projects under consideration were “simply not ready to go under current circumstances.” Rather, the Synfuels Corporation should consider “smaller and fewer projects, spread out over a longer period.”¹⁴⁷ This “go slow” approach was endorsed by a majority of the board, including Noble, and it reflected political realities. The Reagan administration needed to placate SFC opponents while satisfying its supporters. Corcoran’s proposals, backed by the White House, accomplished this.

By the April 1985 board meeting, an initial draft of the comprehensive strategy was available and distributed to the public. The board recommended no additional funds, outside of the \$8 billion then available. This draft, dated April 22, 1985, also expressed concern over the funding of large-scale synthetic fuels projects, while at the same time expressing concern that the nation may at some point require them: “However, it is too soon to know when and if this may be a good idea, or, how it should be done when and if it is a good idea.”¹⁴⁸ The report argued that current conditions in the world oil markets did not justify producing large quantities of expensive synthetic fuels to displace cheaper natural fuels, either domestic or imported. Efforts to develop synthetic fuels, the board suggested, should emphasize research and technology, along with a demonstration/pilot plant, to have on hand the “capability” to produce synfuels on a large scale. Within three years, the board would report back to Congress on SFC’s progress under Phase I and recommend the appropriateness or necessity of a Phase II.¹⁴⁹

While the Synfuels Corporation was operating under the reconstituted board, Congress had the SFC directly in its sights. Probably the most outspoken critic was Rep. Howard Wolpe (D-MI). In late February 1985, at a hearing on the Budget Proposals for Fiscal Year 1986, Wolpe had described the Synfuels Corporation to Stockman as “the most outrageous example of waste in

¹⁴⁷ *Ibid.*

¹⁴⁸ *Synthetic Fuels Policy*, 152-153.

¹⁴⁹ *Ibid.*, 153, 155.

the entire [federal] budget.” Stockman agreed, and testified that if Wolpe could get Majority Leader Jim Wright (D-TX) and Minority Leader Robert Byrd (D-WV) to concur with the SFC philosophy that Wolpe and Stockman held, then perhaps something could be done about this “outrageous” entity.¹⁵⁰ In an interview with *Synfuels* in early April 1985, Wolpe emphatically stated he would pursue “every legislative route possible” to kill the corporation. He argued that the new approach of the reconstituted board merely reinforced criticism that the Synfuels Corporation had been following “an unnecessary and terribly wasteful program,” and that this new effort was “a last gasp effort to save themselves.” All the economic assumptions offered by the Carter administration as justification for the SFC at the time of its creation “have proven false,” he said, pointing out that the large-scale synthetic fuels production facilities have never “acquired even a semblance of commercial viability.”¹⁵¹

Rep. Philip Sharp (D-IN), former congressional supporter of the corporation, was taking an increasingly hard line with the SFC and its future viability. During an April 1985 hearing of his Subcommittee on Fossil and Synthetic Fuels, Sharp stated that “a \$7.9 billion Synthetic Fuels Program cannot be justified in today’s budgetary circumstances.”¹⁵²

An additional certainty is that the operation of the Synthetic Fuels Corporation during its lifetime has led to criticism for a wide variety of reasons, and their cumulative effect has diminished the [C]orporation’s ability to carry out a synfuels program. Many who advocate the abolition of the Corporation do so because of its conduct, rather than a disagreement with its mission.¹⁵³

¹⁵⁰ *Views of Budget Proposals for Fiscal Year 1986*, Hearings Before the Committee on the Budget, House of Representatives, Serial no. 99-7, Part 1, 178-179. Wright’s support for the activities of the SFC, according to Jeff Lipkin, was for two reasons: (1) Wright had been a B-17 pilot in WWII and was impressed with the German synfuels effort, and (2) coal mining was (and is) located in many jurisdictions with a strong Democratic Party presence, and Wright fed the constituency. Email from Jeff Lipkin to author, January 30, 2013. Byrd was from a coal mining state, West Virginia.

¹⁵¹ *SynFuels*, April 19, 1985, 6-8.

¹⁵² *Synthetic Fuels Policy*, Hearing Before the Subcommittee on Fossil and Synthetic Fuels of the Committee on Energy and Commerce, House of Representatives, April 24, 1985, Serial No. 99-20, 1.

¹⁵³ *Ibid.*, 2.

The hearing focused on H.R. 935, legislation to abolish the United States Synthetic Fuels Corporation and reduce federal deficits, among other purposes. The SFC became a “whipping boy,” as well as a pariah. Dingell used very sharp and stinging language. For the SFC to commit \$8 billion over the next two years would be “unconscionable,” he said. The behavior of the corporation was unacceptable to Dingell, as it had demonstrated that large-scale synthetic fuels projects were “uneconomic” and that the board members themselves were “uneconomic.” Before cutting benefits to people, Dingell concluded, the SFC itself should be eliminated. Wolpe, also present, did not hesitate to state boldly, “The Synthetic Fuels Corporation has been an utter failure.”¹⁵⁴ Supporters of the SFC also testified, with little if any impact. Wolpe had been a strong opponent of the corporation. He could not understand why it continued to exist. Stockman explained to him there was a “bipartisan majority in the Senate who thinks – still thinks that this [SFC] is the greatest thing since sliced bread.” Such thinking was present in the House as well. The SFC had powerful and influential friends in high places and was not about to go gently into that good night.¹⁵⁵

Congress, thus, had achieved the covert goal of the White House – momentum to terminate the corporation. An amended H.R. 935 was introduced in the House of Representatives, titled *Synthetic Fuels Fiscal Responsibility Act*. The House Committee on Energy and Commerce recommended to the full House that this bill pass as amended. The legislation eliminated all SFC funding, suggested the Department of Energy establish a new \$500-million multiyear synfuels program, and made this proposed new DOE program subject to

¹⁵⁴ *Ibid.*, 9, 10, 221.

¹⁵⁵ *Views on Budget Proposals For Fiscal Year 1986*, Hearings Before the Committee on the Budget, House of Representatives Ninety-Ninth Congress, First Session, Serial No. 99-7, Part 1, February 20, 21, 27, 28; March 5, 6, 7, 8, 11, 12 and 20, 1985, 178-179. Jonathan Fuerbringer, “Fuels Program Is ‘a Waste,’ Stockman Tells Budget Panel,” *New York Times*, February 28, 1985, B7.

congressional accountability.¹⁵⁶ The House report argued persuasively for SFC termination, focusing on the declining world price of oil, lack of success on any major projects, and growing US deficits approaching over \$200 billion annually. The proverbial nails in the coffin were the excesses in SFC procedures and management. The corporation had repeatedly demonstrated it was not the proper agency to administer any synthetic fuels program, as the committee report delineated:

1. Political fund-raising efforts by board members with potential project sponsors and beneficiaries of SFC financial assistance.
2. Repeated charges of conflicts of interest among board members (leading to the resignations of two SFC presidents), and such insensitivity to conflict concerns that SFC officials responsible for them have been publicly berated by SFC directors for raising these concerns.
3. Repeatedly the proposals selected by the SFC Board as the most likely candidates for financial assistance have failed to materialize into viable synthetic fuel projects.
4. Excessive salaries and pensions, lavish travel benefits, and other costly perquisites.
5. Questionable use of “safe houses” to avoid public and congressional oversight.
6. “Psychological testing” of prospective employees by overpaid outside “consultants.”
7. Repeated changes in plans and procedures, and repeated internal reorganizations to improve efficiency – which in fact only contributed to SFC inefficiency.¹⁵⁷

Throughout 1985, Congress debated the merits and the need for a national synthetic fuels program, in a climate characterized by rising federal deficits, budget cuts, and declining energy prices. Toward the end of 1985, Ralph Bledsoe, executive secretary for the President’s Domestic

¹⁵⁶ *Synthetic Fuels Responsibility Act*, House of Representatives, July 11, 1985, Rept. 99-196, Part 1, 1, 2.

¹⁵⁷ *Ibid.*, 4.

Policy Council (DPC),¹⁵⁸ wrote a memo to council members addressing the issue of whether or not the administration should support legislation to abolish the SFC, and whether or not it should “attempt to influence the SFC Board’s decision to fund additional projects in light of current Congressional proposals.”¹⁵⁹ The administration took no action on either of these questions. Instead of announcing a position, the White House let Congress know that support for the SFC had eroded, and that the White House would not object to efforts to cease SFC project commitments or to abolish the SFC itself.¹⁶⁰ At the September 26, 1985, DPC meeting it became apparent that the SFC had gone against the agreement it had previously made, to cease further funding of projects, by subsidizing one project on September 24, 1985.¹⁶¹ At this meeting, a significant and true observation came from the DPC members: “There is a great concern among many in the Administration that we have lost control of this agency [SFC].”¹⁶² The SFC had done a superb job of insuring its termination by Congress, and Reagan had no desire to do anything to subsidize private enterprise.

The congressional discussion culminated on Thursday, December 19, 1985, with the passage of the Continuing Appropriations Act for Fiscal Year 1986 (Public Law 99-190), which contained mandates to terminate the SFC and to rescind all remaining unobligated and uncommitted funds. The four financial assistance contracts signed by the corporation were to be transferred to the Department of the Treasury. The Synfuels Corporation had 120 days to close-

¹⁵⁸ The DPC consisted of the president, the vice president, and secretaries of Defense, Transportation, Commerce, Energy, State, Interior, HUD, and Education.

¹⁵⁹ Memorandum from Ralph Bledsoe to the Domestic Policy Council, September 17, 1985. Ronald Reagan Library, Domestic Policy Council.

¹⁶⁰ Talking Points for the President on the Synthetic Fuels Corporation Issue, September 26, 1985. Ronald Reagan Library, Domestic Policy Council.

¹⁶¹ The financial assistance awarded on September 24, 1985, by the SFC board was \$60 million to the Forest Hill heavy oil project in Wood County, Texas. The Board also approved the key terms of an award for up to \$500 million to the Union Oil Parachute Creek oil shale project. SFC, September 25, 1985, press release.

¹⁶² Meeting with the Domestic Policy Council, September 26, 1985, Alfred Kingon, Cabinet Secretary. Ronald Reagan Library, Domestic Policy Council.

up shop and permanently go out of business.¹⁶³ The directors had their duties terminated 60 days after December 19, 1985. In regard to the sensitive subject of salaries, as of that December termination date, no officer or employee was permitted to receive a salary in excess of Level IV of the Executive Schedule as established by statute.¹⁶⁴

During the heated debates in the House, several supporters of the corporation often referenced a July 9, 1985, letter from the Congressional Budget Office (CBO) to the House Committee on Energy and Commerce. The CBO stated that “abolishment” of the SFC “would cut outlays by only \$332 million through 1990, about one quarter of one percent of the cumulative budget deficit in that period.”¹⁶⁵ SFC backers argued that besides the negligible budget impact, the corporation was “moving forward with new confidence and direction” to accomplish its mission.¹⁶⁶ These explanations had no impact on the termination provision and its passage.

Noble had previously submitted his resignation to Reagan on January 28, 1986 – effective February 15, 1986. In his letter to the president, Noble wrote:

As you know, from the beginning I had reservations about how a national synthetic fuels program should be approached, and this job as Chairman of the Corporation has proven to be a lot tougher at times than I’d imagined. It has also, however, provided moments of deep satisfaction in knowing that we were doing a necessary job in a limited way which would serve the long term interests of the country and bring credit to your administration.

Mr. President, I believe that true conservatives build for the future in ways that promote opportunity and growth within our free enterprise system. . . .

¹⁶³ *United States Synthetic Fuels Corporation, 1985 Annual Report*, 1. Author’s possession.

¹⁶⁴ *Public Law 99-190*, December 19, 1985, Department of the Treasury, Energy Security Reserve. In April 1986, Congress passed Public Law 99-272, which had SFC termination language as well. P.L. 99-190 terminated funding and P.L. 99-272 terminated the authorization. Library of Congress, Congressional Research Service, email dated April 2, 2012.

¹⁶⁵ Letter from Rudolph G. Penner, director of the Congressional Budget Office, to Rep. John Dingell (D-MI), Chair of the Committee on Energy and Commerce, July 9, 1985, SFC files of the CBO.

¹⁶⁶ *The Synthetic Fuels Program*, Hearings Before the Subcommittee on Economic Stabilization, House of Representatives, Serial No. 99-49, September 11 and 12, 1985, 6.

We have given the country a few diverse plants which will provide a national insurance policy against future energy disruptions and which in time will lead to expansion of a synthetic fuels industry fully within the private sector. We have done this with less than two percent of the monies the Carter Administration anticipated spending ¹⁶⁷

Noble ended by mentioning he returned to the private sector “with a heightened understanding of the political process.”¹⁶⁸ After all the corporate travails he experienced, such insight was undeniably an understatement.

Both board and senior officer turnover were significant. Two officers remained at the corporation for its duration: vice president of projects Ralph Bayrer and vice president of technology Len Axelrod. The staff experienced little turnover and remained committed to the SFC. They were dedicated, hard working under adverse political circumstances in a difficult economic environment.

Reagan did not shed any tears over the demise of the corporation. On February 4, 1986, Noble had written Frederick Ryan, director of presidential scheduling and appointments, seeking a farewell appointment with Reagan for a thank-you photo. Despite Noble’s “long-time financial support” of the president *and* the likelihood that he would be a “large contributor to the [Reagan] library,” Reagan did not meet with Noble. Ryan, responding on March 19, wrote that Reagan had a “busy schedule in the days prior” to Noble’s February 15th departure from Washington. Ryan thanked Noble for his “thoughtfulness in wanting to see the President,” noting that Noble had their best wishes.¹⁶⁹ Noble never had been – nor would ever be – considered an important ally to the administration.

¹⁶⁷ Letter to the President from Edward Noble, January 28, 1986. Author’s possession.

¹⁶⁸ *Ibid.*

¹⁶⁹ Ronald Reagan Library, White House Files of Frederick J. Ryan, Jr., 383120, PR007-01.

Matters had not been completely settled, though. During its last meeting on January 21, 1986, the board voted unanimously to grant a \$327-million loan guarantee to Union Oil Company's Parachute Creek oil shale project, despite a congressional directive to stop spending money. The argument centered on whether Union Oil had been promised the aid under an earlier signed contract. The board based its decision on a fifteen-page legal opinion from corporation attorneys and an eight-page opinion from a Chicago law firm specializing in contract law – Schiff, Hardin, & Waite. The board spent more than two hours discussing the legal situation. Both opinions argued that the SFC board had a “legally binding commitment” to Union Oil. SFC staff decided that Congress had exempted previous commitments from its ban on additional financial assistance. Needless to say, this action, viewed as insubordination by Congress, elicited caustic comments. Dingell termed it “corporate socialism,” and Sen. Howard Metzenbaum (D-OH) said it “elevated hypocrisy to new heights.”¹⁷⁰ The SFC board felt “bolstered” by a letter from the Department of the Treasury to the corporation indicating that the SFC had consulted with Treasury on the Union loan guarantee, and that Treasury had commented favorably.¹⁷¹

At the final SFC press conference, Noble commented that the accomplishments of the corporation would be seen as “worthwhile.” He wished that he had “pushed the process a little harder” knowing what he knew now “about the fickleness of Congress.” Concluding, Noble said the SFC “and the few truly dedicated project sponsors and other steady supporters of a national synthetic fuels program . . . have initiated an industry which is going to be needed one day.” It may be in a few years, he speculated, or “not for a couple of decades,” but it would most likely be sooner rather than later.¹⁷²

¹⁷⁰ Cass Peterson, “Lame-Duck Synfuel Unit Votes \$327 Million Aid,” *Washington Post*, January 22, 1986, A17.

¹⁷¹ *SynFuels*, January 3, 1986, 3. *SynFuels*, January 17, 1986, 2. *SynFuels*, January 24, 1986, 1.

¹⁷² *SynFuels*, January 24, 1986, 2.

Noble had stepped into a difficult situation. He had no substantive support from a White House that had many serious issues of far higher priority than the SFC, and was left to swing in the wind until the administration could maneuver to close the corporation. He did lead the SFC to fund four projects that operated for a period of time, but all eventually were shut down. His approach was to prove out a few key technologies for the benefit of the nation so they would be ready for future energy crises.¹⁷³

On Friday, April 18, 1986, at 5 p.m., the United States Synthetic Fuels Corporation became history. The few remaining employees at the corporation's modern office at 2121 K Street, NW, were packing up the last boxes to be transferred to Treasury. Richard Miller, former SFC budget chief, directed this effort he referred to as "the sweep-out force." All walls in the SFC's four floors of office space were now bare, except for one that had a large banner saying: "It's all over, baby." It, too, would be gone by the end of the day. When the packing was over, the SFC staff turned off the lights, closed the door, and left for good. Government agencies are easily created, but seldom, if ever, do they die. The SFC stands out as one of the few that did. The SFC, wrote *Post* reporter Cass Peterson, "was conceived in response to one crisis and put to death in response to another."¹⁷⁴

The next day, April 19, Reagan addressed the nation on oil prices. He did not miss the opportunity to comment, "We've also been able to close down the costly Synfuels Corporation, a quasi-governmental agency that ate up billions of taxpayer dollars while it didn't solve the energy crisis." What and who solved the energy crisis? "[F]reedom did, the market place did, the

¹⁷³ Holleman, July 23, 2012 and Bayrer July 17, 2012.

¹⁷⁴ "U.S. Synthetic Fuels Corporation Shuts Down," *New York Times*, April 19, 1986, 46. Cass Peterson, "Turning Out the Lights at the Synfuels Corp.," *Washington Post*, April 18, 1986, A19.

entrepreneurs and businessmen and women of America did.” As for those in Washington, they “lifted the artificial restraints, sat back, and watched the gushers blow.”¹⁷⁵

At the time, there were public reports that the victorious foes of the Synthetic Fuels Corporation who had forced its demise planned a “synfuels wake” to celebrate in a rented hall on Capitol Hill during the weekend of April 20-21. Among the partygoers were Rep. Mike Synar (D-OK), aides to Sen. Howard Metzenbaum (D-OH) and Sen. Howard Wolpe (D-MI), environmentalists, and other assorted groups whose lethal efforts came to fruition with the abolition legislation. A congressional source denied that the door prize would be a loan guarantee.¹⁷⁶

BOARD OF DIRECTORS



Edward E. Noble

Born: March 19, 1928. Residence: Tulsa, Oklahoma. Political affiliation: Republican. SFC position: Chairman of the board. Confirmed: May 14, 1981. Term: seven years. Chairman of the board, Noble Inns Corporation. Director, Auto Crane Company of Tulsa, Oklahoma. Previous director of Noble Affiliates, an oil-related company. Director of the Hoover Institute and Trustee of the Samuel Roberts Noble Foundation, Inc. of Ardmore, Oklahoma. University of Oklahoma, 1951.



Victor A. Schroeder

Born: July 29, 1921. Residence: Atlanta, Georgia. Political affiliation: Independent. SFC position: President and board member. Confirmed: September 11, 1981. Term: six years. Manager of development for the Atlanta Apparel Mart and executive director of the Peachtree Center for three years. Past president and chief executive officer of Aplob, Inc., a real estate consulting firm. Also served as senior vice president for development of the Phipps Land Company and president of Resort Properties. Attended Oklahoma State University and was graduated from Officer Candidate School at Fort Benning, Georgia.



C. Howard Wilkins, Jr.

Born: February 19, 1938. Residence: Wichita, Kansas. Political affiliation: Republican. SFC position: board member. Confirmed: September 11, 1981. Term: five years. Founder and managing partner of the Maverick Company. Former president of the Pizza Huts of Louisville, Inc. and later president and chairman of the board of Pizza Corporation of America. Served as vice chairman of the board of the Pizza Huts, Inc. Yale University, 1960.



Victor M. Thompson, Jr.

Born: November 12, 1924. Residence: Tulsa, Oklahoma. Political affiliation: Democrat. SFC position: board member. Confirmed: September 11, 1981. Term: four years. Chairman and chief executive officer of Ulica National Bank & Trust and Ulica Bankshares Corporation of Tulsa. Previously president and chief executive officer of First National Bank and Trust of Stillwater. Former director of Oklahoma Bank and Trust of the Federal Reserve Bank of Kansas City. University of Oklahoma, 1948.



Robert A. G. Monks

Born: December 4, 1913. Residence: Cape Elizabeth, Maine. Political affiliation: Republican. SFC position: board member. Confirmed: September 11, 1981. Term: three years. Past chairman of the board of the Boston Company, Inc. Also former president of the Maine Wood Fuel Company, Ram and Company and C. H. Sprague and Son Company. Held directorships with several coal companies, including Westmoreland, Imperial Smokeless, Winding Gulf and Penn-Virginia. Harvard College, 1934. Harvard Law, 1938.



John B. Carter, Jr.

Born: October 19, 1924. Residence: Houston, Texas. Political affiliation: Independent. SFC position: board member. Confirmed: August 16, 1982. Term: two years. Senior vice president and director of Pogo Producing Company, an oil and gas exploration and refining firm. Previous managing director, general partner and southwestern representative of Lehman Brothers. Former independent oil operator and financial consultant. Babson College, 1947.



Milton M. Masson, Jr.

Born: July 27, 1941. Residence: Paradise Valley, Arizona. Political affiliation: Republican. SFC position: board member. Confirmed: August 16, 1982. Term: one year. President of Sullivan and Masson, Inc., consulting engineers, architects and construction managers. Also general partner for Squaw Lake Marine Company of Mesa, Arizona. Former board member of Security Savings and Loan. Past president of the Arizona State Chamber of Commerce. Christian Brothers College, 1964. Graduate work, University of Missouri.

Figure 8.2. United States Synthetic Fuels Corporation 1982 Board of Directors, from the 1982 Annual Report

¹⁷⁵ Ronald Reagan, “Radio Address to the Nation on Oil Prices,” April 19, 1986. www.presidency.ucsb.edu/ws/?pid=37156 (Also in Barrow, 231.)

¹⁷⁶ *SynFuels*, April 18, 1985, 3.

BOARD OF DIRECTORS



Edward E. Noble

Chairman of the Board. Confirmed: May 14, 1981. Term: seven years. Chairman of the Board, Noble Iron Corporation, Director, Auto Crane Company of Tulsa, Oklahoma. Previous director of Noble Affiliates, an oil-related company. Director of the Noble Foundation, Inc. of Andover, Oklahoma. University of Oklahoma, 1941. Born March 19, 1928. Residence: Tulsa, Oklahoma. Political affiliation: Republican.



Victor A. Schroeder

Board Member. Confirmed: September 11, 1981. Term: six years. President and chief executive officer of Aplymb, Inc., a real estate consulting firm. Manager of development for the Atlanta Apparel Mart, and executive director of the Peachtree Center. Served as senior vice president for development of the Phlips Land Company and former president of Resort Properties. Attended Oklahoma State University and graduated from Officer Candidate School at Fort Benning, Georgia. Born: July 29, 1921. Residence: Atlanta, Georgia. Political affiliation: Independent.



Thomas J. Corcoran

Board Member and Vice Chairman. Confirmed: June 13, 1985 for the term ending August 16, 1990. Member of the U.S. House of Representatives serving the Fourteenth District of Illinois for four consecutive terms, from his election in 1970 until his appointment to the Corporation's Board of Directors in November 1984. Served on the Committee on Energy and Commerce, Subcommittee on Fossil and Synthetic Fuels, and the Committee on Post Office and Civil Service. Formerly vice president of the Chicago-North Western Transportation Company, lobbyist for Governor Richard Ogilvie of Illinois, and administrative assistant to the Leadership in the State Senate of Illinois. University of Notre Dame, PhD. Born: May 23, 1919. Residence: McLean, Virginia. Political affiliation: Republican.



Paul W. MacAvoy

Board Member. Confirmed: June 13, 1985 for the term ending September 14, 1991. Dean of the Graduate School of Management, University of Rochester, N.Y. Formerly Beinecke professor of economics at Yale University and Henry Luce professor at Massachusetts Institute of Technology. Author of numerous articles and 41 books on energy and regulatory policy. Bates College, 1955. Yale University, M.A., 1956, Ph.D., 1960. Born: April 21, 1934. Residence: Rochester, New York. Political affiliation: Republican.



Eric H. Reichl

Board Member. Confirmed: June 13, 1985 for the term ending September 14, 1986. Engineering consultant. Past president of Conoco Coal Development Company. Also former vice president for research, director of research and research manager of Consolidation Coal Company. Previous process research on synthetic liquid fuels with Stanolind Oil & Gas Company (now Standard Oil of Indiana) and California Research Corporation (Standard Oil of California). Education: Technische Hochschule, Vienna, 1937. Born: December 3, 1913. Vienna, Austria. Residence: Greenwich, Connecticut. Political affiliation: Republican.

Figure 8.3. United States Synthetic Fuels Corporation 1985 Board of Directors, from the 1985 Annual Report

Chapter 9: Environmental and Socioeconomic Effects of Synthetic Fuels Plants

President Carter outlined in his July 15, 1979, address to the nation his idea for an Energy Security Corporation (ESC), while also urging Congress to create the Energy Mobilization Board (EMB). While several members of Congress referred to the acronym as, “Even More Bureaucracy,” that board would actually have had the responsibility and authority “to cut through the red tape, the delays, and the endless roadblocks to completing key energy projects.”¹ As envisioned, the EMB would have been given enormous power. Three board members, nominated by the president and confirmed by the Senate, would have directed the entity. The initial number of employees was estimated at two hundred, but anticipated to increase to several thousand within a few short years via a larger budget. Sen. John Melcher (D-MT) predicted that if the EMB were to become the law of the land, then some future Congress would be saddled with the burden of dismantling it to free up the energy companies to conduct their business. The EMB would have created more problems and delays than it would have solved, according to Melcher.² The DOE, in preparation for congressional hearings, estimated that at least seven hundred employees would be necessary to run the EMB.³

The EMB would have been authorized to (1) designate projects as critical to achieving the nation’s import-reduction goals, and then (2) establish binding schedules for federal, state, and local decision-making for those projects. If a federal, state, or local agency failed to act within the specified time frame, the EMB would have been empowered to apply the law. The EMB board, as Carter envisioned it, would have the authority to waive procedural requirements

¹ Jimmy Carter, “Address to the Nation on Energy and National Goals,” July 15, 1979. www.presidency.ucsb.edu/ws/?pid=32596

² *Congressional Record*, June 21, 1980, 16136-16137.

³ *Congressional Record*, June 27, 1980, 17359.

of federal, state, or local laws to hasten the development and construction of a critical energy facility. To avoid further delays, the board could waive the application of new or procedural requirements of laws that might come into effect after construction had commenced. The exercise of waivers by the EMB would have been subject to presidential veto.⁴

The SFC board recognized that without an EMB, construction of energy projects might run into delays. Such interruptions would mean not only delaying the reduction of imported foreign crude oil, but would also affect rates of financial return to the SFC and the project sponsors. In a May 1981 SFC presentation to a financial forum on natural gas, a senior officer used the slide shown in Figure 9.1 to illustrate his point that “a delay caused by environmental concern for crickets would have the effect of delaying the revenues that the plant would earn once it was operational[, and] this would have a negative impact on the project’s rate of return.”⁵ The cartoon references an article in the April 3, 1981, issue of *Science* featuring two-headed and three-eyed crickets hatched in sand that had been treated with chemicals produced at synthetic fuels plants.⁶ As prescribed by law, SFC had mandated production and diversity goals in the interest of national security. Environmental concerns, while important, would pale in comparison to the mandates.

⁴ “The White House Fact Sheet on the President’s Import Reduction Program,” July 16, 1979, 9. Press Report, July 16, 1979, Deputy Press Secretary Rex Granum files, Box 63, folder “7/1/79 – 7/16/79,” Jimmy Carter Library.

⁵ Robert T. Blakely, “An Approach to Risk and Financial Assistance at the Synthetic Fuels Corporation,” Remarks given at the Sixteenth American Gas Association Financial Forum, Boca Rotan, Florida, May 11-13, 1981.

⁶ Barbara Walton, “Chemical Impurity Produces Extra Compound Eyes and Heads in Crickets,” *Science*, vol. 212, no. 4490, April 3, 1981, 51-53.

Delays Affect the Rate of Return

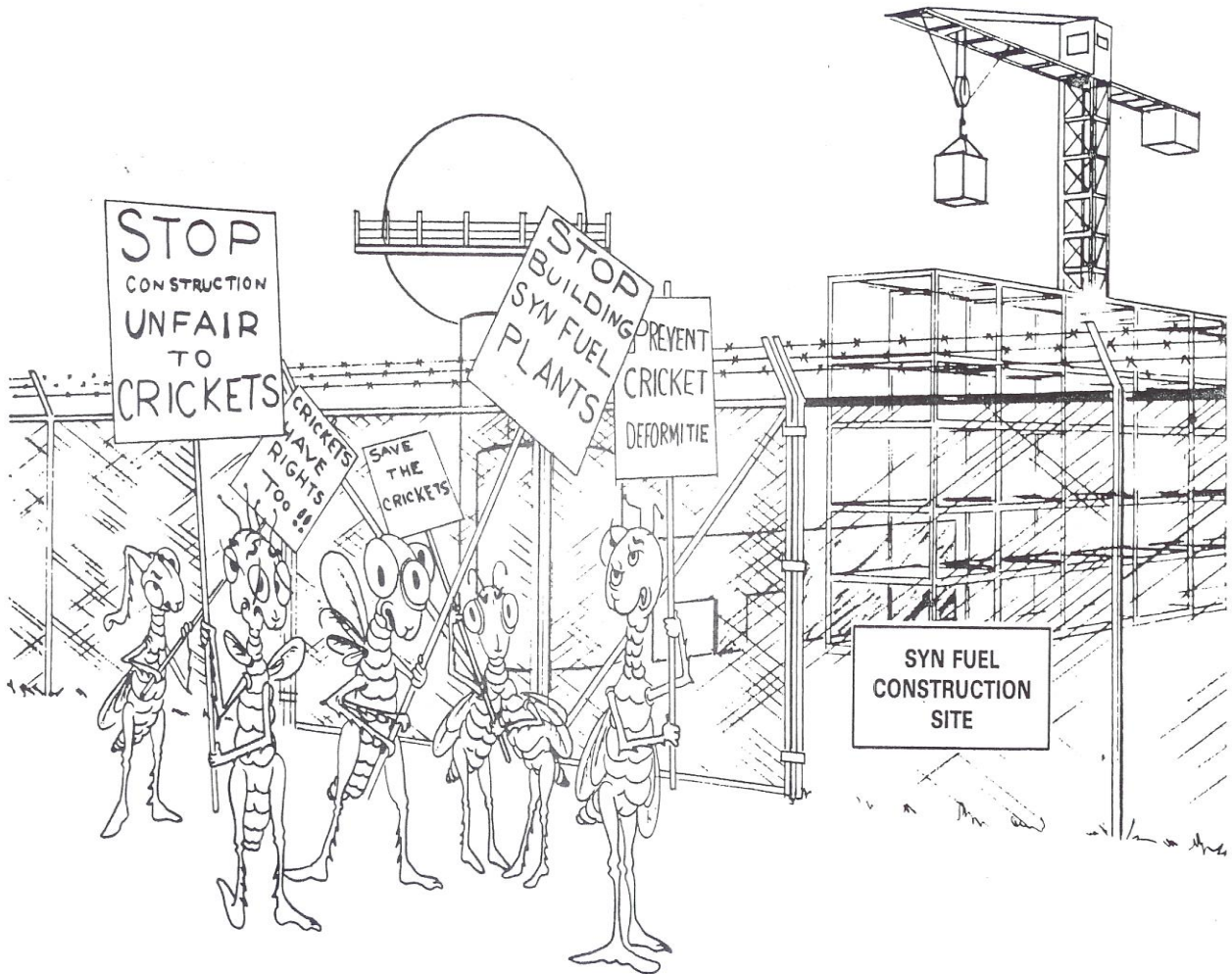


Figure 9.1. Slide from May 1981 SFC presentation at Sixteenth American Gas Association Financial Forum

The reaction to Carter's idea for an EMB was mixed. Environmentalists and states responded in a negative manner: Environmentalists felt the EMB would ignore environmental laws, while states were anxious over the potential for the federal government to supersede state laws. Larry Lukens, (acting) deputy assistant secretary of Energy for industrial planning and development at the time of congressional debate on the EMB bill, recalls that the governor of Colorado, Richard Lamb, sent his chief of staff to Washington, directing him to camp full-time in the offices of the secretary of Energy. Lamb was adamant about not wanting the EMB bill to pass. The mere idea of the federal government having the power to supersede the environmental and health laws of the State of Colorado was anathema not only to him but also to most, if not all, of the other states.⁷ If passed, the EMB would have been a huge intrusion into areas normally reserved as states' rights. As proposed, the EMB would have been permitted to take over, waive, or otherwise usurp state decision-making authority over at least 250 state laws regulating health, safety, and environmental protection.⁸

In congressional testimony on the EMB, Anthony Roisman, staff attorney of the Natural Resources Defense Council, and Alan Morrison, director of the Public Citizen Litigation Group, had harsh words for both Carter and the legislation. Roisman alleged that the president was schizophrenic. Roisman pointed out that Carter, in his July 15th address, had extolled the virtues of citizen involvement in government, and then, in the same speech, advocated elimination of that very participation via the EMB. Roisman argued that the EMB would bypass participatory decision-making processes only to place them in the hands of incompetent people. He commented, "The opportunity to waive environmental laws, the opportunity to waive safety standards – all in the name of a 'national [security] interest' in building the biggest and largest

⁷ Email to author from Larry Lukens, June 19, 2011.

⁸ *Congressional Record*, June 26, 1980, 16924-16925. *Congressional Record*, June 27, 1980, 17361.

synthetic fuel facility that one can imagine” – was the wrong path for the country to take.⁹

Morrison expressed concerns over the potential power of the EMB to permit synthetic fuels plants so quickly under the guise of “national interest.” Morrison and Roisman coined the phrase “Justice accelerated is justice denied” to describe the EMB, turning around the old legal maxim of “Justice delayed is justice denied.”¹⁰

Developing synfuels posed significant environmental risks, as journalist Joanne Omang of the *Washington Post* wrote, using hyperbole: “Over the synthetic fuels industry hovers the specter of a deformed baby cricket with two sets of eyes,” referencing the *Science* article previously mentioned.¹¹ To be fair to the enterprise, the deformed crickets were actually hatched at Oak Ridge National Laboratory in Tennessee, though. Yet Omang commented that synfuels from coal and oil shale would have as much impact on the environment as the oil, coal, and utility industries combined, and then some. Devising the necessary controls would be an enormous task because most of the environmental risks were unprecedented. In the western United States, environmental risks were compounded by a lack of water sources. The Reagan administration was now under way, and environmentalists were already wary of its general antiregulatory stance and the efforts to lessen regulations on private industry. The EPA, making an extraordinary attack on inconsistent and stop-and-go regulations that infuriate industry, set up a task force to address synthetic fuels, which it ruled were new chemicals. Industry, aware of the issues, believed that the problems could be addressed and solved.¹²

⁹ *Synthetic Fuels*, Hearings Before the Committee on Governmental Affairs, United States Senate, July 17, 18 and 20, 1979, 74.

¹⁰ *Ibid.*, 84.

¹¹ Joanne Omang, “Synfuels Industry Faces Problems Both Toxic, Novel,” *Washington Post*, May 30, 1981, A1.

¹² *Ibid.*

The synthetic fuels industry would require large numbers of workers with the skills necessary to construct and operate synthetic fuels plants. It would also require significant capital investment and place enormous demands on the construction industry. Pace Consultants and Engineers, advising the Senate Budget Committee, estimated the production levels Carter had outlined would require a national commitment to divert resources into this activity, depriving other sectors of the economy and sharply escalating costs in mining and construction, equipment, and materials. To design and build the projected thirty-five plants, Carter's plan would also require an additional 24,000 professional employees every year from 1985 through 1990. This figure would represent a 53-percent increase over the 45,000 workers with the required skills who were available in 1978. Estimated annual construction expenditures would amount to \$14 billion for the president's proposal; by comparison, expenditures for the entire construction industry in 1978 totaled \$27.2 billion. In 1978, the construction industry employed 4.5 million workers; Carter's plans would require 210,000 new construction workers each year.¹³

Pace Consultants concluded that with the above construction constraints, the nation would be hard-pressed, even with a crash program, to achieve over two million barrels per day of synfuels production by 1990. Pace placed the upper limit of synfuels production at 1.5 to 2.0 million barrels per day, depending upon the level of the nation's commitment. Even at the lower end of the estimate, "considerable economic disruption" and diversion of resources (people, money, and time) would be necessary, as well as leadership from the president.¹⁴

¹³ *National Energy Security Corporation*, Hearings Before a Subcommittee on Energy and Power of the Committee on Interstate and Foreign Commerce, House of Representatives, Serial No. 96-112, September 21, 24, October 11, and 18, 1979, 540-549.

¹⁴ *Ibid.*

In July 1979, the DOE issued a report on the environmental impact of synthetic liquid fuels.¹⁵ The purpose of the report was to determine whether it would be possible to accelerate the development of commercial-size plants that could produce synthetic liquid fuels from oil shale and coal liquefaction – technologies near commercialization.¹⁶ The report looked at first-generation technologies, including surface facilities for oil shale retorting and indirect processes for coal liquefaction, and found “no absolute environmentally related constraint identified for any of the first-generation . . . technologies.”¹⁷ Environmental controls would add to the production cost of synthetic liquids: \$2 to \$4 per barrel for surface retorting of oil shale, or 10 to 20 percent of total product cost. First-generation coal-derived liquids would have incurred environmental control costs in the 10-to-20 percent range as well. The report explored second-generation technologies – direct coal liquefaction and modified *in situ* oil shale – but did not expect that those technologies would contribute commercial production of synthetic liquids by 1990. These second-generation technologies posed potential show-stopping problems, such as effects on water supplies, large volumes of toxic or hazardous wastes, and reclamation issues. If the industry was to meet the 1990 goals, leaders had to consider socioeconomic effects at the beginning of the planning and permitting processes. They needed to consult local planning boards from the start so that plant construction schedules and associated industries and communities could be phased into the process.

Friends of the Earth and the Sierra Club, among several citizen groups, expressed deep reservations about the EMB.¹⁸ These environmental organizations, as well as others, felt that

¹⁵ *Environmental Analysis of Synthetic Liquid Fuels*, Department of Energy, July 12, 1979, DOEEVOO44.

¹⁶ The report also examined biomass conversion technology and found that this technology was not capable of producing any significant product.

¹⁷ *Environmental Analysis*, 1.

¹⁸ The entities indicating concern over the proposed synfuels plants included: Environmental Defense Fund, Environmental Policy Center, Friends of the Earth, League of Conservation Voters, League of

Carter had abandoned his promises to them, despite his earlier intentions to be a proper steward of the environment. The president's July 15th proposals, if adopted, posed the "strongest kind of threat to the laws now protecting" the environment and the public.¹⁹ Those regulations included not only the carefully woven structure of environmental laws, but also many other laws and rights that would be waived by the proposed EMB. Tampering with those rules would affect every segment of society: business, labor, consumers, farmers, ranchers, Native Americans, railroads, truckers, in addition to local and state governments. Carter's plan, according to environmentalists, was the energy path with the "most adverse effect" on the environment and the economy. Their ire was directed mostly at the proposed EMB (which they labeled "authoritarian"), the centralization of arbitrary and capricious decision-making, and the discarding of federal policy on carcinogenic and toxic substances.²⁰ The Carter administration did not alleviate, but rather aggravated, concerns over presidential nominations to the EMB board when a White House aide stated that Carter would appoint "good people," while what environmentalists "really want[ed] [was] a government of men and women, not of laws." The environmentalists seemed to feel that the White House "assurance [had] been slim assurance" that their issues would be addressed.²¹ Issues raised by synfuels plants created such apprehensions that these groups demanded an equal period on prime-time television, comparable to Carter's July 15th address, to articulate the full scope of choices for the nation.²²

Environmentalists also had concerns about the proposed ESC, but these were overshadowed by their larger anxieties about the EMB. The issues they raised about the ESC

Women Voters, Natural Resources Defense Council, National Wildlife Federation, National Audubon Society, Sierra Club, Solar Lobby, and Wilderness Society. *Synthetic Fuels*, 359.

¹⁹ *Synthetic Fuels*, Hearings Before the Committee on Governmental Affairs, United States Senate, July 17, 18 and 20, 1979, 357-359.

²⁰ *Ibid.*, 360-362.

²¹ *Ibid.*, 269.

²² *Ibid.*, 359.

revolved around its exemption from certain federal laws and its emphasis on energy production at the expense of cost effectiveness, production technologies, and environmental safety.²³

The EMB came close to passing, but failed in the end. Carter had desperately wanted the EMB, hoping to sign it into law on the same day he placed his signature on the Energy Security Act (ESA) – to make it Energy Independence Day. However, members of Congress had several misgivings about the EMB. Some believed that with the proposed amendments, the EMB would cause more delay than speed. Others feared it would lead to the suspension of state water and environmental laws. Some saw it as another layer of federal bureaucracy that would cause further construction delays. Of particular concern was the fact that the bill would have permitted the waiving of federal laws. Rep. Toby Moffett (D-CT), commenting on the bill's final version, said it would make the federal government a big brother that would trample on state and local rights. House Majority Leader Jim Wright (D-TX) was the only member of Congress who spoke fervently in favor of the bill, arguing that its failure would signal to the world that the United States was not serious about wanting energy independence. Wright argued that for the synthetic fuels industry to get off the ground, it needed both the ESA and the EMB. Without the EMB, he noted, projects could be delayed endlessly through bureaucratic red tape.²⁴

The Energy Security Act called for “the creation of commercial synthetic fuels production facilities . . . in an environmentally acceptable manner,” asking the SFC to consider “the potential of the technology for complying with applicable regulatory requirements” in awarding financial assistance. Any contracts for funding required the development of a plan, acceptable to the SFC board, for the monitoring of environmental and health-related emissions from the construction and operation of a synthetic fuels plant. The corporation implemented

²³ *Ibid.*, 363-364.

²⁴ Richard L. Lyons, “President Loses ‘Fast Track’ Bill in House Voting,” *Washington Post*, June 28, 1980, A1.

procedures and policies mandating that financial assistance would be granted only to projects that met applicable environmental regulatory requirements and the environmental policies of the SFC.²⁵

The corporation required that each project receiving assistance from the SFC be subject to an environmental monitoring and reporting plan that was approved and accepted by the board. In each proposal submitted to the corporation, sponsors had to address the permitting requirements, socioeconomic impacts, and water supply needs. This condition allowed SFC staff to determine whether adequate consideration had been given to these factors. In the project submission, applicants had to (1), outline socioeconomic effects by evaluating the availability of a labor force in the project area and the anticipated number of construction workers expected to relocate to the region, (2), identify projected impacts on public services by the construction and operation of the plant, (3), present evidence of consultation with appropriate local officials regarding the ability of local infrastructure to absorb the expected number of relocated workers and the need for mitigation, and (4), demonstrate that effective impact mitigation measures had been or would be undertaken. The socioeconomic criteria were designed to identify those projects that demonstrated a willingness and ability to take action where needed to minimize the poor labor productivity and high worker turnover rates that had occurred in major construction projects where inadequate assessment and mitigation of socioeconomic impacts had been performed.²⁶

The ESA authors specifically exempted the Synthetic Fuels Corporation (SFC) from the requirements contained within the National Environmental Policy Act of 1969 (NEPA). Thus, the corporation was not required to file an environmental impact statement (EIS). When a “major

²⁵ *United States Synthetic Fuels Corporation: Comprehensive Strategy Report, Appendices*, June 1985, D-1, D-5.

²⁶ *Ibid.*

Federal action significantly affecting the quality of human environment” is involved, there must be NEPA compliance by the applicable government agencies.²⁷ Congress provided that the SFC was not a federal agency for NEPA purposes. However, with respect to corporation construction projects, the SFC was a federal agency and required to obey the NEPA. Hence, the project sponsors had to prepare and file an Environmental Impact statement (EIS).

At an SFC board meeting in Salt Lake City, Utah, on December 11, 1981, board members heard a presentation from Joseph Cannon, acting associate administrator for policy and resource management of the Environmental Protection Agency (EPA), representing Anne Gorsuch, EPA administrator. Cannon reported that the EPA was “taking special care to assure that environmental concerns relating to synthetic fuels development [were] handled in as smooth and as cost-effective a manner as possible.” He said the key in addressing environmental issues and achieving public acceptance of the safety of these plants lay in cooperation among and between the EPA, the corporation, members of industry, state and local governments, and residents. He reported that staff meetings at both EPA and SFC were continuing to develop permitting procedures for the proposals before the SFC, and that the EPA had begun issuing permits on the Colony project. Cannon concluded by assuring the board that “the goal of an environmentally acceptable synthetic fuels industry with cost effective controls and without regulatory delays [could] be reached.”²⁸

In early January 1982, the SFC board held a briefing that devoted significant time to outlining the environmental and socioeconomic aspects of synthetic fuels proposals. The board

²⁷ NEPA, sec. 102(2) (C).

²⁸ Minutes of a Meeting of the Board of Directors of the United States Synthetic Fuels Corporation, December 11, 1981. National Archives two, RG56, Acc. 056-86-0064, vol. 4.

discussed the range of both positive and negative effects that these plants would have on communities and regions:

- Tax bases and employment opportunities would expand, although the tax revenue would come after employees and the project were in progress;
- Because of the delay in tax revenues, local finances, services, and facilities would be delayed;
- Conflicts over scarce resources and changing values were likely;
- “Boom and bust” cycles were likely.

Board members reported that the environmental, health, and safety aspects of synthetic fuels development remained uncertain, despite extensive studies, in part because no operating plants of significant size had yet been built. Sponsors and state and local governments would have to consult in advance and work closely in a responsible and cooperative manner, and environmental requirements would have to be determined and compliance achieved. The early plants would present a learning experience for the private sector, government, and the public about how to develop the industry safely and beneficially, as long as growth was not too rapid or concentrated and the early experiences were correctly monitored and analyzed.²⁹

Commercial synthetic fuels production plants raised many questions about environmental implications. Some of the problems requiring attention included water availability, solid waste disposal, air quality and occupational and health hazards. The Synthetic Fuels Corporation was not required to prepare an EIS when contemplating financial assistance for submitted proposals, but the SFC had to use stated criteria in its decision-making capacity, including diverse technology, production cost per barrel or unit production cost of synfuels from a proposed project, potential for technology replication, and technology’s potential for complying with

²⁹ *United States Synthetic Fuels Corporation Original Minute Book*, vol. 6, 1/18/82 through Annex D, “Summary Version, U.S. Synthetic Fuels Corporation Staff Briefing for the Board on Strategic Matters, January 18, 1982. National Archives 3, RG56, Acc. 56-82-0064.

applicable regulatory requirements.³⁰ The SFC was also required to consider the extent of natural resources required and their geographic distribution, water availability, and water-quality impact. The initial solicitation did not require detailed environmental information, as *speed* and *brevity* were the watchwords of the day. The SFC hoped to encourage proposals without burdening the developers with cumbersome environmental requirements. Congress did not want environmental factors to play a very significant role in SFC decision-making, but did require the SFC board to take environmental issues into consideration.³¹

Steven Gottlieb, director of environment for SFC projects, was responsible for environmental and socioeconomic matters relating to plans brought before the corporation. He stated that under Ed Noble (chair) and Vic Schroeder (president), the SFC would give “meaningful consideration” to environmental and socioeconomic factors in its project-selection procedures.³² This approach was reflected in the SFC’s project-evaluation criteria. The SFC staff worked closely with state and local governments to ensure that the project sponsors did the same with these authorities. These environmental and socioeconomic evaluation procedures assisted the corporation in meeting its statutory mandate: First, to operate as a prudent provider of federal financial assistance, fully cognizant of the major aspects of each project and how they would affect schedules and costs; and second, to foster the creation of synthetic fuels facilities in an environmentally and socioeconomically acceptable manner.

Congress addressed environmental issues in a March 1983 seminar titled *United States Synthetic Fuels Corporation and National Synfuels Policy: Status, Outlook, and Environmental*

³⁰ ESA, Section 131(b)(3)

³¹ Elaine F. Rappaport, “The Synthetic Fuels Corporation and a New Industry’s Exemption from NEPA,” *Boston College Environmental Affairs Law Review*, vol. 9, 1980-1982, 893-894.

³² *The Socioeconomic Impacts of Synthetic Fuels*, Hearings Before the Subcommittee on Energy Development and Applications of the Committee on Science and Technology, House of Representatives, No. 125, April 28, 1982, 125.

Concerns. The Congressional Research Service sponsored this seminar in cooperation with the House Subcommittee on Fossil and Synthetic Fuels. Three speakers participated: Noble of the SFC, Michael Korda of the National Council on Synthetic Fuels Production, and Robert Roach of the Environmental Policy Institute. As expected, Noble and Korda argued forcefully in support of the corporation and its continuation. Roach's presentation took issue with the SFC and its efforts to date. He described environmental groups' concerns about how ineffectively the corporation had fulfilled its responsibility to ensure that the synthetic fuels industry was developed in an "environmentally sound manner." Roach stated that the corporation's performance in this area was "both inadequate and short sighted." The monitoring plans lacked comprehensiveness and no concrete guidelines existed for the development of acceptable project monitoring plans, in the opinion of environmental groups. Roach added, "major environmental questions relating to the development of synthetic fuels, such as the release of unregulated pollutants, socio-economic impacts, and water consumption, will not be answered by the SFC's monitoring program."³³ Responding to Roach's comments, Korda pointed out that there were implicit tradeoffs in building these plants and inherent uncertainty related to using new technology on a commercial scale. Ralph Bayrer, SFC vice president-projects, disagreed with Roach, but acknowledged there were many environmental unknowns relating to the projects. To summarize, environmental groups saw danger around every corner, whereas the SFC was focused solely on the bottom line – meeting the production goals.

Within the continental United States, the most abundant natural resources for creating synthetic fuels are coal and oil shale. Estimates indicated that the nation had reserves in excess of

³³ *United States Synthetic Fuels Corporation and National Synfuels Policy: Status, Outlook and Environmental Concerns*, Proceedings of a Seminar Sponsored by the Congressional Research Service, Committee Print 98-L, August 1983, 19.

two hundred years' worth in each of these resources.³⁴ Conversely, US reserves of tar sands were and still are negligible. The SFC plan, therefore, was to build enormous production facilities to convert coal and oil shale into synfuels. As a result, the environmental and socioeconomic issues associated with these two resources garnered the most attention.

Synthetic fuels technologies for coal and oil shale were not new. Not until the nation confronted two energy crises within a decade, however, did the need arise to develop these technologies commercially. The environmental and socioeconomic implications of a viable synthetic fuels industry were important factors in its development. These plants would have to comply with all the applicable regulations issued pursuant to existing laws. Major federal environmental and health laws applicable to synthetic fuels projects at that time included:

- Antiquities Act
- Archaeological Resource Protection Act
- Clean Air Act
- Clean Water Act
- Coastal Zone Management Act
- Endangered Species Act
- Energy Supply and Environmental Coordination Act
- Executive Order 11988 – Floodplain Management
- Executive Order 11990 – Protection of Wetlands
- Federal Coal Mine Safety and Health Act
- Federal Land Policy and Management Act
- Fish and Wildlife Coordination Act
- Forest and Rangeland Renewable Resources Act
- National Environmental Policy Act
- National Historic Preservation Act
- National Pipeline Safety Act
- Noise Control Act
- Nonnuclear Energy Research and Development Act
- Occupational Safety and Health Act
- Protection of Bald Eagle and Golden Eagles (16 U.S.C. 668)

³⁴ *America's Power*, Energy Information Agency. National Oil Shale Association. *Energy: An Uncertain Future – An Analysis of U.S. and World Energy Projections Through 1990*, Publication No. 95-127, 35. Paul Rothberg, *Oil Shale Development: Outlook, Current Activities, and Constraints*, Library of Congress, Issue Brief Number IB74060, March 29, 1978.

- Resource Conservation and Recovery Act
- Rivers and Harbors Act
- Safe Drinking Water Act
- Surface Mining Control and Reclamation Act
- Toxic Substances Control Act
- Water Resources Planning Act
- Wild and Scenic Rivers Act
- Wilderness Act³⁵

Synthetic fuels plants were required to comply with twenty-eight different environmental laws and regulations. That large number indicates why proponents were so eager to pass the EMB, which would have made the permitting procedure much less bureaucratic.

Coal can be converted into alternative energy products via coal gasification and coal liquefaction. Products from these two processes include gasoline, jet fuel, petrochemical feed stocks, liquefied petroleum gas, synthetic natural gas, benzene, boiler fuel, and hydrogen.

In the coal-gasification process, coal is converted into three types of synthetic gas: high-Btu gas, medium/intermediate-Btu gas, and low-Btu gas. High-Btu gas is pipeline-quality gas, similar to natural gas. Questions arose about whether medium-Btu plants could run within existing environmental standards. Low-Btu production facilities had a low technical risk. Two commercial users of low-Btu gas were already operating.

To produce liquids from coal, two basic routes existed: indirect liquefaction and direct hydrogenation. Indirect liquefaction had been used in South Africa for more than fifty years. According to the DOE, direct liquefaction presented technical and environmental issues; for example, its use in the removal of sulfur and nitrogen was not as effective as the indirect method.

³⁵ *Synthetic Fuels Environmental Research and Development*, Hearing Before the Subcommittee on Energy Development and Applications and the Subcommittee on Natural Resources, Agriculture Research and Environment of the Committee on Science and Technology, US House of Representatives, October 1, 1981, 191. *Environmental Analysis of Synthetic Liquid Fuels*, Assistant Secretary for Environment, Office of Technology Impacts, Department of Energy, July 12, 1979, 33-37.

Oil shale is a sedimentary rock that contains various amounts of solid organic material called *kerogen*. When heated to about 900°F, kerogen decomposes into liquid and gaseous hydrocarbons and char (carbon). The liquids (i.e., shale oil) can be processed into liquid and gaseous petroleum products, such as jet and diesel fuel and gasoline, and the gas can be used as a substitute for natural gas.

The two major methods for converting oil shale resources are:

1. Conventional mining (either deep or surface mining) in conjunction with surface processing of oil shale. Surface processing involves a sequence of steps – mining, crushing, and retorting (heating) of shale – to produce gas and/or oil. Surface technology was generally recognized to be ready for commercial testing.
2. *In situ* or underground processing of shale. In this method, instead of retorting (heating) above ground, shale oil and gas are produced below ground or *in situ* (in place). The Atomic Energy Commission and the US Bureau of Mines collaborated on this method in 1958 by developing a concept for using nuclear explosives to fracture deeply buried oil shales in preparation for an *in situ* combustion-extraction process. They developed preliminary plans for a nuclear experiment on the Naval Oil Shale Reserve near Rifle, Colorado. The two agencies met with representatives from the petroleum industry to discuss the interest and participation of private industry. Nothing ever came of this concept.³⁶

Interestingly, only one true *in situ* proposal was submitted to the SFC. This was the Geokinetics Seep Ridge Project in Utah. In this case, a federal court determined that the project was on Ute Indian Reservation land. The court required the SFC to obtain the tribe's approval, which could not be done in a timely manner, so the application was withdrawn. The general view of *in situ* projects was that they were not sufficiently advanced for commercial scale development. Occidental Petroleum did apply for SFC assistance for a "modified" *in situ* project to be constructed at Cathedral Bluffs in Colorado.³⁷

The Federal Energy Administration (FEA), the DOE's predecessor, recognized the problems with coal and oil shale development. Consequently, the FEA issued a report in July

³⁶ M.A. Lekas and H.C. Carpenter, "Fracturing Oil Shale with Nuclear Explosives for In-Situ Retorting," *Quarterly of the Colorado School of Mines*, vol. 60, no. 3, July 1965, 7. *Fact Book on Non-Conventional Energy Technologies*, Congressional Research Service, Library of Congress, Report No. 79-47 SPR, February 12, 1979.

³⁷ Email from Larry Lukens to author, May 14, 2012. Email from Glenn Vawter to author, May 15, 2012.

1976 titled *Analysis of Financing Problems in Coal and Oil Shale Boom Towns*.³⁸ According to this report, using the coal and oil shale resources of the western United States would lead to rapidly increasing economic activity in the small and relatively isolated communities where these reserves were located. In turn, this situation would create economic and social disorganization and disintegration, unless there was proper planning. During the initial “boom” period, local tax bases would not be able to keep up with additional needs, placing local officials in a difficult position. The FEA study predicted that taxes and fees paid by a typical household in 1976 in the four areas studied would have to increase by at least 75 percent over a two-to-four-year period.³⁹ The social and economic characteristics of many communities in the western US would be subject to serious socioeconomic problems. For example, the large influx of possibly thousands of additional workers and their families into rural areas would place demands on the infrastructures. New utilities, roads, and schools were just a few of the necessary facilities, in addition to increased fire and police services. Tax revenues to support these necessities would arrive well after the services were needed. Companies building these plants were willing to assist communities in such endeavors because they realized the construction and operation of oil shale production plants would seriously strain the nearby social and cultural infrastructure.

These plants were dependent on people and their families, who in turn relied on local and state governments to maintain law and order, education, and general well-being. By necessity, industry had to work closely with local and regional governments. Unfortunately, time did not allow for these issues to develop and be addressed in an evolutionary manner. The purpose of federal assistance for synfuels was to demonstrate as quickly as possible that the United States could convert the vast resources of the country into more usable energy forms.

³⁸ Federal Energy Administration, *Analysis of Financing Problems in Coal and Oil Shale Boom Towns*, FEA/D-76/361, July 1976.

³⁹ *Ibid.*, 2.

The Congressional Research Service of the Library of Congress observed in 1983 that for the foreseeable future, environmental factors were likely to constrain commercialization of the shale oil industry. The richest resource base was located on the western slope of the Rocky Mountains, a sparsely populated, undeveloped, and semiarid region. An industry producing about 200,000 barrels of oil-equivalent a day threatened adverse effects on health and safety, flora and fauna, land integrity, grazing and agricultural activities, and the quality of both water and air. The firms would be required to file for more than one hundred environmental permits. Oil shale projects would consume large volumes of water in areas without much in the way of aquatic resources. Several companies had been acquiring water rights for over thirty years.

The Union Parachute Creek and Colony oil shale projects, both in Colorado on the western slope of the Rocky Mountains, were facilities that had progressed to the point where significant effort was being devoted to addressing their social and economic effects on surrounding communities. Union Oil's facility was in Garfield County, near the town of Parachute. Union did not honor every request, but it did make significant monetary contributions toward fulfilling its community responsibility as a "good neighbor." As of April 1982, the total costs committed and spent by Union amounted to \$62 million, which included \$49 million for employee housing and \$13 million for roads, fire, police, schools, solid waste, park land, emergency medical services, and human services.

Management of Tosco's Colony plant was similarly concerned about socioeconomic effects that would be associated with their project due to the large stream of individuals moving to the area. Tosco developed and implemented mitigation measures that addressed: (1) the lack of infrastructure necessary to accommodate large increases in population, (2) the substantial population influx related to the construction and operation of Colony, and (3) the difficulty in

timing these events to allow local governments to plan adequately. The population issues were complicated by differences in workforce sizes at the facility: The construction force was substantially larger than the operations force. For local governments, costs were incurred before the appropriate tax revenues were generated, so economic effects varied by plant location and residential location of the employees. Tosco developed mitigation programs that suited the particular areas.

Colony's socioeconomic efforts centered on the development of Battlement Mesa, a new community built on 3,000 acres of land across the Colorado River from the town of Parachute. Housing plans called for up to 24,000 people. Exxon and Tosco, owners and operators of Colony, worked closely in conjunction with Union Oil on its Parachute plans. As an example, they coordinated with the Parachute School District to help Colony owners build an elementary school and to help Union owners construct a middle school. Both operators also assisted the school district in obtaining financing for a new high school. Colony and Union made plans to build a \$6.5-million community recreation center that included an Olympic-size swimming pool, a gymnasium, and other amenities for residents. The proposal called for a commercial area that would have had the largest supermarket on the western slope of Colorado. Colony's owners saw from studies that the worker/employee-to-population ratio was 1:7, indicating that a permanent workforce of 2,000 would generate 14,000 people.

With the Colony and Union projects moving forward, the SFC board, in March 1982, addressed the need for office space in Denver to monitor these projects. Pursuant to the agreements with Tosco and Union, the corporation was entitled to some space in the offices of both these projects. In the interests of confidentiality and independence, the SFC decided to obtain its own space of about 2,000 to 3,000 square feet, and to house three to five professionals

and one support person. William Sharp was responsible for the Denver office. Once the Colorado office was established, SFC personnel visited the two projects as often as once or twice a week. In the early stages, Sharp spent up to 80 percent of his time on monitoring efforts, while a detailee from DOE concentrated entirely on the plants. Financial monitoring was done from the office in Washington, DC.⁴⁰

Exxon terminated the Colony project on May 2, 1982, referred to as “Black Sunday” by locals in the area. After this, there was a significant egress of workers and their families from Parachute and Battlement Mesa, leaving the region with an insufficient tax base to maintain the significant expansion of the community that had occurred. The rural nature of the oil shale areas had caused local officials to question how they would cope with anticipated population increases. Congress established an Oil Shale Trust Fund to provide needed infrastructure improvements and necessary services. The monies came from lease bonus payments that companies had paid to the federal government to secure oil shale leases on federal lands. Companies had paid a total of \$450 million to the federal government for these leases, and through the Oil Shale Trust Fund, Congress returned a portion of this money to the affected states and communities. Local governments in Colorado spent \$100 million of Oil Trust Funds for roads, schools, hospitals, city buildings, sewage and water treatment plants, senior-citizen care, fire protection, libraries, and community recreation before the short-lived oil shale boom concluded.⁴¹

The Trust Fund was not the only coffer from which the industry drew for the area. Battlement Mesa, in 2012 a community of mostly retirees and oil and gas workers, was constructed without any government funding at a cost of \$100 million incurred solely by Exxon

⁴⁰ Minutes of a Meeting of the Board of Directors of the United States Synthetic Fuels Corporation, March 26, 1982. National Archives Two, RG56, Acc. 56-82-0064, vol. 8.

⁴¹ “Black Sunday – The Rest of the Story,” National Oil Shale Association, May 2012.

and Tosco. Union Oil likewise provided similar funding to Rifle and Parachute.⁴² Arnold Mackley, rancher and former commissioner in Garfield County, Colorado, commented that during the 1970s the trust fund contributed over \$100 million to affected communities. Although termination of the Colony project in May 1982 was devastating for many, the Union project operated until 1991 and provided a continuing source of employment for thousands. The infrastructure improvements funded by oil shale supplied a foundation for the eventual recovery of the local economies. For example, the recent natural gas boom would have been far more painful without the infrastructure paid for by the oil shale funds.⁴³

Arthur Conn, president of the energy, management, and information consulting firm of Arthur L. Conn & Associates, testified before Congress that the ESA was enacted with the long-range objective of reducing the nation's dependency on foreign energy sources, which in turn affected national security, the economic well-being of the United States, and the quality of life of its citizens. He viewed the SFC as a form of insurance. It would provide technical experience and demonstrate to crude-exporting countries that the United States intended to be self-sufficient, thereby discouraging them from making prices spiral upward.⁴⁴

Technology presented significant challenges. The greatest problems were not in the technical areas, though. The nontechnical issues were the “show-stoppers,” and these were environmental, socioeconomic, political, and legal in nature. Vacillating government policies and a patchwork of regulatory activities made the risks associated with synthetic fuels projects enormous.

⁴² *Ibid.*

⁴³ “Black Sunday – The Rest of the Story,” Arnold Mackley, Local Rancher, Former Garfield County Commissioner, Business Manager for American Shale Oil LLC, 2012.

⁴⁴ *Synthetic Fuels Development*, Hearing Before the Subcommittee on Energy Development and Applications and the Subcommittee on Investigations and Oversight of the Committee on Science and Technology, House of Representatives, no. 33, July 27, 1981, 51- 83.

Chapter 10: The Projects

During its brief existence (1980-1986), the Synthetic Fuels Corporation issued four general solicitations, along with eight focused competitive solicitations centering on the resource bases of oil shale, coal, tar sands, and heavy oil, as well as technology. Project sponsors submitted 211 proposals in response to the twelve solicitations that actually closed. SFC staff evaluated 129 projects, conducting negotiations with twenty-five potential sponsors.¹ Solicitations are summarized in Table 10.1. The corporation provided financial assistance to four projects. There were two additional projects receiving financial assistance during the Defense Production Act (DPA) interim “fast-track” program and the Federal Nonnuclear Energy Research and Development Act: Exxon/Tosco/Colony Oil Shale Project and Great Plains Coal Gasification Project.

The first solicitation issued by the United States Synthetic Fuels Corporation is shown in Figure 10.1. The first was a general, rather than specific, solicitation issued within ESA guidelines. By mandate, the corporation had to send out its first call for synthetic fuels projects by the end of December 1980. SFC managed to meet the deadline, and the first solicitation came forth on Friday, November 21, 1980. This “Initial Solicitation for Proposals for Financial Assistance for Synthetic Fuels Projects” was a mere two-and-one-half pages in length. The solicitation was deliberately nonspecific and flexible, both to jump-start the synfuels development process and to avoid the appearance of a typical long-winded government bureaucracy solicitation.² The brevity of the first SFC solicitation contrasted sharply with the two “fast-start” Interim Program

¹ *Comprehensive Strategy Report*, United States Synthetic Fuels Corporation, June 1985, E-1, E-2, E-3. In author’s possession.

² Betty Nolan, “US Synthetic Fuels Corporation: An Overview of Organization and Major Work,” Revised Draft, November 11, 1981, 12.

Solicitations, each exceeding one hundred pages.³ The conferees intended for the SFC solicitations to “be brief and designed to encourage innovative synthetic fuels proposals and not constrain bidders to compromise the quality of desirable proposals because of narrowly delineated requirements in such solicitations.”⁴

The tone of this SFC industry solicitation was direct and to the point: “We have the mandate, directive, authority, and money, so give us your best shot!”⁵ The energy industry was aghast at the solicitation’s brevity and minimal requirements outlined within. The call was totally unlike conventional federal-government solicitations, which were typically quite lengthy and complex.⁶ To “get the word out,” the corporation held informational meetings in New York City and Denver, Colorado, during January 1981. These gatherings described solicitation procedures, including the flexible March 31, 1981, closing deadline. Altogether, about one thousand people attended the meetings.⁷

Congress had legislated certain dates for the first solicitation to stress the urgency of getting the synthetic fuels industry up and running to abate the mounting risks associated with the country’s growing dependence on imported crude oil. As further evidence of the national emergency, Congress amended the Defense Production Act of 1950 (DPA) to provide for a “fast start” interim assistance program utilizing existing federal departments and agencies. This action would expedite the development and production of synthetic fuels to meet national defense needs. ESA directed the president to launch this program immediately upon enactment. Congressional

³ James M. Fisher, “The New Synthetic Fuels Program: Boomlet or Bust?” *Tulsa Law Journal*, vol. 16, no. 3, 413.

⁴ *Conference Report*, 211.

⁵ Larry Lukens, vice president – projects for SFC, author interview on October 14, 2008.

⁶ *Ibid.*

⁷ Nolan, 12.

conferees concurred, believing that no time should be lost during the period between ESA enactment and the presidential declaration that SFC was operational.

Subsequent solicitations were in greater depth. The April 14, 1983, “Competitive Solicitation for Oil Shale Projects, Standard Terms and Conditions,” numbered eighty-two pages, while the “Fourth General Solicitation for Synthetic Fuel Projects” dated February 16, 1984, totaled forty-four pages.

Table 10.1. Solicitation Summary

Solicitation	Date issued	Proposal submission deadline	-----Proposals-----			
			Submitted	Rolled over	New	Resubmittals
1. Initial general	11/21/80	3/31/81	68	n/a	68	n/a
2. Second general	12/11/81	6/1/82	35	3	14	24
3. Third general	8/19/82	1/10/83	46	3	17	32
4. Western oil shale	1/20/83	3/15/83	6	n/a	1	5
5. Gulf lignite	4/25/83	7/25/83	1	n/a	1	0
6. Eastern coal	6/30/83	12/1/83	9	n/a	7	2
7. Coal/lignite	1/5/84	2/2/84	1	n/a	0	1
8. Coal/water	1/5/84	6/15/84	11	n/a	11	n/a
9. Retrofit	2/16/84	6/21/84	2	n/a	1	1
10. Fourth general	2/16/84	6/29/84	18	n/a	5	13
11. Eastern bituminous	5/28/85	7/8/85	10	n/a	8	2
12. Tar sands	6/24/85	8/30/85	4	n/a	2	2

a. Data source: Ralph Bayrer

Figure 10.1. Initial solicitation for proposals (November 21, 1980)



United States Synthetic Fuels Corporation

1200 New Hampshire Avenue, N.W. Washington, D.C. 20586 Tel (202) 653-4400

**INITIAL SOLICITATION FOR PROPOSALS FOR FINANCIAL ASSISTANCE
FOR SYNTHETIC FUELS PROJECTS**

To All Interested Parties:

The United States Synthetic Fuels Corporation invites the submission of competitive proposals for financial assistance from concerns interested in the construction and/or operation of synthetic fuel projects, in accordance with the Energy Security Act of 1980. The Act establishes a national goal of achieving a synthetic fuels production capability from domestic resources equivalent to at least 500,000 barrels per day of crude oil by 1987 and at least 2,000,000 barrels per day of crude oil by 1992. The Corporation will provide financial assistance, in conjunction with private sources of capital, to help attain these goals.

The Corporation will carry out its responsibilities free of rigid, detailed procedural requirements and with maximum flexibility. The Corporation encourages the submission of the broadest range of synthetic fuel projects involving a diversity of technologies. Proposals may request any one or more of the methods of financial assistance which the Corporation is authorized to provide. The highest priority of assistance are loan guarantees, price guarantees, and purchase agreements. Loans and joint ventures, in that order, are of lower priority.

Submission of Proposals. This initial solicitation consists of a two-phase process for the submission and evaluation of proposals for financial assistance to synthetic fuel projects.

In Phase One, which will open November 21, 1980 and close March 31, 1981, interested parties are invited to present proposals for all types of synthetic fuel projects for basic evaluation by the Corporation. Applicants should adequately describe their financial resources and expertise for the project; their proposed project, including the technology and plant input and output; their scheduling timetable and risks with respect to completion; the availability of water to meet project needs and water quality impacts on other users; their ability to deal with environmental considerations and regulatory requirements; socioeconomic impacts; and their financing plan.

In Phase One, the Corporation is not requiring proposals to meet detailed specifications. The Corporation wishes to have the benefit of the experience and expertise of project sponsors. The Corporation recognizes that in order to attain the goals set by Congress, even with assistance from the Corporation, private sector commitments of capital and management and technological effort of a magnitude not previously attempted in the United States are essential. To facilitate these commitments, the Corporation will be flexible and will cooperate fully with project sponsors, financial institutions, investment bankers and other private sector interests that are involved in synthetic fuel projects.

Eligible proposals submitted under the Department of Energy's interim synthetic fuels program, but not selected for assistance by the Department of Energy, will be considered by the Corporation as proposals against this solicitation.

The Corporation will select proposals for Phase Two using reasonable standards which take into account the statutory criteria. Promising proposals selected under Phase One for further evaluation will be invited to submit detailed, supplemental technical, business and financial information. On the basis of such submissions and any further materials or information the Corporation requests, the Corporation will decide which proposals it will select for financial assistance.

Forms of Available Financial Assistance. The Corporation offers, in order of priority, the following general categories of financial assistance: loan guarantees, price guarantees, and purchase commitments; and loans and joint ventures. Financial assistance awarded by the Corporation is intended to encourage and supplement, rather than to compete with or supplant, private investment capital which otherwise would be available to a proposed synthetic fuel project. In order to qualify for assistance, a party submitting a proposal must demonstrate the capability to undertake successful completion of the design, construction and/or operation of the project.

All proposals must contain a representation that the project and its proposer meet the necessary conditions and requirements of the Act before they may receive financial assistance, and interested parties should familiarize themselves with the Act in preparing their proposals. Copies of the Act are available upon request.

The Corporation has not specified the amount of financial assistance which it will provide to successful proposals made under this solicitation because that determination cannot reasonably be made until the Corporation receives and evaluates proposals. Thus, the Corporation cannot now state whether it will use all of its appropriated funds in connection with this solicitation.

Factors to be Considered. Among the factors which will be considered in awarding financial assistance to a particular proposal are the diversity of its technology from existing projects; the potential unit production cost; the long-term potential of the technology, considering the extent of the natural resources required and their geographic distribution; water availability and water quality impact; and the compliance of the technology with applicable regulatory requirements.

In addition, the Corporation is obligated to give due consideration to promoting competition in the synthetic fuels industry. In the case of projects involving companies whose rates are regulated, the Corporation may consider whether the rate-making agencies are likely to protect the financial

interests of investors and the Corporation. The Corporation will give priority consideration to proposals to be sited in a state which will expedite regulatory, licensing and other governmental activities related to such project.

Address for Submission. Ten copies of each proposal should be submitted to the Corporation before March 31, 1981, addressed to:

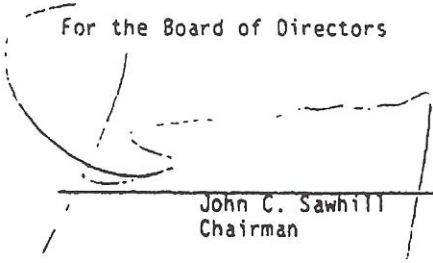
Office of Project Development
United States Synthetic Fuels Corporation
Suite 460
1200 New Hampshire Avenue, N.W.
Washington, D.C. 20586

Public Summary. Each proposal should contain a separate summary for public release and distribution to interested parties as well as the Governors of the affected States. A form for this purpose may be obtained from the Corporation.

Questions concerning this solicitation may be submitted to the Corporation at any time.

UNITED STATES SYNTHETIC FUELS CORPORATION

For the Board of Directors



John C. Sawhill
Chairman

November 21, 1980 /

By statute, projects submitted under the several solicitation calls had to address procedures for environmental and health effects. The proposals were required to present a plan, acceptable to the SFC board, for monitoring the environmental and health related emissions from construction and operation of the synthetic fuels plant. This monitoring plan had to be developed after consultation with the Environmental Protection Agency, the Department of Energy, and appropriate state agencies.

During the interim “fast track” program, as authorized by the Defense Production Act (DPA) Amendments of 1980 contained within the ESA, DOE provided financial assistance to two projects: Tosco/Colony Oil Shale, and Union Oil Parachute Creek Oil Shale. The Great Plains Coal Gasification Project received its award under the Federal Nonnuclear Energy Research and Development Act and the Nonnuclear Act provisions of the Energy Security Reserve. The DPA program was assigned to Deputy Assistant Secretary for Industrial Planning and Development Larry Lukens. Under the DPA solicitation, eighteen proposals were submitted in November 1980, and were quickly winnowed to ten –from which the DOE selected three projects to begin negotiations: Tosco, Union, and Tennessee Synfuels Associates (TSA). The TSA project was subsequently “deselected.”⁸

When Reagan declared the corporation “operational,” on February 8, 1982, only the Colony/Tosco and the Union Oil Parachute Creek projects transferred to the SFC from the DOE, despite a recommendation from the White House that all three come under SFC auspices. Noble was not favorably disposed toward the Great Plains Project, as he had “expressed strong doubts about the need for plants that produce natural gas”⁹ With no apparent shortage of natural gas, Noble did not believe that a large plant producing pipeline gas made economic sense or contributed new technology. Congress had long been interested in Great Plains with specific

⁸ “US Gets 18 Energy Proposals,” *New York Times*, November 17, 1980, D1, D9. “DOE Selects Three Proposals for \$3 Billion Synfuels Negotiations,” *DOE News*, January 13, 1981. An interesting story surrounds the Tennessee Synfuels Associates Project. Reagan had been elected president, but Carter remained in office. The Republicans had won control of the Senate, and Sen. Howard Baker (R-TN) was slated to be elected Senate majority leader. The thinking of the Carter people was purposely to select the Tennessee project even though in fact it would never have been selected in the first place, knowing that the new administration would “deselect” it, thereby incurring the anger of Baker and possibly Reagan. However, that was not the outcome.

⁹ Robert Hershey, “Synthetic Fuel Chief Doubts Gas Need,” *New York Times*, June 22, 1981, D1.

legislative support.¹⁰ Due to Noble's overt reluctance to have the project transferred to the SFC, Sen. James McClure (R-ID), chair of the Senate Energy Committee, introduced an amendment to the Interior and Related Agencies Appropriations Bill for fiscal year 1982 requiring the Great Plains Project to remain at DOE.¹¹ The conference report stated, in part, that "the Great Plains Gasification Project [will] remain under the jurisdiction of the Department of Energy and not be transferred to the Synthetic Fuels Corporation," with funds made available by the DOE.¹²

In early February 1981, Reagan announced that he was not disposed to continuing the funding for the synthetic fuels program. Powerful Senate and House leaders reacted strongly. The chair of the Senate Energy Committee, Sen. James McClure (R-ID), quickly asked that the funds be restored.¹³ Prior to this time, a few days following Reagan's election, three powerful and influential Republican senators – James McClure (R-ID), Pete Domenici (R-NM), and Henry Bellmon (R-OK) – wrote the president-elect asking him not to reject the SFC.¹⁴ As for the House, upon learning of the proposed budget cuts to synthetic fuels, the entire Democratic leadership warned Reagan not to touch the synthetic fuels subsidy created in 1980. Rep. Jim Wright (D-TX) organized the effort with the help of House Speaker Rep. Thomas O'Neill (D-MA). Wright's letter to the president pointed out that rescissions to the appropriations for the SFC would contribute nothing to efforts to balance the budget because if all went well no federal money would be spent. Cutting back funding would indicate that the nation was not "really serious" about energy independence. Projects must not be held back "by a false sense of

¹⁰ SFC Director Paul MacAvoy recently referred to the project as "Great Pains." E-mail to the author, April 19, 2011.

¹¹ Betty Nolan, "US Synthetic Fuels Corporation: An Overview of Projects Selected Under the Department of Energy's Interim Synthetic Fuels Program," Trend Report Series: II, November 25, 1981, 24.

¹² *Making Appropriations for the Department of the Interior and Related Agencies for Fiscal Year Ending September 30, 1982*, Conference Report, November 5, 1981, House Report No. 97-315, 25.

¹³ Robert Hershey, "Reagan's Budget Proposals Include Deep Cut in Synthetic Fuel Projects," *New York Times*, February 5, 1981, A1.

¹⁴ Robert Hershey, "Reagan Said to Back Synthetic Fuels Unit," *New York Times*, November 10, 1980, D4.

economy.”¹⁵ Opposition in the House and Senate to Reagan’s plans to slash the budget for synthetic fuels won the day. The administration “pulled back,” but also did announce that it was committed to the eventual elimination of the DOE and the SFC.¹⁶

The issue of funding and transferring the three projects to the SFC became such a volatile issue that President Reagan was asked “to resolve [the] sharp dispute within his Cabinet.”¹⁷ James Edwards, secretary of Energy, pushed hard for federal guarantees for Union, Colony/Tosco, and Great Plains. The SFC was still not operational and decisions rested with DOE. David Stockman, the director of the Office of Management and Budget (OMB), did not support these guarantees, viewing them as unwarranted and contrary to Reagan’s policy of reducing federal subsidies to business. Whether or not to provide federal support was a decision that should be made by the SFC after they were transferred to the SFC. Stockman and Edwards were not on speaking terms as a result of this power struggle. The standoff was compounded by political complications on the Hill. Sen. James McClure (R-ID) was a strong supporter of synthetic fuels and the SFC. Being displeased with the delay, he delayed confirmation hearings on four people nominated by Reagan to be directors of the corporation. The impasse was resolved, with all three projects receiving financial assistance. Despite Reagan’s dislike of federal guarantees to private business, the support on the Hill from both the Senate and the House forced Reagan to agree. The president prioritized his battles and this was not a crucial one. He

¹⁵ Richard Lyons, “House Democrats Unify Against Synfuels Cuts,” *Washington Post*, February 10, 1981, A1.

¹⁶ Peter Bernstein, “Coal Gasification Project is Given Reagan Reprieve,” *Washington Post*, February 21, 1981, D9. Richard Lyons, “Stockman is Overruled on Synfuel Subsidies,” *Washington Post*, March 4, 1981, A4.

¹⁷ Peter Behr, “Settlement of Synfuels Fund Urged,” *Washington Post*, July 22, 1981, E1.

wanted to win the war of reduced taxes, more defense spending, and smaller government, and he needed the support of the House and Senate for these important crusades.¹⁸

Ralph C. Blackwell, director of the DOE-DPA task force, reflected the feelings of Noble and Schroeder about two of these projects in an August 4, 1981, memo.

I talked to Vic Schroeder at 2 P.M. on August 4, 1981 relative to SFC positions on two projects. . . . Mr. Schroeder stated that the Chairman's [Noble's] is as follows:

Tosco

Exxon is not formally committed to the Colony Project until 1982 and the Government should not guarantee until Exxon is committed.

While the loan guarantee is necessary to permit Tosco to participate in the project, it may not be necessary for the completion and successful operation of the project. This would raise a question of eligibility for SFC support.

Great Plains

Chairman Noble feels that he and Secretary Edwards have had a full discussion on the issues. In summary he [Noble] feels that it is inappropriate for the Government to underwrite the cost of the pipeline, natural gas prices, the cost of the plant and four companies in the joint ventures.¹⁹

Union Oil's Parachute Creek project and the Tosco/Colony undertaking were transferred to the SFC. The board at its December 11, 1981 meeting unanimously approved accepting them at such time as the corporation became operational. In February 1982 (Executive Order 12346 – Synthetic Fuels), the SFC, pursuant to the provisions of the Supplemental Appropriations and Recession Act, assumed all of the DOE's rights and obligations for Colony and Union. The resolution specifically addressed only those projects that had been awarded financial assistance under the DPA's "fast-track" criteria.²⁰ The technology was innovative and new. Each would produce liquids from shale, a totally undeveloped resource. The SFC wanted Exxon formally to commit to its equity share in the project, which it did not do, and though these worries remained,

¹⁸ *Ibid.*

¹⁹ Memorandum for File from Ralph C. Blackwell, August 4, 1981. In possession of author.

²⁰ Minutes of a Board Meeting of the Board of Directors of the United States Synthetic Fuels Corporation, December 11, 1981. National Archives Two, RG56, Acc. 056-86-0064, vol. 4. Letter from Comptroller General of the United States to Rep. Mike Synar (D-OK), July 12, 1984.

they did not prevent the project from being moved to the SFC. Union Oil and Tosco were approved under the DPA “fast-track” and the provisions of the statute. Therefore, the SFC, once declared operational, had to assume their responsibility. Since Great Plains was not under the “fast-track” sections, the corporation was not obligated to tackle it.

Great Plains Coal Gasification Project

The Great Plains project became a curse for the government. At one point, efforts were made to enlist White House counselor Edwin Meese to intercede personally with Noble and the SFC to provide financial assistance to the project.²¹ Great Plains desperately needed additional support and its sponsors wanted to apply to the SFC for a price guarantee. Great Plains finally did submit a request for financial aid to the SFC on Sunday, March 15, 1981, in response to the initial SFC solicitation of November 21, 1980. The corporation was concerned about assuming responsibility for a project that reflected questionable economics. SFC staff held that there did not exist “sufficiently credible” evidence “to substantiate the need for SFC assistance.”²²

This project remained a favorite of House Majority Leader Jim Wright (D-TX), Sen. James McClure (R-ID), and Sen. Pete Domenici (R-NM). Wright felt “fatherly” toward the corporation, having devoted much of his time and energy in 1979 and 1980 to getting the SFC legislation through Congress.²³ These three met as a group on Thursday, October 27, 1983, with Noble and SFC general counsel Jeffrey Lipkin, to stress to Noble the critical importance of backing Great Plains. According to Lipkin and board member Monks, Wright had “summoned” Noble to Wright’s chambers to demand that SFC proceed with a price guarantee. Lipkin argued there were legal issues involved and that an open solicitation for a high-Btu project would be the

²¹ Milton R Benjamin, “New Subsidy for Coal-Gas Plant Asked,” *Washington Post*, November 20, 1983, A1, A8.

²² *Ibid.*, A8.

²³ “Why Is Rep. Toby Moffett Saying Those Nasty Things About the SFC? Asks Rep. Wright,” *Energy Daily*, April 18, 1981, 3-4.

best way to proceed. Noble agreed to this plan. During the meeting, “Domenici became concerned about the pressure being placed on Noble and that it sounded to Domenici as possibly illegal and he would not be a party to such an effort.”²⁴ Monks has recalled that in this gathering he had never seen such a public display of anger on the part of Wright, who went “ballistic” in the face of Noble’s simple and persistent unwillingness to bend to Wright’s demands.²⁵

Domenici and McClure had succeeded in putting language into the Continuing Resolution for Fiscal Year 1984 indicating support for Great Plains, and for all intents and purposes directing the SFC to assist the project.²⁶ Wright was particularly peeved because the SFC was seeking coal-gasification plants to support, and here was the Great Plains Project “95 percent complete” needing help.²⁷ The meeting became intense, according to Lipkin, so much so that it was later described as “the most heated meeting ever on Capitol Hill.”²⁸ There was concern that the Great Plains Project might default with respect to the loan guarantee from the Department of Energy, which is what eventually happened on Thursday, August 1, 1985.²⁹ On October 31, 1989, the DOE sold the project to subsidiaries of Basin Electric Power Cooperative. The plant produces synthetic gas from coal and it is still owned by Basin Electric. The DOE declared the Great Plains project “to be a substantial technical success” prior to its sale to Basin.³⁰

²⁴ Email from Jeffrey Lipkin to author, April 12, 2011.

²⁵ Email from Bob Monks to author, September 26, 2011.

²⁶ “Mark-up Session,” November 8, 1983, United States Senate, Committee on Appropriations, 36-9. Milton, “New Subsidy . . .,” A1, A8.

²⁷ *Ibid.*

²⁸ Email from Jeffrey Lipkin to author, April 1, 2011. Milton R. Benjamin, “New Subsidy for Coal-Gas Plant Asked,” *Washington Post*, November 20, 1983, A1, A8.

²⁹ Email from Ralph Bayrer, September 9, 2009. *Fiscal 1985 Annual Report for the United States Synthetic Fuels Corporation*, 15.

³⁰ *Synthetic Fuels: An Overview of DOE’s Ownership and Divestiture of the Great Plains Project*, Report to the Chairman, Subcommittee on Energy and Power, Committee on Energy and Commerce, House of Representatives, General Accounting Office, July 1989, GAO/RECD-89-153, 12.

Exercising the Gas Option

Gas Update: Large-scale coal gasification begins in North Dakota.



A new era in energy begins on July 28, 1980, with the announcement of our nation's first commercial-scale coal gasification project in Minner County, North Dakota. The \$1.4 billion plant will process local lignite coal into approximately 125 million cubic feet of clean gas energy every day—enough to heat a quarter of a million homes.

Next-Step Energy
The project's advance and plant operation, American Natural Resources Company, will start

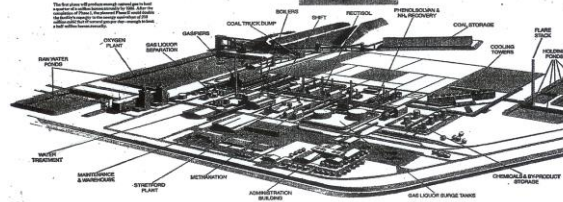
the gas produced with four other companies: Peabody Energy Corp., Columbia Gas System, Inc., Shinnick, Inc., and Fluoro Corporation, Inc. The significance of the Great Plains project goes beyond processing 14,000 tons of coal into approximately 125 million cubic feet of gas energy every day to demonstrate the feasibility of large-scale coal gasification in the U.S. The plant will provide a stream of valuable economic, environmental, and technical data for future projects of its kind.

This information is essential to the creation of an entire new industry based on the utilization of America's vast coal resources, the world's largest in terms of currently recoverable reserves. Coal for the Great Plains project will come from low-sulfur mining areas. Only 500 acres per year will be disturbed, and reclamation

Coal Gasification Hides
America's Energy. Approximately 200 million cubic feet of clean methane gas energy produced every day will be comparable in heating value to approximately 60,000 barrels of fuel oil—part of an increasing nondestructive gas can make to dispense our nation's dependence on foreign oil. And using gas instead of imported oil helps our nation's critical balance of payments problem.

Part of the Solution
New technology for coal gasification will solve only part of America's energy problems. But they can make an important contribution nevertheless. Environmental sources of gas, which will require expanded research can help make available, are potentially huge—and it now seems virtually insurmountable.

When you consider the economic, environmental, and efficiency advantages of gas, it becomes an energy option that makes increasing sense.



Gas: The future belongs to the efficient.

Figure 10.2. Ad promoting Great Plains coal-gasification plant in North Dakota (*Washington Post*, August 28, 1980, A25)



Figure 10.3. Logo for Great Plains synthetic fuel plant (Stan Stelter, *The New Synfuels Energy Pioneers*. Bismarck: Dakota Gasification Company, 2001, 36)

Exxon/Tosco Colony Oil Shale Project

Shale Country U.S.A.

Oil shale is actually not oil; it is a rock, marlstone, that contains a solid, rubbery substance known as kerogen. When heated, kerogen breaks down to form heavy shale oil. In the Mountain West of prehistoric times, two fresh-water lakes were the womb for the largest oil-shale deposit in the world. When the lakes disappeared, they left behind biotic remains mixed with clay and sand that became pools of crude oil and gas in some areas; but the earth's upward movement left most of the organic material in the form of kerogen. Today this region is

known as the Green River formation, a 16,500-square-mile area covering the connecting corner of Colorado, Utah and Wyoming. The shale of the region contains an estimated 1.8 trillion barrels of oil, an amount that far overshadows the oil resources of the Middle East. The U.S. Dept of Interior estimates that 600 billion barrels of oil are recoverable from these deposits by known technology today. The richest deposits are found in Colorado's Piceance Creek Basin, a 1,380-square-mile area ranging over Garfield and Rio Blanco counties.

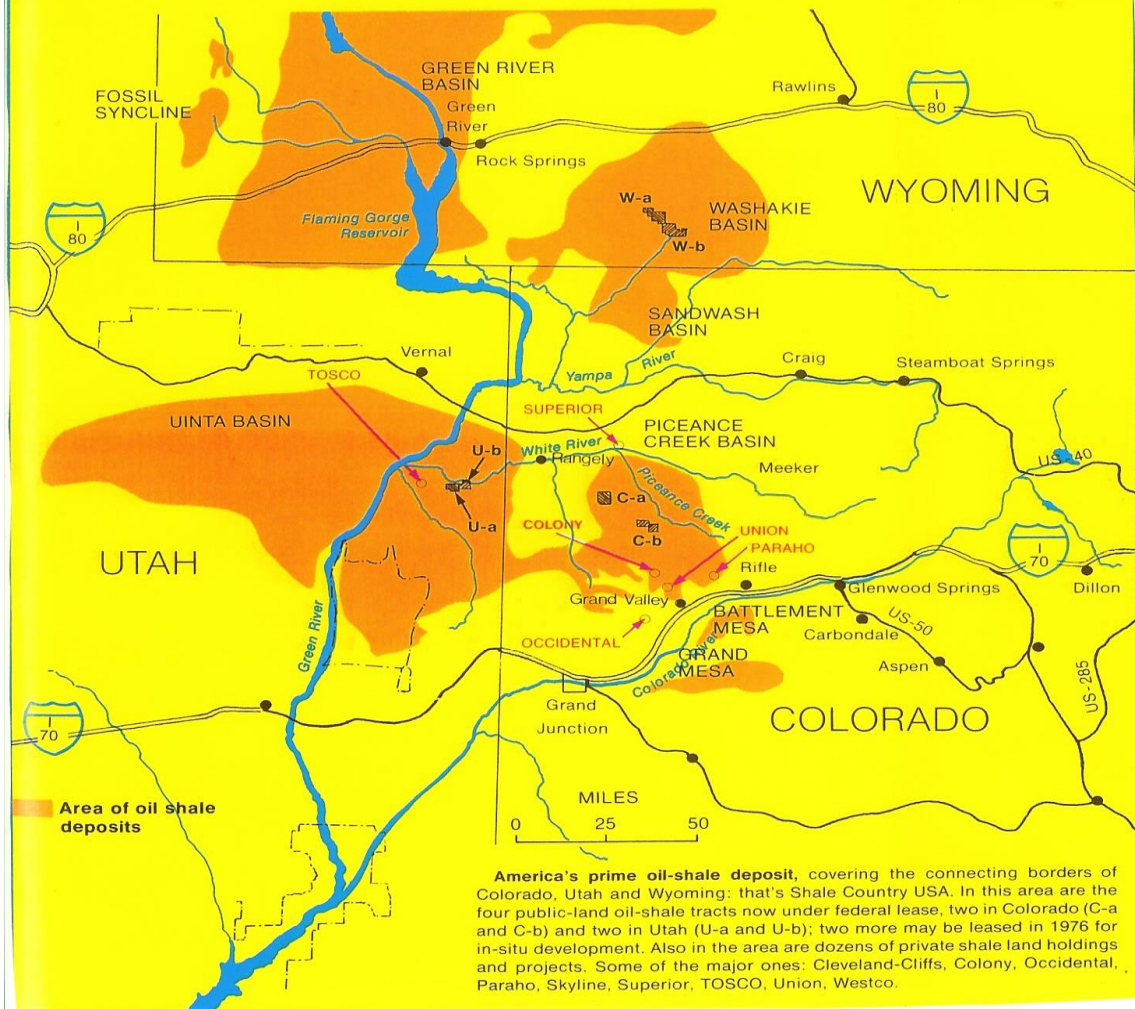


Figure 10.4. Oil Shale Country (Source: *Shale Country*, Winter 1983, 9)

Exxon Corporation operated the Colony/Tosco Oil Shale Project. Tosco, formerly The Oil Shale Corporation, applied to the Department of Energy under both its Nonnuclear Act (NNA) and Defense Production Act (DPA) (“fast-track”) solicitations of October 15, 1980, for a loan guarantee covering 75 percent of the cost of its 40 percent share in the Colony Project. To qualify under DPA, Tosco agreed to provide the Department of Defense ten thousand barrels per day of military specification fuels to be sold at prevailing market prices.³¹ Tosco did not seek either a price guarantee or a purchase commitment. In January 1981, Tosco was selected by DOE under the DPA for negotiations. The DOE did receive “pressure from the [Carter] White House to fund the Tosco project.”³² The negotiations were held only with Tosco, not Exxon. DOE was concerned about what Exxon would do. Specifically, if DOE provided financial assistance to Tosco, would Exxon commit to fund its share of the project as well? No assurances were forthcoming from Exxon. Exxon refused even to talk to DOE.³³ During the DOE/Tosco negotiations, DOE asked many times for a copy of the Joint Operating Agreement for the Colony Oil Shale Project (JOA). Exxon refused to give permission to Tosco to provide the government a copy. Exxon was obligated under the JOA “to cooperate reasonably in responding to requests with respect to meeting requirements arising from [Tosco’s] efforts to obtain its required funding for the Project . . . ,” but Exxon interpreted this language as “we will not talk to the government

³¹ As Tosco employees were drafting the five volume proposal for a loan guarantee, they were concerned with the requirement that structures be harmonious with the environment, including that signs be rustic and in earth tones. The retorting facilities were going to be very large, high, and industrial looking, like a petroleum refinery. While debating how to present this in the application, a postcard arrived from a witty employee (Glenn Vawter) vacationing in Paris, France. On the card was a picture of the then-new Centre Georges Pompidou Museum, designed by Renzo Piano. A copy of the photo on the card was included in the application, with the text stating that the plant would be tastefully designed in the mode of Renzo Piano’s design of the Centre Georges Pompidou. Email from Roger Chittum to author, October 30, 2012.

³² Email from Larry Lukens to author, May 10, 2011.

³³ *Ibid.*

nor will we share with the government.”³⁴ Finally, the DOE did receive one copy with stipulations restricting its distribution. Tosco submitted the same proposal to SFC on March 31, 1981, in response to the first SFC solicitation.³⁵

The concern mentioned by Blackwell referenced earlier pertained to the JOA. At no time during the negotiations and discussions with the SFC, DOE, and other government officials did Exxon officials participate. Exxon refused, as the company had no desire for the government to be meddling in Exxon’s business. Language in the JOA stated that Exxon was not obligated to commit or spend money on the Colony project, even if Tosco did. Further, neither the DOE nor the SFC could obtain any sort of agreement, implied or otherwise, that Exxon would commit to the project. Thus, the concern was legitimate.

Exxon and Tosco each prepared detailed information papers in support of the Colony Project. Exxon’s report was a ten-page white paper published in June 1980, entitled *The Role of Synthetic Fuels in the United States Energy Future*. Tosco’s eighty-five page presentation, *The Energy Crisis –Oil Shale: Part of the Solution*, was issued in 1979. Roger Chittum, a Tosco senior officer, recalled that in, 1979-1980, there was an argument being made by many in Washington, DC, that because oil shale alone could not solve the energy insecurity problem, it should not be developed. Tosco believed oil shale was an important and vital *part* of the solution. Exxon’s white paper argued that oil shale would solve the problem, or at least a major part – after all, why would Exxon purchase Atlantic Richfield’s 60-percent ownership of Colony in May 1980 for about \$400 million? Exxon had been on a spending spree, having purchased Reliance Electric Company a year earlier for over \$1 billion.³⁶ Tosco executives speculated that the

³⁴ *Operating Agreement, Colony Oil Shale Project, Garfield County, Colorado*, July 18, 1980, 8-9.

³⁵ Nolan, November 25, 1981, 13.

³⁶ Lydia Chavez, “Exxon to Pay \$400 Million for Oil Shale Project Share,” *Los Angeles Times*, May 14, 1980, F1. In May 1979, Exxon made a \$1.17 billion tender offer for Reliance Electric Company. Exxon’s

intended audience for the white paper was Saudi Arabia, in order to get them to end the deep recession attributed in large part to high oil prices.³⁷ Saudi Arabian oil minister Yamani had made it clear during speeches in the Middle East that high oil prices would force Western countries and companies to develop alternate sources of energy, and that this move was not in the national interest of Saudi Arabia.³⁸ If prices declined, Exxon made money; if prices continued to rise, Exxon made money and also had oil shale.

Exxon made a formal presentation of its white paper on August 25, 1980, in Grand Junction, Colorado, at a meeting arranged by Club 20, a local, commercially oriented, group of leading business people in the area. Because the Piceance Basin – about forty miles northeast of Grand Junction – played such an important role in Exxon’s plans, company officials had worked with Club 20 to organize a meeting in Grand Junction. More than 400 representatives of government, business, and communities of the Western Slope met there.³⁹ Similar conferences had been conducted by Exxon in Houston and Denver.

The Club 20 gathering was hosted by former Colorado Gov. John Vanderhoof. Presentations by Exxon officials Fred Dunnstedt (senior vice president of Exxon USA), Bob Larkins (manager of Exxon USA’s synthetic fuels division), and Sam Vastola (manager, corporate planning, Exxon USA), stated that a synthetic fuels industry could start contributing to the domestic energy supply by the end of the 1980s and grow to a “large sustainable volume” in the 1990s. Synthetic fuels were *the* alternative to continued reliance on imported petroleum

offer was linked to “an energy-saving electronic device for controlling the speed of electric motors,” and would save the equivalent of a million barrels of oil per day. Peter J. Schuyten, “Exxon Bids \$1 Billion for Reliance,” *New York Times*, May 26, 1979, 25. This event did not happen. Exxon had “cash-to-burn.”

³⁷ Email from Roger Chittum to author, June 4, 2012.

³⁸ Shaikh Ahmad Zaki Yamani, “The Impact of Oil on International Politics,” *Middle East Economic Survey, Supplement*, May 5, 1980, 1-6. “Yamani Takes A Look At The Future Of Oil,” *Petroleum Intelligence Weekly, Supplement*, March 9, 1981, 1-5.

³⁹ John Colson, “Exxon’s ‘Oil Shale Scenario’ Illuminated,” *Rifle Telegram*, August 27, 1980, 3A. Sheri Poe Bernard, “Slope Leaders Hear Exxon’s Shale Assessment,” *Daily Sentinel*, August 26, 1980, 1.

through the 1990s and beyond, and shale oil was economically competitive with imported crude oil. Exxon projected that demand for synthetics would reach at least 15 million barrels per day of oil equivalent by 2010 – eight million barrels per day supplied by oil shale and seven million barrels per day from coal gasification projects. This 2010 production volume would meet 12 percent of the nation’s projected energy demands and would be augmented by alternative renewable sources, such as solar, and conservation. Exxon suggested that this volume of synthetic fuels production, in conjunction with the augmented factors, would eliminate America’s dependence on foreign oil by the year 2010. To accomplish this, it was imperative that planning and construction of synthetic fuels plants begin immediately. Larkins addressed socioeconomic concerns commenting that by continuing the concerted efforts between the company and local governments, the number of workers could be accommodated in the Piceance Basin area without causing “social and economic chaos.”⁴⁰

Although Exxon was ranked number one on *Fortune* magazine’s top 500 industries list, the company still would not be able to afford the capital outlay for an oil shale development program requiring an estimated investment in excess of \$3 trillion over the next thirty years. There was mention of – or implied in the language – the fact that Exxon would not seek or want assistance from the government: The \$3 trillion was “within the capabilities of private companies,” and “can be handled by the private sector.”⁴¹

Previously in August 1980, Exxon had announced that an executive would move immediately to Grand Junction, Colorado, in recognition of the importance of the Colony Project both to the area and to Exxon.⁴² Seven months later in March 1981, Exxon reported a \$75,000

⁴⁰ Colson, “Exxon’s Oil Shale . . .,” 3A.

⁴¹ Exxon Corporation, *The Role of Synthetic Fuels in the United States Energy Future*, 1980. Sheri Poe Bernard, “Slope Leaders Hear Exxon’s Shale Assessment,” *Daily Sentinel*, August 26, 1980, 1.

⁴² “Exxon Corp. Executive to Move to Grand Junction,” *Daily Sentinel*, August 14, 1980, 3.

grant “to get a synthetic fuels information and research center at the University of Colorado off the ground.”⁴³ As recently as January 29, 1982, Exxon had told county officials that “their construction schedule [would] require a peak work force of 6,992 in 1985, for the shale facility and related projects.”⁴⁴

Tosco’s report went into considerable depth about the benefits to the US of the commercial development of oil shale, in conjunction with conservation, solar and other renewables, and the increased production of liquid fossil energy – which Tosco defined as a balanced energy program. Tosco argued that the “energy crisis” was in fact an “oil problem.” The symptoms appeared when oil prices started to increase, led by OPEC decisions in 1972, and shortages became widespread following the oil embargo of 1973-74 and the trebling of oil prices. The 1979 Iranian revolution only exacerbated the problems.⁴⁵

Oil shale represented a new source of domestic fossil energy: (1) it was an ideal source of urgently needed premium-quality oil used in transportation, (2) its vast resources would yield a high volume of production well into the next century, (3) the technology was ready, (4) at a projected \$25-per-barrel selling price, oil shale was the most economical of the synthetic fuels and the investment was less than that for offshore production, (5) oil shale development was compatible with the highest standards of environmental quality, (6) each 47,000-barrel-per-day facility generated 2,400 construction jobs, 1,000 permanent operating jobs, and approximately 3,400 jobs in related areas of employment – a total of 6,800 new temporary and permanent jobs, and (7) a \$1.2 billion investment in oil shale development would generate nearly \$5 billion

⁴³ “Exxon Kicks in for Synfuels Research Center,” *Rifle Tribune*, March 16, 1981, 8.

⁴⁴ Gary Schmitz, “Work Force Estimate for Colony Project Revised Up to 7,000,” *Daily Sentinel*, January 29, 1982, 1.

⁴⁵ Tosco Corporation, *The Energy Crisis. Oil Shale: Part of the Solution*, 1979.

additional in related domestic economic activity for each 47,000-barrel-per-day oil shale facility constructed.⁴⁶

Tosco owned 40 percent of the Colony Project, with Exxon as the operator owning the remaining 60 percent. Initially in 1955, Tosco was founded as a research and development organization to cultivate new technology for the commercial production of high-quality fuels from oil shale. Although Tosco later diversified into other energy-production areas, the continued development of commercially viable systems to produce oil from shale remained its primary corporate objective.⁴⁷ For the Colony Project, Exxon and Tosco designed and printed an eighteen-page glossy, four-color brochure (cover shown in Figure 10.5), as well as two additional smaller ones – also glossy and four-color (Figure 10.6), with one eighteen pages and the other sixteen pages.

⁴⁶ *Ibid.*

⁴⁷ *Tosco Corporation*, August 6, 1981, 1. Tosco was acquired by one of the companies that became Conoco Phillips.

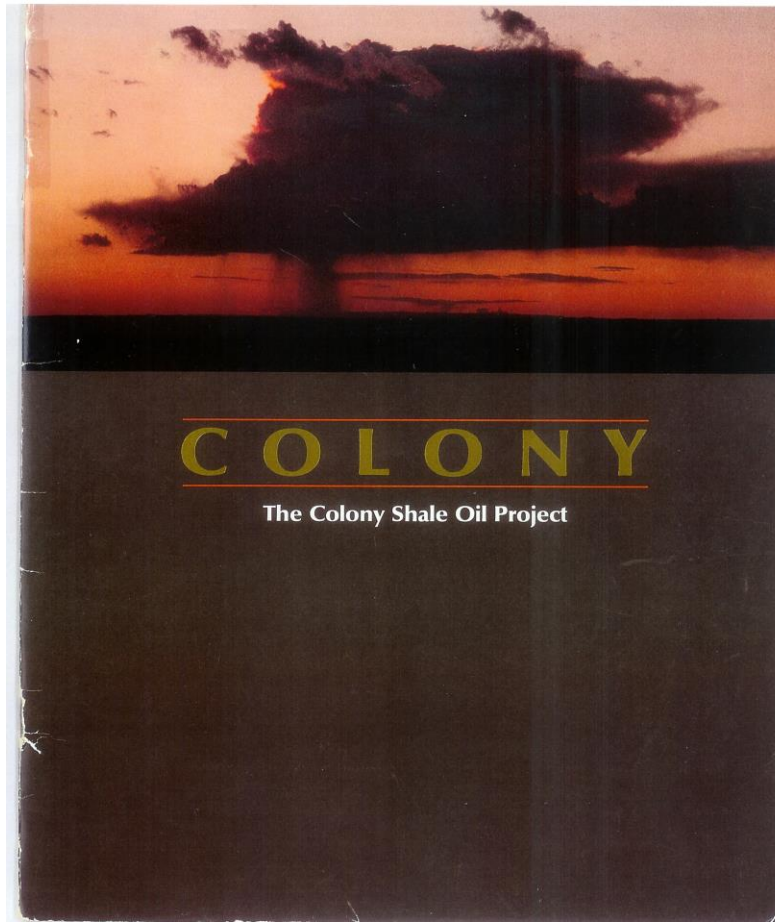


Figure 10.5. Colony Shale Oil Project brochure

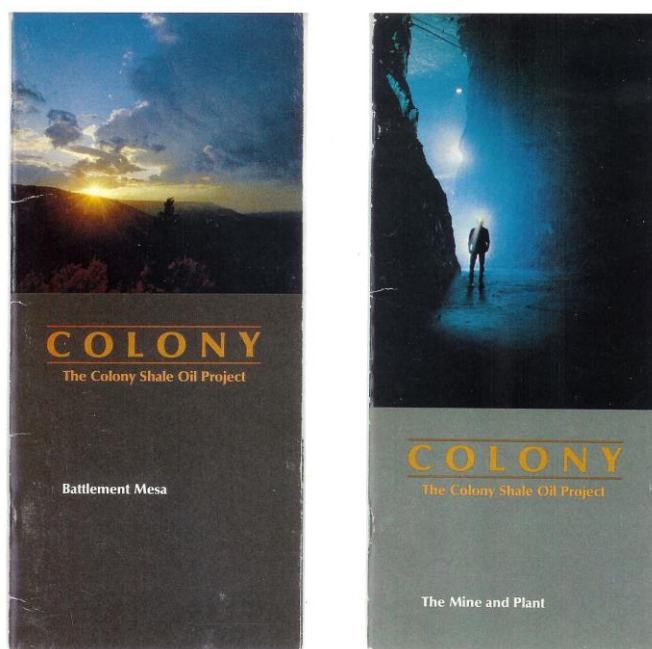


Figure. 10.6. Two small brochures describing Battlement Mesa and the project (Exxon/Tosco 1980)

President Reagan announced on August 5, 1981, that his administration would support a loan guarantee award to Tosco. With SFC personnel assisting in the negotiations, Secretary of Energy James B. Edwards signed a conditional loan guarantee agreement on August 6, 1981, for \$1.2 billion to Tosco for its share of the project costs. As required by the Defense Production Act under which the award was made, the Tosco loan guarantee was submitted to both houses of Congress on September 9, 1981, for a thirty-day review period ending on October 15, with the guarantee not being disapproved during that time. The complete document package for the loan guarantee was finalized and signed on November 10, 1981.⁴⁸ At the congressional hearing to oversee DPA financial programs, specifically the Tosco loan guarantee, Sen. Jake Garn (R-UT) commented that “if the Congress turned over the Sahara Desert to the Department of Energy,

⁴⁸ Betty Nolan, “US Synthetic Fuels Corporation: An Overview of Projects Selected Under the Department of Energy’s Interim Synthetic Fuels Program,” Trend Report Series: II, Draft, November 25, 1981, 18.

within 2 years we would have a shortage of sand in the world.”⁴⁹ Such was the general view of the DOE. Tosco borrowed the money from the Federal Financing Bank, a department within the Treasury, paying a guarantee fee of ½ percent of the outstanding obligation in addition to the interest rate on the debt. The interest rate was the cost of Treasury borrowings. Disbursements were based on an agreed-upon “Disbursement Milestone Schedule.”⁵⁰

Motivated by an upward cost spiral claimed by Exxon (soaring 200 percent and possibly higher), with a concurrent 15 percent decline in crude prices, Exxon unexpectedly announced on May 2, 1982, the termination of any further funding for the Colony Project.⁵¹

Sunday May 2, 1982, quickly became known as “Black Sunday.” The headline in the *Weekly Newspaper* of Glenwood Springs, Colorado, read “Jolt: Exxon’s overnight shutdown stuns county.” In part, the article said:

The Sunday afternoon announcement rolled like a thunderbolt across Garfield County Monday and Tuesday, effecting [sic] virtually everyone [sic] of its citizens. Some were jolted. Others confused. Many were angry. Some wept. Some cheered. Some got drunk on the proceeds from their last paycheck.⁵²

Reporter William Schmidt of the *New York Times* wrote that the shut-down “hit this tiny community [Battlement Mesa/Parachute, CO] like a sledgehammer Sunday.”

⁴⁹ Sen. Jake Garn (R-UT), committee chair, Hearing Before the Committee on Banking, Housing, and Urban Affairs, United States Senate Ninety-Seventh Congress, First Session, *TOSCO Loan Guarantee Proposal*, October 7, 1981, 103.

⁵⁰ *Commitment to Guarantee Obligations Pursuant to the Defense Production Act by the United States of America*, 30, and Exhibit A to the Trust Indenture. In author’s possession.

⁵¹ “Exxon’s Abrupt Exit from Shale,” *Fortune*, May 31, 1982, 105-106. Exxon stated, “Exxon believes that the final cost could be more than twice as much as we thought it would be when we entered the project.” Exxon estimated “that the cost had risen from \$2 billion or \$3 billion to \$5 billion or \$6 billion or perhaps more.” In its fight with Ken Good, Tosco placed full-page ads in the *New York Times* and *Los Angeles Times* on May 5, 1982, stating it had been informed of Exxon’s termination decision on Friday, April 30, 1982.

⁵² “Jolt: Exxon’s Overnight Shutdown Stuns County,” *Weekly Newspaper*, May 5, 1982, 1. One of the best descriptions of the societal impacts of this “boom/bust cycle” on local communities was done by Andrew Gulliford in his book *Boomtown Blues: Colorado Oil Shale, 1885-1985* (Niwot, CO: University Press of Colorado, 1989).

Exxon's closing left over two thousand workers jobless. The outcome all but erased Battlement Mesa, the town Exxon was developing for them, leaving "a city frozen in mid-burst, a city where old plans cruelly clash with new realities."⁵³ Colorado Gov. Richard Lamm called it "a disaster."⁵⁴



Figure 10.7. Photo of Exxon's Battlement Mesa development at the beginning

⁵³ Steve Twomey, "Exxon Deflates the Shale Boom, and Parachute's Residents Bail Out," *Philadelphia Inquirer*, May 6, 1982, 2A.

⁵⁴ Ellen Haddow, "Hundreds of Laid-Off Oil Shale Workers Hit the Bars," Associated Press, May 4, 1982.

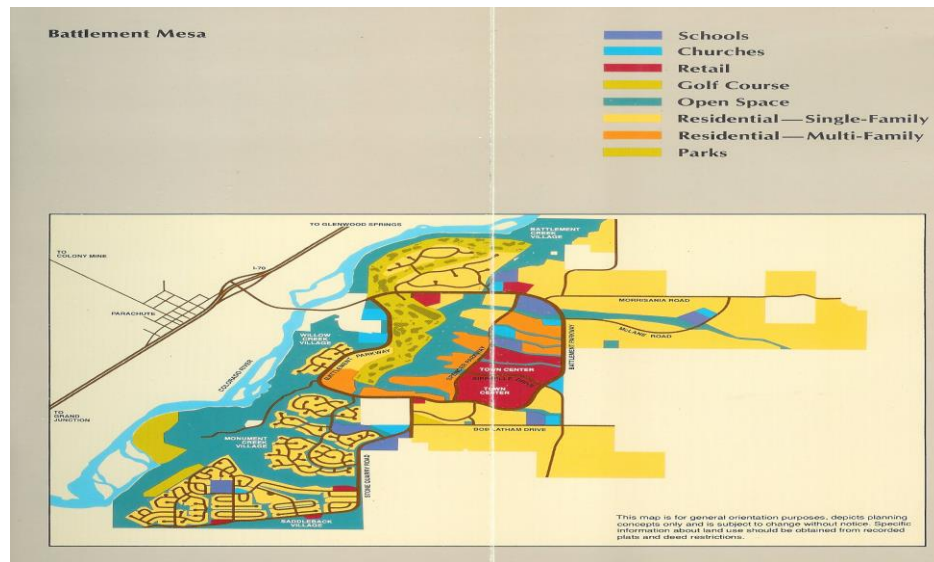


Figure 10.8. Planned development of Battlement Mesa



Figure 10.9. Battlement Mesa, circa 1982 (Photo courtesy of Glenn Vawter)



Figure 10.10. Battlement Mesa circa 2010. Photo courtesy of Glenn Vawter.

Many observers interpreted Exxon's abrupt cancellation as the death knell for synthetic fuels in the foreseeable future. John O'Leary, former administrator of the old Federal Energy Administration and first deputy secretary of the new Department of Energy, was instrumental in drafting the ESA. He called the Exxon decision "a very, very serious blow for the entire synthetic fuels effort in this country."⁵⁵ When asked if he believed a need for synthetic fuels development remained, O'Leary responded:

Yeah, I think the situation that we find ourselves in is not different from what it was in the summer of 1973 or yet again in the summer of 1978. The difficulty here is chronic instability in the principal supplying area for the world, the Middle East, and if you take a look at our situation – the global situation – today, the same sort of catastrophic consequences would flow from an interruption which is no less probable today than it was five or 10 years ago.

The basic cause of instability in the world energy market is still right where it was in the early '70s, and as we found to our terrible perplexity in the late 1970s in the Iranian situation, and that is, most of the oil that's traded in international commerce comes from the Persian Gulf, and that area is simply very, very unstable.⁵⁶

O'Leary opined that the Reagan administration's basic energy policy relied much more heavily on markets and the free enterprise system than did the original SFC concept as it developed during the Carter administration.

Tosco disputed Exxon's cost estimates and did not believe that Exxon had sufficient justification to cancel the project. Morton Winston, Tosco chief executive, commented that the "government will need to take a larger role in stabilizing the future environment in order for the plant [Colony] to get built now or later."⁵⁷

⁵⁵ TOSCO Corporation *Newsletter*, Report to the Nation, May 1982, 5. This newsletter included a copy of the transcript from the May 12, 1982, *MacNeil/Lehr Report*, "Synfuels Retreat," 5.

⁵⁶ "Synfuels Retreat," May 12, 1982, 5.

⁵⁷ *Ibid.*, 2.

The newspaper nearest to the Colony Project, *Rifle Telegram*, boldly stated in large type “Exxon Slams on the Brakes.” The accompanying article reported that Exxon’s president, Randall Meyer, said that the difficult decision was not made lightly and only after several “tough” and “careful” reviews of all the economic and other factors which affect a project of this nature and magnitude.⁵⁸ Exxon had come to the oil shale industry with a bang in the summer of 1980 and, less than two years later, it went out the same way. The Colony closing, according to Colorado Governor Dick Lamm, represented “a devastating blow to the [Colorado] economy.”⁵⁹ With the closing and purchase of Tosco’s share, it was estimated that Exxon would have invested over \$1 billion in Colony.⁶⁰



Figure 10.11. Exxon check presented to Tosco to buy out Tosco's share of Colony Project (Winston on left and Lyon on right)

As Exxon issued its press release announcing the termination of Colony’s activities, world headlines focused on only one thing: WAR. Residents of Denver opened their Sunday

⁵⁸ “Exxon Slams On the Brakes,” *Rifle Telegram*, May 5, 1982, 1.

⁵⁹ Russ Arensman, “Exxon Comes In With a Bang, Goes Out In the Same Way,” *Rifle Telegram*, May 12, 1982, 2. “Editorial,” *Rifle Telegram*, May 5, 1982, 2.

⁶⁰ Russ Arensman, “Exxon Pull-Out Decision Not Sudden,” *Rifle Telegram*, May 12, 1982, 36.

May 2nd papers to read: *British Planes, Warships Pound Falklands as War Breaks Out, Argentines Report British Invasion of Isles Repulsed*.⁶¹ Despite the war, the main headline of the May 3rd *Denver Post* proclaimed “Exxon Will Close Shale Oil Project, Serious Blow to the Industry, [Gov.] Lamm says.” Former Colorado Gov. John Vanderhoof called it “an absolute shocker.” This action meant a loss of \$85 million in annual payrolls for Western Colorado as well as upwards of 4,100 jobs – and, including the ripple effect, 8,000 to 10,000 people impacted. It was a body blow to the area, particularly after Exxon had paid \$300 million in 1980 to Arco for Arco’s interest in the Colony project and had itself since 1980 invested \$400 million in engineering design and construction.⁶² Colorado officials were so concerned about the possibility of violence following the announcement locally that State Adjutant Gen. J.L. France was prepared to send National Guard troops to western Colorado. France alerted thirty security police from Buckley Air National Guard Base to be ready to be airlifted to Rifle, Colorado. He had also asked the Wyoming National Guard to place two C-130 cargo planes on standby to airlift additional troops, if necessary.⁶³

John Sawhill, first SFC chair, saw no reason to go against the tide causing so many projects to cease – the economics were simply not there. The best way to increase domestic crude oil supply was to raise the production of conventional energy sources by such means as enhanced recovery – increased use of new and improved technology in exploration and drilling, not federal assistance – from depleted oil fields and upgrade refinery capacity to handle heavier crude – the private market place, rather than the government, having the ability to increase the domestic supply of crude oil. Rep. Wright (D-TX), an ardent SFC booster, boldly stated, “We need to remind ourselves that corporate policy and national policy do not always coincide. What’s good

⁶¹ *Denver Post*, May 2, 1982, 1A.

⁶² Gail Pitts, “Exxon Will Close Shale Oil Project,” *Denver Post*, May 3, 1982, 1A.

⁶³ Neil Westergaard, “Troops Went on Alert in Shale Closing,” *Denver Post*, May 7, 1982, 5B.

for Exxon is not necessarily good for the country.”⁶⁴ Rep. Wright’s attitude toward the private sector stood in marked contrast to that of former Secretary of Defense Charles Wilson’s, whose statement Wright inverted. Wilson had famously declared in his 1953 confirmation hearing, “. . . I thought that what was good for our country was good for General Motors, and vice versa.”⁶⁵

Only three days after Exxon made its announcement, the SFC president, Vic Schroeder, was in Denver to address a symposium of synfuels experts from the Rocky Mountain states. Schroeder offered a well-rehearsed spin: “I tend to minimize the impact of its [Exxon’s] decision on the [synthetic fuels] industry.” Continuing his rationalization, he said, “the probability of renewed hostilities in the Middle East and the prospect of additional economic shocks are imminent. The rationale for the corporation [the SFC] was both strategic and economic.” Not sure if he had justified SFC’s existence, “We [the SFC board] think that the development of this industry does do the Free World a service and furnishes an insurance policy against undue foreign influence in our economy and defense.” In response to the increasing level of attacks on the mounting expenditures planned to help private industry, Schroeder testily replied, “We’re not afraid of a fight. I’m in the job because of my attitude and experience.”⁶⁶

The \$550 million Union Oil shale project in nearby Parachute Creek was not affected by Exxon’s decision, and was “proceeding rapidly” and “on schedule.” The chair of Union, Fred Hartley, stated, “Union is taking full financial responsibility for investment without recourse to the American taxpayers in the event the plant is unsuccessful. We are . . . fully confident our

⁶⁴ Robert Hershey, “Synthetic Fuels: A Crossroads,” *New York Times*, May 5, 1982, D1.

⁶⁵ *Nominations*, Hearings Before the Committee on Armed Services, United States Senate, January 15 and 16, 1953, 26.

⁶⁶ Bruce Wilkinson, “Synfuels Chief Says Agency Vital to Nation,” *Denver Post*, May 6, 1982, 2D.

project will be a technical and economic success.”⁶⁷ In May 1982, Union’s proposed project was about one-fifth the size of Colony and was backed by \$400 million in federal price supports.

In the May 2, 1982, press release, Randall Meyer, president of Exxon USA, stated, “Exxon still believes that alternate fuels such as shale oil will be required to meet future U.S. energy needs. . . . Exxon believes that the final cost [to build the plant] could be more than twice as much as we thought it would be when we entered the project. . . . [I]n our judgment, the investment economics no longer support our continuing to fund the present project.”⁶⁸ From 1980 to 1982, the average world price of crude oil had decreased about 9 percent, from \$37 per barrel to just over \$33 per barrel. Projections were that it would continue its downward trend.⁶⁹ In Tosco’s 1980 proposal for financial assistance, plans were to build and operate a 48,300-barrel-per-day commercial oil-shale complex. Total costs at that time were estimated at \$3,434 million.⁷⁰ Exxon’s new reported estimate of the total costs (including Tosco’s 40 percent share) had escalated to between \$5 and \$6 billion or more.⁷¹

⁶⁷ Peter Chronis, “Union Oil Project Work to Continue,” *Denver Post*, May 4, 1982, 9A.

⁶⁸ Exxon press release, “Exxon to Discontinue Funding of Present Colony Shale Oil Project,” May 2, 1982.

⁶⁹ *DeGolyer and MacNaughton*, 13.

⁷⁰ *The Oil Shale Corporation, Colony Shale Oil Project, Proposal for a Loan Guarantee under the Defense Production Act, Solicitation Number DE-PS60-81RA50481*, 1980, 1, 66.

⁷¹ Douglas Martin, “Exxon Abandons Shale Oil Project,” *New York Times*, May 3, 1982, A1, D4.



Figure 10.12. Photograph of Tosco and SFC personnel during site visit to Colony Project (date unknown)

Tosco did not then (nor does former senior management today) agree with Exxon's view that costs were significantly more than originally anticipated. Exxon had an inclination toward gold-plating and sloppy construction management. These tendencies were primarily the result of laziness by a huge company with virtually limitless capital. If you overspent, no one knew. If you built something that failed or did not live up to expectations, however, your future at Exxon was in serious doubt.⁷² Tosco, a mouse to Exxon's elephant, was much more sensitive and attentive to costs.

John Lyon, Tosco senior executive and head of its oil shale operations, recalls the backstory to the announcement of Exxon's decision. During the week of April 26, 1982, Randall Meyer called Morton Winston, Tosco's chief executive, and Lyon to say that Meyer wanted to

⁷² Email from John Lyon to author May 13, 2011.

meet as soon as possible, personally with them, at their offices. They scheduled Friday, April 30, late in the day. Winston and Lyon speculated about the upcoming visit, knowing it had to be extremely important for the senior officer of Exxon USA to come in person late on a Friday afternoon. Meyer arrived with Lyon's counterpart at Exxon, Bob Larkins. Although Winston and Lyon had considered the possibility of a shutdown, they were still surprised by the news. Meyer stated that Exxon's planning department had concluded there would be, within a year or two, a dramatic fall in the price of oil. Furthermore, Exxon thought the depressed price would continue for several years. As a result, Exxon had determined it was not a wise use of its capital to continue with oil shale development, and that it would stop funding its 60 percent share effective the next day, May 1. Winston and Lyon excused themselves to discuss Exxon's announcement. They returned, telling Meyer and Larkins that Exxon might as well cease funding Tosco's 40 percent share as well, because Exxon now owned it. Meyer said Exxon figured that would be the response. Therefore, Exxon would promptly pay Tosco the \$382 million that Exxon owed under the "put" provision. Winston and Lyon commenced calling Tosco's directors for an emergency board meeting immediately after Meyer and Larkins left.⁷³ On Saturday, before the public announcement by Exxon, Lyon called Glenn Vawter – senior vice president of Tosco's shale operation – interrupting his son's birthday party. Lyon asked, "Are you sitting down?" Vawter sat down and Lyon told him "Exxon had pulled the plug and the Colony project was over." Tosco had an office in Denver with one hundred employees overseeing Colony. Vawter told them Colony was over and they no longer had jobs. On May 4, at 7:30 a.m., hundreds of men lined up to get their final paychecks. The exodus from Battlement Mesa began in earnest on

⁷³ When Exxon purchased its 60 percent interest in the Colony Project from Arco, Exxon had tried to buy the remaining 40 percent from Tosco, with Tosco adamantly refusing. Eventually, Exxon agreed to a call on Tosco's share, with Tosco having the right to "put" its share to Exxon at an agreed-upon price and principal terms. Source: Email from John Lyon to author, May 13, 2011.

the same day with families rushing to the First National Bank in Battlement Mesa to close out accounts. Many began packing their belongings and pulling their children out of school – five weeks before the end of the school year. Some workers were just getting settled in and with their \$14.85-per-hour-pay had already purchased new cars, pick-ups, campers, and trailers. They had “no safety net.” As one bulldozer operator stated, “We were making good money and buying what we wanted.”⁷⁴ A few weeks later, Vawter gave himself a pink slip.⁷⁵

Black Sunday continues to have ripple effects in the Grand Junction area, Jay Seaton, publisher of the *Daily Sentinel* of Grand Junction, commented as recently as June 26, 2012. In the newspaper’s boardroom, hang two framed issues: May 3, 1982, and September 12, 2001.⁷⁶ Memories remain sharp for those who experienced that day. Several people are even able to describe where they were and what they were doing when they first received the closing-down news. Figure 10.8 is the front page of the *Daily Sentinel* of May 3, 1982.

⁷⁴ Pete Chronis and Gail Pitts, “Colony Pullout Came as Shock to Thousands,” *Denver Post*, May 9, 1982, 1D, 4D.

⁷⁵ Email from Glenn Vawter to author, May 16, 2012.

⁷⁶ Email from Jay Seaton to author, June 26, 1982.

Employees stunned by news of project shutdown

Employees of the Clear Creek shale oil project were stunned and shocked by the news that the project would be shut down, according to a report in the Daily Sentinel.

The report, which was published on May 3, 1982, stated that the project had been operating for several years, but that the company had decided to shut it down due to a lack of funds.

The employees, who were not given any advance notice of the shutdown, were left in a state of disbelief and anger. Many of them had been working on the project for several years and had invested a significant amount of time and effort into it.

The report also mentioned that the company had not provided any compensation or benefits to the employees who were laid off. This further fueled the employees' frustration and anger.

THE DAILY SENTINEL

Grand Junction, Colorado — Vol. 60, No. 141 Monday — May 3, 1982 Sixteen-cent — 25 pages today

Colony closing to 'devastate' West Slope?

By John Smith
The news that the Colony project, a massive shale oil project in the West Slope area of Colorado, is being shut down has caused a great deal of concern and speculation among the residents of the area.

The project, which was operated by the Colony Oil Company, had been a major source of employment and income for the local community. The shutdown of the project is expected to result in the loss of thousands of jobs and a significant decrease in the local economy.

Many residents are worried that the shutdown of the Colony project will have a devastating effect on the West Slope area. They are concerned that the loss of jobs and income will lead to a decline in the quality of life in the area.

Some residents are also worried that the shutdown of the Colony project will lead to a loss of tax revenue for the local government. This could result in a decrease in the quality of public services and infrastructure in the area.



Colony of shale project facility has been shut down. Shale project could be devastating to West Slope.

Riot police attack rally in Warsaw

By John Smith
A large rally in Warsaw, Poland, was broken up by riot police, resulting in several injuries and arrests. The rally was held in support of the Solidarity movement, which is a major labor union in Poland.

The rally took place in a large square in the center of Warsaw. It was attended by thousands of people, many of whom were carrying flags and banners in support of Solidarity.

Riot police, equipped with tear gas and batons, moved in to break up the rally. They used force to disperse the crowd, and several people were injured in the process. Some people were also arrested.

The rally was a significant event in the ongoing struggle for democracy and human rights in Poland. It showed the strength of the Solidarity movement and the willingness of the Polish people to stand up for their rights.

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Bank loans, related services to be held

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Abruptness of Exxon pullout shocks local officials

By John Smith
The abrupt announcement that Exxon was pulling out of the Colony project has shocked local officials and residents. Exxon had been a major partner in the project, and its withdrawal is expected to have a significant impact on the project's future.

Local officials are concerned that the withdrawal of Exxon will lead to a loss of funding for the project. They are also worried that the project will be abandoned altogether.

Residents are also shocked by the abruptness of Exxon's withdrawal. They had been counting on Exxon's support for the project, and its sudden departure has left them in a state of uncertainty.

Reagan accepts invitation to meet with Brezhnev

By John Smith
President Ronald Reagan has accepted an invitation to meet with Soviet Premier Leonid Brezhnev. The meeting is expected to take place in the near future and is seen as a significant step towards improving relations between the United States and the Soviet Union.

The meeting is expected to be a high-level diplomatic event, with both leaders discussing a wide range of issues, including nuclear disarmament and international trade.

The meeting is seen as a positive development in the ongoing efforts to reduce tensions between the two superpowers.

Figure 10.13. Front page of the May 3, 1982 issue of the Daily Sentinel of Grand Junction, Colorado

Following Exxon's announcement about shutting down the Colony Project, Chevron Oil announced it was suspending operations at its Clear Creek shale oil project. Standard Oil of Indiana did likewise for its Rio Blanco Oil Shale Company, jointly owned with Gulf Oil

Corporation. Neither of these enterprises had sought federal financial assistance. Several other projects involving Occidental Petroleum Corporation, Tenneco, and Mobil Corporation were postponed as well.⁷⁷ Because the oil shale industry had been “stopped dead in its tracks” by the Exxon decision, Mobil chair Rawleigh Warner proposed an oil shale consortium of about a dozen companies. Initial response appeared favorable, but enthusiasm quickly faded. Union Oil’s oil shale project remained the only one still being built.⁷⁸

One of the unintended consequences of Tosco constructing the Colony Project was a proxy battle with a Denver real-estate investor and developer, Kenneth Good. During 1981, Good had purchased a large number of Tosco shares, approximately 8.8 percent of those outstanding, which was sufficient to make him the largest shareholder. He was outraged over Tosco’s involvement with the Colony Project, in which costs had begun to spiral out of control, Good thought.

In April 1982, Good made his approach with a series of full-page ads appearing in the *New York Times*, the *Washington Post*, and other papers. Tosco quickly responded in kind with its own full-page advertisements. Each side vigorously attacked the other.⁷⁹ Tosco headlined one ad with “Good will be Good for Good, But will Good be good for you?” Good is described as a “crapshooter” and a “gambler.” Tosco referred to the Colony Project as the nation’s “crucial first commercial shale production facility.” Good countered that the Colony Project, in which Tosco owned 40 percent, had been cursed with endless time delays and continually escalating costs. Tosco had a “put” option with Exxon whereby Tosco could sell its interest to Exxon, which Good estimated at \$450,000,000. Such a sale would inevitably enhance value to shareholders. Good

⁷⁷ “Chevron Cutbacks,” *New York Times*, June 4, 1982, D4. “Amoco Suspends Shale Oil Project,” *New York Times*, July 9, 1982, D4.

⁷⁸ “Oil Shale Consortium Suggested,” *New York Times*, July 27, 1982, D5. “Nation: Mobil Idea on Synfuels,” *Washington Post*, July 27, 1982, D8.

⁷⁹ *New York Times*, April 27 1982, D7; *Washington Post*, April 30, 1982, D13.

had labeled his investor group the “Tosco Stockholders Protective Committee.”⁸⁰ Following Exxon’s announcement that it was discontinuing the Colony Project, Tosco placed another full-page ad, titled “Bulletin, From Tosco Management.” The management explained the Exxon decision and Tosco’s put option, worth about \$380,000,000. With the net proceeds, the company intended to make a special shareholder distribution. Tosco regretfully acknowledged that “the discontinuance of Colony is a grave setback to the national program to launch a commercially viable synthetic fuels industry.”⁸¹

Good placed yet another full-page ad in major newspapers, headlined, “A Question of Business Judgment.” With Exxon’s exit, Good argued that his position had been proven correct. He quoted a recent management letter stating, “The Colony Project is under excellent control. Costs are not out of control.” And yet, according to Good, Exxon terminated the project three days later, saying that costs continued to escalate and market conditions did not justify such a large investment.⁸² At the May 11, 1982, Tosco shareholder meeting, Good’s slate of five directors was defeated by management’s slate, with a 5-to-3 margin.⁸³

⁸⁰ *Ibid.*

⁸¹ *New York Times*, May 5, 1982, D7.

⁸² *New York Times*, May 6, 1982, D11.

⁸³ Thomas Hayes, “Tosco Dissidents Lose,” *New York Times*, May 27, 1982, D7. Thomas Hayes, “Square-Off at Tosco Meeting,” *New York Times*, May 12, 1982, D1, D8.

Union Oil Parachute Creek Oil Shale Project

In response to the DOE solicitation of October 15, 1980, Union Oil Company, under the DPA submitted, a proposal for a price guarantee/purchase commitment for ten thousand barrels of oil equivalent per day in jet aircraft and diesel fuel for the DOD. Since Union received its financial assistance under the auspices of the Defense Production Act of 1950, the DOD had right of first call on any production from the plant. In mid-January 1981, Union submitted an identical proposal to SFC under the SFC's November 1980 solicitation. On July 29, 1981, President Reagan authorized a federal price guarantee/purchase commitment for Union, with the finalized agreement signed on July 30, 1981, by Secretary of Energy James B. Edwards. The contract provided that DOD would pay the prevailing market price for the entire product it received. Any difference between this price and the guaranteed floor price as specified in the contract would be paid by DOE, up to a maximum outlay over a seven-year period of \$400 million. The base price was listed as \$42.50 per barrel, escalated for inflation.⁸⁴

The Union Oil Parachute Creek Shale Oil Program transferred to SFC when SFC was declared operational by Reagan on Monday, February 8, 1982. The chair of Union, Fred Hartley, liked to point out that Union's involvement with shale and other experimental projects dated from the 1920s, and this experience provided the company and its people with a better perspective than Exxon – "Union takes a long-term [*sic*] view of the oil shale industry."⁸⁵

"The change in world energy conditions, coupled with difficulties in achieving satisfactory operation of Phase I, led Union in 1985 to reassess" its program.⁸⁶ Discussions

⁸⁴ Nolan, November 25, 1981, 10. This agreement had to be approved by the White House to insure the inflation computation used in the contract did not exceed the inflation rate the Reagan administration was using in its budget projections. The inflation calculation had to be revised downward from what was initially submitted to the White House to coordinate with the inflation figures being used there.

⁸⁵ "Union Oil President Says Shale Project Remains on Solid Ground," *Rifle Tribune*, March 14, 1984, 7.

⁸⁶ *1985 Annual Report United States Synthetic Fuels Corporation*, 10-13.

between SFC staff and Union during spring 1985 resulted in an amendment to the original DOE financial-assistance contract negotiated in August 1985. The terms of this amendment, executed in October 1985, provided for additional assistance up to a maximum of \$500 million in the form of loan and price guarantees.⁸⁷ Union had submitted a request proposal to SFC on December 14, 1982, that would assist Union in developing Phase II of the Parachute Creek program. By June 1984, SFC and Union had negotiated a final draft agreement for financial assistance. The SFC board lacked a quorum, however, which prevented the corporation from taking any formal action.

Union obtained all major federal and state permits and submitted an Environmental Monitoring (EMP) to the SFC, the EPA, the DOE, and the Colorado Department of Natural Resources. Corporation staff determined that Union's EMP was consistent with SFC guidelines and provided a sound basis for environmental monitoring of the project.⁸⁸

Union prepared and published two different glossy, four-color brochures for its Parachute Creek Shale Oil Program – one sixteen pages and the other eighteen (covers shown in Figures 10.14 and 10.15).

⁸⁷ *Ibid.*

⁸⁸ *United States Synthetic Fuels Corporation 1985 Annual Report*, 12.

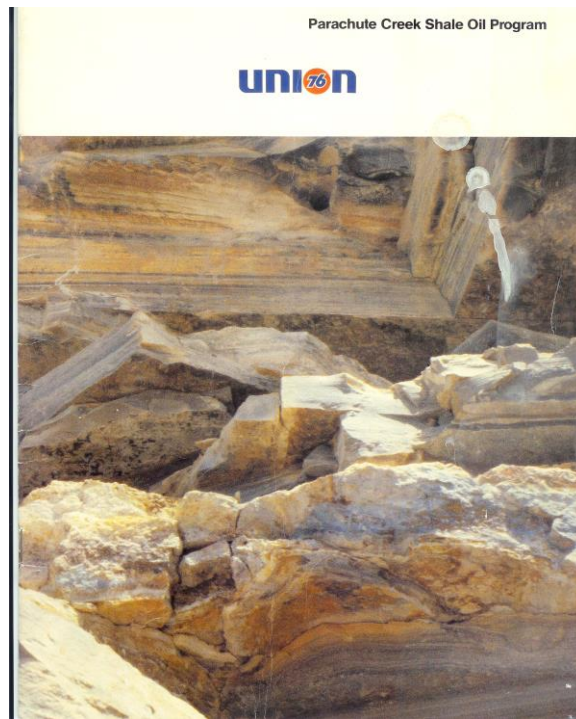


Figure 10.14. Union Oil Parachute Creek Shale Oil Program brochure (October 1981)

Parachute Creek Shale Oil Program

06-10-024-001

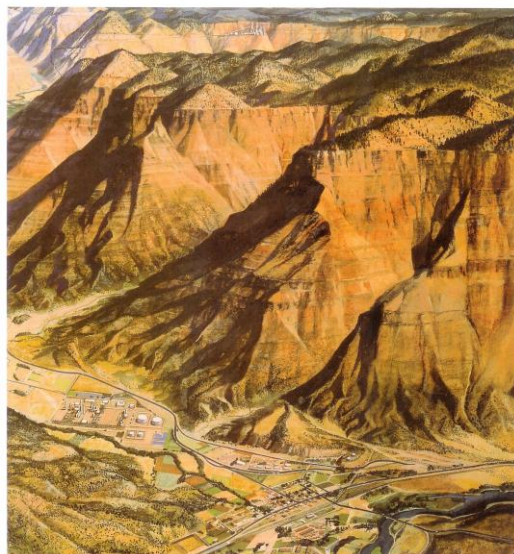


Figure 10.15. Union Oil Parachute Creek Shale Oil Program brochure (August 1982)

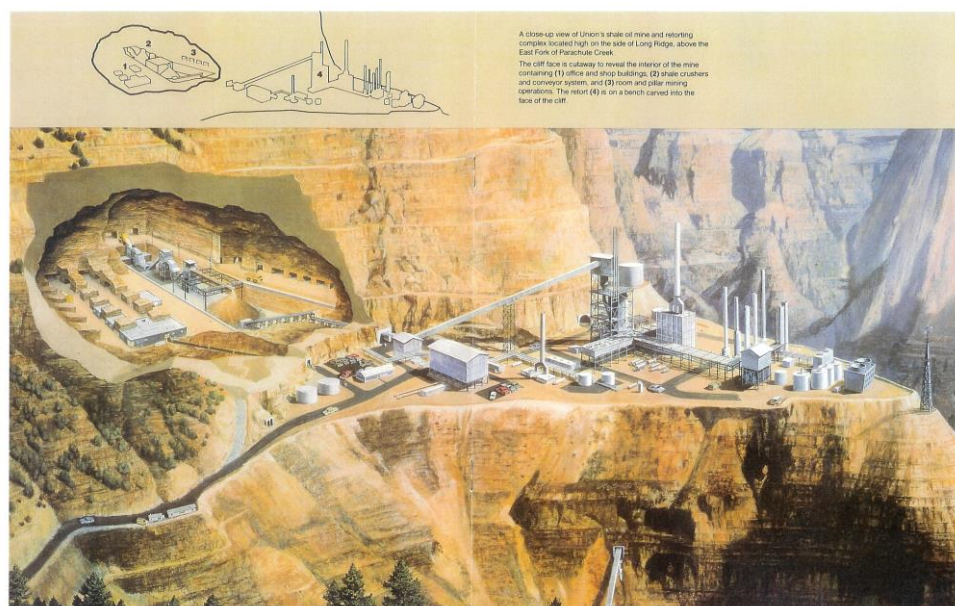


Figure 10.16. Drawing of Union Oil Parachute Creek shale oil plant

James Weith was the Union Oil retort process foreman at the time. The *retort* is a device for heating a material, such as oil shale, to recover vapors that can be condensed into a liquid product. Weith wrote that Union Oil “shut down the project in [June] 1991,”⁸⁹ with Union saying, in essence, that the company believed it had learned all it could. Richard Stegemeier, Unocal chair since Union Oil changed its corporate name, stated, “We [Unocal] have operated the project for nearly 5 years and produced nearly 4.5 million bbl of high quality synthetic crude oil, making this the largest oil shale effort in U.S. history.”⁹⁰ Weith commented that the “plant was able to operate in the black in random months. . . [It] needed to run for 20 days in any month in order to get into the black.” Weith observed that as they “learned more about the process, [they] began to have a quarter in the black as well.” He offered that Unocal was making “real progress in the field” when the plug was pulled.⁹¹ Weith suspected that a major contributing factor to the shutdown was an unfriendly takeover offer for Unocal from T. Boone Pickens in 1985. At this time, Pickens was chair of Mesa Petroleum Corporation and an advocate of creating value for shareholders of what he determined were poorly managed and undervalued companies. He became known primarily as an unfriendly “takeover” investor.

By February 1985, Pickens and a group of investors had purchased 7.9 percent (13.8 million) of the outstanding shares of Unocal, and the investing group planned to purchase additional amounts.⁹² Pickens and his group eventually controlled 13.6 percent of Unocal stock.⁹³ The Pickens investor consortium announced a tender offer on Monday April 8, 1985, for an additional 64 million shares of Unocal at \$54 per share, giving Pickens slightly more than 50 percent of the outstanding shares. Unocal countered by offering to exchange up to \$6.3 billion of

⁸⁹ Letter from James D. Weith to the editor of *Oil & Gas Journal*, September 27, 2004, 10.

⁹⁰ “Unocal to Close Sole U.S. Commercial Oil Shale Plant,” *Oil & Gas Journal*, April 8, 1991, 38.

⁹¹ Email from James Weith to author, October 3, 2008.

⁹² Mark Potts, “Pickens, Partners Buy 7.9% Stake in Unocal,” *Washington Post*, February 15, 1985, F1-F4.

⁹³ “Unocal Will Hold Meeting April 29 Despite Mesa Plea,” *Washington Post*, March 30, 1985, D2.

new indebtedness for 87.2 million of its shares.⁹⁴ In a last-ditch effort to defeat this bid, Unocal increased its outstanding indebtedness from \$1.2 billion to \$5.3 billion by way of an exchange offer of \$4.1 billion in senior secured notes for 57.7 million shares of Unocal common stock.⁹⁵ This huge debt burden severely curtailed Unocal operations. One project that ended up suffering the consequences was the Parachute Creek oil shale facility.⁹⁶ Fred Hartley, Unocal chair and chief executive, had announced that capital spending would have to be “trimmed by an estimated \$200 million to \$300 million” due to increased debt expenses.⁹⁷ This situation represented a huge personal setback to Hartley, as he had been a strong supporter of oil shale since 1955 when he was appointed the first director of Union Oil’s comprehensive oil shale research and development program. Hartley had argued in June 1957 that he had confidence in the future of oil shale; Colorado possessed “mountains of oil,” and he felt the problems associated with the development of oil shale could be overcome.⁹⁸

Unocal officially closed the project in June 1991. The *Los Angeles Times* reported that in a last gasp for Jimmy Carter’s synthetic fuels effort, Unocal would cease operations at its \$650 million shale oil project in Parachute Creek, Colorado, citing “continued losses.” The closure of this thirteen-year-old effort by the only remaining commercial shale oil operation signaled the end of major efforts to develop oil shale to displace imported crude oil. The company blamed falling oil prices, at that point about \$20 per barrel, and production problems. The original plant

⁹⁴ Nancy Rivera, “Unocal Offers to Buy Half Its Shares in Bid to Thwart Pickens Plan,” *Los Angeles Times*, April 17, 1985, I1, I7.

⁹⁵ Nancy Rivera and Debra Whitefied, “Unocal and Mesa Reflect on Takeover Fight,” *Los Angeles Times*, May 24, 1985, G1, G4.

⁹⁶ Second email from James Weith to author, October 3, 2008.

⁹⁷ Nancy Rivera, “Unocal Will Trim Capital Spending, Hartley Says,” *Los Angeles Times*, June 3, 1983, D1, D3.

⁹⁸ Fred L. Hartley and Claude S. Brinegar, “Oil Shale and Bituminous Sand,” *Science Monthly*, vol. 84, no. 6, June 1957, 275-289.

was designed to cover Unocal's costs with oil at \$42 per barrel and production volume at 10,000 barrels per day for 330 days a year.⁹⁹

Both oil shale projects that were provided financial assistance by the government received unsolicited and unfriendly takeover offers. The attacking parties did not consider the oil shale activities of Unocal and Tosco to be wise uses of corporate assets. Within the Great Plains Project, MidCon Corporation, a 15-percent partner, became concerned about a hostile takeover – so much so that MidCon increased its credit line to \$2.5 billion. Tenneco, the largest partner holding a 30-percent ownership share, approved anti-takeover measures and faced the threat of hostile shareholders wanting to force Tenneco to restructure so as to maximize shareholder value.¹⁰⁰ The financial marketplace did not view the synthetic fuels activities of Unocal, Tosco, and MidCon – even with federal financial assistance – in a favorable light.

Although not granted any SFC financial assistance, Occidental Petroleum Corporation and Tenneco had an oil shale project in the Colorado Rockies named Cathedral Bluffs. Occidental had applied for SFC assistance, but never received any. Two glossy, four-color brochures were prepared (see Figures 10.17 and 10.18).

The Occidental/Tenneco Cathedral Bluffs Shale Oil Company provides an insight into the Reagan administration's negative attitude toward government intervention. Armand Hammer, chairman and chief executive of Occidental and a resident of Los Angeles, wanted to influence and speed the SFC's progress on the proposal submitted by Cathedral Bluffs on January 10, 1983. He wrote a personal letter to Reagan on February 12, 1983, with a memorandum. This memo outlined all the major points made to the corporation, and ended with: "the sheer magnitude of

⁹⁹ Lee Patrick, "Unocal to Close the Nation's Last Shale Oil Project," *Los Angeles Times*, March 27, 1991, 1.

¹⁰⁰ *Synthetic Fuels Corporation's Proposal to Award the Great Plains Project \$820 Million in Additional Federal Financial Assistance*, Hearing Before a Subcommittee on Government Operations, House of Representatives, May 22, 1985, 176.

our project [\$2.65 billion] could get bogged down in Washington. *Attention from the highest levels of government would prevent that from happening. Your [Reagan's] willingness to call the project to the attention of those levels would be very useful . . .*" (emphasis added by author)¹⁰¹

The White House, sensitive to this brazen attempt for special consideration, spent several weeks determining who should respond and with what words. Danny Boggs of the White House staff opined, "Since the SFC is an independent corporation, I think nothing more than a routine acknowledgement (if that) is appropriate."¹⁰² After several drafts, Edwin Harper, assistant to the president for policy development, replied with a carefully worded letter that was bland and nonspecific, except for the sentence describing the corporation as "an independent entity that is not subject to the *direction* or *control* of the President." (emphasis added by author)¹⁰³ Previously, Harper had submitted a draft of his reply to Fred Fielding, counsel to the president, who advised Harper that his draft made the central point that the SFC was an independent authority not subject to presidential direction. However, the draft was a shade too enthusiastic in expressing admiration for Occidental's efforts and process. Fielding advised that the final letter tone down enthusiasm to the point it was "equally polite while minimizing the risks of misinterpretation."¹⁰⁴ Ed Noble replied on behalf of the SFC on February 22, 1983, after his letter was approved by the White House. Noble provided Hammer a status update on the project: It passed the SFC's board "maturity decision" on February 17; however, representatives of Occidental did not attend a preliminary negotiating meeting held on February 15, while representatives of Tenneco did. Noble closed by notifying Hammer that if there were better,

¹⁰¹ Letter to President Reagan from Armand Hammer, February 12, 1983, with enclosure, Ronald Reagan Library.

¹⁰² National Security Council Referral, February 12, 1983, Memorandum for Danny Boggs to the President, Ronald Reagan Library.

¹⁰³ Letter from Edwin L. Harper to Armand Hammer, March 17, 1983, Ronald Reagan Library.

¹⁰⁴ Memorandum to Edwin Harper from Fred Fielding, March 17, 1983. Ronald Reagan Library.

more competitive projects that would allow “more prudent utilization of the taxpayers’ money,” Cathedral Bluffs would not be chosen. Noble was confident that the directors, officers, and staff of the SFC were capable of making the correct decisions.¹⁰⁵

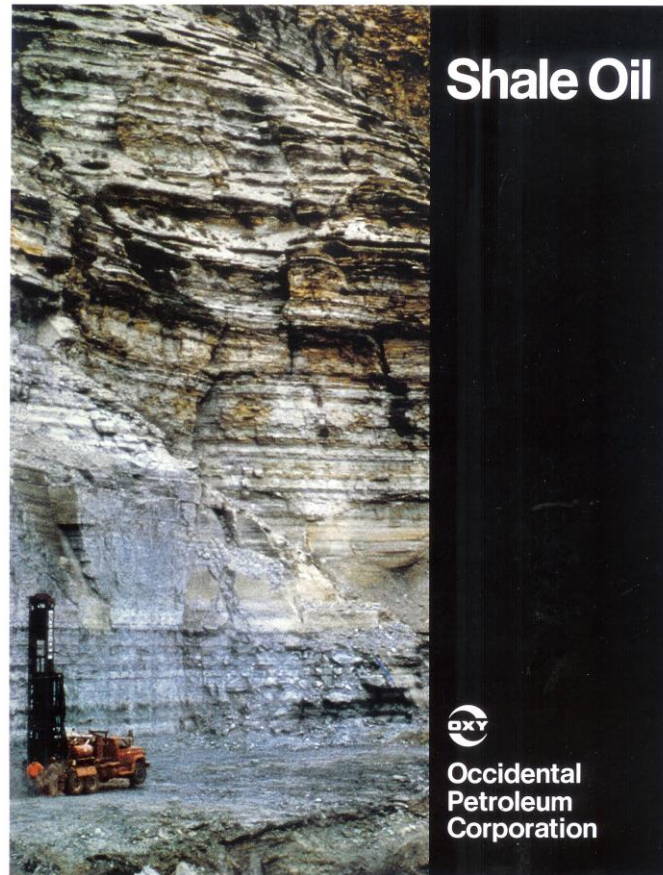
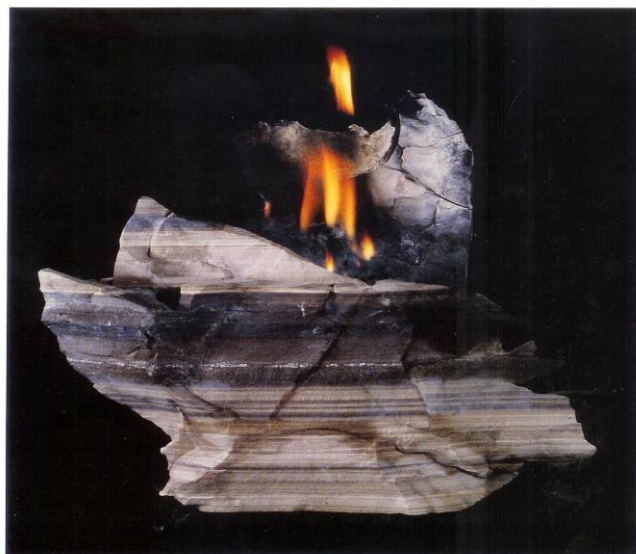


Figure 10.17. Occidental Petroleum Corporation Shale Oil Project brochure

¹⁰⁵ Letter from Edward Noble to Armand Hammer, February 22, 1983, Ronald Reagan Library.



A New Proposal to Develop America's Energy Treasure

Figure 10.18. Occidental Petroleum Corporation Shale Oil brochure

Cool Water Coal Gasification

Cool Water Coal Gasification was awarded a \$120-million price guarantee by the SFC in July 1983. This price was inflation adjusted (at \$12.50 per million Btus plus escalation for the first 9 trillion Btus, and then \$9.75 per million Btus plus escalation for the next 11 trillion Btus) to the Cool Water Coal Gasification Project, which generated electric power for Southern California.¹⁰⁶ The sponsoring consortium included Texaco Inc., Southern California Edison, Bechtel Power Corporation, the Electric Power Research Institute, General Electric, the Japan Cool Water Program Partnership, Empire State Electric State Electric Energy Research

¹⁰⁶ Btu: British thermal unit, which is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at or near 39.2°F. *Webster's New Collegiate Dictionary*.

Corporation, and the Sohio Alternate Energy Development Company. The plant was located in the Mojave Desert near Barstow, California. The plant was a commercial scale facility designed to process a variety of coals. Construction on the facility began on December 15, 1981, and was completed by May 1, 1984, one month ahead of schedule. Commercial production of electricity began on June 24, 1984. The original estimated capital cost for the plant was \$294 million and the actual completed cost was \$278 million. SFC monitoring of Cool Water began when the corporation's price guarantee was executed. Environmental monitoring by the SFC included areas of water, solid waste, worker health and safety, and socioeconomic impacts involving the collection of and analysis of both permit-mandated monitoring data and supplemental monitoring data.¹⁰⁷

Due to declining energy prices and reduced demand for electricity, however, Cool Water went offline in 1989, and a formal closure plan was submitted in 1998.¹⁰⁸

Dow Syngas Project

The Dow Syngas Project, which produced power in existing gas turbines, received a ten-year price guarantee on April 26, 1984 of \$620 million at \$12.50 per million Btus, inflation adjusted for the first 10,950 billion Btus, and \$11.00 per million Btus plus inflation thereafter. Like Cool Water, the Dow Syngas Project was completed within budget and on schedule. The project was sponsored by Louisiana Gasification Technology, Inc., a wholly-owned subsidiary of the Dow Chemical Company. It was located within Dow's existing chemical plant complex in Plaquemine, Louisiana. The facility produced power for existing gas turbines. Programmatic analysis by SFC staff indicated significant replication potential for various grades of coal. Dow

¹⁰⁷ *United States Synthetic Fuels Corporation 1985 Annual Report*, 5-8. (SFC 1985 Annual Report)

¹⁰⁸ Status of the Cool Water Project from portions of a draft book by Ralph Bayrer (November 1980). In author's possession.

Syngas prepared a detailed Environmental Monitoring Plan that was agreed to by the SFC, DOE, the EPA, and the State of Louisiana.¹⁰⁹

After operating for almost a decade, the plant closed operations in 1996. Dow Syngas operated flawlessly, for all intents and purposes, and provided a significant learning experience for the operators.¹¹⁰

Forest Hill Heavy Oil Project

In September 1985, the Forest Hill Heavy Oil Project (a recovery program) received a maximum loan guarantee of \$24.4 million and a price guarantee of \$35.6 million, increasing to a maximum of \$60 million – with the inflation-adjusted price guarantee set at \$40 per barrel for production equal to or less than 500,000 barrels, and \$37.50 per barrel when production exceeded 500,000 barrels. The sponsor was Greenwich Oil Corporation. The project was located in Woo County, Texas. Forest Hill produced heavy oil using an *in situ* combustion process known as oxygen fireflooding.¹¹¹

Even though this project was completed within budget, “[a]fter two years of operation, it defaulted on its guaranteed loan, and filed for protection under the bankruptcy code.”¹¹²

Peat Methanol Associates/First Colony Project

By spring 1985, the SFC also entered into a cost-sharing agreement with Peat Methanol Associates (PMA) partnership, also known as the First Colony Project, to refine their project. Maximum obligation to the corporation was \$820,750, of which only \$467,507 was provided to PMA. This project intended to produce about 63 million gallons of methanol from peat each year. Following withdrawal of support by the sponsors, this project was eliminated from further

¹⁰⁹ *SFC 1985 Annual Report*, 8-9.

¹¹⁰ *Ibid.* Dow Syngas Project.

¹¹¹ *SFC 1985 Annual Report*, 9-10.

¹¹² Ralph L. Bayrer, “Appraisal of Current Projects in Synthetic Fuels Technology,” *Fuel*, November 1991, vol. 70, 1328.

consideration.¹¹³ The US General Accounting Office issued a report, “Circumstances Surrounding the First Colony Peat-to-Methanol Project,” on November 10, 1983, questioning the wisdom of the SFC board in selecting this project.¹¹⁴ As mentioned previously, CIA director William J. Casey, as well as several former high-ranking Ford administration officials, financially backed this project.¹¹⁵ Either by coincidence or design, Reagan had nominated, in early 1982, former senior CIA executive Robert W. Gambino to be SFC deputy inspector general. Gambino had worked for the CIA for ten years, from 1970-1980, both overseas and in the United States. Most recently, he had been CIA director of security from 1975-1980.¹¹⁶

Santa Rosa Tar Sands Project

The PMA project garnered an extra measure of public attention because of Casey’s involvement. Another program that attracted congressional notice was the Santa Rosa Tar Sands Project in New Mexico. The House of Representatives Government Operations Subcommittee on Environment and Natural Resources held a public hearing on the Santa Rosa Project on December 8, 1983.¹¹⁷ Noble had signed a letter of intent on January 17, 1983, to provide this undertaking with \$42.6 million in financial assistance. The SFC board subsequently withdrew the letter of intent on October 22, 1983, due to the departure of the project’s principal equity sponsor, the Foster-Wheeler Energy Corporation. Events surrounding the issuance and withdrawal of this letter raised considerable congressional concern about the corporation’s

¹¹³ *Comprehensive Strategy Report*, Appendices, F43-F46.

¹¹⁴ *Circumstances Surrounding The First Colony Peat-to-Methanol Project*, US General Accounting Office, GAO/RECD-84-32, November 10, 1983.

¹¹⁵ Martha Hamilton, “Synfuel Chief Backs Peat Plan With Noted GOP Investors,” *Washington Post*, December 22, 1982, A1, A6.

¹¹⁶ *Lessey and Gambino Nominations*, Hearing Before the Committee on Energy and Natural Resources, United States Senate, April 16, 1982, Publication No. 97-78.

¹¹⁷ *Examination of Procedures by Which the Synthetic Fuels Corporation Selects Projects for Federal Financial Assistance*, Hearing Before a Subcommittee of the Committee on Government Operations, House of Representatives, December 8, 1983, and subsequent House Report 98-1135 issued by the Committee on October 4, 1984.

diligence in evaluating proposals.¹¹⁸ The primary issue centered on the inadequacy of the project's reserves to support the plan. Solv-Ex, the sponsor, had misrepresented the quantity of resources available to support the project, as they were insufficient. Solv-Ex had possibly violated federal securities laws. The Santa Rosa Project was basically a fraud. It was ultimately rejected by SFC staff.¹¹⁹

¹¹⁸ *Ibid.*, 1.

¹¹⁹ *Ibid.*

Chapter 11: Conclusion

On June 28, 1985, as required by the ESA, the United States Synthetic Fuels Corporation submitted to Congress its Comprehensive Strategy Report. Although it was a year late, the report set forth SFC board recommendations:

After careful and extensive consideration, the Board has now concluded that, under current conditions, it is not possible to achieve the national production goal within the requirements of the Act; accordingly, the Board cannot formulate a strategy to achieve the production goal.¹

During its lifetime, the SFC experienced an incredibly high turnover rate in both board and senior officer positions – one recess-appointed chair, followed by an acting chair, and finally a presidentially nominated and Senate-confirmed chair. The four board members, who received recess appointments from Carter, all resigned in tandem with Sawhill on January 30, 1981. Except for Noble, all the members of Reagan’s original board of four also eventually resigned. Then several of the replacement board members resigned, along with fifteen senior officers. This recurring exodus made it difficult, if not impossible, for SFC to maintain any continuity – let alone forward momentum – in its operations because at several points, the board of directors was without a quorum to make decisions. The senior staff experienced little turnover, while diligently and conscientiously pursuing project analysis and project recommendations to board members. They suffered from the lack of consistent and effective leadership.

An editorial in the January 2007 *Wall Street Journal* described the Synthetic Fuels Corporation as “one of the more notorious Washington boondoggles of all time, having spent

¹ *Comprehensive Strategy*, F43-F46.

\$2.1 billion of tax dollars on alternative fuels before declaring bankruptcy.”² This characterization remains the perception of the SFC in Washington and the rest of the nation even today. Ralph Bayrer, a former SFC officer, wrote a letter to the editor replying to this editorial. He stated that the corporation did not declare bankruptcy, but rather was terminated prematurely by Congress, and spent barely one billion dollars. It did fund four projects: two coal gasification plants, one oil shale project, and one heavy oil endeavor. The heavy oil one was unsuccessful, while the oil shale facility achieved three-quarters of its design output. The two coal gasification projects were fully successful, operating for years above design capacity. SFC’s monitoring of these projects established the environmental acceptability of synthetic fuels.³

A former counsel for the House Subcommittee on Environmental, Energy, and Natural Resources investigating the corporation commented that the SFC became the Reagan administration’s dumping ground for people to whom they owed favors. The SFC hired the son-in-law of President Richard Nixon, Edward F. Cox, who eventually became general counsel of the corporation. After Cox resigned from Synfuels, he joined the board of Noble Affiliates, Inc., of Ardmore, Oklahoma, the company started by Noble’s father.⁴ Cox had planned to stay no more than “a short while” when he joined the corporation in 1981. When he left after two years, he joined the New York law firm of Reid & Priest as a partner.⁵ When Reagan won the 1980 presidential election, Noble had thought he at least would get a cabinet position, based on his involvement with the Heritage Foundation, his monetary contributions to the presidential

² “The OPEC Energy Security Act,” *Wall Street Journal*, January 16, 2007, A20. How the *Wall Street Journal* determined this amount is unclear. The best guess is that the paper combined the SFC amount and the Department of Energy’s Great Plains loss of over \$1 billion. Ralph Bayrer email to author, February 1, 2013.

³ Ralph Bayrer, Letter to the Editor, *Wall Street Journal*, January 31, 2007, B6.

⁴ The company is now Noble Energy, Inc., and Cox remains on the board. It is now headquartered in Houston, TX.

⁵ “Nixon Son-in-Law Leaves Fuels Corp.” *New York Times*, July 4, 1983, 28.

campaign, and having tried, although unsuccessfully, to be elected to the US Senate from Oklahoma as a Republican senator.⁶ Noble was a founder and significant supporter of the Heritage Foundation, and reportedly gave the foundation the building it occupied. The Foundation was a major supporter of Reagan's presidential campaign.

On December 19, 1985, legislation was passed by Congress that terminated any further funding to the corporation.⁷ The SFC was in negotiation with various parties on thirteen projects. When Rep. Mike Synar (D-OK) and Rep. Howard Wolpe (D-MI) introduced this legislation in February 1985, Synar stated, "Killing the Synthetic Fuels Corporation is the easiest budget decision that Congress will get," calling the SFC "a corporate welfare program for some of the *Fortune* 500 companies."⁸

Following passage of the funding-termination legislation, the corporation closed up shop on Friday, April 18, 1986.⁹ Congress had passed the ESA in response to long lines at the gas pumps in mid-1979. At that time, the strongly held conviction was that the national security of the United States depended upon the ability to convert the nation's abundant resources of coal and oil shale into liquid and gaseous fuels. Carter had presented his idea in a military-like atmosphere. Now, in late 1985-1986, the gas lines had evaporated along with the sense of urgency.

Noble departed in February 1986 and in April 1986, ongoing projects and other business were transferred to the Department of the Treasury. Journalist Rochelle Stanfield of the *National Journal*, interviewing Noble about his SFC experience, opined, "Lots of books are bound to be

⁶ Holleman interview.

⁷ P.L. 99-190 terminated SFC authority to award new financial assistance, the directors, and most activities of the program. P.L. 99-272, passed in April 1986, terminated SFC's authorization.

⁸ "Rep. Synar Budget Measure Would Kill Synfuels Corp.," *Oklahoman*, February 5, 1985, 26.

⁹ From June 30, 1980, to December 19, 1985 = 1,998 days, – to April 18, 1986 = 2,118 days. From the operational date of February 8, 1982, to the December 1985 termination legislation date, SFC lasted 1,411 days – or, to the April 1986 date, 1,531 days.

written about the failed synfuels experiment,” but none by him, Noble replied.¹⁰ To date, only one book has been written on the topic, Ralph L. Bayrer’s *The Saga of the U.S. Synthetic Fuels Corporation* (2011).¹¹ One essay has also been published, Sabrina Willis’s “The Synthetic Fuels Corporation as an Organizational Failure in Policy Mobilization,” which appears in an edited volume, *The Unfilled Promise of Synthetic Fuels*.¹² The SFC did have achievements, despite challenging political and economic circumstances, having funded four successful projects that demonstrated that the technology of the projects worked.¹³

Many supporters and critics argued that Noble was “in over his head,” “overwhelmed by the job,” and “not in control of the agency.” Stanfield’s article pointed out that Noble had altered his initial view from an earlier recommendation to terminate the SFC, as reflected in the “Transition Report,” to a mindset of wanting it to succeed. Noble acknowledged that he came into his position with a “naïveté” about Washington and the way it worked, but learned quickly. After Noble admitted he had moved from advocating the SFC’s demise to favoring its continuation, many on Capitol Hill gave him the benefit of the doubt, along with credit for being able to change his mind. Once they had dealt with Noble, however, Capitol Hill people came to acknowledge that his transformation was a sign of weakness. Rep. Toby Moffett (D-CT) and congressional counsel Edith Holleman observed that Noble did not cope well with the constant and insistent pressure from Congress; they recalled that it was difficult to schedule congressional hearing dates with Noble because his diverticulitis often would flare up and send him to the

¹⁰ Rochelle L. Stanfield., “Synfuels Chief Says He Did It for a Noble Cause,” *National Journal*, February 22, 1986, 458.

¹¹ Ralph L. Bayrer, *The Saga of the U.S. Synthetic Fuels Corporation, A Cautionary Tale* (Washington, DC: New Academia, 2011).

¹² Sabrina Willis, “The Synthetic Fuels Corporation as an Organizational Failure in Policy Mobilization,” in Ernest J. Yanarella and William C. Green (eds.), *The Unfilled Promise of Synthetic Fuels* (New York: Greenwood Press, 1987), 71-87.

¹³ Memorandum to the author from Ralph Bayrer, July 17, 2012.

hospital.¹⁴ Noble argued that the charges he mismanaged the corporation were unjustified. He said the directors lacked knowledge about how the federal establishment worked and were unable to understand quickly the vast differences between the private and the public sectors. According to Stanfield, the SFC was slow to comprehend distinctions between the private sector perspective and government's perspective. What appeared clearly as "prudent business practices" in the private arena would be viewed as hesitation or "hidden agendas" by elected officials. Noble felt enormous pressure "to do something now," even if it led to "expensive dead-ends." Noble ended the Stanfield interview by stating that he would not take "that kind of guff again," referencing the intense interrogations he suffered before House and Senate committees and subcommittees. Having been in private business all his life, Noble found the switch from the private sector to a high profile and visible public sector position challenging and frustrating.¹⁵ Bottom line, Noble lacked the support of Reagan.

At the time of his SFC appointment, Noble was a director of Noble Affiliates and resided in Tulsa. He had decided to work in real-estate development in Atlanta. When he took the position of SFC chair, he hired many of his Atlanta employees for SFC positions. Victor Schroeder, the senior officer of Noble's Atlanta operations, was nominated and confirmed as an SFC board member and SFC president.

The criticism that hurt Noble the most involved the high salaries and benefits paid to SFC employees. For his first two years there, Noble accepted no salary, returning to the SFC his

¹⁴ Moffett interview and Holleman interview. Moffett vividly recalls, as a young congressman, flying on the shuttle to New York City and queuing for a taxi into the city. A young woman, recognizing Moffett, approached him and asked if he would share a ride. Once in the cab, the woman told Moffett that he had destroyed her father's career and life. Her father had left a lucrative and respected career to join the SFC. She believed that her father had been ruined by Moffett's intense grilling of him at Moffett's hearings. This incident reminded Moffett that he was dealing with real people who had real lives. Moffett thinks the woman was Ed Noble's daughter, Vivian.

¹⁵ Letter to the editor from Edward Noble, *New York Times*, October 1, 1984, A18.

prorated annual pay of \$69,630 for the remainder of his term ending on February 14, 1986.¹⁶ He believed that what the SFC accomplished would “be good for the long-term benefit of the country.”¹⁷

Board member Robert Monks has provided a first-hand account of the SFC and his days with it from the perspective of being the only outside member of the board to have an office at SFC headquarters. Monks worked there almost every day from 1981 through 1983 in an office assigned to him, and also attended White House, Central Intelligence Agency, and congressional meetings with Noble and Schroeder.¹⁸ Monks described the SFC as “a grand experiment,” the biggest of its kind: government assistance to develop an industry. Monks adhered to the Reagan administration ideology that government does not belong in the energy industry. He did believe, though, that government just might make a big difference in developing an industry to lessen the nation’s dependence on imported crude oil – if that industry were designed correctly and structured properly. Eventually projects would go to the private sector, but the government could help. After being on the board and having daily interaction with Noble and Schroeder, his opinion quickly changed from favoring government assistance to favoring the immediate cessation of SFC activities. His experience convinced him that government could not help and that the private sector must be allowed to function autonomously. He considered SFC’s senior management to be in disarray, dysfunctional, with no direction or leadership, and questioned some of their actions, including the vote trading that prompted Schroeder’s resignation as president and the forced resignation of Thompson following the hearing before Rep. John Dingell’s (D-MI) committee. In 2012, Monks’s opinion is that the private market works, and that

¹⁶ Stanfield, 458.

¹⁷ *Ibid.*

¹⁸ Hilary Rosenberg, *A Traitor to His Class; Robert A.G. Monks and the Battle to Change Corporate America* (New York: John Wiley & Sons, 1999).

the nation's current natural gas surplus and increased domestic oil production are proof that it works.

Total funds spent were about 2 percent of SFC's original authorization (Table 11.1).¹⁹

Table 11.1. Total SFC expenditures during its existence (1980-1986)

	<u>Project assistance</u>	
Cool Water		\$105.0 million
Forest Hill		\$36.5 million
Union Oil/Parachute Creek		\$134.2 million
Dow Syngas		\$576.9 million
	<u>Administrative expenses</u>	
SFC (1981-1986)		\$96.3 million
Treasury		<u>\$11.5 million</u>
Total:		<u>\$960.4 million</u>

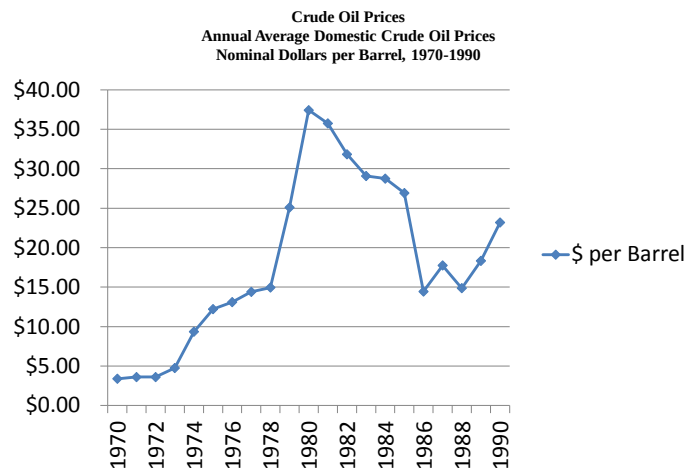
From 1980 to 1986, the price per barrel of domestic crude oil declined over 42 percent, from \$21.59/bbl to \$12.51/bbl (see Chart 11.1 below).²⁰ This dramatic drop affected the economic viability of synthetic fuels plants for private industry. Equally important, the political winds had shifted 180 degrees, from Carter's belief that government was capable of solving the nation's problems to Reagan's conviction that government was the crux of the problems and not the solution. In his *Energy Position Paper*, Reagan wrote that he "favor[ed] elimination of the Department of Energy and of federal allocation rules. The reorganization plan that aggregated so much power over the energy field into a single department and its bureaucrats has proved to be unsuccessful."²¹ Reagan strongly advocated limiting the role of government intervention in the private sector. Instead, he wanted to allow the free market to operate unrestricted by any

¹⁹ This analysis is from Ralph Bayrer, vice president of projects for the corporation. As mentioned, Bayrer is the only SFC employee to have been present at its creation, during its life, and on into its afterlife at the Department of the Treasury.

²⁰ *Twentieth Century Petroleum Statistics 2005*, DeGolyer and MacNaughton, 34.

²¹ *Reagan on Energy: An Oil Daily Report*, July 1981. Oil Daily New York, 1981, 68.

intrusion by the federal government. In his Program for Economic Recovery, President Reagan bluntly observed, “the most important cause of our economic problems has been the government itself.”²²



Source: Historical Oil Prices Chart,
Inflationdata.com/inflation/inflation_rate/historical_oil_prices_table, accessed March 19, 2012.

Chart 11.1. US crude oil prices, 1970-1990

The United States Synthetic Fuels Corporation failed for eight reasons. **First**, it did not have an auspicious birth. It took most of a year to produce the legislation for Carter to sign. During this time, Carter easily became focused on the Iranian hostage crisis, the Soviet invasion of Afghanistan, the Chrysler Corporation federal loan guarantee, and the potential threat to his presidency from Sen. Ted Kennedy (D-MA). Once he had signed the legislation, Carter had a difficult time finding people to nominate for the SFC’s board of directors. His primary search

²² Ronald Reagan, *America’s New Beginning: A Program For Economic Recovery* (Washington, DC: US Government Printing Office, February 18, 1981), Presidential Message to Congress, 4.

was for an individual from the private sector with experience in large construction projects, but Carter was rebuffed because of the upcoming presidential election, a private industry dislike of the Carter administration, and Sawhill's *sub-rosa* campaign to make certain Sawhill got the nod. In one embarrassing episode, the White House deliberately leaked the story that Fletcher Byrom, chair of Koppers Company, would be picked to lead the SFC and that a public announcement was imminent. Five days later, after several press reports on his forthcoming nomination, Byrom asked that his name be withdrawn from consideration because of "uncertainty" that might adversely affect Koppers. Four other candidates also turned down the appointment because of political uncertainty about securing Senate confirmation before the 1980 presidential election.²³ When Carter found nominees, he could not get the Senate to confirm a sufficient number to ensure a quorum, resulting in recess appointments and an inability to declare the SFC "operational" as defined by the statute.

Second, Carter's board chair, John Sawhill, interpreted the ESA as permitting "market" salaries. Once the levels he had committed to officers became widely known, a public firestorm erupted. As John Deutch commented, the ESA did allow salaries above government levels, but not "market" rates and certainly not as high as Sawhill had recommended.

Third, after Sawill's termination, Jack McAtee stepped in as acting board chair. His lack of familiarity with Washington ways and politics made him a natural target for Congress. Members considered him flippant, arrogant, inconsiderate, and combative. This relationship did not help the public image of the corporation.

Fourth, with Reagan's election, the entire paradigm of government shifted dramatically. The equation changed between government and the private sector, with government taking a less

²³ Robert Hershey, "Koppers Chief May Head Synthetic Fuels Agency," *New York Times*, July 23, 1980, D1. Hershey, "Koppers Chief Bars Fuels Post," *New York Times*, July 29, 1980, D1.

active role. Carter had championed his Energy Security Act as “a very good example of how Government” could devise, through its own actions, a comprehensive national energy policy.²⁴ At the time Carter presented his July 15, 1979, energy proposals, Dick Kirschten of the *National Journal* wrote: “President Carter’s energy program amounts to nothing less than a massive federal intervention in the energy business.”²⁵ Under Reagan, the free market trumped government interference. Following his election, Reagan received a memorandum from the thirteen members of his Coordinating Committee on Economic Policy, bluntly stating: “The battle between government . . . and the private market is nowhere more apparent than in energy, where the market has a decisive comparative advantage. Government intrusion into energy production and use provides a glaring example of how [this] costs us dearly.”²⁶ Committee members argued that market pricing and market incentives would accelerate the development of domestic resources as alternatives to imported oil. Turning attention to the corporation, the memo again was to the point: “The Synthetic Fuels Corporation is incompatible with the free market pricing of energy and should be promptly eliminated.” The authors also concluded that the DOE had become unwieldy and unmanageable, comprised of programs ranging from essential to useless.²⁷

Reagan saw no value in the SFC, but he knew it had bipartisan support on the Hill. The future president succinctly described his energy policy in 1978: “Our problem isn’t a shortage of

²⁴ Jimmy Carter, “Great Plains Gasification Remarks Announcing Federal Loan Guarantees for Plant to Be Built in North Dakota,” July 18, 1980. www.presidency.ucsb.edu/ws/?pid=44770

²⁵ Dick Kirschten, “Carter’s Newest Energy Goals-Can We Get There From Here? Carter’s Proposals,” *National Journal*, July 21, 1979, 1192.

²⁶ *Economic Strategy for the Reagan Administration*,” Memorandum from the Coordinating Committee on Economic Policy to President-Elect Ronald Reagan, November 16, 1980. Each of the committee members signed the memo, including chair of George Schultz, Arthur Burns, Milton Friedman, Alan Greenspan, Michel Halbouty, Jack Kemp, James Lynn, Paul McCracken, William Simon, Charls Walker, Murray Weidenbaum, Casper Weinberger, and Walter Wriston. In author’s possession. “Advice for a New President,” *Wall Street Journal*, May 26-27, 2012, A11. See online version for entire memorandum : www.online.wsj.com/article

²⁷ *Ibid.*

fuel. It's a surplus of Government."²⁸ At a campaign stop in Greensboro, North Carolina, Reagan asked his audience rhetorically, "Does it take a genius to figure out that the answer to our having all we need and no more being dependent on OPEC is to turn the energy industry loose [from government regulations and controls] to produce all the natural oil and natural gas that there is to be found?" Reagan argued that for the first seventy-five years of the twentieth century, the United States had abundant, cheap energy, and that the energy problems existing in 1980 resulted from the federal government's intervention.²⁹ Or, as he pithily put it, "government is not the solution to our problem[s], government is the problem."³⁰

Reagan appointed a free-market oriented SFC chair (the Transition report authored by Noble explicitly outlines Noble's position) and the chair's friends to the board, completely incapable of undertaking such an enormous task, except for Monks, Carter, Wilkins, McAvoy, and Reichl. Noble, Reagan's nominated chair, was a parvenu and amateur to Washington and its *modus operandi*. To satisfy – and at the recommendation of members of Congress – Reagan nominated five well-qualified individuals to the board (Monks, Carter, Wilkins, McAvoy, and Reichl) who believed that government and industry could work together to solve the energy crisis. In other words, they were Rockefeller Republicans. Then, the White House ignored the SFC and let it flounder without support to a position of intense dislike by Congress. As Noble wrote, "Every project has at least two senators, one congressman, and a governor unhappy because the project in their state wasn't approved. Under the circumstances, the corporation was

²⁸ Anthony J. Parisi, "Reagan Wants A Different Energy Policy; What Is It?" *New York Times*, July 27, 1980, E3. Also in Barrow, 231.

²⁹ Adam Clymer, "Carter Riddles vs. Reagan Simple Answers," *New York Times*, April 14, 1980, B10. Barrow, 224.

³⁰ Ronald Reagan, "Inaugural Address," January 20, 1981. www.presidency.ucsb.edu/ws/?pid=43130

pretty unpopular.”³¹ Reagan’s election signaled the demise of the Rockefeller Republicans, a faction of the Republican Party who held moderate to liberal views. In some instances, they believed government could be of benefit to the economy, such as Vice President Rockefeller’s Energy Independence Authority, presented to Congress and the American people by President Ford.

Fifth, the crude oil markets substantially improved. Average domestic prices for crude oil decreased from \$37.42 per barrel in 1981 to \$14.44 in 1986 (a 61 percent decline), with a corresponding increase in supplies.³² No longer were synthetic fuels plants economically viable or necessary. A major benefit to the Reagan administration of these lower crude oil prices was that they reduced to almost zero the foreign currency reserves of the Soviet Union, as crude oil exports were their primary and almost only source of funds. Author Peter Schweizer persuasively argued that the plunge in oil prices, a policy goal of Reagan’s, had such a dramatic effect on Soviet financial fortunes that the USSR reached a meltdown, precipitating challenges to communist authority and a desire for independence by many Soviet states.³³ The Reagan administration deemed lower oil prices important to its Soviet foreign policy, with synthetic fuels being paid only lip service.

Sixth, there is no government program that will foster technological change in the energy business. The usual leverage of money does not work; only the free market does. The major oil companies avoided the SFC. The government had nothing to do with advances in horizontal drilling and improvements in “hydraulic fracturing.” (fracking). The corporation was not a good fit for the major oil companies and was not able to provide the right kind of help to

³¹ Edward E Noble., “National Security Implications of the Development of Synthetic Fuels,” *Oklahoma Law Review*, 1985, vol. 38, 822.

³² http://inflationdata.com/inflation/inflation_rate/historical_oil_prices_table.asp

³³ Peter Schweizer. *Victory: The Reagan Administration’s Secret Strategy That Hastened the Collapse of the Soviet Union* (New York: Atlantic Monthly Press, 1994), 262-265.

entrepreneurs.³⁴ Public/private partnerships in the energy field do not function well unless there is a long-term national emergency – World War II/Manhattan Project, Apollo moon mission/Cold War. The energy crisis quickly disappeared once gasoline prices dropped and became readily available again. The public lost interest in any synthetic fuels efforts. Congress took longer to reach the same point because members saw benefits to their districts and financial donors.³⁵

Edith Holleman succinctly states the case for the SFC demise:

[T]he technology [on a commercial scale] was unproven, the cost was too high, the energy companies did not want to invest their own money, the administration was unsupportive, and the public lost interest.³⁶

Two economists at the Massachusetts Institute of Technology, Paul Joskow and Robert Pindyck, argued in their September 1979 essay, “Synthetic Fuels: Should the Government Subsidize Nonconventional Energy Supplies?,” that the government should not overrule the decision of energy producers and consumers, who are in the best position to assess the commercial value of alternative supplies. They argued that the only reason the synthetic fuels industry was being built was the active intervention of government in the industry. The private sector had not been interested in developing synfuels without government subsidies, and argued that the development of synfuels was not an efficient use of society’s scarce resources. It was not logical, they said, to invest enormous sums of money in synthetic fuels projects that were not economical, unless it could be demonstrated that private sector decisions were inconsistent with the public interest. The Reagan administration was making every effort to limit government spending in such areas such as health, education, the environment, and many other areas, with the notable exception for defense. In this environment, was it appropriate to provide government

³⁴ Letter from Robert Monks to author, May 30, 2012.

³⁵ Holleman, July 23, 2012.

³⁶ *Ibid.*

assistance to energy technologies to make them economically attractive to energy companies and consumers?³⁷

After Reagan assumed the presidency, his administration followed a blueprint provided by the Heritage Foundation. Heritage advocated immediate termination of the Synthetic Fuels Corporation and the abolition of the Department of Energy. In assessing policy assumptions and the DOE mission of addressing the energy crisis, the preferred solutions to the problems lay in the private sector. Heritage phrased it succinctly: “[T]he major deficiency of the department of Energy is found in the fact of its existence.”³⁸ The only way the United States would be able to attain the energy security so essential to its future was through the free functioning of the marketplace. By the conclusion of the first year of the Reagan administration, Heritage leaders thought that modest progress had been made. The accelerated schedule of oil decontrol exhibited the efficiency of the market place, and DOE’s uselessness.³⁹

In Reagan’s transmission letter to Congress for his first National Energy Policy Plan in July 1981, he wrote that his proposal represented a break from the philosophy of the two previous plans – both of which were Carter’s. The president commented that the nation’s energy strategy should not be a rigid set of production and conservation goals dictated by government. The free market must be permitted to work.⁴⁰ Within the plan, Reagan articulated his overall thrust: “Increased reliance on market decisions offers a continuing national referendum which is a far better means of charting the nation’s energy path than stubborn reliance on government dictates

³⁷ Paul L. Joskow, and Robert S. Pindyck, “Synthetic Fuels: Should Government Subsidize Nonconventional Energy Supplies?” *AEI Journal on Government and Society, Regulation*, September/October 1979, 18-24, 43.

³⁸ Richard N. Holwill, ed., *The First Year* (Washington, DC: Heritage Foundation, 1982), 83.

³⁹ *Ibid*, 83-97. Charles L. Heatherly, ed., *Mandate for Leadership: Policy Management in a Conservative Administration* (Washington, DC: Heritage Foundation, 1981), 213-244.

⁴⁰ Ronald Reagan, “Message to the Congress Transmitting the National Energy Policy Plan,” July 17, 1981. www.presidency.ucsb.edu/ws/?pid=44096

or on a combination of subsidies and regulations.”⁴¹ Past energy policy relied heavily on federal intervention, and Reagan argued that native American genius, and not arbitrary federal policy, would better provide for the nation’s energy future.⁴²

Seventh, despite their best intentions, President Carter and Congress were not able to create a *sui generis* entity different from normal government agencies. Congress immediately started second guessing the board and senior officers. There was too much money at stake – \$88 billion – which they believed to be outside of their control. The result was endless hearings held by a plethora of House and Senate committees and subcommittees. The SFC had to create a specific department, the Office of External Relations, to provide “valuable support” in “extensively” preparing for and briefing the chair and other officers for their appearances at various congressional hearings.⁴³

Eighth, the concluding reason for the demise of the SFC is that Congress placed conflicting and unreasonable demands on the corporation. The law mandated that the SFC meet two production goals: 500,000 barrels per day of synthetic crude production by 1987 and at least 2,000,000 barrels per day by 1992. At the same time, the corporation had to maintain technological, resource, and regional geographic diversity in meeting the production goals. There were both production and diversity goals, each to be met simultaneously. The production mandates presented their own peculiar challenge. Outside engineering consultants reporting to congressional committees advised that the production goals would be difficult, if not impossible, to accomplish. Technologies applicable to oil shale included above-ground retorting and below-

⁴¹ *Securing America’s Energy Future: The National Energy Policy Plan*. Department of Energy, July 1981, 2, in S. Lawrence Paulson, *Reagan on Energy*, New York: Oil Daily, 1981. Thomas C. Lowinger, *Energy Policy in an Era of Limits*. (New York: Praeger, 1983), 185.

⁴² Ronald Reagan, “Statement Announcing a Series of Policy Initiatives on Nuclear Energy,” October 8, 1981. www.presidency.ucsb.edu/ws/?pid=44353

⁴³ Board Minutes, March 26, 1982, Board Meeting, Management Report. National Archives, MA2 RG56, Acc. 56-82-0064.

ground, *in situ*. With respect to coal gasification, several engineering options were available: high Btu coal gasification, medium Btu coal gasification, and low Btu coal gasification; for coal liquefaction: indirect liquefaction and direct hydrogenation.⁴⁴ Geographic diversity was important as well. The SFC board struggled with the operational definition of *diversity* and directed the staff, acting through the chair, to develop and analyze programmatic options for defining and implementing diversity, but with no real success. The confusion reached such a level that the SFC board adopted a resolution to sacrifice production for diversity.⁴⁵

Despite confusion, contradictions, and sound advice, Congress had proceeded full-speed ahead with the Synthetic Fuels Corporation because of political and public pressure “to do something about the energy crisis.”⁴⁶ The Union of Soviet Socialist Republics (USSR) had invaded Afghanistan and seemed to be penetrating and circling the oil region and oil wells, and thereby presented a clear and present danger.⁴⁷

The United States Synthetic Fuels Corporation represented a bold experiment by the federal government to mobilize the private sector, with assistance from the government, to develop a new industry – the commercial development of synthetic fuels. The SFC was to aid the private sector in getting over the risk, as well as the financial and environmental “humps” of developing the business. The SFC was to assist financially in accelerating the building of synthetic fuels plants that the country desperately needed. The projects that the corporation

⁴⁴ Library of Congress, Congressional Research Service, *Synthetic Fuels from Coal: Status and Outlook of Coal Gasification and Coal Liquefaction*, Report No. 79-212 SPR, June 7, 1979 (Revised September 21, 1979).

⁴⁵ Adopted at the February 16, 1982, SFC Board Meeting. Referenced in the March 26, 1982, Board Minutes. National Archives, NA2, RG56, Acc. 56-82-0064.

⁴⁶ *Synthetic Fuels*, Report by the Subcommittee on Synthetic Fuels of the Committee on the Budget, United States Senate, September 27, 1979.

⁴⁷ Speech by Shaikh Ahmad Zaki Yamani, Saudi Arabian Minister of Petroleum and Mineral Resources, at the King ‘Abd al-‘Aziz University in Jiddah, Saudi Arabia, April 16, 1980. *Middle East Economic Review*, May 5, 1980.

helped fund would have provided thousands, if not hundreds of thousands, of jobs. For a brief time, Synfuels Corporation was the place to be in DC, the sought-after spot to work for energetic individuals who wanted to make a difference and help their country. Unfortunately, the experiment did not work.⁴⁸ The Rand Corporation, though, offers a positive view on synthetic fuels plants. Rand argued that demonstration plants should precede commercial plants to allow perfecting the technology, so plants may be efficiently replicated and scaled-up in size, benefitting from economies-of-scale. Even though the “near-term prospects for major increases in liquid hydrocarbon supplies from [synthetic fuel] plants [is] not good,” the United States would be the recipient of “longer-term benefits of having designed, constructed, and operated a well-chosen set of pioneer synthetic fuels plants,” and this “could prove to be a national blessing.”⁴⁹

President Carter – tough, hard-working, and intelligent – had courageously proposed a way for the country to lessen its dependence on imported oil: an independent federal entity. *Wall Street Journal* columnist Alan Otten observed that even when Carter tried to do the right thing [by creating the SFC], it somehow came out wrong.⁵⁰ With the Synfuels Corporation, it took almost a year for the legislation to reach the president’s desk, and when he had the chance to have his qualified and capable board nominees confirmed by the Senate, Carter stubbornly refused to make one phone call that would have permitted a quorum to be confirmed and then the corporation could be declared operational by him. Reedy noted that during Carter’s time in office, American society had no intention of being moved or shaken about anything, especially energy, as no national consensus existed. America had been badly burned by the powerful

⁴⁸ Saint Phalle interview.

⁴⁹ Edward W. Merrow, Kenneth E. Phillips, and Christopher W. Myers. *Understanding Cost Growth and Performance Shortfalls in Pioneer Process Plants* (Santa Monica, CA: RAND Corporation, 1981), 93.

⁵⁰ Alan L. Otten, “Politics and People,” *Wall Street Journal*, May 4, 1978, 20.

Johnson and the Machiavellian Nixon, and wanted a president who did not get too far out in front of American society with courageous ideas and bold legislation.⁵¹

Journalist Robert Kuttner labeled Carter a “minimalist liberal.”⁵² Carter believed that the United States had entered into an era of limits, and acted accordingly. At the October 1979 dedication of the John F. Kennedy Library, Carter said that the nation was struggling to adapt to the profound transition from a “time of abundance to a time of growing scarcity of energy.” While making this transition, Carter continued, the country was learning new habits and developing new technologies.⁵³ The SFC was a concept that held promise in an era of limits – an idea that followed in the New Deal and Great Society traditions: There did not exist a problem that government could not solve.

Carter lost interest in the SFC mission and he believed – or at least hoped – that others would carry out his brilliant and visionary plans. Matters were not helped when the Energy Mobilization Board failed to pass Congress. The EMB would have speeded up the permitting process. With the skilled leadership and organizational skills of Sawhill, combined with the proficient board, the SFC would have had a very strong chance for success. The problem of dealing with Congress would have continued, but perhaps Sawhill, with his experience in government, could have satisfied its members.

⁵¹ Reedy, 155, 156.

⁵² Robert M. Collins, More: *The Politics of Economic Growth in Postwar America* (New York: Oxford University Press, 2000), 157.

⁵³ Jimmy Carter, “Remarks at the Dedication Ceremonies for the John F. Kennedy Library,” October 20, 1979. www.presidency.ucsb.edu/ws/?pid=31566

Epilogue

Frank Zarb, administrator of the Federal Energy Administration during the Ford administration was also called the “Energy Czar.” He has argued persuasively that energy is the most important public policy failure of our time. Zarb points out that for decades, the United States has been unable to develop a cohesive and thoughtful energy policy, even though the country has desperately needed one. The crux of Zarb’s argument is that the United States lacks the political fortitude and leadership to deliver long-term policies that benefit the national interest in the face of short-term political gain. How the nation uses energy, where it gets it, and how the American people pay for it drive the economic and foreign policy of the United States, as well as affect global alliances and national security. Immediately following the 1973-74 Arab oil embargo, there was a push for an energy policy, but then an increased flow of oil from the Middle East and lower oil prices worked against any plans for such a policy. The nation remained dependent on crude oil imports. Even today, both the foreign policy and defense strategy of the United States continues to be held hostage by the unstable nations from which the United States imports its crude oil supplies. Energy independence, as Nixon defined it, was never a sensible goal for the United States. But energy independence for North America is – and that can be achieved.¹

John Deutch, former under-secretary of Energy (1977-80) as well as deputy director of Defense (1994-95) and director of the Central Intelligence Agency (1995-96), also expressed worry recently over domestic energy policies. According to Deutch, the reason for the failure by the United States in developing an energy policy is a lack of national leadership coupled with the

¹ Frank Zarb, “The Most Important Public Policy Failure of Our Time – Energy,” Speech given at the University of Michigan – Ann Arbor, Gerald R. Ford School for Public Policy, April 4, 2012. Zarb gave the address at least two other times in the same year.

short-term attention span of an American public that demands immediate solutions. Elected officials feel immense pressure to provide quick and easy solutions, but can never adequately address them during their first term time in office.² Developing, constructing, and perfecting the commercial production of synthetic fuels plants and products take in excess of ten-plus years.

President Carter argued eloquently that energy would test the character of the American people and the ability of the president and Congress to lead and govern. Carter's Department of Energy was to formulate a comprehensive national energy policy. In his April 1977 energy address to the nation, Carter declared that to tackle the nation's energy issues, the American people must declare the "moral equivalent of war," because by the end of the 1980s the United States and the rest of the world "could use up all the proven reserves of oil in the entire world."³

Within the last few years, drilling and fracturing technology have advanced to the point that the United States has a surplus of natural gas and an increasing level of domestic crude oil production. The oil industry's technical advances have succeeded in unlocking oil and gas from increasingly difficult locations and have placed the nation on the path to become, within the near future, independent from the energy supplies of nations with unstable governments. Canada's commitment to tar sands technology and development offers the United States a chance to increase supplies dramatically by importing from a neighboring nation with a stable government and a history of consistently friendly relations. As of June 2012, production from Canadian tar sands was 1.7 million barrels per day. The Canadian Association of Petroleum Producers

² John M. Deutch, *The Energy Crisis in Energy Policy* (Cambridge: Harvard University Press, 2011).

³ Jimmy Carter, "Address to the Nation on Energy," April 18, 1977: www.presidency.ucsb.edu/ws/?pid=7369 In 1977, Carter stated that the world was using about 60 million barrels per day. For the year 2010, the world used about 87 million barrels per day, a 45-percent increase.

estimated that this figure could double to 3.4 million barrels per day by 2020, enough to supply nearly 20 percent of US oil consumption.⁴

In 2011, for the first time since 1949, the United States became a net exporter of petroleum products – gasoline, diesel, and jet fuel – but continued to be a net importer of crude oil. Citi GPS: Global Perspectives & Solutions of Citigroup projected in March 2012 that the United States is on track to be a net exporter of crude oil as well. Citi wrote: “North America is becoming the new Middle East,” as it has been the world’s fastest-growing producer of oil and natural gas for the past half-decade. Lack of government intervention, free-market pricing on crude oil and natural gas, new technologies in drilling and production, and increased drilling have all contributed to this state of affairs.⁵ According to Citi, the emphasis of US policy has changed from *energy independence* to *energy security*, which is defined as the ability of households and businesses to accommodate disruptions of supply in energy markets. Under this scenario, the country would no longer be at the mercy of OPEC, facing another oil embargo.

Commenting on the 2012 energy revolution, *Wall Street Journal* columnist Joel Kurtzman recently observed: “Those who doubt that market forces still have the power to transform the world aren’t paying attention to America’s revitalized energy sector.” According to Kurtzman, the market, unfettered by government intrusion, operated in an efficient manner. As crude prices increased, companies developed cheaper alternatives to crude oil, for example natural gas, as well as “unconventional” oil from shale and tar sands.⁶ Oil produced from shale is different from oil shale. As described previously, oil shale is a sedimentary rock that contains kerogen, which releases oil when heated to extreme temperatures. According to the United States

⁴ Steven Mufson, “Keystone XL Pipeline Expansion Driven by Oil-Rich Tar Sands In Alberta,” *Washington Post*, June 30, 2012, 1.

⁵ *Energy 2020, North America, the New Middle East?* Citi GPS: Global Perspectives & Solutions, March 20, 2012.

⁶ Joel Kurtzman, “The Market-Driven Energy Revolution,” *Wall Street Journal*, May 22, 2012, A17.

Geologic Survey, world oil shale production peaked in 1980 at 20,000 barrels per day, with Estonia accounting for two-thirds of global production; by 2000, world production had declined to fewer than 10,000 barrels per day. Shale oil, like shale gas, is oil produced from shale reservoirs; the term *tight oil* is sometimes used to describe shale oil.⁷ In June 1980, who would have imagined that in June 2012, the United States would read the headline, “Rise in US Oil Supplies Haunts OPEC Talks”? The accompanying article states that for the past three years, the United States has accounted for the entire net increase in global output, excluding OPEC and the former Soviet republics. According to the article, the increase in US oil production is due to technological advances in horizontal drilling and hydraulic fracturing.⁸

Tar sands, oil sands, or technically bituminous sands are unconventional petroleum deposits. The largest reserves of tar sands exist in northern Alberta, Canada. Geologists estimate that these sands contain between 1.75 and 2.5 trillion barrels of oil, compared with Saudi Arabia’s 250 billion barrels. In 2011, daily oil production from Alberta’s tar sands amounted to 1,576,000 barrels per day. The United States imported about 10.7 million barrels of oil per day in 2011, of which 22 percent (about 3 million barrels per day) originated from Canada, the largest supplier of crude oil to the United States. Mexico supplied 12.4 percent and Saudi Arabia 11.8 percent of the nation’s imports. The United States is Canada’s best customer, importing 97.6 percent of Canada’s daily crude oil exports of 2.6 million barrels per day.⁹ North America has the potential to become the new Middle East, and the only thing that can stop this scenario from happening is

⁷ *Energy 2020*, 17. Technical definitions: Shale oil and shale gas are hydrocarbons produced from fine-grained, thermally-mature, organic-rich rocks via hydraulic fracturing. Oil shale is kerogen-rich rock that is thermally-immature, meaning it has not produced any liquid oil. It must be heated to very high temperatures to produce a liquid. Email from Eric Potter, University of Texas Bureau of Economic Geology, to author, May 25, 2012.

⁸ Ed Crooks, and Guy Chazan, “Rise in US Oil Supplies Haunts OPEC Talks,” *Financial Times*, June 24, 2012: www.ft.com

⁹ Paul Chastko, “Anonymity and Ambivalence: The Canadian and American Oil Industries and the Emergence of Continental Oil,” *Journal of American History*, June 2012, 166.

politics: environmentalists, impediments to expansion of pipelines, or Mexican production being curtailed.¹⁰

Energy historian Daniel Yergin makes the same observations. According to Yergin, the United States became a major importer of crude oil in the 1970s, which was an era of belief in permanent scarcity. In those days, declining domestic production of crude oil and natural gas was a fact of life. In 2012, by contrast, the nation's energy situation has changed significantly. Natural gas is available in such ample supply that its price is at historic lows. The oil story has been rewritten as well, according to Yergin: Imports have fallen from 60 percent in 2005 to 42 percent in 2012. This decline in imported oil is due not only to improved gas mileage in cars but also to increased domestic crude production, which has risen 25 percent from 2008 to 2012. In 2011, the United States registered the largest increase in oil production of any non-OPEC country. Yergin writes, "[W]hat is striking is this great revival in oil and gas production in the United States." In Yergin's analysis, technology and the free market have made the difference. The possibility of energy independence, once laughed at, has become a "subject of serious discussion and debate." Combined with the production gains occurring in Canada, this once-elusive goal may actually be achievable, according to Yergin.¹¹ It is estimated that 2012 domestic oil production will reach 6.3 million barrels per day, an increase of 600,000 barrels over 2011 levels and the highest level since 1997, evidence that the free market, in conjunction with American ingenuity, works.¹²

¹⁰ *Energy 2020*, 3. Energy Information Administration, *Weekly Petroleum Status Report*, January 6, 2012, 14; December 30, 2011, 14. Paul Chastko, *Developing Alberta's Oil Sands* (Calgary, Canada: University of Calgary Press, 2004), xiii.

¹¹ Daniel Yergin, "America's New Energy Reality," *New York Times*, June 10, 2012, SR9.

¹² Jim Landers, "Refined Oil Products Surge to No. 2 on List of Exports," *Dallas Morning News*, June 19, 2012, 1D, 6D.

Deutch argued in an August 2012 op-ed essay that a United States “hopelessly dependent on imported oil and natural gas is a thing of the past.” In 2012, most energy experts project that North America will have the capacity to be a net exporter of oil and natural gas by the beginning of 2020. The potential for new production is a result of advances in technology. Deutch correctly stresses that North America will not be energy independent, as it will continue to be subject to world oil prices and supply disruptions will continue to create spikes in crude prices. Close US allies – Germany and Japan, for example – will remain significantly dependent on oil imports from unstable regions, and this dependence will constrain US choices in foreign policy decisions.¹³

“Expanded Oil Drilling Helps U.S. Wean Itself From Mideast” read the June 27, 2012, front-page headline of the *Wall Street Journal*. According to the article, the United States will halve its reliance on Middle East crude oil by the end of 2019, and could end it completely by 2035 due to declining demand and the rapid growth of new petroleum reserves in the Western Hemisphere, particularly in Canada. This shift, resulting from advances in technology, has profound consequences for the domestic economy and the national security of the United States. In 1979, it would have been difficult to imagine this headline, let alone such a dramatic change in outlook.¹⁴

The Rand Corporation published a report in January 1981 that assessed the petroleum resources in the United States, *The Discovery of Significant Oil and Gas Fields in the United States*. The writers concluded that most of the petroleum that will be produced in the United States has been discovered. Historical patterns of detection suggested that “the petroleum

¹³ John Deutch, “The U.S. Natural-Gas Boom Will Transform the World,” *Wall Street Journal*, August 15, 2012, A13.

¹⁴ Ángel González, “Expanded Oil Drilling Helps U.S. Wean Itself From Mideast,” *Wall Street Journal*, June 27, 2012, A1.

industry is gradually running out of ideas as to where oil and gas may still be found in the United States, not because of a lack of creativity and imagination, but because of the increasing exhaustion of geological possibilities.”¹⁵ A November 2012 headline by the International Energy Agency (IEA) proves this statement incorrect when it leads with “U.S. to Overtake Saudi as Top Oil Producer,” projecting that the US will become “almost self-sufficient in energy by 2035.”¹⁶ For 2012, production of crude oil in the United States grew by more than 779,000 barrels per day, more than in any year in the history of the domestic industry, which began in 1859. Estimates are that crude oil production is on track to surge even more in 2013, at a level the Energy Information Administration believes will be 900,000 barrels per day.¹⁷ Imagination, ingenuity, hard work, and technology have placed America in this position.

Leonardo Maugeri of the Harvard Kennedy School states in his June 2012 report “Oil: The Next Generation,” that oil supplies are growing at such a rapid pace that there is the very real possibility it will outpace consumption. By 2020, the Western Hemisphere “could return to a pre-World War II status of theoretical oil self-sufficiency,” allowing the United States to reduce dramatically its oil import needs from politically unstable nations.¹⁸

All is not what it appears, though, with this increased domestic oil and gas production from hydraulic fracturing. The production decline curves for horizontal fracking wells are very steep, approaching an annual decline of 30 percent – and in some cases as much as 50 to 80 percent or more of the original production rates. In order to maintain production, companies must

¹⁵ Richard Nehring and E. Reginald Van Driest II, *The Discovery of Significant Oil and Gas Field in the United States* (Santa Monica, CA: Rand, 1981), vii and “Conventional Oil Supply Put At 20-40 Years at '79 Rate,” *Tulsa World*, April 12, 1981, 4-G.

¹⁶ Peg Mackey, “U.S. to Overtake Saudi as Top Oil Producer: IEA,” *Reuters*, November 12, 2012, www.reuters.com/assets/print?aid=USBRE8AB0IQ20121112

¹⁷ Tom Fowler, “U.S. Oil Sector Notches Historic Annual Gusher,” *Wall Street Journal*, January 19-20, 2013, B4.

¹⁸ Leonardo Maugeri, “Oil: The Next Revolution,” Discussion Paper 2012-10, Belfer Center for Science and International Affairs, Harvard Kennedy School, June 2012, 1,7.

continue to drill additional horizontal wells. The risks are that places to drill and utilize fracking are rapidly depleted and product prices decline to a level that makes drilling uneconomic – a superb argument for commencing the development of synthetic fuels to test and develop properly the technology and to scale up to commercial size plants.¹⁹ Chart 1 shows the decline curves for five recent shale plays in the United States.

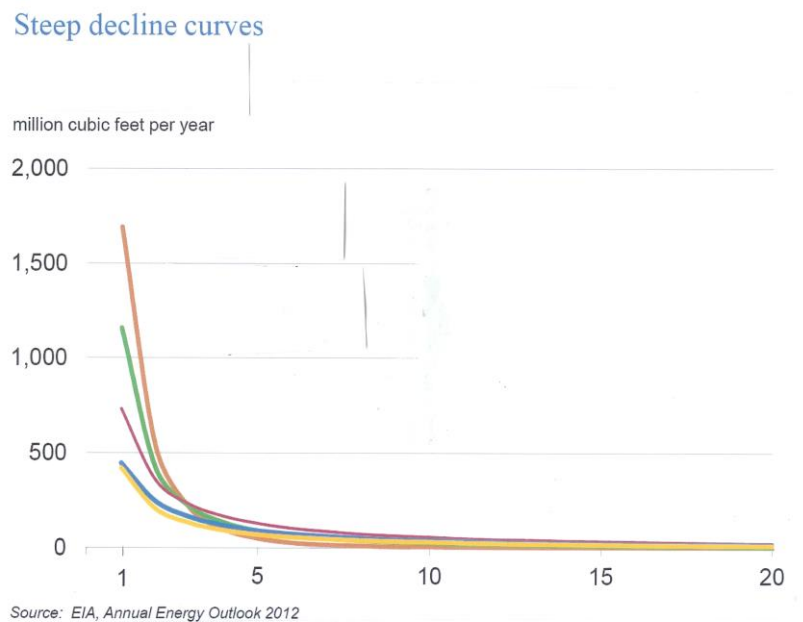


Chart 1. Production decline curves for five recent shale plays

In the past, when the United States chose bold approaches to problems by taking advantage of Americans’ concerted will and intellectual resources, the nation succeeded; indeed, “American might and engineering seemed invincible, even under the crushing weight of economic crisis.” The results of these efforts include the Hoover Dam, the Golden Gate Bridge,

¹⁹ Arthur Berman email to author January 23, 2013. Arthur Berman, *After the Gold Rush: A Perspective on Future U. S. Natural Gas Supply and Price*. February 12, 2012. www.theoil Drum.com/node/8914 Email from Eric Potter to author, January 24, 2013.

the Manhattan Project, the Interstate Highway System, and NASA's moon landing.²⁰ No longer can government take on such huge projects. United States energy policy has become a plethora of cobbled-together congressional earmarks, competing with each other for funding that would be insufficient to complete any one of them successfully. With the SFC, the nation squandered a promising attempt to step out of the DOE swamp of energy incompetence and actually accomplish something. But we can learn from this story: We can reorganize the DOE out of existence, send nuclear energy back to the Atomic Energy Commission, refinance the system of national laboratories so that scientists are no longer spending all their time competing for a few dollars of funding, and organize a few small, strategic, wholly-owned government corporations to accomplish very specific and highly structured mandates. Many DOE projects are overburdened by the DOE's tier-upon-tier of procurement, personnel, budget, and congressional and policy oversights.²¹

Energy is a complex issue, but one that is both intrinsic and essential in the daily lives of all Americans, as well as for the nation's defense. In 1975, *New Yorker* writer and political commentator Elizabeth Drew referred to the energy issue as "a clinical case of interrelatedness."²² She observed that energy is "bound up in the issues of: inflation, recession, and unemployment; the Middle East; transportation; the balance of payments; housing; taxes; and cities."²³ As if this list were not sufficiently complicated, Drew added "economic concentration and antitrust; regional differences within the United States; arm sales abroad; the environment; architecture;

²⁰ Michael Hiltzik, *Colossus: Hoover Dam and The Making of the American Century* (New York: Simon & Schuster, 2010), xiii.

²¹ Email from Tony Dammer to author, May 28, 2012.

²² Elizabeth Drew, "A Reporter at Large: The Energy Bazaar," *New Yorker*, July 21, 1975, 35.

²³ *Ibid.*

America's relations with its European allies and Japan [and today, we can also add China and India]; and the relations between the wealthy and the poor nations of the world.”²⁴

When considering energy, the nation's leaders must take into account the short- and long-term effects that energy plants have on local communities, such as those that occurred with the Colony Project. That case involved the build-up of communities and then the sudden cessation of any further construction, as well as loss of employment for thousands of people. Additionally, economic, political, and environmental issues require specific attention. Plants often take ten years or more to develop and construct, but presidential elections are held every four years, timing that presents questions of continuity between administrations. Each state and region has its own specific priorities, as well as individual issues, related to energy. The nation is undeniably addicted to the consumption of oil. Therefore, efforts to reduce this addiction present problems requiring decades to solve – as well as uncharacteristic levels of patience and sacrifice by the entire citizenry.

Regarding synthetic fuels plants, demonstration factories should precede commercial-sized ones to permit perfecting of the technology. In that way, plants can be efficiently replicated and enlarged, benefitting from economies-of-scale. In 1981, the RAND Corporation acknowledged that despite the fact the “near-term prospects for major increases in liquid hydrocarbon supplies” from synthetic fuels plants is “not good,” the nation would be the recipient of “the longer-term benefits of having designed, constructed, and operated a well-chosen set of pioneer synthetic fuels plants.” Such results, Rand noted, “could prove to be a national blessing in the 1990s.”²⁵

²⁴ *Ibid.*

²⁵ Edward W. Merrow, Kenneth E. Phillips and Christopher W. Myers, *Understanding Cost Growth and Performance Shortfalls in Pioneer Process Plants* (Santa Monica, CA: RAND Corporation, 1981), 93.

The congressional authorization and White House approval of the special-purpose SFC represented a unique effort by the federal government to influence the private industry sector through direct intervention. The question of whether to have major government intrusion in that area of the nation's economy "was settled with the New Deal," said Drew. It is the "nature of that intervention" that has been and continues to be under debate.²⁶ Drew argued that there were two stages of intervention by the federal government, and that in the late 1970s and early 1980s, the nation entered a third stage. The first stage occurred during the Great Depression, with Washington utilizing intervention instruments to stop and prevent further deterioration in the nation's economy. The second stage took place in the 1960s, with the federal government attempting to create opportunities for those who were without, and also to protect the environment. Then the third phase occurred in the late 1970s and early 1980s. At this stage, the nation confronted issues of scarce resources and complex technological problems. The energy crisis represented the first time that the federal government had asked its citizens to make do with less – to give things up, to do without, and to sacrifice.²⁷ These were not pleasant actions for a people accustomed to having their whims indulged instantly. When gas prices declined and stations remained open with plenty of gasoline, Americans quickly forgot the inconvenience of gas lines and shortages, once again consuming enormous amounts of imported crude oil.

John Jimison, then a specialist in the Congressional Research Service of the Library of Congress and who later worked for Rep. Dingell (D-MI), wrote an essay in September 1980, accurately portraying the difficulty of developing a comprehensive energy policy for the United

²⁶ Drew, 35.

²⁷ *Ibid.*

States.²⁸ His 1980 observations apply to 2013 as well. In Jimison's analysis, addressing the energy problem is similar to solving a five-part multilateral equation that cannot be answered for any part without negatively affecting the other parts. Five issues relate to energy: (1) national security, (2) industry, (3) limited supply of the energy source relied on most – fossil fuels, (4) environmental and socioeconomic impact issues, and (5) social structure, economic and political power, and values. Bettering the situation in any of the five individually worsens the situation in one or more of the other four. The SFC addressed the issues of national security and depleting resource issues by increasing domestic supply, but it also handicapped environmental and socioeconomic priorities, confronted the issue of higher energy costs with synthetic fuels, and required a massive intrusion of the federal government into the energy business. The EMB would have imposed national priorities on local governments and individuals.

President Carter had an honorable idea: to reduce the dependency of the United States on foreign oil, and thereby reduce the country's susceptibility to economic blackmail. His idea of an entity outside of and free from the DOE and normal government bureaucracy is to be commended. He knew that America had enormous coal and oil shale reserves that should be developed in the national interest. Unfortunately, politics and economics distorted what was a valiant and perhaps somewhat flawed effort, but still an effort. From a positive perspective, the independent Synthetic Fuels Corporation might not have permitted Solyndra, the California solar energy company, to be granted a Department of Energy loan guarantee – or at least the SFC would have likely ensured a greater measure of due diligence before awarding the assistance.²⁹

²⁸John V. Jimison, *Energy – Is There a Policy to Fit the Crisis?* Congressional Research Service, Library of Congress, Subcommittee on Energy and Power, House of Representatives, Committee Print 96-IFC-57, September 1980.

²⁹Solyndra was a corporation awarded financial assistance from the DOE that subsequently filed for bankruptcy in early 2011, laying off 1,100 workers. The company had received a \$535 million loan guarantee from DOE.

The US private energy sector, through new technology, has been able to find and develop vast reserves of domestic crude oil, which is significantly less expensive than synthetic liquid fuels produced from coal and oil shale. No incentive to create a synthetic fuels industry exists. The only thing that does exist is a dis-incentive – bureaucratic red tape, endless regulations, and impossibly complex and burdensome environmental requirements.

The United States has not adopted any of the comprehensive energy policy packages that have been proposed. Presidents have suggested what were portrayed as complete energy policy plans that would have addressed the challenges posed by the energy crisis. In turn, Congress eviscerated each of them in such a manner that the results came nowhere near what the president had offered and certainly did not address the problems. In fact, they made the problems worse.

The United States could still address the energy issue using the SFC model that Carter outlined. However, any effort would need strong management in the model of the Manhattan Project with a task force leader in the mold of Gen. Leslie Groves.

Former Sen. Gary Hart (D-CO), deeply involved with the ESA and the SFC, offered his definition, in 2007, of the nation's energy policy in an article in 5280, *The Denver Magazine*. He wrote that despite the belief of many people that the nation does not have an energy policy, when in fact it does: "It is to continue to import more than half of our oil [the US] and sacrifice American lives so we [Americans] can drive our Humvees. This is our current policy, and it is massively immoral." To Hart, this may explain why the nation's political leaders find it almost impossible to admit that the wars of the last ten-plus-years in the Persian Gulf area had anything

to do with oil.³⁰ During 2007, the US crude oil imports amounted to 65 percent of domestic demand. For 2012, it is estimated that crude oil imports were 57 percent of domestic demand.³¹

By reviewing the history of America's efforts to develop a synthetic fuels industry through a federally chartered, specific-purpose corporation, perhaps the country can avoid similar mistakes in the future. Historian John Barrow argues that the federal government cannot address energy issues in the absence of an immediate and tangible crisis.³² When unburdened from government interference, the private sector has embarked on addressing the nation's energy crisis. Such lessons are particularly important as America continues to argue about comprehensive healthcare reform. If we study the past, we may even cultivate a broad energy plan someday. Additionally, examining SFC history might shed some light on current issues facing the financial and automobile industries.

We will solve our energy dilemma, but it's going to take time – and enormous perseverance. The importance of having a comprehensive energy policy is illustrated by Chart 2, which shows the dollar amount the United States has spent on crude oil imports from 1973-2011, for a cumulative total of over three trillion dollars – money that could have been spent on domestic issues. Chart 3 reflects the average crude oil price from 1977-1990.

³⁰ Gary Hart, "Position of Power: As America Struggles with Energy Security, Denver Can Light the Way," 5280: *The Denver Magazine*, November 2007. www.5280.com/print/49372

³¹ U.S. Energy Information Administration, *January 2013 Monthly Energy Review* (Washington, DC: Department of Energy, 2013), 41.

³² John Costley Barrow, III, "An Era of Limits: Jimmy Carter and the Quest for a National Energy Policy." PhD dissertation, Vanderbilt University, 1996, 7.

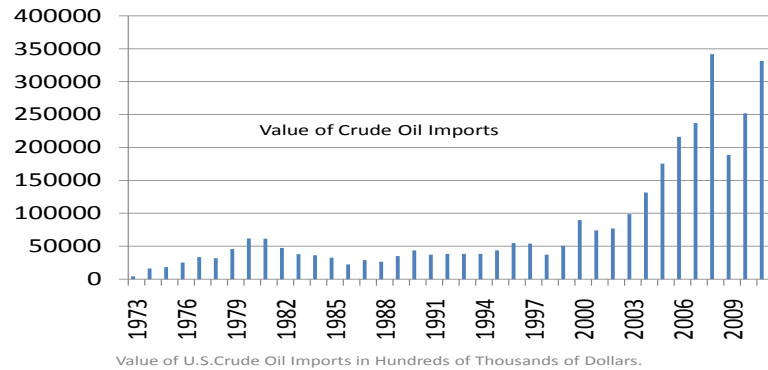
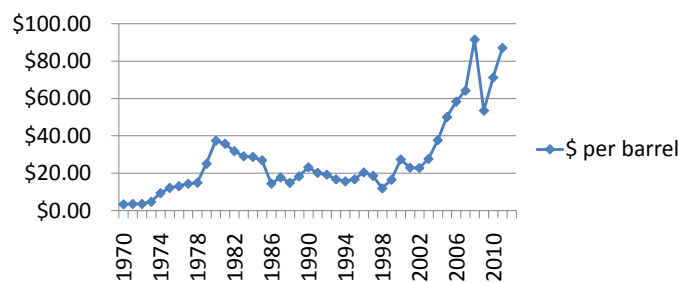


Chart 2. Value of US crude oil imports, 1973-2011, in hundreds of thousands of dollars

Crude Oil Prices

**Annual Average Domestic Crude Oil Prices
Nominal Dollars per Barrel, 1970-2011**



Source: Historical Oil Prices Chart.
inflationdata.com/inflation/inflation_rate/historica
l_oil_prices_table, accessed March 19, 2012.

Chart 3. Historical US Crude Prices, 1970-2011

With the reelection of President Barack Obama, journalists and historians have turned their attention to Obama's broader legacy. At the top of this list for *Wall Street* columnist Gerald Seib is "Energy Independence." Seib writes that this is the "most tantalizing" and "most surprising" possibility for the president. With the proliferation of shale oil and shale gas, the United States has a real opportunity to achieve "energy self-sufficiency." Critics argue that this chance is available despite Obama's energy policies, which have been a handicap. The president's former first chief of staff and Chicago mayor, Rahm Emanuel, says that "of all the things that will happen, it [energy independence/self-sufficiency] will be the biggest game-changer, domestically and internationally, and its effects will be felt for decades going forward."³³ There is a "black swan" on Obama's horizon, though. In a briefing book prepared by the Brookings Institution in January 2013, the president is alerted to the possibility of a revolution in Saudi Arabia due to the Arab Awakenings. The report warns that such an event would cause havoc in global oil markets and disrupt global economic growth.³⁴

To untangle the Gordian knot of energy, the United States requires a president who combines the persuasion of Franklin Roosevelt, with the eloquence of Theodore Sorensen, along with the imaging of Ronald Reagan, and an LBJ mastery of the political process.³⁵

³³ Gerald F. Seib, "Tree Chances for Obama to Craft a Second-Term Legacy," *Wall Street Journal*, January 15, 2013, A4. The other two are immigration overhaul and income equality.

³⁴ Foreign Policy at Brookings, *Big Bets and Black Swans* (Washington, DC: Brookings Institution, 2013), 73-76.

³⁵ Lewis L. Gould, *The Modern American Presidency* (Lawrence: University Press of Kansas, 2003), ix. This is a paraphrase of Professor Gould's sentence.

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Vita

Hervey Amsler Priddy was born in Austin, Texas, where his parents were attending The University of Texas at Austin, and he grew up in Dallas. After nine years at St. Mark's School of Texas he enrolled at Kent School in Kent, Connecticut, graduating in 1967, and attended Vanderbilt University for two years before transferring to UT, where he graduated with a BBA in 1972 and after marrying Dianne (BBA from UT in 1972), also received an MBA in 1975. In 1975, Hervey and Dianne moved to New York City where he worked at Smith Barney, Harris Upham & Co., specializing in energy transactions, until December 1980 when he became employee number thirty-one at the Synthetic Fuels Corporation. In February 1982, he left the SFC to return to Dallas for a position with Sabine Corporation. After the merger of Sabine with Pacific Enterprises in 1988, Hervey gave thought to his next career move. He decided to return to school for a MA in American History from Southern Methodist University, which happened in December 1999. While at SMU, he was elected to the Highland Park Independent School District Board of Trustees for two consecutive three-year terms. With the MA in hand, he decided to go for the PhD at UT.

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