

SYNTHETIC FUELS CORPORATION AND NATIONAL SYNFUELS POLICY

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ISSUE DEFINITION

The Federal Government and U.S. industry are embarking on the largest and most intensive effort ever undertaken to increase the production of synfuels, including oil and gas from coal, peat, tar sands, and oil shale. This effort consists of two major parts: an interim program and a long range program. The interim program was conducted by the Department of Energy's (DOE) Alternative Fuels Production Program, and a joint DOE-Department of Defense (DOD) program which allowed funding for synfuels projects under amendments to the Defense Production Act. Under the interim program which has since been terminated, three projects -- the Union Oil shale project, the TOSCO portion of the Colony shale project, and the Great Plains coal gasification project -- received Federal assistance to proceed with large scale development.

The long range program is being conducted by the United States Synthetic Fuels Corporation (SFC), an independent Federal entity which is functioning primarily as an investment bank to accelerate the commercialization of synfuels. To date, SFC has issued three general solicitations requesting project sponsors to submit proposals for financial assistance. More than 90 groups responded with proposals of widely varying quality. The Corporation rejected most of these proposals because they failed to meet its criteria for demonstrating project strength and maturity. However, SFC judged several projects worthy of support and issued letters of funding intent to two groups of sponsors that intend to convert tar sands into liquid fuels and to process peat into methanol. The Corporation has also issued one "targeted" solicitation restricted to western oil shale projects and plans to issue at least one for coal-based synfuels projects.

P.L. 96-294 directs SFC to help achieve the National Synfuels Production Goals of reaching a daily synfuels production capacity of .5 million barrels of oil equivalent by 1987 and 2.0 million barrels by 1992. Although SFC is seeking to implement efficiently Title I of the Energy Security Act, it is unlikely that the Corporation will be able to carry out effectively many of the goals and objectives of this law. In fact, if an average daily synfuels production level of 30,000 to 60,000 barrels of oil equivalent is reached by 1987, industry and SFC would have achieved a major technological and economic accomplishment.

Congress and the Administration can choose from a variety of options regarding the future of the SFC, including: (1) abolish the Corporation, (2) extend SFC's authority to include the support of biomass fuels projects and energy-from-solid-waste plants, and (3) provide additional appropriations beyond the \$14.9 billion now available to the Corporation. The Reagan Administration has stated that it does not intend to provide any additional appropriations to the SFC.

BACKGROUND AND POLICY ANALYSIS

UNITED STATES SYNTHETIC FUELS CORPORATION

Title I of the Energy Security Act creates an independent, Federal entity called the United States Synthetic Fuels Corporation (SFC), which is authorized to provide several forms of financial assistance to foster the

production of synfuels. SFC-supported projects will be designed to convert the Nation's coal, oil shale, tar sands, peat, and certain heavy oil resources into synfuels which can be used as substitutes for natural gas and petroleum (including crude oil, petroleum products, and chemical feedstocks). The SFC also is authorized to assist facilities used solely: (1) to produce mixtures of coal and petroleum for direct fuel use, (2) for commercial production of hydrogen from water, and (3) for the commercial production of electricity by a magnetohydrodynamic (MHD) topping cycle.

Financial Resources of the Corporation

The financial resources available to SFC over its 12-year lifetime are limited to a maximum of \$88 billion. Congressional appropriations to finance SFC's operations are deposited in the Energy Security Reserve of the U.S. Treasury (which was established by the Department of the Interior and Related Agencies Appropriations Act, 1980, P.L. 96-126). The first installment of funding for the SFC, \$20 billion, is authorized as of June 30, 1980, subject to appropriations. The second and subsequent installments will be authorized (up to a maximum of \$68 billion) by joint congressional resolutions, subject to appropriations.

In P.L. 96-304 Congress stated that up to about \$17.5 billion of the Energy Security Reserve would be available to the SFC. Of these funds, \$6 billion was made immediately available to cover the commitments and expenses of the Corporation; an additional \$6.2 billion was made available for such purposes after June 30, 1982; and the remaining \$5.3 billion was to be derived from funds appropriated to DOE for the interim program under the amendments to the Defense Production Act and the Non-Nuclear Act -- to the extent that such funds were not committed or conditionally committed by the DOE. In February 1982, President Reagan transferred to SFC approximately \$2.7 billion that DOE did not use under the interim program. Thus, by June 30, 1982, SFC had a total of about \$14.9 billion of appropriated funds.

The SFC's authority to make new awards or commitments will end after Sept. 30, 1992, and SFC must terminate its affairs by Sept. 30, 1997. Upon termination, SFC's outstanding contracts for financial assistance will be transferred to the Secretary of the Treasury for administration.

Administrative Structure and Expenses of the Corporation

SFC's powers are vested in a seven-member Board of Directors, composed of a chairman and six other directors, to be appointed by the President and confirmed by the Senate. The chairman, who is responsible for SFC's management and direction, will be appointed for a 7-year term and must serve on a full-time basis. The other six Directors may serve on a part-time basis. The Board, by majority vote, appoints SFC's officers (including a General Counsel and a Treasurer), defines their duties, and fixes their salaries. In addition, the Board sets all major policies, determines guidelines and criteria for soliciting and evaluating proposals, and makes final judgments on the award of financial assistance to projects. Up to 300 full-time professionals may work for SFC at any one time.

Through FY82, SFC spent \$18.6 million on its administrative operations, including generic studies to support program and policy activities. SFC expects its administrative expenses to amount to \$23.6 million in FY83, and \$26.9 million in FY84, versus authorized levels of \$54.1 million and \$56.7

million in FY83 and FY84, respectively. Proposed FY84 increases in the SFC's administrative budget are intended to support additional staffing to handle project evaluation, negotiation, selection, and monitoring responsibilities and to develop the comprehensive strategy required by the Energy Security Act. (See section below for additional information on SFC's comprehensive strategy.)

President Reagan appointed and the Senate confirmed Edward Noble to be Chairman of the SFC. In September 1981 four of the six members of the Board were confirmed by the Senate. They were Victor Thompson, Robert Monks, Victor Schroeder, and Howard Wilkins. In August 1982, the last two members of the Board, John Carter and Milton Masson, were confirmed by the Senate, giving SFC's Board for the first time its full complement of seven members.

SFC's Goals and Comprehensive Strategy

In P.L. 96-294, Congress established a national goal of achieving a synthetic fuels production capability equivalent to at least 500,000 barrels of crude oil per day by 1987, increasing to at least 2 million barrels per day by 1992. Unless a one year-extension is requested, SFC is required by June 30, 1984, to develop and submit to Congress a comprehensive strategy for achieving these production goals. The comprehensive strategy will include reports on economic, technological, and environmental aspects of synfuels projects granted financial incentives up to that date, and will also present SFC's longer-term objectives and its schedule to achieve them. The plan will emphasize private sector responsibilities and will describe how specific limitations will be placed on SFC's involvement. After consultation with the Secretary of Defense, SFC must consider the feasibility of meeting national defense fuel requirements using synfuels produced by SFC-assisted projects.

P.L. 96-294 specifies that Congress must consider SFC's comprehensive strategy for approval by joint resolution. SFC cannot be liable for more than \$20 billion until the comprehensive strategy is approved and funds appropriated.

In February 1982 SFC's Board concluded that the national synfuels production goals would be difficult to meet. Accordingly, the Board decided to support a diversity of projects, instead of funding projects that would provide only near-term production. This decision is consistent with the provisions of P.L. 96-294 that emphasize the sponsoring of technological diversity of projects prior to submission of SFC's comprehensive strategy. By pursuing this strategy, SFC's Board suggested that a larger scale synfuels production could be achieved over the long-term, because the private sector could duplicate the various technologies that proved successful.

In July 1982, SFC's Board concluded that its diversity goal could be accomplished by supporting the commercialization of relatively few combinations of synfuels resources and technologies, especially those that offer the greatest potential for large-scale production. To implement this decision, SFC's Board estimated that the following maximum amounts of financial assistance would be necessary to accomplish the desired technological diversity under its first three solicitations: \$6 billion to support coal-based projects, \$3 billion for oil shale projects, and \$1 billion for tar sands and heavy oil projects. The balance of SFC's obligational authority will be available to meet either diversity or production objectives, or to fulfill other goals of Title I of P.L. 96-294.

Mechanisms of SFC's Financial Assistance

The SFC may provide financial assistance to the private sector for synfuels projects in the following order of decreasing priorities:

- 1) purchase agreements, price guarantees, and loan guarantees;
- 2) loans; and
- 3) joint ventures for project modules. (This last type of assistance may be granted only prior to approval of SFC's comprehensive strategy.)

Before awarding loans or participating in joint ventures, SFC's Board must determine that purchase agreements, price guarantees, and loan guarantees will not adequately support the construction and operation of a synfuels project or will restrict its available participants. The SFC's Board will give preference to proposals which would likely result in the least commitment of financial assistance by the Corporation and the lowest unit production cost within a given technological process.

In deciding which synfuels projects to support, SFC must also consider the range of available technologies, the overall production potential of each technology, and the potential of each technology for compliance with environmental regulations. According to P.L. 96-294, if the synfuels products of a proposed project would be sold or transported at regulated rates, SFC may consider when awarding financial incentives whether the ratemaking decisions are likely to protect the financial interests of the investors and SFC.

Whenever judged practicable by SFC's Board, SFC is directed to award financial assistance on the basis of competitive bids. If SFC solicits bids for a synfuels project and none are received, or if those received are unacceptable to SFC's Board, the Board can negotiate a financial assistance contract for a specific project after reporting to the appropriate House and Senate authorities.

The Board may decide to grant more than one form of financial assistance to a single project only if multiple assistance forms are required to achieve economic feasibility, and if the project is necessary to satisfy national synfuels program goals. Investors who are granted more than one type of incentive must bear "a reasonable degree of risk" -- but those solely in the position of being a lender are not required to bear such risks.

A maximum of 15% of SFC's financial assistance budget may be awarded to each single company or person. Once SFC awards a company some form of financial incentive, SFC may have access "at all reasonable times" to whatever company records are needed to insure compliance with the terms of financial assistance provided by SFC.

SFC is authorized to require appropriate security and collateral for the repayment of any obligations owed to it. All forms of financial assistance granted by SFC shall be general obligations of the United States backed by its full faith and credit.

A recipient of SFC's financial assistance must develop a plan to monitor a project's environmental and health-related emissions. The plan must be acceptable to SFC's Board of Directors and it must be developed in consultation with the Administrator of the EPA, the Secretary of Energy, and

appropriate State agencies.

Under certain limited circumstances, SFC could acquire control of or purchase and leaseback synfuels projects, subject to congressional review and veto. Such control would have to be disposed of within 5 years after acquisition.

When the Secretary of the Treasury transfers requested funds to SFC, obligations and outlays incurred will be included in the U.S. budget. However, since SFC is an independent entity, its receipts and disbursement will not be included in U.S. budget totals, although these financial transactions will be made public in the budget report. Thus, transactions between SFC and the Secretary of the Treasury will be on-budget items, while the transactions between SFC and recipients will be off-budget items.

SFC's Solicitation Process and Activities

The SFC has organized its solicitation activities into three phases. Under Phase I SFC will select synthetic fuels proposals that have best responded to a solicitation and are most likely to advance the purposes of the Energy Security Act. SFC assesses whether a proposed project is mature and has a reasonable prospect of receiving financial assistance from the Corporation under its solicitation criteria. Phase II will involve further project assessment, proposal refinement, verification of industry data and plans, and negotiation of appropriate financial assistance. Phase III will include monitoring plant construction and eventual synfuels production. To assist and oversee projects, the SFC has devised a "project matrix system," which consists of integrated project teams assigned from all relevant offices of the SFC. Each team will help guide a project through SFC's solicitation process and will negotiate with the project sponsors the details of financial assistance and methods of project oversight.

To date, SFC has issued three general solicitations requesting project sponsors to submit proposals for financial assistance. More than 90 industrial groups submitted proposals of widely varying quality in four resource categories: oil shale, coal or peat, tar sands or heavy oils, and hydrogen from water by electrolysis. After a detailed review, SFC rejected most of these proposals because they failed to meet its criteria for project strength and maturity. However, the Corporation judged several projects worthy of support and conducted negotiations with their sponsors over the terms of possible financial assistance.

As a result of these negotiations, SFC signed a letter of funding intent in December 1982 with the sponsors of the "First Colony" project which will be designed to produce 4,800 barrels per day of methanol from peat. Provided that final agreements can be reached, the Corporation intends to provide up to \$465 million in loan guarantees and price guarantees to this project, which is scheduled to be completed by Dec. 31, 1985, near Creswell, North Carolina.

In addition, SFC signed a letter of funding intent with the sponsors of a project that will be designed to produce 4,000 barrels of tar sands oil per day near Santa Rosa, New Mexico. Pending that final agreement, the Corporation intends to provide a loan guarantee of up to \$20 million and an initial price guarantee of up to \$21 million.

SFC officials are also currently negotiating the final details of a letter

of funding intent with sponsors of a heavy oil refining project proposed for West Pittsburg, California. This project will be designed to process the equivalent of 6,050 barrels of oil per day.

SFC's Board of Directors also has approved a competitive solicitation for western oil shale projects capable of producing at least 10,000 barrels per day of oil equivalent. SFC intends to issue one or more solicitations restricted to coal-based synfuels projects.

SFC As Part of the Nation's Synfuels Production Program

The Federal Government and U.S. industry are jointly embarking on the largest and most intensive program ever undertaken to increase the domestic production of synfuels. The Federal Government will play a key and determining role in both promoting and regulating this emerging industry. The SFC, which is a Federal entity as defined by law, will be concerned primarily with providing economic incentives to stimulate commercialization.

However, SFC will also consider other factors that will influence production. For example, SFC officials have stated that they must deal with a number of external constraints, including water and other resource availability, material and equipment capacity, skilled labor availability, socioeconomic development capacity, and the limited number of potential project sponsors able to bear the risks of synfuels commercialization. SFC has also held meetings with various organizations that will influence their program. These groups include Federal regulatory agencies, DOE, Department of Treasury, and environmental and public interest groups. Thus, the SFC can be viewed as one of many participants in the Nation's synfuels commercialization efforts.

An Assessment of SFC's Progress and Possible Accomplishments

SFC's program can be assessed in terms of two criteria: efficiency, a measure of the cost required to accomplish a task; and effectiveness, a measure of accomplishments in terms of stated goals and objectives.

There is much evidence that SFC wants to carry out its responsibilities and implement its program efficiently. Chairman Noble has repeatedly stated that SFC will use its financial incentives to expedite the growth of a synfuels industry at the least cost to the taxpayer and with minimum Government involvement. In selecting which projects to assist, the Corporation seeks sponsors that exhibit strong management capability and that are willing to back financially a major portion of their own projects. Furthermore, SFC wants to fund only economically sound and environmentally safe synfuels plants. SFC has deliberately taken its time in defining its objectives, establishing its procedures and policies, and in seeking to hire the best staff available. By proceeding cautiously, SFC hopes to avoid making costly mistakes. In order to choose the strongest and maturest projects, SFC has developed and is now using a rigorous and carefully designed selection process.

Under Chairman Noble's guidance, SFC also has taken many administrative actions designed to improve its organizational efficiency. The Corporation has revised its salary structure to be more acceptable to Congress and to allow the Corporation to compete better with the private sector for qualified personnel. However, some Members are concerned that salaries of two of SFC's

senior officials are still too high, e.g., those in the \$60,000 to \$100,000 range. Over the last two years, SFC has functioned with approximately 70 to 100 professional staff, fewer than the maximum number allowed under the Energy Security Act (300). In addition, SFC has realigned its organizational structure to a project matrix system that is designed to maximize Corporation efficiency and project monitoring.

Although SFC is seeking to implement efficiently Title I of the Energy Security Act, it is unlikely that the Corporation will be able to carry out effectively many of the various goals and objectives of this law. Under its first four or five solicitations, SFC is expected to commit most, if not all, of its appropriated funds, which total roughly \$15 billion. With these monies, SFC might fund about 8 to 12 projects, including both small and large scale efforts. (In light of the Reagan Administration's policy to request no additional funds for the Corporation and the current budgetary situation, it seems that SFC's program will be limited to its currently appropriated funds, unless there are major changes in national policies affecting synfuels commercialization. Therefore, SFC may be stimulating a much smaller synfuels industry than was envisioned in the Energy Security Act. In fact, if a daily synfuels production level of 30,000 to 60,000 barrels of oil equivalent is reached by 1987, industry and SFC would have achieved a major technological and economic accomplishment. With this size of an industrial base, there is little chance of meeting the Act's goal of having the capacity to produce 2 million barrels of synfuels per day by 1992. Consequently, SFC's current program is likely to be ineffective in stimulating the growth of a synfuels industry capable of "improving the Nation's balance of payments" or "reducing the threat of economic disruptions from oil supply interruptions" in the near-term. Another 10 to 20 years is likely to be required before the U.S. synfuels industry will be able to contribute significantly to either of these broad goals embodied in the Energy Security Act.

Instead of implementing a crash program, SFC has decided to proceed cautiously with the funding of projects that are designed to advance a wide diversity of synfuels processes. For those projects receiving SFC assistance, another five to seven years are likely to be required to reach full production and to collect reliable information on these operations. As a result of this lead time, it may well be into the 1990s before many other companies start investing in new synfuels plants. Thus, the SFC program, as it is now unfolding, is making only limited progress towards assuring "the flow of capital funds to those sectors of the national economy which are important to the domestic production of synthetic fuels."

On the other hand, the SFC may be maximizing the use of the \$14 to \$15 billion appropriated for its program by assisting only the strongest and maturest projects. By assisting in the commercialization of a few successful synfuels projects, the SFC may aid the synfuels industry more effectively than if a less selective program which assumed greater risks had been implemented. By carrying out its solicitation process on a specific timetable, determining in advance the sums to be spent on different synfuels technologies, quickly eliminating weak and immature projects from competition, and expediting its negotiation process, SFC is beginning to demonstrate to the private sector its commitment to aid the emerging synfuels industry.

Policy Options Regarding the Future of the SFC

Congress and the Administration can choose from a variety of options

regarding the future of the SFC, including: (1) abolish the Corporation (see legislative section, e.g., S. 250), (2) extend SFC's authority to include the support of biomass fuels projects and energy from solid waste plants, and (3) provide additional appropriations beyond the \$14.9 billion now available to the corporation. Some of the possible advantages and disadvantages of each of these options are discussed below.

Abolish SFC

If the SFC were abolished, there is the possibility, but not the guarantee, of substantial near-term budgetary savings, assuming uncommitted funds are not used for other purposes. The actual costs of SFC's program will depend upon the success of the projects it supports as well as the terms of any contracts signed by the Corporation. Thus, if a SFC-supported project defaults on a loan guarantee or requires a substantial price support, the public treasury would have to outlay funds to cover SFC's obligation. Although it is too premature to predict the probability of any outlays, one can estimate that the range of possible outlays might be between a total of \$4 and \$6 billion for the FY85 through FY90 budgets. Those who want to abolish SFC can also argue that it is no longer needed because the U.S. energy supply demand situation has become much more favorable and that SFC-supported projects would prove to be economically unfeasible or environmentally unacceptable.

Those supporting SFC can argue that its program is still essential to the Nation's long-term economic stability and national security and that this Nation cannot afford to have synfuels investors delay or terminate their projects if SFC support were eliminated. They can point out that without SFC this Nation would have little of the technical infrastructure to construct a viable synfuels industry, and that abolishment of SFC could also reduce or delay any downward pressure that synfuels might place on the price of OPEC oil.

The Reagan Administration wants to continue SFC's program at current funding levels, although this policy is under review by the Presidential Cabinet Council on Natural Resources.

Extending SFC's Authority

With the authority to support biomass fuels projects or energy from solid waste plants (ESW), SFC would have a much wider range of synfuels resources to choose from. With SFC backing, many ESW and gasohol projects that are still in the initial planning stages would likely move forward. SFC's political constituency would also be expanded and the prospects for achieving additional near-term synfuels production increased. However, this extension of responsibilities could diffuse SFC's senior management capabilities, result in additional budgetary outlays, and leave less funds available to support SFC's major activities in coal liquefaction and oil shale commercialization.

Additional Appropriations for SFC

With additional appropriations, SFC could fund a variety of new synfuels projects that eventually might help this Nation reach the National Synfuels Production Goals contained in P.L. 96-294. These additional funds could be

used to continue development of the infrastructure of experienced people, know-how, and manufacturing capability needed to ensure a successful synfuels industry. A large-scale industry brought about with SFC support would provide the United States with a substantially improved position to deal with OPEC pricing policies as well as other dislocations caused by disruptions of imported oil supplies.

On the other hand, it can be argued that any additional Federal funds spent on SFC's program might be better used for other purposes, e.g., for social programs or for energy conservation measures, and that additional Federal guarantees administered by SFC might create distortions in the credit market. Furthermore, some maintain that the funds already appropriated to SFC should be adequate to stimulate the initial growth of a domestic synfuels industry and that all future risks should be assumed by the private sector.

Development of Synfuels Under Amendments to the Defense Production Act of 1950

In creating SFC, Congress recognized that some indeterminate period of time would be required before SFC could become operational. Given this lead time and the congressional mandate to expedite the production of synfuels for national defense purposes, P.L. 96-294 provided the President with several new authorities which are specified in the form of amendments to the Defense Production Act of 1950.

Before SFC became operational, the President had authority to offer (through the Department of Defense and other Federal agencies) purchase agreements, loans, and loan guarantees to stimulate synfuels development for national defense needs. Up to \$3 billion, subject to appropriations, was made available for this purpose. Once SFC was declared operational by the President in February 1982, these authorities were converted to a standby basis.

Prior to the SFC becoming operational, DOE issued solicitations under the Defense Production Act (DPA) amendments of P.L. 96-294, inviting interested parties to submit proposals for financial assistance to expedite the commercial production of synfuels for national defense needs.

Under the DPA program, DOE awarded a \$1.1 billion loan guarantee to TOSCO to help build the Colony oil shale plant and \$400 million in price supports to encourage Union Oil Co. to produce shale oil for use by the DOD. In February 1982, SFC accepted the responsibility for overseeing the management of the Federal financial assistance for these projects. SFC has since terminated the loan guarantee to TOSCO because the Colony project has been suspended.

OTHER FEDERAL ASSISTANCE FOR SYNFUELS COMMERCIALIZATION

In addition to P.L. 96-294, the Congress passed several other laws designed to promote the commercialization of synfuels projects. Among these are P.L. 96-126 and P.L. 96-304, which appropriated funds for DOE's Alternative Fuels Production Program. This program allowed DOE to provide funds to encourage industry groups to conduct project feasibility studies, to enter into cooperative agreements, to receive loan and price guarantees, as well as to receive purchase commitments for their synfuels products. Using its authorities under this program, as well as those under the DPA, DOE was

the major Federal agency promoting the commercialization of synfuels projects until SFC became operational. Under the Alternative Fuels Production Program, DOE completed the issuance of more than 100 awards for feasibility studies and cooperative agreements. In addition, DOE also awarded a \$2 billion loan guarantee to a consortium headed by the American Natural Resources Co. to build a high-Btu coal gasification plant.

The Reagan Administration does not intend for the DOE to provide any additional funds to help commercialize synfuels plants beyond the approximate \$3.6 billion that have already been committed under the DPA and the Alternative Fuels Production programs. Consistent with this policy, P.L. 97-12 rescinded \$300 million previously appropriated under P.L. 96-304 for the support of preliminary alternative fuels commercialization activities.

OVERVIEW AND ASSESSMENT OF REAGAN ADMINISTRATION'S ENERGY POLICIES AND THEIR RELATIONSHIP TO THE FUTURE PROSPECTS FOR SYNFUELS COMMERCIALIZATION

In the National Energy Policy Plan III submitted to Congress in July 1981, the Reagan Administration outlined a variety of policies and objectives that if implemented successfully could aid synfuels commercialization. An important objective of the plan is "to establish sound, stable public policies that will encourage individuals and groups in the private and public sector to produce and use energy resources wisely and efficiently." The Reagan Administration wants to inventory the Federal lands and waters to determine the quantities of energy resources so that wise resource decisions can be made. In addition, the Reagan Administration's action to end oil price controls has provided additional capital for the petroleum industry. Some of this capital could be funneled into synfuels projects. Accelerated depreciation schedules, which were strongly supported by the Reagan Administration and enacted as part of the Economic Recovery Tax Act of 1981, could also spur new investments in synfuels projects. If these policies work as projected by the Reagan Administration, a business environment could be created over the long-term that will promote more investment in synfuels projects than is forthcoming at present.

The Administration has restructured those aspects of the National Synfuels Production Program pertaining to the demonstration of new synfuels technologies. It wants to terminate direct DOE funding for synfuels demonstration projects. As evidenced by rescissions and deferrals contained in P.L. 97-12, the Congress has largely agreed with the Administration's position. Under its new policies, DOE will fund long-term, high risk research and development projects that industry would not be in a position to finance.

Thus far, the Reagan Administration has not proposed that the SFC be abolished or that its appropriations be reduced. The Administration hopes that responsibility for commercializing synfuels technologies will shift to the private sector, with potential support from the SFC. However, when and if the private sector will make substantial financial commitments of its own funds to construct a large number of synfuels projects remain uncertain.

It is premature to assess the eventual outcome of these policies on the growth of the synfuels industry. However, to date the Federal Government has only made limited progress towards implementing the large-scale programs of public support for synfuels commercialization that were enacted by the 96th Congress. The fast tract program envisioned under the Defense Production Act Amendments of P.L. 96-294 resulted in the issuance of only two financial

awards to encourage synfuels commercialization. DOE's loan guarantee authority under the Federal Non-Nuclear Energy Research and Development Act has only recently been utilized to aid one large scale synfuels project. Implementation of SFC's program has been delayed by a change in Administration as well as the time consuming process of installing a new Chairman and Board of Directors of the SFC. In addition, \$300 million of financial awards under P.L. 96-304, which were designed to expedite pre-commercialization activities, have been rescinded.

With respect to industry's involvement, only a small number of private corporations have committed substantial amounts of their own capital to commercialize synfuels projects. Industry still faces the potential for major delays and increased project costs caused by lawsuits and uncertainties regarding environmental regulations and other governmental policies. In fact, over the last year about eight major synfuels projects have suspended or delayed their commercialization efforts, and SFC has rejected numerous projects from its solicitation process. Based on SFC's and industry's progress to date, it appears that the prospects for meeting the National Synfuels Production Goals have diminished substantially.

Additional information on two of the major synthetic fuels technologies that will be affected by DOE and SEC programs is provided in the following CRS issue briefs:

IB 74060 -- Oil Shale Development: Outlook, Current Activities and Constraints

IB 77105 -- Coal Gasification and Liquefaction

LEGISLATION

N/A

HEARINGS

U.S. Congress. House. Committee on Banking, Finance and Urban Affairs. Subcommittee on Economic Stabilization. Synthetic fuel oversight hearing. Hearings, 97th Congress, 1st session. Mar. 3, 1981. Washington, U.S. Govt. Print. Off., 1981. 96 p.
"Serial No. 97-2"

U.S. Congress. House. Committee on Government Operations. Synthetic Fuels Corporation oversight. Hearings, 97th Congress, 1st session. Feb. 19, 1981. Washington, U.S. Govt. Print. Off., 1981. 169 p.

REPORTS AND CONGRESSIONAL DOCUMENTS

U.S. Congress. House. Committee on Government Operations. Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation. Washington, U.S. Govt. Print. Off., 1981. 148 p. (97th Congress, 1st session. House. Report no. 97-123)

U.S. Congress. Joint Economic Committee. Pursuing energy supply options: cost effective R&D strategies. Washington, U.S. Govt. Print. Off., 1981. 352 p. (97th Congress, 1st session)

U.S. Congress. Senate. Committee on Energy and Natural Resources. Synfuels from coal and the national synfuels production program: technical, environmental, and economic aspects. January 1981. Washington, U.S. Govt. Print. Off., 1981.

At head of title: 97th Congress, 1st session.
Committee Print.

CHRONOLOGY OF EVENTS

- 01/20/83 -- SFC issued a targeted solicitation for western oil shale projects.
- 01/10/83 -- SFC received 46 proposals for synfuels projects under its third solicitation.
- 08/16/82 -- U.S. Senate confirmed the nominations of John Carter and Mike Masson to SFC's Board of Directors.
- 01/04/82 -- Opening of SFC's second solicitation for proposals from industrial projects seeking SFC support. applications will be received until May 31, 1982.
- 07 and 08/81 -- As authorized under the Federal Non-Nuclear Research and Development Act and the amendments to the Defense Production Act, the DOE provided loan guarantees and purchase commitments to a variety of companies to spur the commercialization of synfuels projects.
- 05/28/81 -- House Committee on Government Operations issued its report entitled "Oversight of the Energy Security Act: Implementation of the Synthetic Fuels Corporation."
- 05/14/81 -- Edward Noble was confirmed as Chairman of the the SFC by the U.S. Senate.
- 04/01/81 -- John McAtee, Jr., Acting Chairman of the SFC, announced that 61 proposals for financial assistance were received by the Corporation.

ADDITIONAL REFERENCE SOURCES

- ESCOE (The Engineering Societies Commission on Energy, Inc.). Synthetic fuels summary. Prepared for the U.S. Department of Energy. March 1981. 147 p. (Publ. no. FE-2468-82-A)
- U.S. Library of Congress. Congressional Research Service. Synthetic fuels commercialization. In Congressional Research Service Review, January 1981, pp. 16-19.

----- Challenges facing the U.S. synfuels industry and the status of
our national synfuels policy. Speech given at CRS seminar by
Paul Rothberg. Feb. 3, 1982. 10 p.