Report on:

The Department of Energy's Loan Guaranty Conditional Commitment to UltraSystems, Inc.
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DATE: April 16, 1987

REPLY TO
ATTN OF: IG-1


TO: The Secretary

BACKGROUND:

The attached report is being sent to inform you of our finding and recommendation.

DISCUSSION:

The purpose of our audit was to determine whether the Department's conditional commitment to UltraSystems, Inc. (UltraSystems) was in compliance with the Geothermal Energy Research, Development and Demonstration Act of 1974 and applicable regulations.

We found that the loan guaranty conditional commitment (i) was contrary to regulations, (ii) subordinated the Government's claim to certain assets, and (iii) provided for a guaranty greater than the 80-percent limit prescribed by the Office of Management and Budget. It also exposed the Government to numerous risks which increased the potential for loss. As of December 1986, the UltraSystems application had been under consideration for over 5 years, which exceeded the time period allowed for final processing of a loan guaranty application.

For these reasons, we recommended that the Assistant Secretary, Conservation and Renewable Energy, discontinue consideration of the UltraSystems loan guaranty application. The Assistant Secretary disagreed with several issues discussed in the report, but concurred with our recommendation and informed us UltraSystems had been advised on February 5, 1987, that its application had been terminated.

John C. Layton
Inspector General

Attachment

cc: The Under Secretary
Assistant Secretary, Conservation
and Renewable Energy
THE DEPARTMENT OF ENERGY'S
LOAN GUARANTY CONDITIONAL COMMITMENT
TO ULTRASYSTEMS, INC.
EXECUTIVE SUMMARY


The Geothermal Energy Research, Development and Demonstration Act of 1974 (Geothermal Act) provides the Department of Energy with $500 million in loan guaranty authority to increase the availability of private sector credit for geothermal projects. It allows the Department to guarantee payment of loans due a lender if the borrower is unable to repay.

The Geothermal Loan Guaranty Program established requirements and Office of Management and Budget (OMB) Circular A-70 set policy and guidelines to protect the Government's interests in the event of default. Guidance and support for the geothermal program are provided by the Office of General Counsel and Procurement's Office of Financial Incentives Operations.

Upon approval of a loan guaranty application, a conditional commitment is signed that contains the terms under which the Department is willing to provide a loan guaranty. Issuance of the guaranty is subject to the applicant meeting the terms in the conditional commitment. In December 1982, the Department signed a conditional commitment to provide a loan guaranty of $44.9 million on a geothermal project proposed by UltraSystems, Inc. (UltraSystems). As of December 1986, UltraSystems' application was still under consideration.

The purpose of our audit was to determine whether the Department's loan guaranty conditional commitment with UltraSystems was in compliance with the Geothermal Act, Geothermal Loan Guaranty Program regulations, and OMB policy and guidelines.

We found that the loan guaranty conditional commitment (i) was contrary to regulations, (ii) subordinated the Government's claim to certain assets, and (iii) provided for a guaranty limit greater than that prescribed by OMB. It also exposed the Government to risks which increased the potential for loss. Furthermore, the UltraSystems application had exceeded the time period required for final processing of a loan guaranty application.

The Assistant Secretary disagreed with several issues discussed in the report, but concurred with our recommendation and informed us UltraSystems had been advised on February 5, 1987, that its application had been terminated.
# THE DEPARTMENT OF ENERGY'S
# LOAN GUARANTY CONDITIONAL COMMITMENT
# TO ULTRASYSTEMS, INC.

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THE DEPARTMENT OF ENERGY'S LOAN GUARANTY CONDITIONAL COMMITMENT TO ULTRASYSTEMS, INC.

Audit Report No. DOE/IG-0236

PURPOSE AND SCOPE OF AUDIT

In December 1982, the Department of Energy signed a conditional commitment to provide a loan guaranty of $44.9 million on a project proposed by UltraSystems, Inc. (UltraSystems). The purpose of our audit was to determine whether the Department's loan guaranty conditional commitment was in compliance with the Geothermal Energy Research, Development and Demonstration Act of 1974 (Geothermal Act) and applicable regulations.

We examined the geothermal program files and discussed their content with cognizant officials at the San Francisco Operations Office and at the Office of the Assistant Secretary for Conservation and Renewable Energy. We also reviewed documents in the offices of General Counsel and Procurement. Field work was conducted between September 1985 and August 1986. We held an exit conference with the Director of Renewable Energy Technologies, Conservation and Renewable Energy, on December 12, 1986, to discuss the finding and recommendation in this report.

The audit was performed in accordance with generally accepted government auditing standards and included tests of internal control procedures and compliance with laws and regulations to the extent necessary to satisfy the scope of audit.

BACKGROUND

The Geothermal Act provides the Department with $500 million in loan guaranty authority to increase the availability of private sector credit for geothermal projects. It allows the Department to guarantee payment of loans due a lender if the borrower is unable to repay.

Geothermal Loan Guaranty Program regulations established requirements and Office of Management and Budget (OMB) Circular A-70 set policy and guidelines to protect the Government's interests in event of a default. The overall program is directed by the Assistant Secretary, Conservation and Renewable Energy, with daily operational
responsibility delegated to the Manager, San Francisco Operations Office. Guidance and support for the program are provided by the Office of General Counsel and Procurement in the Office of Financial Incentives Operations.

Upon approval of a loan guaranty application, a conditional commitment is signed that contains the terms under which the Department is willing to provide a guaranty. Issuance of a guaranty is subject to the applicant meeting the terms in the conditional commitment. Final decision authority rests with the Assistant Secretary or, for guaranties over $50 million, the Under Secretary. Although acceptance of new applications was discontinued in March 1982, the Department has continued to process those received prior to that date.

As of December 1986, the Department had issued $285 million in loan guaranty commitments and was at risk for about $32.5 million of this total—the amount drawn-down on the loans. It had also issued a loan guaranty conditional commitment for $44.9 million to UltraSystems.

RESULTS OF AUDIT

The conditional commitment to UltraSystems represented an unreasonable risk to the Department because it:

--subordinated the Government's security interest in certain project assets to the lender;

--provided for a guaranty greater than the 80-percent limit prescribed by OMB;

--allowed the sponsor, UltraSystems, to benefit significantly from the project without any real investment in the project;

--exposed the Government to marketing, commodity, and technical risks that reduced the chances for loan repayment; and

--exceeded the time period allowed for final processing of loan guaranty applications.

If the UltraSystems project is approved, the Government could lose at least $6.5 million in the event of a default and would incur a reduction of about $7.6 million in tax revenue in any event.

Our review did not disclose any material internal control deficiencies. Since the review scope was limited as described, it would not necessarily disclose all internal control deficiencies which may exist.
The Department's Claim on Project Assets

The Geothermal Act and OMB Circular A-70 state that collateral on a loan guarantied by the Government should include the project assets. The Geothermal Act discourages subordination of the Government's claim on assets to other lenders in the event of default. OMB Circular A-70 states that the claim must not be subordinated to other lenders in the case of a borrower's default.

A February 1986 conditional commitment offered to UltraSystems subordinated the Government's claim on project inventory and receivables to a bank providing a $5 million unguarantied, working capital loan to the project. This loan is in addition to the $49.9 million project loan, 90 percent of which will be guarantied by the Department. The Department agreed to the subordination because the lender would not provide the working capital loan without a claim on inventory and receivables, the customary security requirement for such loans.

Program officials stated that they generally agree with the non-subordination policy and normally follow it. They added, however, that subordination was justified in this case for several reasons. The Government maintains a first claim on all other project assets, including cash, plant and equipment (projected to cost about $75 million), as well as corporate guarantees totaling $7.5 million. Furthermore, program officials consider that the working capital loan helps ensure against the project's illiquidity. For these reasons, and because they regard OMB Circular A-70 as advisory rather than mandatory, program officials consider the subordination of project inventory and receivables allowable.

Historically, the riskiest aspect of geothermal projects has been resource development—as evidenced by three other guarantied geothermal loans that defaulted during that phase. According to program officials, the development phase of UltraSystems' project will cost an estimated $6.5 million. As of August 1986, the Department had not yet recovered any of the approximately $32.5 million that it had paid on the three defaulted loans, although it had corporate guarantees for a portion of that amount. Negotiations for disposal of collateral and legal actions on corporate guarantees are still pending.

Program officials pointed out that neither receivables nor inventory will exist during development of the project and consequently would not provide any security. The same is true, however, of the cash assets and plant and equipment that the Department has as collateral. Experience on prior defaults tends to support the need for the Government to
take a first claim on all project assets, as provided by the Geothermal Act and required by OMB regulations.

Guaranty Limitation

OMB Circular A-70 states that in general the lender should bear at least 20 percent of the risk on a loan, but the conditional commitment with UltraSystems results in only a 10-percent risk by the lender. This commitment exposes the Government to an additional risk of about $5 million above that required for an 80-percent guaranty.

The Department advised OMB of its intent to guaranty 90 percent of the loan, thus exposing the lender to only a 10-percent risk. OMB maintained, however, that the circular required the lender to bear at least a 20 percent risk; and requested further justification from the Department. We found no evidence that the Department provided this justification. Program officials felt that while the OMB policy is generally followed, it is not mandatory, and there were sufficient programmatic and business reasons to justify an exception in this case. They also noted that both the Geothermal Act and implementing regulations allow a 100-percent guaranty.

Although program officials do not regard the requirements as mandatory, OMB circulars are issued under the authority of the Budget and Accounting Act of 1921. OMB's Office of General Counsel has stated that the circulars are directives—not just guidelines. The Department has already incurred about $32.5 million in cost associated with three defaulted geothermal loans it had guaranteed. Under these circumstances, we believe that the most conservative interpretation of the OMB circular should be used by the Department in evaluating the UltraSystems and any other loan guaranty applications. Thus, it is our opinion that the Department should not issue a guaranty in excess of 80 percent of the loan value unless an explicit exception from OMB is sought and is granted.

Project Funding

The Geothermal Act requires that at least 25 percent of project funding be provided from a source other than the Department's guarantied loan. This requirement is intended as an incentive to the sponsor to assure a successful project, cover debt service requirements, and provide sufficient collateral for the loan. In this case, however, the funding requirement would be met primarily through limited partners, which have no management control over the project. Project management would be provided by UltraSystems, which will indirectly contribute, at most, 4 percent of the funding. Thus, UltraSystems would have little financial incentive to assure successful completion.
UltraSystems proposes to establish UltraSweet, Ltd., as the borrower of two bank loans totaling $54.9 million. The $45.1 million funding balance for the $100 million project will come from limited partners and UltraSweet, Inc., the general partner. The details of project funding are as follows:

<table>
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<th>Project Funding Source</th>
<th>Amounts (in million)</th>
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<td>Limited Partners</td>
<td>$41.1</td>
</tr>
<tr>
<td>General Partner</td>
<td>4.0</td>
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<tr>
<td>Project Bank Loan ($44.9 million guarantied by DOE)</td>
<td>49.9</td>
</tr>
<tr>
<td>Working Capital Loan</td>
<td>5.0</td>
</tr>
<tr>
<td>Total Project Funds</td>
<td>$100.0</td>
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</table>

Program officials agreed with the policy of requiring a substantial equity contribution by the borrower, and pointed out that it has been complied with in this case. They contended that UltraSystems, the parent corporation, will contribute $4 million in equity and $7.5 million in guarantees for a total at-risk commitment of $11.5 million. For this reason, program officials believe UltraSystems will have a significant stake in the project and an incentive to make it succeed. In addition, UltraSystems has a commitment to fund all construction cost overruns, which could be as high as an estimated $6 million.

We found, however, that the $4 million equity contribution is required from the general partner not UltraSystems. According to a risk assessment by the Department’s Office of the Controller, UltraSystems may lend the $4 million to the general partner. Consequently, if UltraSystems provides the loan to the general partner it would have an indirect investment of $4 million in the project. A draft limited partnership agreement proposes to indemnify UltraSystems against any project losses or cost overruns that are not due to its negligence. If the agreement were approved UltraSystems would not be at risk for the guarantees it would provide.

Further, UltraSystems will benefit from the project by receiving construction contracts of about $73 million, and $450,000 a year to manage the project. UltraSystems and its limited partners will also receive other benefits which will reduce their taxes by about $287,000 and $7.4 million, respectively. Thus, the project, as structured, allows UltraSystems to manage and benefit from the project while avoiding any significant financial risks. This, in our opinion, is contrary to the intent of the Geothermal Act.
Repayment of Loans and Risks

The considerable market and development risk not mentioned later associated with this geothermal project make for less than a reasonable chance of loan repayment. The risks identified during project reviews by the San Francisco Operations Office and various Headquarters offices include:

--a marketing risk, since industry sources claim that the fructose supply exceeds demand by 10 percent (production of fructose—a soft drink sweetener—is the end product of the project);

--a commodity risk, since corn constitutes almost 35 percent of the costs to produce fructose, and corn prices are subject to wide fluctuations; and

--a development risk, since the supplier of geothermal resources (i.e., underground steam) to UltraSystems is having problems providing sufficient resources to two existing projects.

Program officials, while acknowledging some project risks, stated that a consultant's 1985 marketing and commodity report concluded that the principal risk associated with the project is market entry, i.e., establishing a demand for its fructose and winning a sufficient market share. The consultants believe that the fructose market will mature in 1987 and that existing producers will expand to more than meet the demand. Thus, they expect an excess capacity that will adversely affect the project when it begins production. The report also concluded that, even though the project will not have significant commodity price risks—and will have a transportation cost advantage—it will not be able to operate at 85-percent capacity for at least 12 to 24 months. According to the report, 85 percent is the industry average operating rate to achieve reasonable profitability. Regarding development risk, program officials cited an independent assessment that there is a high probability of adequate geothermal resources.

In our opinion, program officials did not give enough consideration to several pertinent points. For instance, the consultant's report confirms the excess supply of fructose. An internal report disclosed that UltraSystems' geothermal resource supplier is having trouble providing resources that it previously guaranteed to two existing customers. According to the internal report this appears to be more of a management problem than a resource problem. Since UltraSystems' contract is not guaranteed, some Department officials are concerned that the supplier would logically give first priority to the two guaranteed customers. The project manager does, however, have a right to drill its own wells, or to contract with another driller.
Department officials stated that a number of measures were taken to reduce risks in the out-years of the project, such as requiring: (1) sinking funds for early repayment of debt; (2) profits to go to the sinking funds before investors; (3) Departmental approval authority over the project marketing and development plan, project costs, geothermal resource contract and key management decisions; and (4) the project developer to obtain contracts, letters of intent, or expressions of interest from potential customers. They pointed out that other risk reductions will be attained by reassessing project economics at major disbursement points and relating disbursement of funds to achievement of milestones.

While such measures may reduce risks, they primarily affect the project once it is completed and operating. The greatest risk aspect of geothermal projects is in the initial resource development phase. Unless the geothermal resource is developed and there are profitable sales, there can be no sinking fund. The project developer has stated that it cannot obtain firm purchase contracts, and while letters of intent provide some assurance of sales, they are not binding contracts. Reassessing project economics prior to disbursement of funds and at various milestones may reduce risks some, but not significantly. Many of these same measures were used to minimize risks on three previously defaulted loans. The Department has paid about $32.5 million on those loans which it had not recovered as of December 1986.

Application Processing Time and Conclusion

The UltraSystems loan guaranty application was submitted in March 1981. The Geothermal Act requires a final decision on such applications within 4 months. Program officials evaluated the application in 1981 and issued a conditional commitment to UltraSystems for a loan guaranty. As of December 1986, the application had been in process for over 5 years and was still not complete.

Processing of the UltraSystems application was delayed because the applicant repeatedly failed to meet the conditions set forth in the conditional commitment. The most recently revised conditional commitment, issued in February 1986, required a response within 15 working days but, as of December 1986, it had not been received.

Over the past 5-year period, the geothermal resource manager has been unable to provide sufficient geothermal resources to existing projects at UltraSystems' proposed location; the price of oil has decreased significantly, making geothermal energy less advantageous; and numerous changes in the tax law have made the project less attractive to investors.
In two similar cases, applications that had been pending for about 4 years were closed, based on determinations that the applications were not satisfactory and that sufficient time had been granted to correct noted deficiencies. We believe the same determination would be appropriate on UltraSystems' application.

RECOMMENDATION

We recommend that the Assistant Secretary, Conservation and Renewable Energy, discontinue consideration of the UltraSystems application for a loan guaranty.

MANAGEMENT REACTION

We submitted a draft copy of this report to the Assistant Secretary, Conservation and Renewable Energy. The Assistant Secretary disagreed with several issues raised in the report, but concurred with our recommendation and informed us that UltraSystems had been advised on February 5, 1987, that its application had been terminated.

The action taken is a satisfactory response to our recommendation. Management's position is summarized below with our comments.

Management Comments. Management maintains that the report was incorrect in stating that the Department violated OMB Circular A-70. Management stated that OMB circulars are not mandatory but allow a reasonable degree of managerial discretion. Management further stated that OMB was advised of the Department's intention to issue a loan guaranty of 90 percent.

Auditor Comments. We believe that it is clear that OMB circulars carry the authority of the Budget and Accounting Act of 1921 and that the provisions of Circular A-70 reflect current policy that the Government needs to be aggressive in protecting its interest by reducing losses associated with Federal loan guarantees. Although the Department advised OMB that it was considering granting the loan guaranty to UltraSystems based on a 90 percent guaranty, OMB responded that its policy required that such guarantees not exceed 80 percent of the value of the loan. OMB indicated that it wanted additional justification from the Department for granting a 90 percent loan guaranty. We could find no evidence that the additional justification was provided nor did OMB grant an exception to A-70 in this regard. As noted in the report, there have been a number of failures associated with the Department's geothermal loan guaranty program. We believe that the prudent course of action for the Department in these circumstances would be to follow a strict interpretation of the OMB Circular.
Management Comments. Management maintains that the report is wrong in stating that the loan must be closed within 4 months from the date of filing. The 4-month limitation applies only to the acceptability of the application.

Auditor Comments. Public Law 93-410 as amended by Public Law 96-294 requires the Department to reach a final decision on any loan guarantee application within 4 months of the date of filing. This requirement was established in 1980. Our concern, however, is with the 60 months that the UltraSystems application has been in process, not the 4-month limitation.

Office of Inspector General