UNCLASSIFIED
GAO/PLRD-81-49

END
DOE Contracts To Demonstrate Coal Liquefaction Adequately Protect Government Interests.

Solvent Refined Coal I and Solvent Refined Coal II are processes for converting high ash and sulfur content coals to clean burning, environmentally acceptable solid and liquid fuels. The Department of Energy in 1980 awarded contracts to two companies to demonstrate these processes.

The Chairman asked GAO to evaluate the negotiation and award of these contracts to determine whether they adequately consider and protect the Government’s interest.

GAO found that the contracts adequately protect the Government’s interest and were awarded in accordance with established Federal and Department of Energy procurement policies and regulations.
The Honorable Sidney R. Yates  
Chairman, Subcommittee on Interior and Related Agencies  
Committee on Appropriations  
House of Representatives  

Dear Mr. Chairman:

In your letter dated September 3, 1980, you asked us to evaluate the negotiation and award of the Department of Energy's (DOE's) two contracts for the Solvent Refined Coal Liquefaction Demonstration (SRC I and II) projects. You asked us to determine if the contracts adequately consider and protect the Government's interest, and more specifically, to review the contract provisions related to contractor rights and liabilities, patents, and revenue and royalty sharing.

Although the contracts are unique and there are no criteria for measuring some of their provisions, we believe that the contracts adequately protect the Government's interest, particularly when considering that DOE's primary objective was to facilitate commercialization of the processes. The contracts are awarded in accordance with established Federal and DOE procurement policies and regulations. Further, DOE structured the contracts to provide incentives for the contractors to pursue the successful completion of the projects. The contractors, for example, will share the projects' costs and have the potential for receiving royalties from the sale of licenses to the processes. The Government, on the other hand, may recover 2.5 times its investment through revenue sharing, sale of the plants, and royalty sharing if the projects are sufficiently profitable. Subsequent to our review, we were told by a high-ranking DOE official that the SRC II contract was terminated on July 2, 1981, for the Government's convenience.

Following is a brief description of the projects, a discussion of the objectives and scope of our review, and a synopsis of our findings on each of the major contract provisions reviewed.

DESCRIPTION OF PROJECTS

SRC I and II are projects to convert high ash and sulfur content coals to clean burning, environmentally acceptable
solid and liquid fuels. The projects are divided into three phases: (1) detailed engineering and design, (2) procurement and construction, and (3) operation and evaluation.

On August 7, 1980, DOE awarded contract No. DE-AC05-78OR03054 to the International Coal Refining Company, a joint venture between Wheelabrator-Frye, Inc., and Air Products and Chemical, Inc., to demonstrate the SRC I process. The SRC I process will remove most of the ash and sulfur from eastern coals to produce a clean burning solid fuel. The process can also convert the solid fuel into anode-grade coke, used by the aluminum industry, or into liquids such as naphtha.

On July 31, 1980, DOE awarded contract No. DE-AC05-78OR03055 to the Pittsburgh and Midway Coal Mining Company, a wholly owned subsidiary of Gulf Oil Corporation, to demonstrate the SRC II process. The contract was later assigned to Solvent Refined Coal International, Inc., a joint venture between Pittsburgh and Midway Coal Mining Company; Ruhrkohle, a West German company; and Mitsui, a Japanese company. The SRC II process produces a clean, nonpolluting liquid fuel from high sulfur bituminous coal.

DOE's objectives for the SRC projects are to demonstrate the technical feasibility of constructing and operating a commercial plant for both processes and to commercialize the technology as quickly as possible. One of DOE's national goals is to produce up to 500,000 barrels (equivalent) a day of a clean fuel substitute for imported petroleum by 1990. DOE officials told us that they considered the SRC projects so important in meeting that goal that the Government would have financed the projects even without contractor cost sharing.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objective was to ascertain if the prime contracts adequately considered and protected the Government's interest. We did not analyze any subcontracts awarded by the prime contractors. We also did not assess the relative merits of the Government's involvement in the SRC projects.

We examined prime contract provisions relating to cost sharing, revenue sharing, sale of the plants, royalty sharing, cost overruns, patents, terminations, and the Buy American Act. We reviewed the contractors' proposals, DOE's evaluation of the proposals, DOE's prenegotiation positions, minutes of the negotiations, applicable Federal and DOE procurement policies and regulations, and various other documents and records related to the projects. We also discussed various aspects of the negotiation process and contracts with DOE officials who negotiated the contracts and are currently managing the projects.
Federal and DOE procurement regulations do not address some of the SRC contract provisions and there are no criteria against which these provisions can be adequately assessed. The regulations, for example, do not address such factors as the amount of cost participation the Government should attempt to obtain on such programs or the degree to which potential cost overruns should be shared between the Government and participating contractors. Because of this lack of criteria, we made our assessment of the reasonableness of the agreements reached during the negotiation process, in part, on our best judgment of the circumstances leading to the award of the two contracts.

**CONTRACT PROVISIONS**

The following summarizes our observations on each of the major contract provisions. A more detailed discussion is presented in the appendix.

**Cost sharing**

The SRC I and II projects are currently estimated to cost about $1.5 and $1.4 billion, respectively. The Government, contractors, two foreign governments, and the State of Kentucky will share the projects' costs.

The SRC I contractor is contributing $118 million toward the project and Kentucky is contributing $30 million. The SRC I contractor's contribution includes $71 million in cash and $10 million for purchase of the site (a total of $81 million in cash and land), $28 million in foregone management fees, $7 million for foregone fees to affiliates, and $2 million for unrecovered cost credits.

The SRC II contractor will contribute up to $130 million toward the project and the governments of West Germany and Japan are to contribute at least $634 million. The SRC II contractor's contribution includes $50 million for certain cost overruns, $30 million in foregone management fees, $25 million in technology previously developed by Gulf Oil Corporation, $12.5 million in cash from foreign companies and $7 million for purchase of the site (a total of $19.5 million in cash and land), and $5.5 million in other contributions. (See p. 7.)

**Revenue sharing**

DOE concluded that sharing revenues with the SRC I contractor would be an incentive for the contractor to invest its funds in the project and to develop a market for the product. DOE decided against sharing revenue with the SRC II contractor because of its small cash investment in the
project and the already established market for the SRC II product. Conversely, DOE determined that revenue from the SRC II project would be shared with the West German and Japanese governments because of their large investments in the project. If cost overruns occur and the foreign governments do not share in that cost, they will not share any revenues until the U.S. Government recovers the amount of the overrun. (See p. 9.)

**Sale of plants**

The SRC I and II contracts provide options for the contractors to purchase the Government's interest in the plants at the end of the operation phase. Language was incorporated into DOE's fiscal year 1981 Appropriation Act which provided authority to sell the plants directly to the contractors, thus bypassing normal Government property disposal procedures. In addition, the sales price under both contracts is negotiable and subject to arbitration. Thus, DOE plans to negotiate an equitable sale based on the market value of the plants and consistent with its objective of commercializing the technologies. (See p. 10.)

**Royalty sharing**

The contractors will become the Government's exclusive licensing agents for the technologies if the projects are successful and commercialized. Royalties from the sale of licenses will be shared between the Government, contractors, West Germany, and Japan. In addition, the SRC I and II contractors are to pay license fees or royalties to the Government if their future production capacity exceeds limits established in the contracts. DOE waived the Government's patent rights in order to make the contractors exclusive licensing agents. DOE believes a patent waiver, coupled with royalty sharing, provides the contractors an incentive to commercialize the technology. (See p. 12.)

**Cost overruns**

The SRC I contractor's cost participation in the project is limited to $118 million; therefore, the Government will be responsible for any cost overruns. The SRC II contractor will contribute up to $50 million to cost overruns if plant modifications are needed to improve operability or reliability or to achieve design capacity of the plant. The foreign governments are not required to share cost overruns, but may volunteer to do so. If the foreign governments do not share cost overruns, they will not share any revenue or royalties until the U.S. Government recovers the cost overruns.
The contracts, however, do provide incentives for the contractors to minimize cost overruns. Under the SRC I contract provisions, for example, cost overruns will be amortized as part of operating expenses in arriving at net revenues to be shared by the Government and contractor. If large cost overruns are experienced, it will take the Government longer to recover its investment, thus delaying the contractor's receipt of royalties. (See p. 15.)

Patents

DOE waived the Government's domestic and foreign patent rights to inventions in accordance with regulations to entice the contractors and foreign governments to participate in the projects and to facilitate commercialization of the SRC processes. (See p. 12.)

Terminations

The SRC I and II contracts allow the Government to terminate the contracts for default or convenience. The SRC II contractor can also cause a termination for the Government's convenience if it believes that the project is not technically and economically feasible. This right expires 30 days after the project baselines are established or at the end of the design phase, whichever occurs first. In addition, the international agreements for the SRC II project allow any of the participants to terminate the agreement if they no longer wish to participate in the project. West Germany and Japan, however, will be liable for their share of costs up to the time either terminates the agreement. (See p. 16.)

Buy American Act

DOE determined that the public's interest would best be served by waiving the Buy American Act for the SRC II project. The waiver enabled DOE to obtain foreign participation in the project. (See p. 21.)
DOE was invited to comment on this report and agreed with its contents.

As arranged with your Office, we are sending a copy of this report to the Chairman, Subcommittee on Environment, Energy, and Natural Resources, House Committee on Government Operations. Also, as agreed, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days 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,

Donald J. Horan
Director
APPENDIX I

ANALYSIS OF SRC I AND II CONTRACT PROVISIONS

COST SHARING

The SRC I and II projects are estimated to cost about $1.5 and $1.4 billion, respectively. The SRC I contractor, International Coal Refining Company, will contribute $118 million and the SRC II contractor, SRC International, Inc., will contribute up to $130 million. DOE officials sought a larger contribution from the contractors even though procurement regulations do not require specific cost sharing ratios. In addition to the contractor participation, Kentucky will contribute $30 million to the SRC I project and West Germany and Japan will contribute $317 million each to the SRC II project.

<table>
<thead>
<tr>
<th>SRC I</th>
<th>Amount (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Coal Refining Company:</td>
<td></td>
</tr>
<tr>
<td>Foregone fees to affiliates</td>
<td>7.0</td>
</tr>
<tr>
<td>Unrecovered cost credits (estimate)</td>
<td>2.0</td>
</tr>
<tr>
<td>Site purchase price (estimate)</td>
<td>10.0</td>
</tr>
<tr>
<td>Cash (estimate)</td>
<td>71.0</td>
</tr>
<tr>
<td>Management fee foregone</td>
<td>28.0</td>
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<tr>
<td>Total</td>
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</tr>
<tr>
<td>Kentucky</td>
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</tr>
<tr>
<td>TOTAL</td>
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</table>

<table>
<thead>
<tr>
<th>SRC II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SRC International, Inc. (note a):</td>
<td></td>
</tr>
<tr>
<td>Necessary plant modification</td>
<td>50.0</td>
</tr>
<tr>
<td>Foregone management fees</td>
<td>30.0</td>
</tr>
<tr>
<td>Technology</td>
<td>25.0</td>
</tr>
<tr>
<td>Cash from foreign companies</td>
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<tr>
<td>Land</td>
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<tr>
<td>Other</td>
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<tr>
<td>Total</td>
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<tr>
<td>West Germany</td>
<td>317.0</td>
</tr>
<tr>
<td>Japan</td>
<td>317.0</td>
</tr>
<tr>
<td>Total</td>
<td>634.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$764.0</td>
</tr>
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</table>

a/The SRC II contract was originally awarded to the Pittsburgh and Midway Coal Mining Co. (P&M), a wholly owned subsidiary of the Gulf Oil Corporation. It was later transferred to SRC International, Inc., a joint venture company made up of P&M, a West German company, and a Japanese company.
The most obvious difference between the SRC I and SRC II cost sharing provisions is the direct cash outlay. The SRC I contractor will contribute $81 million in cash and land, while the SRC II contractor may have to contribute only $19.5 million in cash and land. Most of the SRC II contractor's potential cash outlay is in the performance contribution of up to $50 million. Under that contract provision, when the plant becomes operational, if modifications are needed to make the plant meet its designed operational capacity, the Government and contractor will share the costs equally up to a maximum of $100 million. If no modifications are needed, the contractor will not have to contribute any of the performance related funds.

Negotiation of cost sharing agreements

DOE's procurement regulations require reasonable contractor cost participation in demonstration projects unless exempted by the Under Secretary. The regulations do not define reasonable but do provide a number of factors for the contracting officer and the program office to use in determining what is reasonable on a case-by-case basis. DOE negotiators attempted to increase contractor cost participation in the SRC I and II projects but were unable to do so.

DOE negotiators attempted to get the SRC I contractor to contribute more and also attempted to find other investors in the project. After reviewing the contractor's proposal, DOE concluded that its contribution was reasonable because the partners are considered relatively small businesses and one partner had earned only about $45 million in net income the previous year.

DOE concluded that P&M's contribution to the SRC II project was inadequate and asked for an increased cost share. P&M refused to increase its share because it maintained that it was responsible for obtaining foreign participation in the project and stated that the former Deputy Secretary of Energy had agreed to a $100 million contribution.

DOE's negotiators said that the former Deputy Secretary had told P&M that $100 million would be acceptable. According to DOE officials, the former Deputy Secretary sought a contractor contribution that was large enough to insure top management's commitment to the project. Additionally, he wanted the contractor to have money at risk relative to the plant's performance.
In view of DOE's objective of rapid commercialization and the desire to have private participation in the demonstrations, it was willing to accept the contractor's cost sharing proposals. The contractors are committing their own funds to the projects and this should be sufficient incentive for the contractors to pursue successful completion of the projects.

**Revenue Sharing**

DOE obtained special legislation to allow revenue sharing from demonstration projects. The United States, West Germany, Japan, and the SRC I contractor will share revenue from product sales during the demonstration period. The SRC II contractor will not share project revenues. Revenue sharing was used to compensate the West German and Japanese governments for their large investments in the SRC II project and to give the SRC I contractor an opportunity to recover part of its investment.

**Contract provisions**

SRC I product net revenues during the demonstration will be shared equally by the Government and the contractor. The contractor, however, cannot receive more than $49.8 million in cash. If product net revenues exceed $99.6 million, the contractor's share of the excess will be credited against the sales price of the plant.

The SRC II contractor will not share any revenue from product sales. The Government, however, will share net revenues with the governments of West Germany and Japan.

**Authority**

DOE received special legislation to use revenue sharing in both SRC projects. Public Law 96-514 was enacted with a provision that

"** ** revenues and other monies received by or for the account of the Department of Energy or otherwise generated by sale of products in connection with demonstration plant projects of the Department appropriated under this Act may be retained by the Secretary of Energy, to be available until expended, and used only for plant construction, operation costs, and payments to cost-sharing entities as provided in appropriate cost-sharing contracts or agreements ** **."

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Need for revenue sharing

DOE concluded that revenue sharing should be used to compensate the SRC I contractor and foreign governments for their investments in the SRC demonstrations. The SRC I contractor proposed revenue sharing and DOE concluded that revenue sharing would:

--Induce the contractor to produce efficiently and sell the SRC I products. To share in net revenues, the contractor will want to produce SRC I as cheaply as possible. The contractor has an incentive to hold production costs, including any construction cost overruns, to a minimum and to develop markets in which to sell SRC I products.

--Give the contractor a reasonable opportunity to recover its investment. Over $80 million of the contractor's $118 million cost participation will be in cash and land. As compensation for the relatively large cash contributions, DOE agreed to give the contractor a return on equity in the form of revenue sharing.

The SRC II contractor will not share any revenues from product sales during the demonstration. The contractor did not propose revenue sharing, but attempted to negotiate it after discovering that the SRC I contractor would be sharing revenue. DOE did not agree to share revenues because P&M has a relatively small cash investment in the project, and there is a readily available market for the SRC II product.

Since the governments of West Germany and Japan are contributing about $317 million each to the project, DOE concluded that those governments should share net revenues from the demonstration. Therefore, according to the international agreements, the United States will receive 50 percent of net revenues while West Germany and Japan will receive 25 percent each.

SALE OF THE PLANTS

Both contracts contain options for the contractors to purchase the Government's interest in the demonstration plants at the completion of the operating phases. Purchase by the contractors will conclude the Government's participation in the projects, except for royalties. DOE's fiscal year 1981 Appropriation Act authorizes it to sell the plants directly to the contractors, bypassing normal Government property disposal procedures.
Sales process

Before the end of the projects' operating phases, each contractor must notify DOE of its interest in purchasing the plant. At the same time, the SRC I contractor must submit its computation of the sales price. DOE will notify the contractor whether it accepts that price; if not, DOE will provide its own computation, and the price will be either negotiated or settled by arbitration. In SRC II, the sales price will also be determined by either negotiation or arbitration.

Calculation of the sales price

The sales price will be based on

--the plant's economic value (reasonable economic rate of return on investment) for SRC I and

--the plant's fair market value for SRC II.

Both contracts identify similar factors to be used in computing those values, but only the SRC I contract provides specific guidelines. Under the SRC II contract, both parties will attempt to establish the fair market price by mutual agreement.

If a sales price cannot be agreed upon under either contract, the issue will be settled by arbitration. Both contractors have the right to reject arbitration decisions. In that case, DOE will try to dispose of the plant by other means.

Disposition of the plant if not bought

Under each contract, the contractor is required to operate the plant for up to 9 months if it elects not to buy it and the Government wishes to continue operation. If operation is continued, the contractor will be reimbursed on a cost-plus-fixed-fee basis.

If DOE disposes of the plant, the contractors will receive a proportionate share of the proceeds based on the ratio of their cost participation to total plant cost. The contractors will have the right to bid during the disposition.

Authority

The contractors felt it was necessary to enact legislation authorizing DOE to sell the SRC plants without regard to any other laws or regulations. DOE's fiscal year 1981 Appropriation...
Act included a provision providing the Secretary of Energy the authority (contained in Public Law 85-804) to sell the plants directly to the contractors without competition.

PATENTS AND ROYALTY SHARING

DOE waived the Government's patent rights and made the SRC I and II contractors exclusive licensing agents for the technologies because the contractors and other parties insisted on these contract provisions as conditions for their participation in the projects. DOE agreed to these provisions because it considered them beneficial to the objective of commercializing the technologies, and its actions were in accordance with applicable regulations. DOE did, however, retain the rights to:

-- make, use, and sell the technologies throughout the world by or on behalf of the Government, States, and domestic municipal governments;

-- require the granting of licenses to applicants to the extent that the technologies are required for public use by governmental regulations or to fulfill health, safety, or energy needs;

-- terminate the patent waiver and licensing provisions under certain conditions;

-- share in royalties from the sale of licenses to the technologies; and

-- receive royalties or licensing fees if the contractors or their principal stockholders build production capacities in excess of specific volumes.

Termination rights

Both the SRC I and II contracts enable DOE to terminate the patent waiver and exclusive licensing provisions if:

-- the waivers were based on material false statements or nondisclosure of facts by the contractors,

-- the contractors fail to satisfactorily demonstrate that effective steps have been or will be taken to accomplish substantial utilization of the technologies, or

-- the contractors fail to comply with specific contract provisions.
Commencing 4 years after the effective date of a patent waiver, DOE can also terminate the waiver and licensing provisions or require the contractor to issue licenses to applicants if the waiver has tended to substantially lessen competition or cause undue market concentration in any section of the country.

**Royalties and fees**

Both the SRC I and II contracts provide for the Government to share in royalties from sales of licenses for the technologies and receive royalties or licensing fees if the contractors or their principal stockholders build production capacities in excess of certain limits.

**Royalties from sales of licenses**

The contracts contain specific but different formulas for dividing royalties from the sale of licenses to the technologies between the Government and contractors. Basically, however, the Government will share in such royalties from the SRC I technology until the first of the following events:

--- Money received from all sources (revenues, royalties, license fees, and sale of the plant) equals 2.5 times its investment in the project.

--- The last U.S. patent expires.

--- The first license is 25 years old.

Under the SRC II contract, the Government will share in such royalties until the first of the following events:

--- Money received from all sources (revenue, royalties, and sale of plant) equals 2.5 times its investment and the investments of West Germany and Japan in the project.

--- Ten years after the first royalties are received by the contractor.

--- Twenty years after the project is terminated.

West Germany and Japan each will receive 25 percent of the royalties received by the Government under the SRC II contract after any offsets for arrears in required project payments and their nonparticipation in project cost overruns.

**Production capacity fees and royalties**

The Government will also receive a licensing fee or royalty under the SRC I and II contracts if the contractors or their
principal stockholders build production capacities in excess of specific limits.

The SRC I contract requires the contractor to pay a license fee to the Government for cumulative production capacity in excess of 300,000 barrels a day for commercial plants it builds in the United States. The license fee is to be equal to the established royalty rate for sales of licenses to the technology. The license fee will not be payable after the Government's right to share in royalties ends.

The SRC II contract requires the contractor to pay a royalty to the Government for cumulative production capacity exceeding 400,000 barrels a day for plants it builds in the United States. The contractor's foreign stockholders are required to pay a royalty to the Government for cumulative production capacity exceeding 200,000 barrels a day for plants they build in the United States. The royalty rate will equal that established for sales of licenses to the technology and payments will terminate when the Government's rights to share in other royalties ends.

Regulations

DOE's regulations provide that the Government will have title to patents resulting from DOE contracts unless waived by the Secretary or other designated officials. The Government's rights can be waived if it is in the best interest of the United States and general public based on the following objectives.

--Make the benefits of the energy research, development, and demonstration program widely available to the public in the shortest practicable time.

--Promote the commercial utilization of such inventions.

--Encourage participation by private persons in DOE's energy research, development, and demonstration program.

--Foster competition and prevent undue market concentration or the creation of maintenance of other situations inconsistent with the antitrust laws.

The regulations do not provide specific guidance on when contractors should be granted licensing rights or on sharing arrangements for royalties. Both conditions are authorized, however, on a case-by-case basis.

The SRC I and II contractors, as well as foreign participants, wanted the Government's patent rights waived, and the
contractors made exclusive licensing agents as a condition of their participation in the projects. These parties believed that the patent waivers and licensing rights would significantly facilitate commercialization of the technologies.

In granting the patent waivers and licensing rights, the designated DOE official concluded that the success and commercialization of the projects would benefit from such actions. The following factors were also considered in the decisions.

SRC I contract:

-- Participation of the contractor would substantially assist the Government in demonstrating the environmental acceptability and the technical, economic, and commercial potential of converting high sulfur coals to clean burning boiler fuels and feedstocks.

-- The cost sharing contribution of the contractor.

-- The contractor's willingness to share royalties with the Government.

SRC II contract:

-- The contractor's participation would substantially assist the Government in meeting the goals or producing synthetic fuels from coal, thus reducing demands for imported oil.

-- The cost sharing of the contractor toward the overall SRC II project.

-- The securing of contributions by the governments of West Germany and Japan.

-- The contractor's willingness to share royalty income from commercial licensing of patents and technology.

The royalty sharing arrangements were negotiated between DOE, the contractors, and foreign participants.

COST OVERRUNS

The SRC I contractor's cost participation in the project is limited to $118 million; therefore, the Government will be responsible for any cost overruns. The SRC II contractor will contribute up to $50 million to cost overruns if plant modifications are needed to improve operability or reliability or to achieve design capacity of the plant. The foreign governments are not required to share cost overruns, but may
volunteer to do so. If the foreign governments do not share cost overruns, they will not share any revenue or royalties until the U.S. Government recovers the cost overrun amount.

The contracts, however, do provide incentives for the contractors to minimize cost overruns. Under the SRC I contract provisions, for example, cost overruns will be amortized as part of operating expenses in arriving at net revenues to be shared by the Government and the contractor. Also, large cost overruns under both contracts will lengthen the period of time in which the Government shares in revenues and royalties and may make the technologies more difficult to commercialize.

DOE's regulations do not prescribe specific requirements for sharing cost overruns with contractors and other parties on projects such as SRC I and II. Instead, such matters are handled on a case-by-case basis.

DOE tried to negotiate cost overrun sharing arrangements into the SRC I contract, but the contractor said that its contribution to the project was a fixed investment and that DOE would have to pay for any cost overruns.

The SRC II contractor proposed a minimal risk cost overrun sharing arrangement but also wanted to be rewarded for underruns and greater-than-projected production capacity. DOE did not accept the contractor's proposal and negotiated the arrangement whereby the Government and contractor will share equally costs up to a total of $100 million for any modifications needed to improve plant operability or reliability or to achieve designed production capacity. (The contractor's contribution is limited to a maximum of $50 million.) DOE also did not agree to provisions rewarding the contractor for cost underruns or extra production capacity.

CONTRACT TERMINATION

The SRC I and II contracts include provisions that allow the Government to terminate the contracts for default or convenience. In addition, the SRC II contractor may instigate a termination for the Government's convenience up to 30 days after the project baseline is established, but no later than the end of the design and engineering phase if it believes that the project is not technically and economically feasible. In addition, the international agreements for the SRC II project allow any of the participating governments to terminate their participation in the project.
Termination for default

Both contracts define "default" as failure by the contractor to perform the contracted work. If the contracts are terminated for default, the Government receives total interest in the plants and retains any contractor cost sharing contributions, with the exception that the SRC II contractor will be paid any foregone fees for managing the Fort Lewis Pilot Plant which proved the feasibility of the SRC II process. In addition, the SRC II contractor has to allow responsible parties to use its proprietary technical information royalty free.

Termination for convenience

SRC I contract

If the SRC I contract is terminated for the Government's convenience, DOE will reimburse the contractor for credited cost contributions, except credits for fees to affiliates, in exchange for all of the contractor's interest in the plant. DOE may also reimburse the contractor for any other resources devoted to the project. These payments do not have to be made, however, if DOE has established that the contractor willfully engaged in conduct designed to hinder the project, which was the proximate cause of the contract termination.

SRC II contract

If the SRC II contract is terminated for the Government's convenience, the contractor has the following three options unless the termination was caused by the contractor willfully engaging in conduct designed to hinder the project or by the project's lack of technical and economic feasibility.

Under the first option, the contractor may (1) receive cash for (if available), or title to, project land which it bought or (2) purchase the plant with full credit for all cost contributions. Under either election, the contractor would:

1. Assign title to any waived patent to the Government to which the contractor elected to retain title under the SRC II demonstration contract or DOE contracts DE-AC01-79ET10104 and DE-AC01-79ET14800. However, the contractor will retain a minimum contractor license to the inventions covered by the patent.

2. Retain patents that it had elected to retain title to under the demonstration
contract and contracts DE-AC01-79ET10104 and DE-AC01-79ET14800, with the provision that the minimum contractor rights set forth in the demonstration con-
tract and the foreign patent rights granted to the con-
tactor under contracts DE-AC01-79ET10104 and DE-AC01-
79ET14800 shall continue, without additional review,
through the term of the contracts or any extensions,
modifications, or renewals of the contracts. In such
cases, there would be an understanding that the actual
fee arrangement in effect in the contracts at the time
termination will not be modified as a result of
terminating the SRC II demonstration contract.

3. Continue the SRC I licensing commitments of the SRC II
demonstration contract.

4. Continue royalty-sharing arrangements of the demonstra-
tion contract if at least 25 percent of the projected
costs has been funded. However, the U.S. Government
cannot recover more than its investment in SRC II tech-
nology.

5. Continue the commitment to license background patents
with the understanding that reasonable royalties shall
be determined by the procedures set forth in the SRC
II demonstration contract.

Under the second option, the contractor would receive no
return from the Government of any of its cost-sharing contri-
butions, including real property, and then the contractor
would:

1. Retain patents that it had elected to retain title to
under the demonstration contract.

2. Retain patents that it had elected to retain title to
under the provisions of contracts DE-AC01-79ET10104 and
DE-AC01-79ET14800 with the provision that the United
States and foreign patent rights granted the contractor
in these contracts shall continue without additional
review through the term of the contracts, or any exten-
sions, modifications, or renewals. In such cases, there
would be an understanding that the actual fee arrangement
in effect in the contracts at the time of termination
of the SRC II demonstration contract will not be modified
as a result of the termination.
3. Have the option to purchase the plant with full credit for all cost-sharing credits earned by the contractor as of the date of termination.

4. Continue the SRC I licensing commitments set forth in the demonstration contract.

5. Continue royalty-sharing arrangements of the demonstration contract if at least 25 percent of the projected costs have been funded; however, the U.S. Government cannot recover more than its investment in SRC II technology.

6. Continue the commitment to license background patents with the understanding that reasonable royalties shall be determined by the procedures set forth in the demonstration contract.

Under the third option, if the Government is unable to return the contractor's investment because of a lack of appropriated funds, then the contractor would:

1. Have the right to take the land (including any improvements on it) without further expense.

2. Retain patents that it had elected to retain title to under the demonstration contract.

3. Retain patents that it had elected to retain title to under contracts DE-AC01-79ET10104 and DE-AC01-79ET14800 with the provision that the United States and foreign patent rights granted shall continue without additional review through the term of the contracts, or any extensions, modifications, or renewals. In such cases, there would be an understanding that the actual fee arrangement in effect in the contracts at the time of termination of the SRC II demonstration contract shall not be modified as a result of the termination.

4. Continue the SRC I licensing commitments set forth in the demonstration contract.

5. Continue the commitment to license background patents as set forth in the demonstration contract with the understanding that the reasonable royalties shall be determined by the procedures in the contract.
6. Continue royalty-sharing arrangements of the demonstration contract if at least 25 percent of the projected costs have been funded; however, the U.S. Government cannot recover more than its investment in SRC II technology.

If the SRC II contract is terminated (for the Government's convenience) because of willful misconduct by the contractor, DOE will not return any of the contractor's cost-sharing contributions.

The SRC II contract can also be terminated for the Government's convenience by the Government or contractor if either believes that the project is not technically and economically feasible. The contract can be terminated for this reason within 30 days after agreement on the project baseline but not later than the end of the design phase. If the contractor terminates the contract for this reason and the Government prefers to continue the project, the Government can make a written request to the contractor to:

-- Make any portion of the plant site not already transferred available to the Government at a price equal to 80 percent of the contractor's total direct cost of site acquisition and engineering.

-- Deliver at no cost to DOE technical data valued at $25 million by the contractor.

-- Grant responsible parties a royalty-free, nonexclusive right to use its proprietary technical information in the United States.

-- Furnish necessary resources, on a reimbursement basis, to complete construction and operation of the plant for up to a maximum of 24 months.

-- Agree not to compete for any subsequent work on the project unless the contracting officer determines that such competition is in the Government's best interest.

-- Release the Government from indirect or consequential claims or liability, such as lost profits or lost business opportunities resulting from the Government assuming responsibility for the project.

-- Assign to the Government title to any waived patent which the contractor had previously elected to retain. The contractor, however, will retain a minimum contractor's license to the invention.
-- Continue the SRC I licensing commitments set forth in the contract.

If the Government terminates the contract for its convenience at any time and the SRC II contractor wishes to continue the project, the Government will negotiate with the contractor for non-Federal use of the plant; equipment; facilities; site; inventories of materials; and related leases, permits, licenses, and other property. The Government will also attempt to negotiate for the ultimate disposal of the plant.

**International agreements**

Agreements between the United States and West Germany and Japan on the SRC II project also contain termination provisions. Both agreements can be terminated at the discretion of the parties involved, and the United States can terminate the agreements if agreed-to payments are not received within 180 days after the due dates.

If an agreement is terminated, the foreign participant is liable for its respective share of the project costs as defined in the agreement. If the termination results in termination of the project, the foreign participant is also responsible for the resulting termination costs.

Funds provided by the foreign participants will be returned if requested in the event the project contractor withdraws and DOE elects to continue the project. If the contractor's withdrawal terminates part or all of the project, DOE will liquidate applicable assets and proportionately divide the proceeds.

**BUY AMERICAN ACT**

The Buy American Act (41 U.S.C. 10a-d) states that the Government will give preference to purchasing American products. Even though the act states that domestic products are preferred, foreign companies can compete for Government contracts. The Government can buy foreign products only if they are priced at least 6 percent lower than domestic products. The Secretary of Energy determined that waiving the Buy American Act was consistent with the public interest in assuring participation of the West German and Japanese governments in the SRC II project.

The Buy American Act gives the Secretary of Energy the right to waive the act under certain conditions as when

-- the foreign products procured will be used outside the United States,
--the products needed are not mined, produced, or manufactured in the United States in sufficient quantities and satisfactory quality,

--the domestic preference is inconsistent with the public interest, or

--the cost of domestic products are unreasonable.

DOE officials determined that waiving the Buy American Act was not necessary for the SRC I project but was necessary for the SRC II project in order to obtain foreign commitments. Therefore, the Secretary of Energy waived the Buy American Act for SRC II on the basis that it was inconsistent with the public interest.

Similar public interest waivers have been granted in the past. For example, the Government has waived the Buy American Act in foreign military sales agreements to allow industrial participation by the purchasing countries. The waiver is therefore consistent with the Federal Procurement Regulations.

Need for Buy American Act waiver

During negotiations, West Germany and Japan initially insisted that 50 percent of materials and products for SRC II be procured from them based on their project commitments. DOE would not agree to this percentage, but it agreed to waive the act for any products manufactured in West Germany and Japan which are needed for SRC II.