In the search for solutions to the nation's complex energy problems, many of those concerned with governmental and industry policies have identified synthetic fuels as an important potential element of the nation's energy supply in the relatively near future. In particular, the development of a domestic synthetic fuels industry is seen as a part of the effort to reduce dependence on foreign supplies, enhance national security, and minimize the threats to the economy posed by the unreliability of foreign energy sources.

With the passage of the Energy Security Act, Congress specifically affirmed these as major national goals and initiated an $88 billion program to foster the development of a domestic synthetic fuels industry. This legislation reflected a bipartisan Congressional consensus that synthetic fuels are a necessary and perhaps vital supplement to conventional energy sources. Its basic purpose is to provide sufficient resources to encourage project sponsors to assume the risks associated with major synthetic fuels projects and to bring these risks within a range that can be assumed by the private sector.

Obviously, many of these risks are technological in nature, and, until quite recently, the major concern of potential sponsors and investors was with the workability of the various synthetic fuels technologies. With the development and operation of demonstration and full-scale facilities and with the maturing of the

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* A. Williams College; J.D. Harvard Law School; Member, District of Columbia Bar; former Deputy Director for Natural Resources, Energy, and the Environment, Office of Management and Budget; Partner, O'Connor & Hannan, Washington, D.C.
** A. Rice University; J.D. University of Michigan; Member, District of Columbia Bar, Associate, O'Connor & Hannan, Washington, D.C.

1 The term "synthetic fuels" is used here with the same meaning given to the term by the definition in § 112(17) of the Energy Security Act, Pub. L. No. 96-294, 94 Stat. 611 (1980). That definition includes primarily those liquid and gaseous fuels that (a) may serve as substitutes for crude oil, petroleum products, and natural gas, and (b) are derived from coal, shale oil, tar sands, and heavy oil. This definition excludes such alternate fuels as biomass and alcohol fuels. Title II of the Act concerns federal programs for the production of biomass energy and alcohol fuels. As used herein, the term "synthetic gas" means gaseous "synthetic fuels", and does not include gas produced from, e.g., naphtha or other crude oil products, i.e., so-called "SNF".


4 See, S. Rep. No. 96-824, 96th Cong., 2d Sess 186 (1980); Pub. L. No. 96-294, 94 Stat 611, § 100 (1980) (statement of Congress' findings, inter alia, that the establishment of a synthetic fuels industry would require "financial commitments beyond those expected to be forthcoming from non-governmental capital sources and existing governmental incentives," and recognizing the need "to encourage and assure the flow of capital funds to those sectors of the national economy which are important to the domestic production of synthetic fuel."). See also The White House, "The President's Program For United States Energy Security: The Energy Security Corporation," 6-7 (1980) (the risks of synthetic fuels production include technological uncertainties, high costs, and uncertain economics).

5 Projects in operation in the United States as of November, 1980, included a pilot plant for the production of high-Btu gas from coal at Homer City, Pennsylvania; medium-Btu gas pilot facilities at Madison, Pennsylvania, Windsor, Connecticut, and Chicago, Illinois; and plants for the conversion of coal to liquid fuels at Fort Lewis, Washington, Centerburg, Kentucky, and Baytown, Texas. Numerous projects had reached design stage by this time. See Murphy, "The Synthetic Fuels Industry—Future's Hope," The Oil Daily, Nov. 10, 1980, at 27, col. 1. Projects in operation elsewhere include a coal gasification plant in Oberhausen-Holten, W. Germany and at Secunda, South Africa, the world's largest synthetic fuels production facility, a coal liquefaction plant producing 50,000 barrels of liquid fuels daily.
technologies that has taken place as a result of the heightened level of interest in synfuels, this concern has begun to diminish. There has been a corresponding increase in concern over the marketability of the synthetic fuel product.

In appraising the potential commercial viability of the product of a synfuels project, investors and sponsors should look to the Energy Security Act as a major guide in assessing the extent and nature of the support that can be expected from the federal government. In addition to this legislation, however, there are a number of other federal statutes and regulatory activities which also have the potential to enhance the commercial viability of synthetic fuels in the nation’s energy marketplace. This article examines several of the more significant of these, along with the Energy Security Act, from the perspective of the economics of marketing synthetic fuels. The intention here is to provide an overview of federal authorities and actions that relate to the competitive position of synthetic fuels as against the alternatives with which they will be competing.

I. THE PLACE OF SYNTHETIC FUELS IN THE NATION’S ENERGY MARKET: REGULATORY FACTORS

At least in the early stages of commercial production, synthetic fuels will find a market, if at all, as a supplemental supply of gas or liquids competing with other supplemental supplies. The following discussions focus on particular instances in which synthetic fuels and comparable conventional fuels may be competitive, and certain aspects of federal law applying to each.

A. Federal Control Over Natural Gas Imports

The technology of coal to gas conversion is well advanced and one of the most mature of the pending synfuels projects is a gasification project. Accordingly, there is considerable interest in the national market for synthetic gas as a supplemental source of supply.

Currently, one important source of supplemental gas supplies is imported natural gas. There are a number of reasons why synthetic gas might be preferable to imports; accordingly, the market that imports serve is a potential market of significant interest to synfuels producers. Further, there is considerable regulatory authority that can be exercised by the federal government over imports, which, if exercised, could work to the benefit of domestically-produced synthetic gas.

Section 3 of the Natural Gas Act authorized the Federal Power Commission to regulate the volumes and prices of natural gas imported into the domestic

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Section 1.A.

6The Great Plains high-Btu coal gasification project, planned to be constructed in Mercer County, North Dakota, to produce 125,000 Mcf daily of high-Btu gas from 22,000 tons of North Dakota lignite coal.

3Approximately 5% of the gas introduced into the U.S. market currently is imported. See Monthly Energy Review, United States Department of Energy, June, 1981, at 48.

5See DOE ERA Opinion No. 3, "Importation of Liquefied Natural Gas From Algeria," Tenneco Atlantic Pipeline Co., ERA Dkt. No. 77-010-LNG, (Dec. 18, 1978), 1 ERA ¶ 70, 103 (CCH), mimeo, at 37-40. Imports are subject to unreliability due to changes in foreign governmental policies, and are a detriment to the balance of payments. The physical arrangements necessary to make imports may be vulnerable to interruption by accident or design and the capital investment necessary may represent a long-term commitment to continue importation. Id.

market. That section provides, *inter alia*, that "no person shall ... import any natural gas from a foreign country without first having secured an order of the (Federal Power Commission) authorizing it to do so." Under the Department of Energy Organization Act,\(^\text{10}\) the Department of Energy inherited this authority. That Act provided generally for the functions of the Federal Power Commission to be assumed by a newly-created independent collegial body within the Department of Energy, the Federal Energy Regulatory Commission (the "FERC").\(^\text{11}\)

While the FERC continues to perform most of the regulatory functions prescribed by the Natural Gas Act, including those set forth in Sections 4, 5, and 7 of the Act, Section 402(f)\(^\text{12}\) of the DOE Act expressly excepted from the FERC's jurisdiction those functions relating to imports of natural gas, "unless the Secretary (of Energy) assigns such a function to the Commission." By Delegation Orders issued in 1977, 1978, and 1979,\(^\text{13}\) the Secretary of Energy divided the decision-making authority over gas imports between the Economic Regulatory Administration (the "ERA"), a separate entity within the DOE, and the FERC. Pursuant to those Orders, the ERA exercises control over natural gas imports to the extent that they concern energy policies on an international, national, and interregional scale. Supervisory jurisdiction over any interstate pipeline companies that purchase imported gas for resale or transport imported gas in interstate commerce, and certain other ancillary import issues, remain within the jurisdiction of the FERC.\(^\text{14}\) These are the issues arising for determination under Section 3 of the Natural Gas Act delegated to the ERA, i.e., those of the type that arise under Sections 4, 5 and 7 of the Natural Gas Act, and that portion of Executive Order No. 10485\(^\text{15}\) that concerns physical connections made at United States borders.

Section 3 of the Natural Gas Act establishes the standard by which the ERA determines whether a particular natural gas import is to be authorized. Under that standard the ERA is to authorize an import unless it is found to be "not ... consistent with the public interest."\(^\text{16}\) Pursuant to Delegation Order No. 0204-54,\(^\text{17}\)

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\(\text{10}\) Department of Energy Organization Act, Pub. L. No. 95-91, 91 Stat. 565, Section 301(b), 42 U.S.C. § 7151, transferred to the Secretary of Energy "the functions of the Federal Power Commission or of the members, officers or components thereof."

\(\text{11}\) Id., §§ 401, 402.

\(\text{12}\) Id., § 402(f). This subsection provides: "No function described in this section which regulates the exports or imports of natural gas or electricity shall be within the jurisdiction of the Commission unless the Secretary assigns such a function to the Commission."

\(\text{13}\) DOE Delegation Order No. 0204-1, 12 Fed. Reg. 60,726 (1977); DOE Delegation Order Nos. 0204-25, 0204-26, 43 Fed. Reg. 17,769 (1978); DOE Delegation Order Nos. 0204-34, 0204-35, 44 Fed. Reg. 56,735 (1979). Technically, the authority of the FERC is held pursuant to the Secretary of Energy's assignment of jurisdiction. That of the ERA is delegated to the Secretary.


\(\text{15}\) 18 Fed. Reg. 35997 (1953).


\(\text{17}\) Supra note 13. The FERC's functions include the determination of whether a pipeline's rates for the transportation or sale of gas in interstate commerce are just and reasonable. In the case of imports, it is the ERA that determines whether the price paid by a pipeline to acquire gas is reasonable, and the FERC routinely notes this approval when the pipeline in turn seeks approval of the rates requested for resale. See, e.g., "Findings and Order After Statutory Hearing Issuing Certificates of Public Convenience and Necessity, Authorizing Importation of Natural Gas and Granting and Denying Petitions to Intervene," Transcontinental Gas Pipe Line Corp., FERC Dkt. No. CP 80-372 (Dec. 15, 1980), 13 FERC § 61, 219 (CC); "Order Authorizing the Importation and Exportation of Natural Gas," The Brooklyn Union Gas Co., FERC Dkt. No. CP 81-105-000 (Dec. 19, 1980), 13 FERC § 61, 219 (CC).
the ERA must consider the following factors in determining whether a particular proposed import meets this standard:

1. security of supply;
2. effect on the balance of payments;
3. price proposed to be charged at the point of importation;
4. national need for the natural gas to be imported; and
5. consistency with duly promulgated and published regulations or statements of policy of DOE which are specifically applicable to imports of natural gas.\(^{18}\)

The Administrator of the ERA has discretion to consider certain additional factors,\(^{19}\) and may also attach any terms and conditions that the Administrator deems necessary to ensure that the import is not inconsistent with the public interest.\(^ {20}\)

Such a condition could require, for instance, that the importer sell certain volumes of the imported gas to a specified buyer or buyers, or require that the importer make affirmative efforts to seek out alternative domestic supplies.\(^ {21}\)

In practice, the two factors to which the ERA has given the most importance in determining whether a proposed import is in the public interest are the price of the gas at the point of importation\(^ {22}\) and the need for the gas in the market for

\(^{18}\)Id. These additional factors include the "regional needs for the gas to be imported" and the "eligibility of purchasers and participants and their respective states."

\(^{19}\)Id. These additional factors include the "regional needs for the gas to be imported" and the "eligibility of purchasers and participants and their respective states."

\(^{20}\)In DOE, ERA Opinion No. 14, Inter-City Minnesota Pipelines, Ltd., Inc., ERA Dkt. No. 80-01 NG, et al., (February 16, 1980), 1 ERA § 70, 502 (CCH), the ERA solicited comments on six particular issues to be examined in determining whether the temporary authorization for the imports granted in that opinion would be extended, and what terms or conditions the ERA might impose in granting such further authorization. These issues demonstrate the ERA's concern over excessive reliance on Canadian supplies:

1. The degree to which the service area of the applicant is dependent on Canadian natural gas and the effect on demand for the gas of the U.S. $1.17 border price.
2. The extent to which such service areas have access to current and future supplies of domestic natural gas.
3. The extent to which such service areas have access to alternate fuels, and the specific type and price of alternate fuels which could be used if the Canadian gas supplies were no longer available.
4. The extent to which each applicant plans to increase its supplies of natural gas from domestic sources.
5. Whether, as of May 15, 1980, the new Canadian export price will be competitive with the price of alternate fuels in the U.S.
6. Whether ERA should impose, as a condition to approval of the Canadian export price beyond May 15, 1980, that the applicants take affirmative and positive steps to reduce their dependence on Canadian natural gas.

\(^{21}\)Most of the gas imported into the United States is from Canada, and the ERA's experience in monitoring the price of Canadian imports illustrates the role of the price factor in import regulation. In 1976, the United States government requested that the Canadian government establish a uniform price at the international border for natural gas exported to the United States. Since September, 1977, the price of Canadian gas has been set by the Canadian National Energy Board under a formula designed to reflect the substitution value of crude oil imported into eastern Canada. The base price utilized is the price of imported oil at Montreal. Added to this figure are costs of transporting crude oil from Montreal to Toronto, and the average costs of transporting Canadian gas to the international border. Since the price is designed to reflect the costs of substituting imported crude for Canadian gas, the avoided costs of transporting natural gas from Alberta to Toronto are deducted from the border price. See, National Energy Board, Report to the Governor in Council in the Matter of Pricing of Natural Gas Being Exported Under Existing Licenses (Jan. 1980).

\(^{22}\)While the ERA has approved imports from Canada at an ever-escalating price from $2.16 per MMBtu on May 1, 1979, to the current border price of $1.91 per MMBtu, the ERA has never accepted the Canadian formula in principle, and has utilized its own formula, based on an average domestic alternate fuel price, in assessing the reasonableness of a proposed import price.

With respect to the production of domestic synthetic fuels, the ERA has expressly recognized that in reviewing a proposed gas import, it must consider whether the project has the potential of frustrating the development of domestic intramarginal sources of gaseous fuel such as natural gas from Alaska or synthetic gas from coal. Whether and how such a consideration will have an impact on ERA’s determination in any specific instance, however, remains far from clear. Specifically, it is not apparent whether the ERA would ever disapprove a proposed import based solely or significantly on the prospect, either imminent or remote, that a supply of domestic synthetic gas might become available to the proposed market. The ERA has noted the large number of variable factors that make it difficult to estimate future supplies of domestic natural gas; synthetic gas supplies will be subject to at least as many uncertainties, and the ERA would likely require a strong indication that a particular potential market would be foreclosed from an alternative viable synthetic gas supply if the synthetic supply were to be given consideration as an alternative to imported gas.

Moreover, if the projected or actual cost of a domestic synthetic gas supply were greater than the price of a competing import (set at a level deemed “reasonable”), the ERA would be faced with the choice of increasing the overall cost of gas to ultimate consumers or inhibiting the entry of domestically-produced synthetic gas into the market. The factors that might influence the Agency to prefer a higher priced domestic product over an import would have to be substantial, given the attention that is given to the price factor by the Agency.

Compounding these uncertainties as to the manner in which the ERA could give consideration to the need for synthetic gas supplies in its assessment of the national need for imports, is the fundamental question of whether the current Administration will in fact consider this an appropriate policy at all, in light of its overall free-market orientation. Secretary of Energy James Edwards has prescribed a national energy policy that openly relies on market forces and minimizes the role of governmental actions. Absent a favorable or competitive price level for

25The importation of liquefied natural gas into New England is generally approved by the ERA in light of that region’s inability to secure any reliable alternate supplies. See, e.g., DOE/ERA Opinion and Order, “Authorization to Increase the Price Paid for Liquefied Natural Gas Imported from Canada.” Gas Service, Inc., ERA Dkt. No. 80-18-LNG (Jan. 5, 1981), 1 ERA § 70.111 (CCH); but cf. DOE/ERA Opinion and Order, “Order Denying Authorization to Import Liquefied Natural Gas from Indonesia.” Boston Gas Co., ERA Dkt. No. 81-08-LNG (Feb. 2, 1981), 1 ERA § 70.612 (CCH), in which the ERA noted that its determination of the need for the import was made difficult by the “almost daily changes in the circumstances surrounding this proposal.” The two major factors helping to create the urgent need of the applicants for supplemental winter heating fuel supplies—a period of extremely cold weather and the suspension of shipments of contracted-for Algerian LNG supplies due to the effects of a severe storm in the Algerian port of embarkment—both abated during the pendency of the application and the need for the supplies lessened to such an extent that the application was denied.

While this case illustrates the extreme, it nevertheless highlights the volatility of the market in which supplemental gas supplies compete, and the difficulty the ERA may have in determining the need for a given supply of imported gas.

26DOE/ERA Opinion No. 5, “Importation of Liquefied Natural Gas from Algeria.” Tenneco Atlantic Pipeline Co., ERA Dkt. No. 77-010-LNG (Dec. 18, 1978); 1 ERA § 70.103 (CCH), mimeo, at 31.

27DOE/ERA Opinion and Order, “Application to Import SNG from Canada by Displacement,” Northern Natural Gas Co. and Great Lakes Gas Transmission Co., ERA Dkt. No. 73-002-NG et al., (March 8, 1979), 1 ERA § 70.503 (CCH). These include “projections of the quality of the undiscovered resource base, finding ratios per foot of wells drilled, reserve-to-production ratios, drilling costs, the opportunity cost of capital, and expansion capability of the industry.”

28Secretary Edwards has stated that the Administration is committed to the development of a synthetic fuels industry, but one “whose operation is maintained without large outlays of tax monies or a huge bureaucracy.” “Reagan ‘Fully Committed’ To A Commercial Synfuels Industry, Says Edwards,” Syndiels, April 24, 1981, at 4. See also, National Energy Policy Plan-III, United States Department of Energy, July 1981.
synthetic gas, it appears unlikely that the jurisdiction over gas imports conferred by Section 3 of the Natural Gas Act will be implemented in an aggressive manner to curtail imports, and thus in effect to favor domestic synthetic gas as a potential or actual competitor of imported gas.

The ERA, to a far greater extent than the more precedent-oriented FERC, is apt to reflect the prevailing policies of the Administration. Therefore, given the extent to which the free market is the touchstone of the government’s overall administrative and regulatory policies, any ERA decisions on imports will probably look to the prevailing market price as the basis of any determination of a reasonable price for imported gas, and to market requirements as the basis for determining reasonable volumes. Accordingly, should domestically-produced synthetic gas be offered at a price competitive with imports, the ERA might well conclude that the price of the proposed imports is “excessive” in light of market conditions, and act to restrict imports, thereby in effect encouraging synthetic gas production.

Relevant to the question of government policy regarding imports is the fact that discussions between the United States and Canadian governments over Canadian gas imports are scheduled for sometime in the fall of 1981. The position that U.S. negotiators adopt in these discussions will be a strong indication of the Administration’s views on these issues. While DOE officials themselves currently see the policy questions as being unresolved, it would not be surprising to see natural gas imports in effect “decontrolled” in much the same way that domestic production is being guided toward a free market. In that event, the ERA would likely give consideration to domestic synthetic gas supplies only to the extent that they are (a) actual or imminent and not merely potential competing supplies and (b) priced at a level that would provide reasonably close market competition to imports.

In short, under present circumstances, synthetic gas may be competitive with imported gas if, and only if, it is price-competitive. Despite the existence of the necessary regulatory authorities, and particularly under the incumbent Administration, federal governmental policies and actions regarding imports appear unlikely to give a preference to synthetic gas over imported natural gas in the near future.

Nevertheless the authority to regulate and limit gas imports exists and there are important reasons to prefer domestic sources over imports that may come into play at some future time. Potential synthetic gas project sponsors will want to give this area consideration as they begin to analyze the markets for this product.

B. FERC Regulation of Synthetic Gas Sales

Interstate pipeline companies seeking to augment their systemwide gas supplies are currently looking to sources that include high-cost gas, i.e., gas qualifying for treatment under § 107 of the Natural Gas Policy Act (“NGPA”). These

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27Based on interviews with Department of Energy officials, July 6, 1981 (notes on file with the authors). Section 1.B.
28See the text at notes 59-61, infra.
requirements for additional or supplemental supplies for pipelines represent an important potential market for synthetic gas, which could become a significant alternative to high-cost conventional gas.

Synthetic gas that is sold to an interstate pipeline for transportation through the pipeline’s facilities to distributors will be subject to regulation by the FERC, which regulation attaches when the synthetic gas is commingled with natural gas. Commission regulation is thus another area in which federal policy and actions might work to favor the entry of synthetic gas into the market.

A number of the issues that will be important to potential synthetic gas marketers were brought to light in the recent proceedings before the FERC and in the United States Court of Appeals for the District of Columbia, regarding the application for regulatory approval sought by the sponsors of the Great Plains Coal Gasification Project, the first commercial-scale synthetic gas project to reach the advanced stages of project development, planning, and financing. These proceedings had two important results: a judicial definition of the parameters of the FERC’s jurisdiction over synthetic gas projects generally, and an indication of the way in which the parties to a synthetic gas sales agreement will arrive at a price in light of the rate-setting authority of the FERC.

The Court of Appeals decision established that a synthetic gas project cannot be financed by a construction-period surcharge passed through to the ultimate consumers of the commingled natural gas in the jurisdictional rates charged by their suppliers. Under this interpretation of the Commission’s authority, the only assurance available to a synthetic gas producer is that provided by FERC approval of the recovery of the costs paid for the gas by a purchasing pipeline. Such approval, assuming the level of rates is adequate, would insure the economic viability of the pipeline’s purchase.

The initial order issued by the FERC approving the certificate applications submitted by the sponsors for the Great Plains project’s construction included provisions for a construction-period surcharge. A number of the ultimate consumers of the gas challenged this order in court, and in Office of Consumers’ Counsel v. FERC, the Court of Appeals for the District of Columbia Circuit upheld the challenge.


Office of Consumers’ Counsel v. FERC, No. 80-1303, ___ F.2d ____ (D.C. Cir. 1980).

The composition of the Great Plains’ sponsorship has varied; the partnership that sought and received certificate authorization for the project’s construction under Section 7 of the Natural Gas Act, 15 U.S.C. § 717, in Opinion No. 69 (Nov. 21, 1979), was composed of entities affiliated with five natural gas pipelines, Columbia Gas Transmission Corporation, Michigan Wisconsin Pipe Line Company, Natural Gas Pipeline Company of America, Tennessee Gas Pipeline Company, and Transcontinental Gas Pipe Line Company. Subsequent to the court’s decision striking down the certificate authorizations contained in Opinion No. 69, Columbia Gas Transmission Corporation withdrew from participation as a purchaser of the plant output, see Opinion No. 119, supra note 31, mimeto at 2, 17, and accordingly did not seek Commission approval of the resale of the gas.

Office of Consumers’ Counsel v. FERC, No. 80-1303, ___ F.2d ____ (D.C. Cir. 1980), slip op. at 29-34.

Opinion No. 69, supra note 31, mimeto at 6, 18, 60-62, and 70-75.

Parties representing the ultimate consumers intervened in the proceedings before the Commission and appealed the FERC’s decision. These included the Ohio Office of Consumers’ Counsel, the General Motors Corp., the Public Service Commission of the State of New York, and the State of Michigan.

No. 80-1303, ___ F.2d ____ (D.C. Cir. 1980).
The court held that the FERC has no jurisdiction to approve and implement the pre-operational financing of a proposed synthetic gas project. The FERC plainly has jurisdiction over synthetic gas once it is commingled with natural gas for resale or transportation in interstate commerce, but the court, relying on Henry v. FPC, confirmed that the FERC has no jurisdiction under the Natural Gas Act over a synthetic gas project per se, and cannot issue a certificate for the construction of, or approve the pre-operational recovery of the costs of, such a project.

Under the terms of the initial certificate application filed by the Great Plains sponsors, the price of the synthetic gas produced at the plant would have been based on a cost-of-service formula. This approach was in keeping with the general orientation of the applications, i.e., the production plant was treated as a "facility" and the cost of the gas was calculated on the basis of the facility's cost (including capital expenditures, operating and maintenance expenses, and a return on investment). Perhaps the most interesting aspect of the evolution of the Great Plains proposal is that the agreement ultimately reached between the parties and approved by the FERC reflected a price based not on cost of service but rather on a cost of comparable fuels. The conceptual shift was from the facility to the product, and in pricing that product the parties looked by analogy to current contracts for the purchase and sale of high-cost gas. This suggests the development of a market for synthetic gas at prices comparable to alternative supplemental supplies.

While the price provisions of the Great Plains agreement approved by the FERC reflect a treatment of synthetic gas comparable to high-cost gas, there are important differences in the two types of sales under pertinent provisions of the federal government's regulation of natural gas sales and transportation. Specifically, the sale of high-cost gas is a deregulated sale under Section 107 of the NGPA. Although the market for synthetic gas may be comparable to that for

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48 Id., slip op., at 5, 20-32.  
49 513 F.2d 595 (D.C. Cir. 1975).  
50 The court stated, "In short, we are dealing with an attempt by FERC to utilize its certification and rate setting powers to make possible financing for the construction of a non-jurisdictional, commercial-size coal gasification plant." Slip. op. at 22.  
51 See Opinion No. 69, supra note 31, mimeo at 5-8, 60-62, and 70-75. The tariffs of each pipeline purchasing the plant's output would have provided for the synthetic gas to be sold at a price sufficient to insure recovery of the costs of construction and, in the event of project failure, the losses incurred would have been absorbed by the pipeline's rate-payer customers through a surcharge added to the rates charged for other gas.  
52 The initial application was filed with the Commission pursuant to Section 7 of the Natural Gas Act, which requires, inter alia, certificate authority from the Commission to construct or operate a facility used in providing a service or making a sale subject to the Commission's jurisdiction.  
53 See, Opinion No. 119, supra note 31, mimeo at 3, 10-11. The base price selected for use in the formula, $6.75 per MMBtu, was "intended to correspond to the price being paid for high-cost non-regulated gas under Section 107 of the Natural Gas Policy Act." Id. at 10. This price is to be adjusted under terms set forth in the formula "in favor of the price ceilings under the NGPA." Id. The quarterly escalation factor reflects an equal weighting of changes in both (a) the Producer Price Index for all commodities and (b) the Producer Price Index for No. 2 fuel oil. The price is subject to a ceiling. During the first five years after deliveries of gas commence this ceiling would be set at the equivalent price of No. 2 fuel oil, provided that such price was not regulated. During the succeeding five years, the ceiling price would be the higher of (a) the average price of the highest-priced 10% of the volumes of natural gas purchased in the lower 48 states during the preceding three-month period (the "domestic price cap") or (b) the average prices paid by the pipelines for gas imported from Canada and Mexico (the "imported price cap"). Thereafter, the "domestic price cap" would serve as the ceiling price unless natural gas producer prices were regulated, in which case the "imported price cap" would apply.

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48 Id.  
high-cost gas and a contract for the purchase of synthetic gas may even be expressly intended as an analogous transaction to one for high-cost gas, the sale of synthetic gas is not a deregulated transaction but rather an unregulated transaction. That is, synthetic gas is expressly excluded from the price control jurisdiction of the FERC under both the Natural Gas Act\(^6\) and NGPA.\(^7\) Synthetic gas is truly a free-market commodity.

In the FERC's consideration of the Great Plains sponsors' final application for approval, the issue before the Commission was whether the pipeline companies purchasing synthetic gas from the Great Plains facility could recover the costs of the gas under the purchased gas adjustment clauses of their existing FERC tariffs.\(^8\) Applying the "just and reasonable" standard of Sections 4 and 5 of the Natural Gas Act, the FERC approved the pipelines' purchase of the Great Plains synthetic gas under the price formula contained in the final proposal submitted.\(^9\) In doing so, however, the Commission made it clear that its decision would not be given precedential value in any subsequent application for approval of a pipeline's purchase of synthetic gas.\(^10\) Taking the position that the Great Plains project was unique in its status as the first project of its type, the Commission expressly limited its determination of the reasonableness of the pricing formula to the facts of that application.\(^11\)

Parties representing the ultimate consumers of Great Plains gas concluded not to challenge the FERC's approval of the purchase price of the gas contained in the settlement agreement finally approved. Several of these intervenors, however, expressed the view that they did not necessarily consider the price provided for in the final agreement to be a just and reasonable price.\(^12\) These parties did not oppose the final FERC order but expressly limited their decision to the Great Plains case,\(^13\) just as the FERC limited its approval of the pricing formula to the facts of the Great Plains project.

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\(^{10}\)See Natural Gas Act § 2, 15 U.S.C. § 717a (1970). The definition of "natural gas" contained here states:

"Natural gas" means either natural gas unmixed, or any mixture of natural and artificial gas.

For a complete discussion of this definition, and the determination that it excludes unmixed synthetic gas, see 513 F.2d at 890-405.

\(^{14}\)Natural Gas Policy Act § 2, 15 U.S.C. § 3301 (1980 Supp.). The legislative history of the Natural Gas Policy Act confirms that the definition of natural gas employed is identical to the definition contained in the Natural Gas Act.\(^15\)

The definition of natural gas is intended to be identical to the definition of natural gas provided in the Natural Gas Act. It is not intended to extend the provisions of the Act to facilities for the production of synthetic natural gas, or facilities for methane gas generated by the decomposition of organic waste ... The definition of natural gas is not intended to be used to impose regulations, or price controls, under this Act on the sale of synthetic natural gas which is commingled with natural gas meeting the requirements of the definition.


\(^{16}\)Opinion No. 119, supra note 31, mimeo, at 8.

\(^{17}\)Id. at 11-12.

\(^{18}\)Id. at 12.

\(^{19}\)Id. The Commission noted:

As stated (and restated), our finding in the Order that the pricing formula is reasonable is expressly premised on the unique nature and circumstances of this particular case ... Article V of the Offer of Settlement makes clear that the rate set forth in the Offer of Settlement is not generally, and will not constitute (sic) a precedent that similar rate authorizations would be lawful or in the public interest with respect to any other sale of natural or synthetic gas. ... We agree with the comment by General Motors in objecting to any intimation that the pricing formula would be reasonable in and of itself, without regard to the facts of this particular case.

\(^{20}\)See Opinion No. 119, supra note 31, mimeo at 5-7.

\(^{21}\)Id. Illustratively, General Motors Corp., a major consumer of gas supplied by one of the purchasing pipeline applicants, "expressly reserved its right to object to the guaranteed pricing mechanism in future cases."
A prospective marketer of synthetic gas who plans to distribute its product through sales to interstate pipelines can thus expect to have the price of that gas examined by the FERC under the "just and reasonable" standard of Sections 4 and 5 of the Natural Gas Act. The FERC has expressly preserved its authority to make this determination on a case-by-case basis, and no particular price can be assured of a "just and reasonable" characterization, regardless of its similarity to the Great Plains rates, prior to FERC review.

By contrast, a pipeline company that seeks FERC approval of any purchase of gas made at a price determined under the NGPA has the benefit of the so-called "automatic pass-through" provisions contained in Section 601 of the NGPA. Section 601(b) provides that any prices paid in first sales of natural gas shall be deemed just and reasonable for purposes of Sections 4 and 5 of the Natural Gas Act, provided that such prices do not exceed the applicable maximum lawful prices, if any, established by the NGPA. High-cost, "Section 107" gas is deregulated under the NGPA and the prices paid for this gas, too, are, by statute, deemed just and reasonable. Section 601(c) in turn prohibits the FERC from denying interstate pipelines recovery of any amount deemed just and reasonable by reason of this provision, "except to the extent the Commission determines that the amount was excessive due to fraud, abuse or similar grounds."58

Thus, the high-cost gas to which synthetically produced gas is most likely to be comparable in the marketplace can be marketed at a deregulated price with the purchasing pipeline assured of recovering its costs in the rates that it charges and receives pursuant to FERC approval, provided only that the Commission does not determine that the amount paid is "excessive due to fraud, abuse, or similar grounds." The Commission has only begun to interpret this "fraud, abuse, or similar grounds" language but has indicated that it is a different standard from the standard that would apply under a conventional Natural Gas Act rate proceeding.

Recently, the Commission ordered hearings to determine whether prices shown in the purchased gas adjustment filings of a number of pipeline companies for the purchase of high-cost gas are excessive due to "fraud, abuse, or similar grounds."59 The Commission, noting that the interpretation of this statutory provision presents "a case of first impression," stated that, whatever this standard represents, it does not call for an examination of the prudence of the purchase as it was the case under the "just and reasonable" standard of the Natural Gas

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57Id. If there is no applicable maximum lawful price "solely by reason of the elimination of price controls pursuant to subtitle B of title I of this Act," the price paid is deemed just and reasonable. High-cost gas was deregulated pursuant to § 121 of the NGPA, Title I, subtitle B.
The standards for Commission approval applicable to high-cost natural gas and synthetic gas under the NGPA and NGA, respectively, are thus different. Because the Commission has stated its view that the legislative history relating to NGPA § 601(c) suggests rather strongly that 'abuse' is a more rigorous test than the prudence standard under the NGA," it may prove easier for consumers to contest a pipeline's purchase of synthetic gas than high-cost conventional gas. In other words, synthetic gas marketers may actually face greater obstacles through FERC regulation than high-cost gas producers. The Commission could conceivably arrive at the position of denying a pipeline company recovery of the full purchase cost of synthetic gas while at the same time approving full pass-through of § 107 gas costs—even though the synthetic and high-cost gas were offered at the same price.

The Commission's interpretation of the limitation on automatic pass-through of purchased gas costs under the NGPA, and the approach that the Commission adopts in assessing the prices paid for deregulated gas, will have an important effect in determining the amount of high-cost gas entering the market as new supplemental supplies. Similarly, the view of the Commission as to the reasonableness of prices charged by synthetic gas producers will have an important impact on the competitiveness of synthetic gas versus new sources of natural gas.

The resolution of these issues will be important to the prospects for synthetic gas in the nation's energy market. It is too early to determine whether and how the FERC will coordinate its regulation of the entry of high-cost and synthetic gas into the market. They are comparable products in that they are both supplemental supplies and it would seem reasonable for the Commission to recognize this in formulating its policies. Should the prevailing prices for synthetic gas and high-cost gas prove to be competitive as well, comparable regulatory treatment would arguably be even more appropriate.

Under the NGPA, federal controls over natural gas wellhead prices will phase out to a large extent over the next several years. While the impact of decontrol on conventional gas prices is far from certain, it could well develop that decontrolled gas prices will rise to a level such that synthetic gas prices will be price-competitive with a range of new and supplemental gas supplies. The role of the Commission, applying two different standards in allowing or disallowing the recovery of the costs of these competing supplies, would be heightened should the market economics develop in this way.

In summary, there are a number of issues concerning FERC regulation of the gas industry which have the potential to significantly affect the relative market position of synthetic gas. Accordingly, the potential synthetic gas producer will inevitably have to devote considerable attention to an assessment of the impacts that FERC regulation could have on its intended marketing strategy. With the approval by President Reagan of the government's participation in the financing of the Great Plains project, the potential producer is assured that this particular "test case" will continue, which may help to provide useful information on many of these issues.
C. Restraints on Particular Uses of Gas

Certain provisions of the NGPA and the Powerplant and Industrial Fuel Use Act of 1978 (the "FUA") have the potential for enhancing the marketability of synthetic gas in certain circumstances and in particular markets. These markets deserve consideration by those involved in sponsoring the development of synthetic gas projects.

Title II of the NGPA requires that certain costs incurred by interstate pipelines in the purchase of their gas supplies be borne by certain industrial users who purchase gas from pipeline company suppliers for "low priority" uses, principally the "generation of steam or electricity" and other uses determined by the FERC to be subject to incremental pricing. Section 203 of the NGPA establishes a threshold level for each of eight categories of natural gas; acquisition costs incurred in excess of these threshold levels must be allocated to those volumes of gas purchased by non-exempt, low priority users, and recovered in the prices paid by those users.

The incremental pricing scheme established by Title II was not intended to exclude industrial users from the natural gas market altogether, however. Accordingly, Section 204 of the NGPA provides in effect that incremental prices charged for natural gas are not to exceed the price of those alternative fuels that would be utilized in the event that increases in the costs of natural gas made it economic to do so. This alternative fuel price represents the incremental price ceiling.

Without an extensive examination of the many complexities of incremental pricing, it is enough here to note that the requirement that certain industrial users bear a disproportionate share of certain costs incurred by pipelines for the purchase of conventional natural gas has created an incentive for those customers affected by incremental pricing to switch to a fuel other than natural gas. Marketers of gas have lost portions of the industrial market, and have sought the repeal of Title II virtually since its inception.

The acquisition costs of synthetic gas are not among those costs subject to separate passthrough to low-priority industrial customers under Title II. Therefore, it is to be expected that synthetic gas acquisition costs will be rolled-in for purposes of a pipeline's sales to its customers, including industrial boiler fuel uses.

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Section 1.C.

66Section 206 of the NGPA, 15 U.S.C. § 3346 (1980 Supp.), provides exemptions from the provisions of incremental pricing for small existing boiler fuel users, agricultural users, schools, hospitals and certain other facilities, and provides that the FERC may provide for the exemption of other industrial facilities, subject to Congressional review.
67See "Congressman Dingell Opposes Reopening of NGPA This Year; Other Views on Natural Gas Legislation Expressed During Midyear Meeting of Federal Energy Bar Association." Foster Natural Gas Report, Jan. 29, 1981, at 4, 7.
68ID.
and others subjected to incremental pricing. This is clearly a factor making synthetic gas an attractive alternative supply, where a competing potential supply would be priced above the applicable threshold level established by Section 203.\textsuperscript{72}

As discussed above, high-cost gas is one of the principal competitors of synthetic gas in the marginal supply market. The threshold incremental pricing level for this gas is very high (130% of the New York City price of No. 2 fuel oil)\textsuperscript{73} and the competitive advantage of synthetic gas as a potential supply not subject to incremental pricing may accordingly prove to be limited. However, if and when high-cost gas prices exceed the threshold level,\textsuperscript{74} incremental pricing will begin to make such gas less attractive than alternative supplies such as synthetic gas, whose costs may be rolled in.

Synthetic gas enjoys a similar potential competitive advantage under provisions of the FUA that prohibit the burning of natural gas or petroleum for certain uses. The purposes of the FUA were, among others, to reduce the importation of petroleum and increase the nation's capability to use indigenous energy resources, thereby promoting the nation's energy self-sufficiency;\textsuperscript{75} to conserve natural gas and petroleum for uses other than electric utility or other industrial or commercial generation of steam or electricity;\textsuperscript{76} and, "to the extent permitted by this Act, to encourage the use of synthetic gas derived from coal or other alternate fuels."\textsuperscript{77} Thus Congress expressly intended to create a specific market for alternate fuels, including synthetic fuels, for uses that were identified as inappropriate for natural gas and petroleum.

The principal operative provisions of the FUA designed to carry out these purposes are those contained in Titles II\textsuperscript{78} and III\textsuperscript{79} of the Act, prohibiting the use of natural gas or petroleum as a "primary energy source"\textsuperscript{80} in new and existing "major fuel-burning installations,"\textsuperscript{81} consisting of a boiler, and in new electric powerplants.\textsuperscript{82}

The FUA defines the term "natural gas" to exclude natural gas used by a powerplant or major fuel burning installation, where the person proposing such

\footnotesize{\textsuperscript{72}Pipelines with a relatively larger base of industrial customers who are subject to incremental pricing will of course be relatively more interested in such an alternative supply.


\textsuperscript{74}See "California PUC Seeks Generic Rulemaking to Determine Whether Purchase of Deregulated Gas at Prevailing Prices Is in Public Interest," Foster Natural Gas Report, May 14, 1981, at 1. The California Public Utilities Commission has requested the FERC to institute a generic rulemaking proceeding to determine whether the purchase of deregulated gas at prevailing prices is in the public interest and, if not, whether some regulatory mechanism can be implemented to curtail rising gas costs. "Producters throughout the nation are obtaining an artificially high price for deregulated NGPA Section 107 gas," the California Commission asserts, and the automatic pass-through provisions of the NGPA preclude meaningful regulatory review. Id.


\textsuperscript{76}Id., § 102(b)(2), 42 U.S.C. § 8301(b)(2)(1980 Supp.).


\textsuperscript{78}Id., §§ 201-214, 42 U.S.C. §§ 8311-8324 (1980 Supp.).

\textsuperscript{79}Id., §§ 301-314, 42 U.S.C. §§ 8311-8354 (1980 Supp.). Section 301 of the Fuel Use Act was amended by Congress on July 31, 1981. Title X, Subtitle B of this bill, the Omnibus Budget Reconciliation Act of 1981, Pub. L. No 97-35, 95 Stat. 357 (1981), substitutes a new Section 301 of the Act, which replaces the fuel-burning restrictions contained in former Section 301 with a requirement that existing electric powerplants instead implement a plan to reduce electric power consumption in their service areas. This leaves intact those fuel-use provisions in the Fuel Use Act relating to new electric powerplants (§ 201), new major fuel-burning installations (§ 202) and existing major fuel-burning installations (§ 302).

\textsuperscript{80}Id., § 103(a)(15), 42 U.S.C. § 8302(a)(15)(1980 Supp.).

\textsuperscript{81}Id., § 103(a)(16), 42 U.S.C. § 8302(a)(16)(1980 Supp.).

\textsuperscript{82}Id., § 103(a)(8), 42 U.S.C. § 8302(a)(8)(1980 Supp.).}
use certifies that: (a) such person owns or is entitled to receive synthetic gas at the point of manufacture; (b) the Btu content of the synthetic gas is equal to or greater than that of the gas proposed to be used; (c) such person arranges for the delivery of the synthetic gas to a pipeline capable of delivering the synthetic gas to such person; and (d) all regulatory approval necessary to the construction and operation of the synthetic gas manufacture facility has been obtained. In short, natural gas drawn from a pipeline may be burned for boiler uses where the user has supplied the pipeline with a Btu-equivalent replacement volume of synthetic gas.

A mixture of synthetic gas and natural gas is treated generally as “natural gas” under the FUA. There are a number of provisions in the Act, however, for exemptions, both temporary and permanent, from the fuel-burning restrictions established by Titles II and III. Among these are permanent exemptions for facilities that burn a mixture of petroleum or natural gas and an alternate fuel, such as synthetic gas, provided that the mixture contains no greater (Btu) percentage of petroleum or natural gas than is necessary to maintain reliability and fuel efficiency. Temporary exemptions are available to facilities that will ultimately be in compliance with the Act by the use of a synthetic fuel.

The FUA, as it currently stands, thus creates an incentive for industrial and commercial boiler operators who would otherwise be precluded from burning gas to consider synthetic gas as an alternative to switching to a different fuel, such as coal.

The Energy Security Act provides for a simplified procedure whereby “qualified producers” of synthetic fuels, i.e., those receiving assistance under the ESA, may obtain exemptions from the prohibitions contained in the FUA. Representatives of the synthetic fuels industry have called for legislation to provide similar benefits to all synthetic fuels producers and users, and to clarify the treatment of synthetic fuel mixtures and synthetic liquids under the FUA.

Whether the incentives for synthetic gas use created by the NGPA and FUA have a significant impact in terms of providing market opportunities will depend on a range of variables. The exact effect of incremental pricing depends on the relationships between a number of different fuel prices, some of which have proved to be more volatile than was expected. Moreover, an end user that is subject to incremental pricing is rarely in a position to “select” a supply of gas whose incremental costs will not be subject to pass-through. It is the purchasing pipeline that must take into account this factor, if it is to be taken into account at all.

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14 Id., §§ 213(b), 313(b), 22 U.S.C. §§ 8523(b), 8533(b) (1980).

15 See note 83.


17 Id., §§ 215(b), 315(b), 22 U.S.C. §§ 8525(b), 8535(b) (1980 Supp.).


19 Id.

20 To the extent that the purchase of gas not subject to incremental pricing helps a pipeline to retain its industrial customers it could be expected that this would be a factor in the pipeline’s selection of a supply. Cf. note 69, supra.
More fundamentally, the future of both incremental pricing under Title II of the NGPA and the remaining gas-burning prohibitions of the FUA is uncertain. There is both Congressional and Administration interest in further altering or eliminating these provisions and industry pressure to do so is growing. Accordingly, any current investment decisions that reflect the impact of Title II of the NGPA or the fuel-burning restrictions of the FUA are subject to considerable uncertainty. However, as is always the case in matters of energy policy, a change in supply patterns or other factors could alter the political balance and create renewed support for certain controls, especially those which are already on the books.

D. Synthetic Liquids: An Open Market

Although imported natural gas constitutes a sizeable percentage of the nation’s marginal gaseous fuel supply, the real target of the effort to reduce American dependence on foreign energy sources is the 5 million barrels of crude oil and petroleum products imported daily, particularly those volumes imported from the perennially unstable Middle East. Domestically-produced synthetic liquids, primarily oil extracted from shale and tar sands, and liquids derived from coal, could help to reduce the need for these supplies.

There are in existence federal authorities to control oil imports and to impose fees on such imports. The Mandatory Oil Import Program, which was initiated by Executive Order in 1959 with the express purpose of limiting imports of crude oil and petroleum products to levels that did not represent a threat to national security, has never been used to its full extent as an instrument of import control. A modest per-barrel fee was assessed on imports beginning in 1973. It was suspended on April 6, 1979. Oil import licenses are still required and during the 1970s were carefully monitored due to the fact that imports were allocated. Licenses can now be obtained easily and any stiffening of qualifications would require regulatory action. The Administration apparently intends to maintain the capability to control imports essentially on a stand-by basis, in that the Office of Oil Import Control has been retained within the Economic Regulatory Administration under the Department of Energy’s reorganized departmental alignment.
Under present circumstances, and despite the continuing existence of oil import control authority, the potential seller of domestic synthetic liquids must plan to compete on a free-market basis with imported crude oil and oil products. Further, given that decontrol of domestic prices has now been accomplished, synthetic liquid products also must compete with domestically-produced conventional crude and crude products on equal terms. In short, liquid synthetic fuels will compete in a market that is virtually free of federal regulation, both with respect to imported and domestically-produced petroleum.

However, relevant federal regulatory authorities, particularly authority to control the level of oil imports, remain potentially significant and must be considered by any venture planning to market domestically-produced synthetic liquids. The imposition of these controls would require an affirmative decision by the present Administration, which, in present circumstances, appears unlikely. However, events in the Middle East have repeatedly demonstrated the instability of foreign supplies, and this situation is subject to change.

II. AUTHORITIES OF THE ENERGY SECURITY ACT

In developing its synfuels policy, the current Administration has repeatedly stressed that the Synthetic Fuels Corporation (the "SFC" or "Corporation"), established pursuant to the Energy Security Act of 1980, will be the focal point of the activities of the federal government in synthetic fuels commercialization. Under the Energy Security Act, the SFC has broad authority and substantial resources to encourage the development of commercial synthetic fuel production, with special attention directed toward the initial group of synthetic fuel projects. The Act provides up to $88 billion for these purposes.

A. The Synthetic Fuels Corporation

The Synthetic Fuels Corporation is established as an "independent federal entity", directed by a Chairman and a Board of Directors made up of the Chairman and six members. The Directors are appointed by the President and confirmed by the Senate to serve staggered seven-year terms. The Corporation has


Section II


107These include projects sponsored by the International Coal Refining Co. (SRC-I), the Great Plains Coal Gasification Associates (High-Btu coal gasification), the Tosco Corp. (shale oil extraction in partnership with Exxon), the Union Oil Co. (shale oil extraction), and the numerous projects submitted to the Department of Energy and the SFC.

Section II.A.


109No more than four Board members may belong to any one political party. Id., § 116, 42 U.S.C. § 8712 (1980 Supp.).
no other function than to provide financial assistance to major synthetic fuels projects. Its assigned responsibility is to facilitate the creation of an industry that will produce synthetic fuels equivalent to 500,000 barrels of crude oil per day by 1987, and 2 million barrels daily by 1992.110

The SFC is exempt from many of the procedures and requirements applicable to other agencies and entities of the federal government.111 The basic theory behind the Corporation is that it should operate as much as possible like a financial institution in the private sector and as little as possible like a bureaucratic governmental agency.112

For the initial period of its operations, which terminates with Congress’s approval of the SFC’s recommendations for the further development of the industry,113 the SFC is provided with an appropriation of up to $17 billion.114 Within four years of the Act’s enactment, the SFC must develop and submit to Congress for its approval, a comprehensive strategy for meeting the synthetic fuels production goals established in the Act.115 Congress will at that point consider the comprehensive strategy submitted by the SFC under an expedited schedule and act by joint resolution, approving or disapproving the strategy.116 Congressional approval of the strategy would pave the way for an additional appropriation of up to $68 billion (the available balance of the $88 billion authorized by the Act for SFC financial assistance).117

The Corporation is authorized to provide loans, loan guarantees, price guarantees and purchase agreements to assist the sponsors of synthetic fuels projects in meeting the requirements for financing their projects.118 Combinations of these forms of assistance are authorized only where any one such form of assistance would be inadequate to support a project’s viability or to fulfill the goals of the Act.119 The fund upon which the SFC can draw in making awards of financial assistance is maintained by the United States Treasury in a segregated fund known as the Energy Security Reserve.120 This reserve is depleted by the amount of the SFC’s commitments on a dollar-for-dollar basis; the Corporation may not roll over the resources provided.121 In regard to the requirements which the SFC may impose in connection with the use of its resources, it is clearly established that the

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110Id., §100, 42 U.S.C. § 8701, §8721 (1980 Supp.). The Reagan Administration is now questioning these targets. The wide range estimates included in the National Energy Policy Plan III are lower than the production goals established by the ESA and a draft DOE study states that a target of 500,000 barrels a day by 1990 is more realistic and that the ESA target of 2 million barrels a day by 1992 is “premature and inappropriate.” See “Synfuels Week,” July 20, 1981, at 1.
114See Id. §115, U.S.C. § 8711 (1980 Supp.). Supplemental Appropriations and Rescission Act, Pub. L. No. 96-304 (1980). That Act allotted to the Corporation $6 billion for immediate obligation; $3.10 billion upon a Presidential declaration that the Corporation is operative to the extent that a) the DOE has committed or conditionally committed funds to projects under the interim assistance program of the ESA, and the Corporation elects to transfer those projects to Corporation jurisdiction, and b) any funds remain uncommitted or not conditionally committed; and $2.212 billion, available after June 30, 1982.
118Id., § 131(c), 42 U.S.C. §8731 (a) (1980 Supp.).
120Id.
Corporation is not intended to participate in project management; the development, construction, and operation of a project is to be the responsibility of its private sector sponsor.\footnote{See, \textit{Energy Law Journal} Vol 2:331, 348.}

If one were to look only at the mandate of the SFC, it would appear that it has both the capability and resources to close whatever competitive gap may exist between synthetic fuels and their conventional counterparts. The Corporation concept is the culmination of years of analysis and review of what is required to develop a synthetic fuel industry,\footnote{See \textit{Subcommittee on Energy, Committee on the Budget, House of Representatives, Report No. 96-104}, 96th Cong., 2d Sess. (1980).} and is founded on the basic theory that the nation needs to have a capability in synthetic fuels well before economic forces in the energy market would permit it to develop.\footnote{See \textit{Reagan Administration, The President's Program for United States Energy Security: The Energy Security Corporation"} 6-7 (1980).} One principal purpose of this synthetic fuel capability is to strengthen the national security by avoiding an undue level of dependence on imported products. A second purpose is tied to the idea that early development of the industry will help the nation to avoid severe, temporary energy shortages and their concurrent disruptive effects on the economy. The underlying concept is that it will take less time to expand an existing synfuels industry when the capacity is needed than to develop one from scratch.

Theory and practice, however, may diverge more widely than usual in this instance, because the SFC's insulation from the processes of government which is provided by the Energy Security Act permits it to exercise unusually broad policy discretion. Normal opportunities for Congressional intervention are removed in that the Corporation has multi-year funding.\footnote{The Corporation is capitalized with Treasury notes, secured by obligations of the Corporation itself, \textit{Energy Law Journal} Vol 2:331, 348.} Budgetary controls, normally exercised through the review function vested in the Office of Management and Budget, are largely absent.\footnote{See \textit{Subcommittee on Energy, Committee on the Budget, House of Representatives, Report No. 96-104}, 96th Cong., 2d Sess. (1980).} The Chairman and Board of Directors are responsible to the President and are removable only for cause.\footnote{See \textit{Subcommittee on Energy, Committee on the Budget, House of Representatives, Report No. 96-104}, 96th Cong., 2d Sess. (1980).} For these reasons, the policy direction set by the Chairman and the majority of the Board is extremely important in assessing whether and to what extent Corporation authorities and capabilities will be exercised. The Reagan Administration will, of course, have an unusual opportunity to influence the direction of the Corporation in that it will nominate all seven of the Directors; in the future there will be only one vacancy each year.

Prior to last November's elections, former President Carter installed a Board of Directors, headed by Chairman John C. Sawhill, under his recess appointment authority. On November 21, 1980, the SFC issued its first solicitation of applications for financial assistance.128 With a new Administration in the White House, the resignations of the Carter-appointed SFC Board Members were accepted on January 30, 1981.

President Reagan then nominated Edward Noble, a Tulsa, Oklahoma oil executive, as the Board’s new Chairman and on May 14, 1981, Mr. Noble was confirmed by the Senate. Four additional nominations have been announced: Robert A. Monks, Chairman of the Board of the Boston Company, Inc.; Victor Schroeder, Manager of Development for the Atlanta Appeal Mart and Executive Director of the Peachtree Center; V.M. Thompson, Jr., Chairman of the Board of Utica National Bank and Trust Company of Tulsa, Oklahoma; and C. Howard Wilkins, who was Vice Chairman of the Board of Pizza Huts, Inc. and is currently Founder and Managing Partner of the Maverick Company of Wichita, Kansas.129 There has been considerable pressure to include at least one Rocky Mountain member on the Board; apparently to make way for such an action, the previously announced intention to nominate Donald Santarelli as a Director was rescinded.130

While the identity of the Corporation’s management has changed, the initial solicitation of proposals has remained in effect. By March 31, 1981, the closing date of the initial round, the SFC had received sixty-three proposals, chiefly involving projects for tar sands development, coal gasification, coal liquefaction, and oil shale extraction, and representing most of the nation’s major energy industry participants.131 Under the original terms of the solicitation, the SFC was to examine these proposals and select from among them those projects that offered the greatest likelihood of reaching fruition within the terms set forth in the Act.132 The Corporation would then request further information from these project sponsors and negotiate with the most promising toward the issuance of financial assistance commitments.

In an apparent change of direction from this strategy, the Corporation staff sent letters in early July to all project sponsors requesting substantial additional information.133 Detailed data is requested in the areas of finance, marketing, technical matters, cost, siting, environmental and socio-economic impacts, and management. The level of detail is comparable to a feasibility study. No deadline is indicated. In addition to this request for information, there are also indications

130 Following Santarelli’s designation for nomination, Western Republicans in the Senate expressed their displeasure in view of the fact that there would be only one vacancy on the Board if the current nominees are confirmed, which would be required to filled by a non-Republican. Thus, in order for there to be a board member from a Rocky Mountain State it would have been necessary to nominate a Democrat from that region. See Congressional Quarterly, July 25, 1981, at 1341.
131 See “51 Proposals Submitted to the Synthetic Fuels Corporation,” United States Synthetic Fuels Corporation, April 1, 1981. (Two additional applications were accepted for review under the initial solicitation.)
133 See “Specific Information Requested From (Name of Applicant) to Assist the United States Synthetic Fuels Corporation in the Phase I Evaluation,” The United States Synthetic Fuels Corporation, July, 1981. This request and the accompanying letter from Ralph L. Bayer, Assistant Vice President for Project Development, indicated the SFC management’s desire for “further information” in “a number of areas.”
that the solicitation may be re-opened and that projects may be evaluated competitively by resource category rather than individually.

B. The Operating Approach of the SFC

The incumbent Chairman of the SFC, Edward Noble, has been reserved in providing public indication about his intentions in managing the Corporation. His involvement with the Corporation commenced early in the Reagan Administration when he served as Chairman of the Transition Task Force for the Synthetic Fuels Corporation, which was then operating under the Carter-appointed Chairman and Board of Directors. Several press reports indicated that the Transition Team's final report recommended the abolition of the Corporation, consistent with the general energy policy views of the individuals managing the transition for President-elect Reagan. In light of the basic theory that, freed of regulatory constraints, energy prices would rise to a level sufficient to bring about a long-term balance between energy supply and demand, there was considered to be little need for the kind of governmental assistance represented by the Synthetic Fuels Corporation.

For some period of time the intentions of the Reagan Administration regarding commercial development of synthetic fuels have remained unclear. They now appear to be emerging. The President recently met with his senior energy advisors to discuss the three leading projects under the Interim Program and the options for proceeding. Late in July he personally intervened to resolve an internal dispute among his senior energy advisors and authorized the DOE to enter into an agreement to provide purchase commitments and price guarantees for Union Oil Co.'s $2 billion Colorado oil shale plant. On August 5, the President also approved loan guarantees to the Great Plains coal gasification project and to the Tosco Corp. for its participation in the Colony oil shale project.

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134 Noble, 53, has experience in several business ventures: a manufacturing concern, a motel chain, and a family-controlled oil company.
135 Noble has heretofore issued remarks concerning his views toward particular projects only through the Corporation's public affairs official. See, e.g., "Sponsors Urge Speedy Decision On Great Plains," The Oil Daily, July 9, 1981, at 2, col. 5; he is reportedly "playing his cards close to his vest on what specific decisions he wants the $20 billion corporation to make." "Noble Waits on Synfuels Corp. Decisions," The Oil Daily, July 18, 1981, at 2, col. 3.
136 The Transition Team members concerned with the policies surrounding the Synthetic Fuel Corporation included Chairman Noble and Board-nominee Schroeder.
137 President Carter had made interim appointments to the Corporation Board which included John Sawhill, Chairman, and Directors Catherine Clear, a professor at the University of Wisconsin, retired American Telephone and Telegraph Chairman John DeBart, AFL-CIO President Lane Kirkland, and Equitable Life Assurance Co. officer Frank Savage. These Directors submitted their resignations to President Reagan, who accepted them on January 30, 1981.
139 The Cabinet Council on Natural Resources and the Environment was convened on July 22 and on July 29 the President announced his initial decision. See Washington Post, July 30, 1981, at 2, col. 1; Wall St. J., July 30, 1981, at 7, col. 1.
140 These include the Great Plains high-Btu coal gasification project and oil shale projects sponsored by Union Oil Co. and the Tosco Corp. The $2.8 billion Great Plains project would produce 125,000 Mcf of high-Btu synthetic gas from 22,000 tons of North Dakota lignite coal daily, using the Lurgi method of coal gasification; the Union project is a two-phase project that would produce a total of 50,000 barrels of shale oil from 80,000 tons of oil shale daily, using Union's retort process, at a projected cost of $2 billion; the Colony Project (of which Tosco and Exxon are project partners) would produce 47,000 barrels of shale oil from 66,000 tons of oil shale daily, utilizing Tosco's retort technology, at a cost of $3.4 billion. The Interim Program, which was to have functioned until the President declared the SFC fully operational, ESA, supra note 103 § 104(k), was effectively terminated on August 5, 1981, immediately following the Department of Energy's issuance of financial assistance commitments to the three leading projects under the program. See Department of Energy Press Release, Aug. 5, 1981.
As Chairman-designate, Noble was particularly cautious in commenting publicly on the Corporation and its activities. In the course of his confirmation hearings, his comments were unusually general in nature. Maintaining a low profile after his confirmation by the Senate, Noble has made few public statements. Among them, however, were remarks attributed to him in the New York Times questioning the need for the establishment of synthetic gas plants—made at a time when the Administration was considered to be very close to signing a $2 billion loan guarantee agreement with the sponsors of the Great Plains project.

In recent testimony to Congressional Committees, Chairman Noble has given assurances that he will carry out his mandated responsibilities. He also continues to express his view that the Corporation should operate in a conservative manner; he has stated his goal as being "to remain small, intense and short-lived, getting the job done ... and then going out of business." The Secretary of Energy (along with key members of the House and Senate) has continued to advocate committing funds promptly to the first group of pending projects and moving ahead with the federal effort mandated by the Energy Security Act. Other members of the Administration have expressed reservations, many of which were directed to the Interim Program. One guide to the Reagan Administration's synfuels policy is the recently released National Energy Policy Plan. The Section of the Plan that deals with synthetic fuels states:

The Administration has restructured the National Synthetic Fuels Program to rely more heavily on private investment initiatives and less on the general taxpayer. Responsibility for commercializing the technologies of alternative fuels is shifting to the private sector, with potential support from the Synthetic Fuels Corporation.

Judging from this statement of policy and the positions taken by officials with responsibilities connected with synthetic fuels, this Administration will be substantially less active in supporting synthetic fuels commercialization than the previous one. Project sponsors interested in taking advantage of the support available through the SFC can expect to have to meet rigorous standards applied pursuant to a reasonably narrow reading of the Corporation's mandate. The continuing interest of synfuels advocates in the Congress will probably serve to soften this inclination to narrowness, but the net effect will be that the role of

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146 Id. at 11.

147 Senators McClure and Domenici visited with the President personally to urge him to approve financial assistance from the Department of Energy to the leading synfuels projects. See "McClure Reportedly Pledges to Hold Hearings Soon on Synfuels Corp. Nominees," Synfuels, August 7, 1981, at 3; "Reagan Heirs Strong Support For Interim Program, But Defers Decision," Synfuels, July 24, 1981, at 1.
the federal government will be significantly less active than expected and intended when the authorizing legislation was enacted.

A working majority of the SFC's Board of Directors appears likely to follow Chairman Noble's lead in policy matters with the result that the SFC under his leadership can be expected to follow a conservative operating approach. With respect to its financial assistance capabilities, the expectation is that the SFC will emphasize contingent liabilities, i.e., loan guarantees and price supports, over the alternatives of loans, purchase commitments, joint ventures and development of government-owned company-operated facilities (so-called GOCOs).

If the operating approach of the Corporation were to be one of applying the authorities and resources that it has with a sense of urgency and without departing widely from the original concept of its purpose and approach, the SFC could obviously make a substantial volume of synthetic products economically viable. Of the 63 pending applications for various forms of Corporation support, a substantial number are mature projects and are sponsored by major energy corporations. It is reasonable to expect that many would operate successfully if constructed. Appropriate assistance, tailored to the individual projects and the products involved, could almost certainly serve to make synthetic products competitive with natural gas and crude oil.

The question is to what extent the SFC, under its new leadership and in a changed environment, will choose to apply its resources and leverage to make a substantial number of proposed projects sufficiently attractive so that they can be financed, constructed, and brought into operation. If the SFC chooses not to, the authorities and resources provided under the Energy Security Act will, in effect, be largely unavailable to the industry. A rigidly conservative approach by the Corporation could mean that its involvement would be limited to a small number, perhaps no more than six to twelve, of the early projects, covering the major synfuels resources.

Because of the central role of the Corporation regarding the federal government's involvement in synfuels commercialization, it is of obvious importance to potential project sponsors to remain in close touch with developments as the SFC's new management gets under way. Clarification on the matters of operating policies, opportunities to make application, requirements for information, key staffing and time schedules will be occurring steadily over the next several months.

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148 A majority of the Board membership constitutes a quorum. ESA, supra note 105, § 118(a). See note 129, supra.

149 Section 136 of the ESA, supra note 105, authorizes the SFC to enter into joint ventures for synthetic fuel projects but limits the Corporation to financial participation in such projects. Id., § 136(c). These projects are not expected to be a prominent aspect of the SFC's operations.

150 The SFC is authorized to enter into "Corporation construction projects," which would be owned by the Corporation but constructed and operated by a contractor, but only prior to approval of the comprehensive strategy required to be prepared and submitted to Congress by § 126(h), (i) of the ESA, supra note 105, for one-of-a-kind technologies and only after no participants could otherwise be found who would be willing to proceed under any of the other forms of financial assistance provided for in the Act. See, ESA, supra note 105, §§ 126(a)(1)(B), 141-143.

151 See "63 Proposals Submitted to the Synthetic Fuels Corporation," United States Synthetic Fuels Corp. Release, April 1, 1981. (Two additional applications were accepted for review under the initial solicitation.)

152 The Corporation has recently issued a request for supplemental information from those project sponsors who have submitted applications for assistance. See note 133.
III. Conclusions

As one reviews the various federal laws, programs and regulations that have the potential to advance commercial-scale synthetic fuels projects by making their product more competitive in the energy marketplace, it is necessary to consider not only what authorities exist but how they are likely to be used. In the present circumstances it is unlikely that governmental actions in the form of import controls, pricing policies, or fuel use regulations that would potentially benefit synthetic products over competing conventional products will be taken. In some instances the Administration has evidenced an intent to hold the authorities in reserve, in others it is likely that outright repeal will be proposed. In all instances the guiding policy of the moment is to reduce the role of the federal government to a low level and to allow the forces of the so-called “free market” in energy to operate.

However, there is no certainty that major variables in energy will remain unchanged or that situations in which the Administration is willing to have the government take a more active role may not arise. Due to the basic dynamics of government action, this prospect is particularly strong where the authorities required for action are already in existence.

Especially in the case of the incentives to commercial development provided through the Synthetic Fuels Corporation there is a significant constituency for action both inside and outside of government. Although the conservative instincts of the present Administration will inevitably be reflected in the way in which the Corporation does business, there will be strong countervailing forces. Accordingly, it is reasonable to expect that a significant portion of the originally intended level of activity by the Corporation will in fact take place.

The Energy Security Act confers ample authority on the Synthetic Fuels Corporation to facilitate significant levels of investment in synthetic fuels production and enhance the marketability of the products. The Chairman and Board of Directors play a crucial role in shaping the policies of the Corporation, and the extent to which synthetic fuels are truly made more competitive through Corporation assistance will depend heavily on the particular manner in which these officials interpret their statutory mandate and implement the policies set forth in the Energy Security Act.353

The underlying premise of that Act, that market forces alone would not ensure the development of a synthetic fuels industry soon enough or to the extent necessary to protect the nation’s energy security, and that it is vital that the federal government act to remedy this deficiency, continues to have broad appeal in Washington. Present indications are that Edward Noble, the incumbent SFC Chairman, may take a conservative view of the Corporation’s role and objectives. However, there will also be significant contending forces at work and the Administration has already shown a willingness to respond to pressures brought by key members of Congress who support a more aggressive federal role in the development of a number of commercial-scale synfuels projects. In these circumstances,

353See note 123, supra.
synthetic fuels project sponsors should continue to treat the Corporation as a very significant potential source of support in terms of providing a competitive edge for synfuels products seeking entry into the nation’s energy market, while at the same time recognizing that its management is likely to be both conservative and demanding in dealing with applicants for assistance.

Those interested in the development of synthetic fuels and their potential markets thus should pay careful attention to the ways in which each of the various federal authorities discussed above function, and how those functions change. In the immediate future this will be especially true of the entity with the lead role, the Synthetic Fuels Corporation.