U.S. Department of Energy
Office of Inspector General
Office of Audit Services

Special Report

Loan Guarantees for Innovative Energy Technologies

DOE/IG-0777

September 2007

Department of Energy
Washington, DC 20585

September 19, 2007

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman
Inspector General

SUBJECT: INFORMATION: Special Report on "Loan Guarantees for Innovative Energy Technologies"

BACKGROUND

Title XVII of the Energy Policy Act of 2005 authorized the Department of Energy to provide loan guarantees for projects that "avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases and employ new or significantly improved energy production technologies as compared to commercial technologies in service in the United States." Currently, the Department has $4 billion in loan guarantee authority and has requested $9 billion in Fiscal Year 2008. Although the Department is proposing that sponsors receiving guarantees under the program make a significant equity investment in the project, under the Act, the Department may guarantee up to 80 percent of total project costs. This will result in significant risk to the Government and, therefore, the American taxpayer.

The Department has experience in the use of loan guarantees to advance the Nation's energy security. During the 1970s and 1980s, the Department made a number of loan guarantees to foster domestic synthetic fuel capability, facilitate the construction of alcohol production facilities and support the development of various uses of geothermal power. Due to a combination of administrative difficulties and changes in the energy market, numerous project guarantees for coal gasification, ethanol plants and geothermal projects defaulted and the sponsors abandoned their projects. The Office of Inspector General (OIG) conducted this special review to identify lessons learned from prior Departmental loan guarantee and related programs. We also sought information from other Federal agencies with experience in such agreements. The Department has a unique opportunity to apply the lessons learned from past experiences as it implements the new loan guarantee program.

OBSERVATIONS

In reviewing audits of past governmental loan guarantee programs, we found that the agencies involved had not always exercised due diligence during critical phases of the loan guarantee process. Problems had been encountered during the origination, monitoring and performance stages of the loan guarantee agreements. Specifically, agency officials had not always:

- Evaluated proposals and potential sponsor's ability to perform and repay the loan;

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- Identified and mitigated project risk;
- Monitored project performance to identify early warning signs of problems; and,
- Appropriately acted to protect the Government's interest in the case of default.

It became clear to us that attention to detail during each phase of the loan guarantee process was fundamental to achieving programmatic goals and managing the financial risk to the Government.

In preparation for issuing the first loan guarantee during the first quarter of 2008, the Department is in the process of finalizing a number of policies and procedures that will constitute the framework for its loan guarantee program. Although there have been some delays, the Department has taken a number of actions to implement the program, including: (1) establishing a high-level Credit Review Board to, among other things, develop program policies and procedures and to make recommendations to the Secretary of Energy on the final approval of loan guarantees; and, (2) developing guidelines for both the technical and financial evaluations of loan applications. During the course of our review, the Department hired a loan guarantee program director with impressive credentials and experience.

LESSONS LEARNED

The loan guarantee effort is slated to be a multi-year, multi-billion dollar program. Programs of this size, complexity and potential political interest, carry with them certain inherent financial and programmatic vulnerabilities. Under these circumstances, and based on past experience, loan guarantee programs need to be closely managed. While the actions taken by the Department to date are commendable, we concluded that there are a number of additional steps that should be taken to foster the success of the loan guarantee program. These include finalizing a staffing plan, developing risk mitigation strategies, implementing and executing a monitoring system and promulgating liquidation procedures.

Program Staffing

In our discussions with other agencies, it was apparent that a capable and proficient staff is essential toward establishing an effective loan guarantee program and minimizing costly mistakes. Although the Department has utilized the expertise of employees detailed from other agencies, at the time of our review a full complement of Federal staff designated to administer the loan guarantee program was not in place and plans to utilize technical experts to assist in the administration of the program had not been fully developed. As the Department moves forward in reviewing pre-applications and soliciting proposals for the official application process, staffing should be the first priority in the establishment of a new loan guarantee office.

To assist in the establishment of its loan guarantee office, the Department proactively queried other Federal agencies with large loan guarantee programs about both the

organizational and staffing structure of their respective offices. Department officials found that the U.S. Export-Import Bank, which in FY 2006 reported guaranteeing 736 loans valued at $8.2 billion, employed 76 individuals to administer its program. The majority of the staff was assigned to the origination and portfolio management and review departments. These included loan officers, legal counsel and various other administrative staff. In addition, the loan guarantee program of the Overseas Private Investment Corporation included 54 individuals, primarily loan specialists, legal counsel and other specialists. According to the information available to us, the Investment Corporation issued $6.3 billion in loan guarantees during FY 2006.

In addition to a well-qualified internal staff, we noted that other agencies utilized outside experts to conduct technical, financial and legal evaluations of loan agreements. For example, officials at the Export-Import Bank advised us that the Bank used outside experts to conduct credit, engineering, legal and financial analyses to provide assurance of the sponsors' ability to repay loan guarantees and to determine the viability of proposed projects. As a direct result of this rigorous process, the Export-Import Bank claimed to have one of the lowest default rates on loan guarantees in the Federal government. In our view, the Department should utilize the experience of other Federal loan guarantee programs as models for its own staffing efforts.

Risk Management

Past reviews at the Department and other Federal entities have disclosed that agencies did not always act to effectively identify and mitigate risk when administering loan guarantee or similar programs. In 2005, for example, we reviewed "Selected Energy Efficiency and Renewable Energy Projects," and found that a pre-award audit noted that a recipient's financial management system could not properly accumulate and report costs. Moreover, the audit found that there were serious concerns about the project's completion as a result of the recipient's poor financial condition. Although these risks were identified before the agreement to fund the project was finalized, the Department did not act to mitigate the financial risks associated with the project. Work ceased on the project before it met its final objective when the recipient and the parent company filed for bankruptcy. Although this review concerned a cooperative agreement, the circumstances illustrated the need for aggressive risk management in the Department of Energy's loan guarantee initiative.

Our colleagues at the Department of Transportation OIG identified similar concerns. The auditors found that Transportation's Maritime Administration used waivers or modifications that allowed the Maritime Administration to approve applications in which borrowers did not meet all financial requirements, specifically relating to working capital, long-term debt, net worth, and owner-invested equity. Although waivers modifying financial requirements were permitted, the waivers allowed Maritime Administration officials to assume greater risk in the loans that they guaranteed. The Transportation OIG recommended a rigorous analysis of the risks that arose from modifying loan approval criteria and subsequent initiatives to impose compensating provisions on the loan guarantee. Examples of the compensating provisions included greater collateral and/or higher equity contributions from the borrower.

While risk varies by project, it became clear that a comprehensive risk assessment and management strategy should be in place and fully functioning prior to issuing any loan guarantees.

Monitoring Strategy

In support of its objective to ensure full repayment of debt under the loan guarantee program, the Department is proposing that participating lenders provide certain eligibility, monitoring and performance services. Specifically, lenders will be responsible for providing reviews and evaluations of a project, servicing and collection of the loan, and ensuring that the collateral package securing the loan remains uncompromised. At the time of our review, the Department had not finalized policy regarding its role in monitoring loan guarantees. The lack of a rigorous Federal monitoring effort can undermine success of the loan guarantee program.

A Department of Transportation review disclosed that, although required, its Maritime Administration could not demonstrate that it had received annual and semiannual financial statements, which may have alerted the agency to financial problems with companies involved in loan guarantees. Between 1993 and 2000, financial statements for one borrower showed that the company had net income in only three of the years and that, over this period, it lost a total of $33.3 million. These financial conditions, among other factors, ultimately caused the borrower to file for bankruptcy. In this case, the OIG auditors found no evidence that the Maritime Administration had routinely requested or performed analyses of the company's financial statements or made systematic site visits and inspections to verify progress. These are, in our view, basic monitoring steps, which the Department should utilize in the administration of its loan guarantee program.

Similarly, reviews at other Federal agencies identified cases in which neither the agencies nor responsible lenders had fully complied with established practices pertaining to project monitoring and fund disbursement. An October 2006 loan guarantee review by the Small Business Administration OIG, for example, found that the lender disbursed loan proceeds directly to the borrower. The purpose was to purchase, among several items, equipment and inventory. When the loan went into default, the lender was not able to substantiate the use of $358,000 in loan proceeds. Although a site visit confirmed that inventory was missing, based on the lack of documentation, the auditors could not even confirm that inventory purported to have been purchased with the loan proceeds ever existed.

Through our discussions with officials in other agencies with large loan guarantee portfolios, all agreed that careful monitoring of both the financial and technical aspects of loan guarantee projects are essential. The Export-Import Bank maintained a separate, in-house monitoring division to oversee critical aspects of guaranteed projects. In developing policies and procedures in this area, the Department should consider a similar monitoring structure to stay abreast of changes in the financial condition of borrowers as well as all other programmatic and technical matters that could impact specific loan guarantees.

Liquidation

The Department should have in place a well-defined process to handle and enforce the terms of its agreements, particularly with respect to restructuring, managing and disposing of assets. A Department of Energy OIG review of the "Department's Collection Procedures for Defaulted Geothermal Loan Guaranties" identified delays of up to two years in liquidating $9.5 million in collateral on three defaulted loans. The review disclosed that although the Department had paid lenders $32.5 million on these defaulted loans, it had not prepared final liquidation plans or notified the U.S. Justice Department to obtain assistance in recovering amounts paid. As a result of these delays, the collective value of the collateral decreased by approximately $2.7 million. The Department also incurred over $690,000 in questionable lease, maintenance and administrative costs.

Reviews by Inspectors General at other Federal agencies as well as those of the U.S. Government Accountability Office also revealed problems in the handling of defaulted assets. For example, in the case of one defaulted loan, Transportation's Maritime Administration conducted on-site inspections after a default. However, the inspections were not conducted in time to properly assess the condition of equipment and infrastructure. The Maritime Administration did not have a market appraisal for the defaulted assets and relied on an interested party to determine the cost of making the project viable. An appraisal of the assets immediately after default would have assisted in preparing a strategy for offering the assets for sale. Although $2 million was received, without an appraisal, it was unclear whether this was the maximum recovery that could have been received.

CONCLUSION

Establishing and managing a sizable Federal loan guarantee program is a challenging task. As this analysis of prior programmatic performance highlights, the establishment of a robust set of administrative safeguards is essential if the loan guarantee program is to be successful in its overall objective, which in this case, centers on the pressing issue of meeting U.S. energy requirements.

cc: Deputy Secretary of Energy
Chief of Staff
General Counsel
Chief Financial Officer

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