

114246

BY THE COMPTROLLER GENERAL  
Report To The Chairman, Subcommittee On Energy And  
Power, Committee On Interstate And Foreign Commerce,  
House Of Representatives  
OF THE UNITED STATES

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# Special Care Needed In Selecting Projects For The Alternative Fuels Program

Under the Alternative Fuels Program, the Department of Energy is providing financial incentives to expedite the development of alternatives to imported oil. GAO reviewed the Department's procedures and criteria for soliciting, evaluating, and selecting the recipients of feasibility study and cooperative agreement grants.



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GAO believes that the technical evaluations of the proposals were reasonably comprehensive and thorough and that evaluation criteria were appropriate and consistently applied. However, the Department's frequent use of policy factors, such as geographic diversity, to alter technical rankings during the final selection of projects, heightens GAO's concerns regarding the integrity of the selection process. This is an area which will require close attention and one where the Department will have to exercise special care to avoid any inferences of impropriety in future project selections.



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COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON D.C. 20548

B-201400

The Honorable John D. Dingell  
Chairman, Subcommittee on  
Energy and Power  
Committee on Interstate and  
Foreign Commerce  
House of Representatives

Dear Mr. Chairman:

In your letter dated October 2, 1980 (see app. II), you requested that we review and report on the Department of Energy's (DOE's) management of the Alternative Fuels Program and the broader issue of the effectiveness of DOE's other ongoing efforts to advance synthetic fuel technologies to commercial production. This report addresses the Alternative Fuels Program. Our work in the broader area is continuing and will be discussed in a separate report.

Under the Alternative Fuels Program, DOE is authorized to provide various forms of financial assistance to expedite the commercial production of alternative fuels from such sources as coal, oil shale, tar sands, and biomass. As of November 30, 1980, DOE had 113 proposed projects for awards totaling about \$200 million in response to solicitations issued February 25, 1980.

We reviewed the procedures and criteria used by DOE to solicit, evaluate, and select the projects of the Alternative Fuels Program. Our review which covered the period February 25, 1980, through November 30, 1980, focused on the proposals and awards for coal liquefaction, high-Btu coal gasification, low- and medium-Btu coal gasification, and oil shale. We did not examine in detail awards in the other technologies. In reviewing DOE's efforts we obtained information from DOE officials and reviewed program and project selection documents. We did not, however, review individual proposals to evaluate their merits. We also obtained information from industry organizations with experience in synthetic fuels. (See app. III.) Many of the

companies contacted submitted proposals under DOE's Alternative Fuels Program. The companies were experienced in coal liquefaction, coal gasification, or oil shale technologies.

Each proposal made in response to DOE's solicitation received a technical and cost evaluation by DOE technical evaluation teams and "Source Evaluation Boards." We reviewed the organization of the evaluation teams and Boards and the procedures and criteria they used in examining applications for feasibility studies and cooperative agreements. We believe that the work performed by the evaluation teams and the oversight provided by the Source Evaluation Boards was reasonably comprehensive and thorough. It appears that the teams and Boards ranked proposals with heavy emphasis on their potential commercial viability. In our opinion, the criteria used to evaluate the proposals were reasonable and appeared to be applied consistently.

Officials of energy companies with whom we met--both winners and losers of program assistance--also said that based on the information they received from DOE in the post-award briefings they felt the technical merits of their proposals had been fairly and objectively evaluated. They generally said that the evaluation teams and Source Evaluation Boards had done an excellent job in evaluating their proposals, especially in view of the short time available to them.

A "Senior Review Board" was responsible for recommending specific proposals for funding to the selecting official, DOE's Under Secretary. The Board reviewed the reports of the Source Evaluation Boards and supporting evaluation teams and applied certain program policy factors in recommending projects for funding. This was the first level at which the program policy factors were considered. According to the solicitation, program policy factors are "\* \* \* those factors which, while not appropriate indicators of a proposal's individual merit (e.g., technical excellence, proposer's ability, cost, etc.), are relevant and essential to the process of choosing which of the proposals received will, taken together, best achieve the program objectives."

The program policy factors were assigned no priority; DOE officials could apply any or none of the policy factors in choosing among the proposals ranked by the evaluation teams and Boards. According to the selection statement, the Senior Review Board and selecting official used only four of the eight factors available in developing their

recommendations and selections. According to agency officials, these factors were applied after reviewing the technical scores and ranking of the proposals. The selecting official cited the program policy factors of geographic diversity, technical diversity, cost considerations, and the desire to involve small and disadvantaged businesses and/or Indian Tribes in the program as reasons for selecting or not selecting projects in accordance with their technical ranking. In some cases more than one of these factors was cited.

In the cooperative agreements area, only two projects were approved for funding in the four technologies we reviewed--one each in coal liquefaction and high-Btu gasification. The technical evaluation teams and Source Evaluation Board ranked both proposals the highest of their respective technologies and the Senior Review Board recommended both for funding.

The feasibility study projects which the Senior Review Board and selecting official chose differed substantially from the rankings developed by the evaluation teams and Source Evaluation Board. The application of two of the eight factors--geographic diversity and technical mix--weighed heavily in the final selection of projects for feasibility study funding and generally accounted for this difference for the four technology areas we examined. DOE, in choosing the 21 projects, passed over 15 projects which had received higher technical scores than some of those selected. We note, however, that all of the projects selected received relatively high technical scores.

The geographic diversity policy factor was cited most often as the reason for altering the rankings of the proposals we covered and it was evident that DOE was intent on achieving a broad geographical coverage. DOE made awards in 46 States, the District of Columbia, and Puerto Rico on a program-wide basis.

After applying the program policy factors, the Senior Review Board prepared a statement setting forth its recommendations as to the proposals DOE should fund and the rationale for recommending those projects. In seven instances, however, no reason was given for passing over proposals in favor of others which had received lower scores.

The DOE Under Secretary, as the selection official, made the final choice as to the applicants with whom DOE should enter into negotiations and also prepared a statement describing his choices and rationale. In only one instance

did his selections in the technologies we reviewed differ from the proposals recommended by the Board. In that instance he initially selected a lower ranked (fourteenth vs. seventh) low- and medium-Btu gasification project. Subsequently, on October 31, 1980, with funds made available through the negotiation process, the selection official added this seventh-ranked medium-Btu gasification project to those selected.

We recognize the need for policy judgments and some flexibility in the selection process. However, such judgments should be made without losing sight of the program's objective of achieving maximum production of alternative fuels at the earliest time practicable and in a way which will maintain the integrity of the decision process itself.

The myriad of factors which DOE considered in selecting projects and the high technical ratings of those selected provides some positive indication that DOE did not lose sight of the program objective. It is too early, of course, to judge the effectiveness of the individual projects and their contribution to the program. However, DOE's frequent use of policy considerations to alter project rankings which were based on the individual merits of projects heightens our concern regarding the integrity of the process itself. This is an area which will require close attention and one where DOE will have to exercise special care to avoid any inferences of impropriety in future project selections.

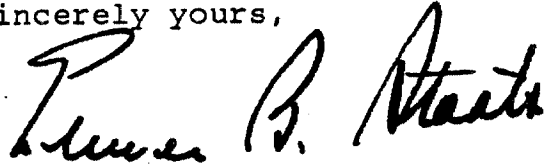
As part of our continuing oversight responsibilities, we intend to follow-up on this issue at some future date. Also, we believe that DOE should address the program results in its semi-annual reports to the Congress required by the program's authorizing legislation.

In order to meet the time frames requested, we did not obtain official agency comments. As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days

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from the date of the report. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Thomas B. Staats". The signature is written in a cursive style with a large initial 'T'.

Comptroller General  
of the United States

Attachments - 3





MANAGEMENT OF THE  
ALTERNATIVE FUELS PROGRAM

The Congress has appropriated DOE over \$5.5 billion to carry out a financial incentives program to expedite domestic alternative fuels production. Under the Department of the Interior and Related Agencies Appropriations Act for fiscal year 1980 (Public Law 96-126, Nov. 27, 1979), funds in the following amounts and categories were made available to DOE:

- \$100 million for project development feasibility studies not to exceed \$4 million each;
- \$100 million for cooperative agreements with non-Federal entities, not to exceed \$25 million each, to support commercial-scale development of alternative fuels facilities 1/;
- \$1.5 billion for purchase commitments and price guarantees pursuant to the provisions of the Federal Nonnuclear Energy Research and Development Act of 1974 (Public Law 93-577, as amended);
- \$500 million for a loan guarantee reserve to finance construction of alternative fuels production facilities pursuant to the authority of the Federal Nonnuclear Energy Research and Development Act of 1974, provided that not more than \$1.5 billion in loans are guaranteed 2/; and
- \$8 million for program management.

The objective of the act is to ensure maximum production of alternative fuels in the shortest time practical. The alternative fuels production provisions of Public Law 96-126

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1/DOE set aside \$22 million of this amount for the Great Plains Coal Gasification Plant pursuant to the legislative history of P.L. 96-126.

2/Subsequently, the Congress in the fiscal year 1981 continuing appropriations legislation (Public Law 96-369, Oct. 1, 1980) authorized DOE to transfer up to an additional \$500 million from the purchase commitment and price guarantee category to the loan guarantee category.

required that the Secretary of Energy issue a solicitation for project development feasibility study grants within 90 days of enactment. The act defined the term "alternative fuels" as

"gaseous, liquid, or solid fuels and chemical feedstocks derived from coal, shale, tar sands, lignite, peat, biomass, solid waste, unconventional natural gas, and/or minerals or organic materials other than crude oil or any derivative thereof."

Feasibility study grants are intended to accelerate assessment of the technical and economic feasibility of proposed commercial alternative fuels plants by private sector and other non-Federal entities. 1/ Feasibility study funds may also be used for such efforts as preliminary designs and environmental monitoring and analysis.

Cooperative agreements are intended to advance projects from the feasibility stage to construction and operation by performing activities such as arriving at final designs, developing project financing, finalizing necessary permits, and in certain cases, assisting in actual plant construction.

In July 1980, the Congress, under the fiscal year 1980 Supplemental Appropriations and Recision Act (P.L. 96-304), appropriated DOE an additional \$3.3 billion. Of this \$100 million is available to fund feasibility studies which are not to exceed \$10 million each and \$200 million for cooperative agreements of not more than \$25 million each. 2/ Three billion dollars was made available for alternative fuels production for defense needs as specified by the Energy Security Act (P.L. 96-294). This money is to be used for purchases of, or commitments to purchase, synthetic fuels for defense needs and loan guarantees to finance the construction of

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1/The act stated that non-Federal entities were eligible for grants. Thus, in addition to private companies, State and local governments, nonprofit associations, and others are eligible for funding.

2/Subsequently, the Congress, in the fiscal year 1981 continuing appropriations legislation (P.L. 96-369) set aside \$30 million of this \$300 million to fund feasibility studies and cooperative agreements for direct combustion projects using innovative systems.

synthetic fuel production facilities issued in conjunction with contracts to supply synthetic fuels for defense needs.

The Office of Resource Applications, which is responsible for DOE's ongoing energy technology commercialization efforts, manages and administers the Alternative Fuels Program. The Resource Applications staff is assisted by personnel from DOE's Offices of Fossil Energy, Energy Research, Conservation and Solar Energy, Procurement, Environment, the Controller, Policy and Evaluation, and General Counsel in drafting solicitations, reviewing proposals, and administering the program.

DOE initially selected 99 awardees for feasibility study grants and 11 awardees <sup>1/</sup> for cooperative agreement grants under P.L. 96-126. Subsequently, as a result of DOE's negotiations with the feasibility study awardees, the amounts of their awards were less than the amounts they had originally requested. DOE then used these remaining funds to make four more awards on October 31, 1980, for a total of 103 feasibility study awards. Also, during the negotiations one of the cooperative agreement grant awardees withdrew, leaving a total of 10 awardees. DOE is still negotiating with some of the awardees before making the grant awards final. As of November 19, 1980, DOE had finalized all but 15 feasibility study awards and 2 cooperative agreements.

On August 1, 1980, DOE issued the solicitations for the second round of feasibility studies and cooperative agreements for the \$270 million in funds for alternative fuels production made available in July 1980 under Public Law 96-304. Over 1,000 proposals were received by the September 30 closing date and DOE plans to make the awards in early December. DOE issued solicitations for the \$30 million for direct combustion systems on November 10, 1980. The closing date of the solicitation is January 12, 1981. DOE issued solicitations on October 15, 1980, for the \$5 billion available in loan guarantees, purchase commitments, and price guarantees which were authorized by Public Law 96-294 and Public Law 96-126. DOE received proposals for 18 projects by the solicitations' November 14, 1980, closing date. Three other proposals were received and accepted after the closing date. According to

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<sup>1/</sup>This includes the cooperative agreement grant set aside for the Great Plains Coal Gasification Plant pursuant to the legislative history of P.L. 96-126.

DOE officials, some initial conditional awards are expected to be made by December 31, 1980.

DOE'S MANAGEMENT OF THE  
ALTERNATIVE FUELS PROGRAM

Before issuing the feasibility study and cooperative agreement solicitations and to stimulate interest from a wide range of proposers, DOE disseminated information about the program through several channels, such as the Commerce Business Daily and The Federal Register Notices, press releases, public conferences, and mass mailings. DOE also held presolicitation and preproposal conferences to receive comments on a draft solicitation and to answer questions by the prospective proposers. The solicitations were issued in final form on February 25, 1980, with an April 25, 1980, closing date. The solicitations resulted in 971 proposals--747 for project development feasibility studies and 224 for cooperative agreements.

Upon receipt of the proposals, DOE made an initial screening to determine if the proposals met the qualifying criteria. During this process, DOE rejected 116 applications for feasibility study grants and 34 applications for cooperative agreements. Proposals were rejected for several reasons--they were submitted after the closing date of solicitation, covered other than eligible energy technologies, failed to meet DOE's minimum production criteria, or were not signed by an authorized official of the proposing organization. DOE notified applicants that their proposals had been rejected and gave the reasons why.

Proposals which were not rejected during this initial screening were grouped according to technology and then underwent a three-phase review process--Technical Evaluation Team, Source Evaluation Board, and Senior Review Board. The DOE Under Secretary, as the selection official, made the final choices. The following sections describe this process.

Technical evaluation of projects

An evaluation team, consisting of technical personnel from various DOE offices, other Federal Government agencies, and DOE national laboratories was established to review the feasibility study and cooperative agreement proposals for each of the resource technologies identified in the solicitations. The personnel on the teams represented a broad range of expertise on technical, financial, environmental, business, and cost matters. The same

evaluation team reviewed both the feasibility study and cooperative agreement proposals for a technology. DOE developed evaluation plans for each of the teams.

All proposals received a technical and a cost evaluation and each team evaluated all proposals against the same set of criteria. Four general criteria were established for the technical evaluation, consisting of (1) commercial viability of the project, (2) environmental, safety, health, and socioeconomic factors, (3) proposed approach to conducting the feasibility study, and (4) proposer's capability. More specific criteria were established under each of the four general criteria. For example, under the "commercial viability of the project" criterion, the suitability of the selected site, technical readiness of the process, availability of all necessary resources, estimated time to beginning commercial operation, and economic competitiveness of commercial plant output were evaluated.

The cost evaluation phase involved an examination of each proposal to establish the reasonableness of the total proposed cost of the feasibility study. The cost proposal was also used as an aid to determine the proposer's understanding of the solicitation's requirements, as well as to assess the validity of the proposer's approach to meeting the requirements.

The teams arrived at a consensus and assigned numerical scores to each proposal using weighted averages. Commercial viability of the project had the greatest weight and was significantly more important than the other three general technical criteria.

The next level of review--the Source Evaluation Boards--operated as the managers of the evaluation process. Each Board member was assigned a technology area and was responsible for reviewing evaluation team reports, recommending changes or approval to those reports, and otherwise advising the Board on all matters within his or her technology area. The Board was composed of program directors from DOE's Resource Applications, Fossil Energy, Energy Research, and Conservation and Solar Energy Offices. A representative from the procurement office on the Board reviewed the cost evaluations of all proposals and a Board representative from the Office of the Environment reviewed the teams' evaluation of environmental, safety, health, and socioeconomic factors related to all proposals. A Board representative from the General Counsel's Office served as an advisor on legal matters.

While we did not review individual proposals to evaluate their merits, we reviewed the organization of the evaluation teams and Boards and the procedures and criteria they used in examining applications for feasibility studies and cooperative agreements. We believe that the work performed by the evaluation teams and the oversight provided by the Source Evaluation Boards was reasonably comprehensive and thorough. It appears that the teams and Boards ranked proposals with heavy emphasis on their potential commercial viability. In our opinion, the criteria used to evaluate the proposals were reasonable and appeared to be applied consistently.

Officials of energy companies with whom we met--both winners and losers of program assistance--also said that based on the information they received from DOE in the post-award briefings they felt the technical merits of their proposals had been fairly and objectively evaluated. They generally said that the evaluation teams and Source Evaluation Boards had done an excellent job in evaluating their proposals, especially in view of the short time available to them.

Senior Review Board recommendations  
and project selections

The Senior Review Board was responsible for recommending specific proposals for funding to the selection official, DOE's Under Secretary. The Board was composed of one Deputy Assistant Secretary from Resource Applications, Conservation and Solar Energy, Fossil Energy, and Environment, and the Office of the Chief Financial Officer, and a second Deputy Assistant Secretary from Resource Applications as Chairman. Representatives from the General Counsel and Procurement Offices advised the Board.

The Board reviewed the reports of the Source Evaluation Boards and supporting evaluation teams and applied certain program policy factors which are described below. This was the first level at which the program policy factors were considered and options developed for allocating funds among the eligible technologies. The Board had substantial flexibility in using the program policy factors and in recommending the number of proposals within each major technology that would be funded.

According to the February 25, 1980, solicitation, program policy factors are

"\* \* \* those factors which, while not appropriate indicators of a proposal's individual merit (e.g., technical excellence, proposer's ability, cost, etc.), are relevant and essential to the process of choosing which of the proposals received will, taken together, best achieve the program objectives."

The following are the program policy factors set forth in the solicitation and used in developing the Senior Review Board's recommendations and the selection official's final choices.

1. The need to expedite the commercial development of a suitable range of alternative fuels.
2. The desire to select for award or support a group of projects which represent a diversity of methods or approaches.
3. The desire to obtain maximum possible leverage in the use of Federal funds in giving non-Federal entities a broad incentive to commercialize the technology or resources.
4. The desire to proceed as rapidly as possible in the development of those projects offering the best potential for reducing the dependence on foreign supplies of energy resources.
5. The desire to select projects which seem most likely to lead to other commercial-scale projects and to cause the most expeditious overall increase in domestic production at the earliest time practicable.
6. The desire to select projects that treat regional energy requirements and geographic balance.
7. The desire to select projects that will entail the substantial involvement of small and disadvantaged businesses and/or Indian Tribes in the design, construction, and operation of alternative fuel facilities.
8. The desire to select projects which are capable of maintaining or improving the quality of the environment and of mitigating any undesirable environmental, health, or safety impacts.

No further definition of the factors was provided in the solicitation or other program documents. DOE program officials told us they developed the factors based on their professional judgment. According to the officials, the factors were assigned no priority, nor were guidelines established for their use. The Board and the selection official could apply any or none of the program policy factors in choosing among the proposals ranked by the evaluation teams. While companies we contacted during our review said they understood DOE's objectives in using the program policy factors, they did not believe the factors' use would necessarily contribute to early commercialization of synthetic fuels.

After applying the program policy factors, the Board prepared a statement setting forth its recommendations as to the proposals DOE should fund and the rationale for recommending those projects.

The DOE Under Secretary, as the selection official, made the final choice as to the applicants with whom DOE should enter into negotiations and also prepared a statement describing his choices and rationale. In only one instance did his selections in the technologies we reviewed differ from the proposals recommended by the Board. In that instance he initially selected a lower ranked (fourteenth vs. seventh) low- and medium-Btu gasification project. Subsequently, on October 31, 1980, with funds made available through the negotiation process, as discussed on page 3, the selection official added this seventh-ranked medium-Btu gasification project to those selected. The rationale for his initial selection is discussed below.

Difference between Senior  
Review Board recommendations  
and final selection

In the rationale statement on low- and medium-Btu gasification, it was stated that "Of the 37 low- and medium-Btu gasification proposals evaluated, the 11 highest ranking fell into a group distinctly separate from the other proposals in the [Source Evaluation Board's] judgment." The Senior Review Board recommended seven of these.

The Board recommended as a group the fifth through eighth-ranked projects, which were powerplant applications of the technology, citing their technical strength, early and relatively large fuel production, small grant request in relationship to project size, and the fact that they provided geographic and technical diversity. However, according to



the selecting official's rationale statement, he did not initially select the seventh-ranked project because it requested the largest grant of the four proposals and duplicated the gasifier technology of one of the other proposals.

In choosing the fourteenth-ranked project, he cited the program policy factor of geographic diversity. He said that it was important to support medium-Btu gasification in New England (where the proposed project was located), because it can backout oil in a region heavily dependent on imported oil.

Some inconsistency was evident in the rationale provided by the selecting official. While he cited the cost factor and duplication of the gasifier in rejecting the seventh-ranked project, the fourteenth-ranked project which was selected also requested more funds than the seventh and used the same gasifier.

Difference between evaluation  
ranking and projects selected  
for funding

In the cooperative agreements area, only two projects were approved for funding in the four technologies we reviewed--one each in coal liquefaction and high-Btu gasification. The technical evaluation teams and Source Evaluation Board ranked both proposals the highest of their respective technologies and the Senior Review Board recommended both for funding.

However, the feasibility study projects which the Senior Review Board and the selection official chose differs substantially from the rankings developed by the evaluation teams and Board. The application of the program factors weighed heavily in the final selection of projects for feasibility study funding and generally accounted for this difference. This is illustrated by the table on page 10 which compares the evaluation team rankings, the proposals' point scores, and the projects selected for feasibility study grants.

As can be seen in the table, considerable differences existed between the evaluation team rankings and the projects selected for feasibility study grants. For example, in the coal liquefaction area where eight selections were made, projects ranked fourth, seventh, and ninth were not funded, while the eighth, twelfth, and fourteenth projects were selected. In the high-Btu gasification area, the first- and second-ranked projects were passed over in favor

Comparison of Evaluation Team Ranking of  
Feasibility Study Proposals and Their Scores (note a)  
With Projects Selected

Rank assigned by team	Technology Area							
	Coal Liquefaction		High-Btu Gasification		Oil Shale		Low- and Medium-Btu Gasification	
	Proposals' point scores	Selected	Proposals' point scores	Selected	Proposals' point scores	Selected	Proposals' point scores	Selected
1	916	X	603		937	X	748	X
2	913	X	598		817	X	733	X
3	913	X	567	X	800	X	731	
4	892		558	X	727		726	
5	870	X	(note c)		699	X	705	X
6	859	X			(note d)		705	X
7	856						702	X (note e)
8	854	X					701	X
9	844						698	
10	788						693	
11	788						690	X
12	752	X					669	
13	723						628	
14	720	X					627	X
	(note b)						(note b)	

a/Since different teams evaluated proposals in the four technology areas, scores of proposals in different technologies should not be compared.

b/No projects ranked lower than 14th were selected.

c/No projects ranked lower than 4th were selected.

d/No projects ranked lower than 5th were selected.

e/This project was added to the original selections on October 31, 1980.

of the third- and fourth-ranked projects. The third- and fourth-ranked low- and medium-Btu gasification projects were not funded, but the eleventh and fourteenth projects received grants.

This resulted in the selection of some proposals which had received significantly lower scores than others not selected. For the four technology areas we examined, DOE, in choosing the 21 projects funded, passed over 15 projects which had received higher technical scores. For example, in the coal liquids area the fourth-ranked proposal was not selected although it was rated 172 points, or 24 percent, higher than the fourteenth proposal, which was selected. Similarly, more than 100 points difference existed between the third- and fourteenth-ranked low- and medium-Btu gasification projects although the lower ranked project was selected.

According to the selection statement, the Senior Review Board and selecting official used only four of the eight factors available in developing their recommendations and selections. Agency officials informed us that these factors were applied after reviewing the technical scores and rankings of the proposals. The selecting official cited the program policy factors of geographic diversity, technical diversity, cost considerations, and the desire to involve small and disadvantaged businesses and/or Indian Tribes in the program as reasons for selecting or not selecting projects in accordance with their technical ranking. In some cases more than one of these factors was cited.

Geographic diversity was cited most often--nine times as a reason for selecting a project and six times for not selecting projects in the coal gasification, coal liquefaction, and oil shale areas. We noted that geographic diversity was achieved in the entire program, since awards were made in 46 States, the District of Columbia, and Puerto Rico. In the areas we reviewed, the technical diversity factor was cited seven times for selecting projects and four times for passing over a project. The cost factor was used once for selecting a project and four times for not selecting projects. The desire to select projects involving small and disadvantaged businesses and/or Indian Tribes was cited once. In seven instances no reason was given for passing over proposals in favor of others which had received lower scores. According to agency officials, although no reasons may have been given, program policy factors were considered in rejecting these proposals.

Use of program policy factors

As mentioned earlier, the selection official and Senior Review Board has flexibility in applying the program policy factors. They could cite any or none of the eight factors in choosing among the proposals ranked by the evaluation teams. The following discussion of the high-Btu coal gasification selections illustrates the use of the factors in determining the final selections. In the high-Btu coal gasification area the third- and fourth-ranked projects were selected over the first- and second-ranked projects.

In rejecting the first-ranked project the geographic diversity policy factor was cited. It was pointed out that this number-one-ranked project, to be located in Wyoming, was identical in technical details, in size, and in cost to the third-ranked project. The third-ranked project is located in New Mexico. In rejecting the first-ranked project, DOE stated that it had already selected a coal liquids project in Wyoming, so instead of selecting another project in Wyoming, it chose a similar but lower-ranked project in New Mexico to achieve geographic diversity.

The number-two-ranked project was also rejected. The rationale given was that the number-two-ranked project would be the same size as the third-ranked project but requested a larger grant. Thus, the cost-related policy factor was used in rejecting the number-two-ranked project.

The third-ranked project was selected based on the policy factors used in rejecting the first two projects--geographic diversity and cost.

In selecting the fourth-ranked project DOE cited the policy factors relating to the desire to involve Indian Tribes in the program.

In our opinion, it appears that DOE could have used these same four policy factors in a different manner to justify other selections. Keeping within the high-Btu gasification area as an example, we note three instances where applying different weight to the factors would have altered the final selections. These examples are intended to show the flexibility in the use of program policy factors and not as expressing an opinion on the relative merits of the projects in DOE's final selections.

Firstly, while DOE rejected the number-one-ranked project in the high-Btu gasification area it could have cited

the cost program policy factor as a reason for selecting the gasification project. The coal liquids project cost about a million dollars more and its grant cost per output was almost three times higher than the high-Btu project.

In the second instance, while DOE accepted the fourth-ranked high-Btu project, citing the factor relating to Indian Tribes, it could have rejected the project in favor of the number-one-ranked project by citing the cost related program policy factor. The fourth-ranked project's grant cost per plant output is almost twice that of the number-one-ranked project.

The final example concerns the selection of the third- and fourth-ranked projects. These projects used the same gasifier and similar coals. DOE could have used the policy factor relating to technical diversity to reject one of these projects.

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CONGRESS OF THE UNITED STATES  
HOUSE OF REPRESENTATIVES  
SUBCOMMITTEE ON ENERGY AND POWER  
OF THE  
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE  
WASHINGTON, D.C. 20515

October 2, 1980

The Honorable Elmer B. Staats  
Comptroller General of the United States  
U. S. General Accounting Office  
441 G Street, N.W.  
Washington, D. C. 20548

Dear Mr. Staats:

The Department of Energy and Related Agencies Act (P.L. 96-126) authorized the Department of Energy to award \$200 million for synthetic fuel feasibility studies and cooperative agreements. The Act also authorized \$2 billion for financial incentives such as loan guarantees, price supports, and purchasing agreements.

The Department of Energy has announced the first group of awards for synthetic fuel feasibility studies and cooperative agreements as authorized by P.L. 96-126. DOE plans to select the second group within the next few months. Solicitations for financial incentives are expected to be issued soon.

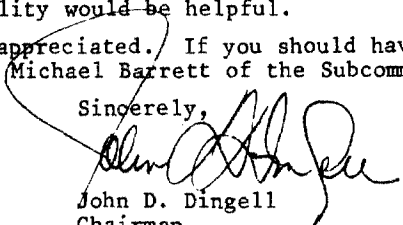
Noting the magnitude of the funds involved and the importance of these efforts, I would appreciate the assistance of the General Accounting Office to review and report on the initial phase of the alternative fuels programs -- that is the awards for \$200 million in feasibility and cooperative agreements. This report should present GAO's findings on management policy issues as well as the effectiveness of the issued awards. In order to have an impact on the awarding of the financial incentives, this report should be completed before the end of November 1980.

In a more detailed review, I would like you to address the broader issue of DOE's effectiveness in commercializing synthetic fuels from coal, oil shale tar sands and other synthetic fuels as defined in the Energy Security Act. This report should discuss how on-going DOE activities to the Nation's production goals from synthetic fuels of 500,000 barrels per day of oil equivalent by 1987 and 2 million barrels per day by 1992.

Your comments should be made available to assist the newly created Synthetic Fuels Corporation since it could experience similar problems. I am also concerned that near-term commercially viable and less costly technologies relating to heavy oil refining and residual conversion may be overlooked in a haste to create liquid synthetic fuels from coal and oil shale. Your review and comments on this possibility would be helpful.

Your attention is appreciated. If you should have any questions, please contact Roger Staiger or Michael Barrett of the Subcommittee staff.

Sincerely,



John D. Dingell  
Chairman

INDUSTRY ORGANIZATIONS CONTACTED

American Gas Association	Panhandle Eastern Pipeline Company
Dynalectron Corporation	Rocky Mountain Energy Company
Engineering Societies Commission on Energy, Inc.	Superior Oil
Exxon U.S.A. Corporation	Tenneco Incorporated
Fluor Engineers and Constructors, Incorporated	Texas Eastern Corporation
Gas Research Institute	The Pace Company Consultants and Engineers, Incorporated
Houston Natural Gas Corporation	Tosco Corporation
Mobil Research and Development Corporation	Transco Corporation
Multi Mineral Corporation	Union Oil Company of California
National Coal Association	Westinghouse Electric Company
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