U.S. Department of Agriculture

Office of Inspector General
Southwest Region

# Audit Report

## Rural Utilities Service
## Implementation of Loan and Grant Programs That Promote Renewable Energy

Report No. 09601-7-Te
March 2008

UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF INSPECTOR GENERAL

Washington, D.C. 20250

March 21, 2008

REPLY TO
ATTN OF: 09601-7-Te

TO: James M. Andrew
Administrator
Rural Utilities Service

THROUGH: John Purcell
Director
Financial Management Division

FROM: Robert W. Young /s/
Assistant Inspector General
for Audit

SUBJECT: Implementation of Loan and Grant Programs That Promote Renewable Energy

This report presents the results of our audit of the Rural Utilities Service (RUS) implementation of loan and grant programs that promote renewable energy. The overall objective of the audit was to assess RUS' actions related to renewable energy funds.

RUS has reported assistance totaling over $113.5 million in loans and grants to 23 recipients for renewable energy projects from fiscal years (FY) 2001 through 2006. This assistance funded renewable energy projects such as solar, wind, hybrid, hydroelectric and landfill gas. The Department of Agriculture (USDA) anticipates that Congress will increase funding for such programs. Given the increased emphasis on renewable energy for the U.S. economy, the Office of Inspector General (OIG) initiated an audit to assess how RUS is administering these funds, including its internal controls for determining program participants' eligibility, monitoring program activities, and evaluating the effectiveness of renewable energy projects.

We found that RUS' internal controls over its electric loan and grant programs, which include renewable energy projects, were generally adequate. It should be noted that RUS does not have specific programs devoted solely to renewable energy. Instead, projects with a renewable energy component are supported through one of RUS' preexisting loan and grant programs. We found that RUS does not have a mechanism for easily identifying grant applications with renewable energy components; however, we did not take exception.[1] We also found that RUS' controls over program participants' eligibility and efforts to promote renewable energy projects were adequate. However, we did identify one area in which RUS could strengthen program operations relating to renewable energy activities.

We found that RUS did not have a formal strategy to maximize the utilization of funding set aside for renewable energy. Although Rural Development (RD) does have a strategic plan, it is general and not specific to RUS. RUS officials believe that they do not need a strategic plan that is specific to RUS since they are one of the mission areas of RD, and RD has a strategic plan.

Specifically, we noted the following:

- For FYs 2001 through 2006, RUS used only $98.8 million of the approximately $800 million (12 percent) in funds set aside for renewable energy loans.

- Of the $44.7 million funded for grants from FYs 2003 through 2005, only about $14.9 million went to renewable energy projects.

We recommend that RUS develop a formal strategy that will maximize the use of available funding resources for renewable energy projects.

**BACKGROUND**

USDA spent nearly $1.7 billion on renewable energy programs between FYs 2001 and 2006. In 2006 alone, USDA provided more than $270 million in areas such as the commercialization, research, infrastructure development, and technical support of renewable energy projects. On January 24, 2007, the Secretary of Agriculture announced that $1.6 billion in new funding would be included in the 2007 Farm Bill for renewable energy, with a focus on cellulosic energy research and production. This funding will support an array of renewable energy-related efforts underway at USDA.

Within the RD mission area, RUS' Electric Programs provide leadership and capital to upgrade, expand, maintain, and replace America's vast rural electric infrastructure. The Rural Electrification Act of 1936 authorizes the Electric Programs to make direct loans and loan guarantees to electric utilities to serve customers in rural areas. The loans and loan guarantees finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacements required to furnish and improve electric service in rural areas. Eligible borrowers are corporations, States, territories, and subdivisions and agencies thereof, municipalities, people's utility districts, and cooperative, nonprofit, limited-dividend, or mutual associations that provide retail or power supply service needs in rural areas.

RUS has provided assistance totaling over $113.5 million in loans and grants to 23 recipients for renewable energy projects for FYs 2001 through 2006. The Electric Programs provide renewable energy assistance for rural electric utilities. These renewable energy projects include renewable

[1] We discussed the issue with RUS officials, and they agreed that they could improve the tracking of renewable energy loans and grants.

energy systems such as solar, wind, hydropower, biomass, and geothermal power. RUS does not have specific programs devoted solely to renewable energy loans and grants. Instead, projects with a renewable energy component are supported through one of RUS' preexisting programs. RUS' Electric Programs offer the following sources of financial assistance: hardship loans, municipal rate loans, treasury rate loans, and guaranteed loans.

As a part of its assistance to rural communities with extremely high energy costs, RUS has made funds available since FY 2003 for high energy cost grants. These grants fund projects that may include, but are not limited to, renewable energy. For rural communities with extremely high energy costs (where the average residential energy expenditure for home energy is at least 275 percent of the national average), the Electric Programs provide grants to acquire, construct, extend, upgrade, and otherwise improve energy generation, transmission, or distribution facilities. Eligible entities are persons, State and local governments, and federally recognized Indian tribes and tribal entities. Eligible projects provide or improve energy services to eligible communities through on-grid and off-grid renewable energy projects, and energy conservation programs.

## OBJECTIVE

The objective of this audit was to assess RUS' actions related to renewable energy funds. We evaluated key internal controls, such as program participants' eligibility, as well as agency efforts to promote renewable energy projects, monitor program activities, and determine the effectiveness of renewable energy projects.

## SCOPE AND METHODOLOGY

Our audit covered loans and grants for renewable energy projects made by RUS for FYs 2001 through 2006. Fieldwork began April 10, 2007, and ended July 23, 2007.

To accomplish our objective, we conducted interviews with RUS national and regional office officials. We obtained and reviewed loan and grant records from national and regional offices. The record reviews included administrative and financial records, as well as regulations, policies, and procedures used to administer renewable energy projects. In addition, we reviewed the eligibility of the applicants and the agency's efforts to promote renewable energy. Our universe consisted of 23 loans and grants totaling over $113.5 million.

From our universe, we judgmentally selected two loans and two grants totaling over $11.9 million for review and site visits. We selected these four projects because they were all located in Arizona, and Arizona was the only State with both renewable energy loans and grants. We conducted site visits (1) for the two loans in Lakeside and Fort Defiance and (2) for the two grants in Cameron and Grand Canyon West. Our sample represented over 10 percent ($11.9 million/$113.5 million) of the total renewable energy loans and grants issued nationwide. We also conducted interviews, performed physical observations of the renewable energy projects, and reviewed grant recipient and borrower records to ensure that funds were used as intended.

We conducted the audit in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

## FINDING AND RECOMMENDATION

### FINDING 1: Formal Strategy for Renewable Energy Projects is Needed

RUS did not have a formal strategy to maximize the use of funds set aside for renewable energy projects and to ensure the effectiveness of these projects. Although RD does have a strategic plan, it is general and not specific to RUS. RUS officials believe that they do not need a strategic plan that is specific to RUS since they are one of the mission areas of RD, and RD has a strategic plan. As a result, RUS has not maximized the use of available methods of funding, such as loan and grant combinations, to satisfy requests for renewable energy grant project funds.

Over the past several years, the Administration has emphasized renewable energy as a solution to our nation's dependence on foreign sources of energy. Agencies have been encouraged to direct funds from preexisting programs into renewable energy projects.

Departmental regulations state that all managers directing or controlling resources within the Department are responsible for establishing, maintaining, evaluating, improving, and reporting on controls in their assigned areas. The regulations also state that managers are to ensure efficiency and effectiveness in operations.[2] RUS regulations[3] state that grant funds may be used in combination with other USDA assistance programs, including RUS loans.

USDA's Strategic Plan for FYs 2005-2010 and the FY 2008 Budget Summary and Annual Performance Plan make renewable energy a priority for USDA. Additionally, the FY 2008 Budget Summary and Annual Performance Plan states "more attention is being paid to addressing specific priorities that have the potential for significant returns in terms of income and social benefits, including directing the business programs to venture capital opportunities, such as renewable energy and energy efficiency projects."

Although USDA has placed emphasis on renewable energy, a great deal of the funds RUS set aside for renewable energy loans went unused. In FYs 2001 and 2002, RUS approved $8.5 million in loans for renewable energy, but the officials were unable to provide the total amount of loan funds set aside for renewable energy projects in these 2 years. From FYs 2003 to 2006, RUS set aside $200 million each year in loan funds for renewable energy projects.[4] Of the $800 million set aside for energy-related loans from FYs 2003 to 2006, only $90.3 million in loans, or about 11 percent, was used.

[2] Departmental Manual 1110-002, *USDA Management Control Manual*, dated November 29, 2002
[3] 70 F.R. 100, sec. III D 2, dated May 25, 2005
[4] If the agency does not use these funds for renewable energy loans, then the agency makes them available again for other electric loans.

The fact that RUS issued no renewable energy loans in FYs 2005 and 2006 because there were no viable applications demonstrates the low demand for these loans. During FYs 2001 through 2006, for all of its programs, RUS received grant applications totaling approximately $355 million, of which it funded $44.7 million (or about 13 percent). Of the $44.7 million funded, only $14.9 million (33 percent) went to grants with a renewable energy component.

We spoke to RUS officials about the unused energy loan funds and the concurrent limited funding for renewable energy grant projects. RUS officials stated that a lack of tax incentives was a reason for the low demand of loan funds. RUS officials also stated that they have encouraged potential borrowers to apply for grants first. RUS officials believed that once a recipient had obtained a loan, they were ineligible to receive a grant.

In our review of RUS regulations, we did not find a restriction preventing recipients from obtaining a grant after receiving a loan. RUS regulations[5] state that grant funds may be used in combination with other USDA assistance programs, including RUS loans. We also discussed with RUS officials the combining of grant and loan funds. RUS officials stated that combining loan and grant funds for projects was a possible alternative. By using loan and grant combinations, RUS should be able to use less grant funds and more loan funds while still maintaining both the applicant's ability for repaying the loan and providing sufficient working capital and cash flow that will sustain the project. For example, rather than giving a $1 million grant, RUS can require that the applicant take a $700,000 grant coupled with a $300,000 loan, while still maintaining the applicant's ability to have a successful project and pay back the loan. In that way, loan funds are used more often (loan funds are underused now) and limited grant funds are stretched further to more applicants.

The officials also stated that RUS has approved projects that received both RUS electric loans and high energy cost grants; however, the projects did not involve renewable energy. These loans and grants were made separately and not approved at the same time. RUS officials agreed that combining loan and grant funding would make more funds available for renewable energy projects if the grantees were in a position to support the loan.

We believe that RUS should develop a formal strategy that will maximize the use of available funding resources for renewable energy projects

**Recommendation 1:**

Develop a formal strategy that maximizes the effectiveness of renewable energy projects, including the development of goals and performance measures. Include in the strategy the use of grant and loan combinations to maximize the use of available funding resources.

[5] 70 F.R. 100, sec. III D 2, dated May 25, 2005

**Agency Response:**

RUS' written response, dated March 13, 2008, concurred with the recommendation and stated that the agency is developing a comprehensive marketing plan for renewable energy financing. The marketing plan is scheduled to be completed by the end of March 2008.

**OIG Position:**

We accept management decision for the recommendation.

# *Exhibit A – RUS Response*



MAR 1 3 2008

SUBJECT: Utilities Programs - Implementation of Loan and Grant Programs that Promote Renewable Energy - (Audit Number - 09601-007-TE)

TO: Robert Young
Assistant Inspector General for Audit
Office of Inspector General

Attached for your review is Utilities Programs response to the official draft for the subject audit.

This response is being submitted for inclusion in the final report and your consideration to reach management decision on the Recommendation 1.

If you have any questions, please contact Arlene Pitter of my staff at 202-692-0083.

John M. Purcell

JOHN M. PURCELL
Director
Financial Management Division

Attachment

cc:
USEC - Tim McNeilly w/attachment
UP - James Newby
UP - Ken Ackerman w/attachment
OIG - Bruce Karson w/attachment
FMD - Pitter
FMD - File w/attachment
FMD - Reader (2)

United States Department of Agriculture
Rural Development

March 5, 2008

TO: Robert W. Young
Assistant Inspector General
For Audit

THROUGH: John Purcell
Director
Financial Management Division

FROM: JAMES M. ANDREW
Administrator
Rural Utilities Service

SUBJECT: Audit 09601-7-Te, Implementation of Loan and Grant programs that Promote Renewable Energy.

I have reviewed the subject audit report and concur with the recommendation that the Agency develop a formal strategy that maximizes the effectiveness of renewable energy projects, including the development of goals and performance measures and include in the strategy, the use of grant and loan combinations to maximize the use of available resources.

As discussed with your staff, the Electric Programs is developing a comprehensive marketing plan for renewable energy financing. The marketing plan is scheduled to be completed by the end of March 2008. Your staff agreed that the marketing plan would fulfill the requirements of a formal strategy.

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