Mr. Edward E. Noble
Chairman, United States Synthetic Fuels Corporation

Dear Mr. Noble:

Subject: The United States Synthetic Fuels Corporation's Project Selection Guidelines Need Clarification

The General Accounting Office (GAO) was asked to testify on July 29, 1981, before the Subcommittee on Fossil and Synthetic Fuels of the House Committee on Energy and Commerce. The purpose of the hearings was to assess the United States Synthetic Fuels Corporation's (SFC's) proposed project selection guidelines that were released on April 9, 1981, for public comment. Specifically, GAO was asked to comment on the proposed guidelines based, among other things, on our previous work concerning the project selection process of the Department of Energy's (DOE's) alternative fuels program. 1/

The hearings were postponed until September. In the interim, we are providing you our comments and recommendations for clarifying the guidelines and for implementing the selection process. We recognize that the SFC is currently without a Board of Directors, and until at least four Board members are confirmed, the SFC cannot set policy. However, we believe that these issues are of sufficient importance that the SFC should devise proposals for addressing them. These could be reviewed by the Board of Directors when it convenes.

Our comments and recommendations are based on a preliminary review of the proposed guidelines. We met with SFC officials, reviewed the public comments received by the SFC, and compared the SFC's proposed guidelines to DOE's project selection process for the alternative fuels program.

1/"Special Care Needed in Selecting Projects for the Alternative Fuels Program" (EMD-81-36, Dec. 8, 1980).
The SpCAs project selection guidelines provide information on the process for evaluating proposals, the criteria to be used, and their relationship to the requirements of the Energy Security Act. It appears that the guidelines are consistent with the requirements of the Energy Security Act. However, in reviewing the public comments, we found that probably the principal criticism is that they are vague. There is concern that industry sponsors may not have enough guidance to adequately prepare their proposals. Also, the Environmental Protection Agency and environmental groups would like the environmental criteria to be clearer and more complete.

Our comments similarly concern areas in need of clarification. We found that the SpC needs to clarify the project selection process by describing in greater detail how projects will be reviewed and by establishing a target date for beginning the review of "mature" projects. The SpC also needs to clarify how economic assumptions, such as inflation rates, interest rates, and the price of oil and gas, will be standardized so that the financial viability of a project can be assessed and compared with other projects. Furthermore, to ensure the integrity of the project selection process, the SpC needs to maintain detailed documentation at each level of the process.

How will projects be selected?

According to the proposed guidelines, the project selection process involves a two-level review. Projects will be evaluated for (1) their intrinsic merit, or project evaluation criteria, and (2) their conformance with the Energy Security Act's overall objectives, or program-level evaluation criteria.

The project evaluation criteria provide that (1) the project must be technically viable and properly managed; (2) the project must demonstrate good prospects for economic viability, and its financing must reflect an appropriate balancing of Corporation and sponsor interests; and (3) the project must be acceptable in terms of its environmental, regulatory, and socioeconomic aspects.

The program-level evaluation criteria correspond to the requirements of the Energy Security Act to

--encourage technological diversity in order to use domestic resources offering significant potential as a feedstock,

--assist projects that offer the potential to achieve the act's production goals of 500,000 barrels per day by 1987 and 2,000,000 barrels per day by 1992, and

--establish a comprehensive strategy by June 30, 1984, to achieve the act's production goals.
It is our understanding that the SFC will first evaluate projects based on project evaluation criteria and then apply the program-level criteria. However, it is unclear how the SFC will use the two levels of review to achieve the Energy Security Act's goals. For example, the guidelines are vague regarding the comparative process to be used in judging the relative merits of diverse processes. Of the 63 proposals received by the SFC, 17 coal gasification project sponsors applied for assistance. Conceivably, the projects could compete among themselves as a group, or they could compete within smaller groups, such as low-, medium-, and high-Btu gasification. Potential sponsors should know the ground rules under which they must compete. Also, it would help to ensure consistency in the review process once the proposals have been submitted.

**What additional information is needed?**

The proposed project selection guidelines state that, before the selection process begins, the SFC will assess whether a proposed project is mature and has a reasonable prospect of receiving financial assistance. In July 1981, the SFC notified most of the 63 project sponsors that certain information must be submitted for their projects to be judged mature. The information includes design engineering, cost estimates, cash flow and internal rate of return projections, marketing information, and environmental and socioeconomic planning.

SFC officials told us that the 63 proposals are of mixed quality and completeness. They said that many of the sponsors would need to devote more than a year to their proposals before the SFC would consider their projects mature.

Because the proposals will become mature at different times, it is unclear how the SFC will address the Energy Security Act provision that, when it is practicable and provident to do so, the SFC shall award financial assistance on the basis of competition. So far, the SFC has given no indication whether projects will be evaluated individually when they are judged mature or whether they will be held for concurrent review with other mature projects. It is questionable whether the SFC can adequately compare mature projects with projects in various stages of completeness. On the other hand, it would be unfair to those early sponsors of mature projects to require them to wait indefinitely until other project proposals become mature.

To ensure fairness to those projects which have been judged mature while allowing sufficient time for initial proposals to be supplemented sufficiently to be judged mature, we
believe the SFC should establish a target date for beginning the review of mature projects. This could also help to ensure timely action by the SFC toward achieving its production and technological diversity goals. Those proposals, which were not judged mature by the initial target date, could then have the option of bringing their projects to maturity for competition with others at a later cut-off date.

In evaluating mature projects, the SFC must, among other things, assess the financial viability of a project by analyzing cost estimates and financial and market information. It is unclear how the SFC will make this economic comparison of projects since the guidelines do not provide sponsors with a uniform set of economic assumptions to use such as inflation rates, interest rates, and the price of oil and gas. These economic assumptions can make a substantial difference in a project's outlook and consequently in the SFC's evaluation.

To simplify comparisons between projects, the SFC could provide economic assumptions which all sponsors can use as a framework. Alternatively, if the SFC does not choose to dictate economic assumptions, the project sponsors should clearly identify their assumptions so that the SFC can make adjustments to ensure evaluation of the projects on a comparable basis.

How will the integrity of the selection process be ensured?

We believe that inherent with any two-level selection process, special care must be taken to ensure process integrity. In December 1980, we reported on DOE's alternative fuels program; specifically, the selection process used to award grants for feasibility studies and cooperative agreements for synthetic fuels projects. We found that it also uses a two-level review process.

DOE first evaluated and ranked each synthetic fuels project in terms of technical, economic, environmental, and socioeconomic merit. It then applied certain program policy factors, including discretionary factors such as geographical diversity, before selecting projects for funding. We found that the criteria used to evaluate the proposals initially were reasonable and appeared to be applied consistently. There was enough flexibility in the use of program policy factors in the second level of review, however, that DOE could justify an award to a number of projects, despite lower technical rankings. We stated that this is an area requiring close attention and one where special care must be exercised to avoid any inferences of impropriety in future project selections.
Although the SFC has fewer program level criteria to use to override the technical evaluations of projects, we believe the same potential concern exists with the SFC's selection process. Consequently, the same note of caution to ensure integrity at each point of the selection process is applicable to the SFC. Detailed documentation at each level of the process could assist the SFC in resolving any questions in regard to future oversight of the SFC's selections.

Recommendations to the Chairman,
United States Synthetic Fuels Corporation

To ensure that project sponsors, State and local officials, and the general public have sufficient information to make decisions and to ensure the integrity of the selection process, we recommend that the SFC:

--- Clarify the project selection process by describing in greater detail how projects will be reviewed.

--- Establish a target date for beginning the review of "mature" projects. This date should allow adequate time for project sponsors to complete their proposals without unduly delaying the project selection process.

--- Clarify how economic assumptions, such as inflation rates, interest rates, and the price of oil and gas, will be standardized so that the financial viability of a project can be assessed and compared with other projects.

--- Maintain detailed documentation at each level of the project selection process.

We are sending copies of this letter to the Senate Committee on Energy and Natural Resources, the Senate Committee on Governmental Affairs, the House Committee on Energy and Commerce, and the House Committee on Government Operations. We would appreciate it if you would advise the committees and us within 60 days of any action you have taken or plan to take on our recommendations.

Sincerely yours,

J. Dexter Peach
Director