



U.S. Department of Agriculture



Office of Inspector General  
Western Region

# Audit Report

## Forest Service's Renewable Energy Program

Report No. 08601-52-SF  
August 2008



UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF INSPECTOR GENERAL

Washington D.C. 20250



AUG 12 2008

REPLY TO

ATTN OF: 08601-52-SF

TO: Abigail Kimball  
Chief  
Forest Service

ATTN: Art Seggerson  
Audit Liaison

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

SUBJECT: Forest Service's Renewable Energy Program

This report presents the results of our review of the Forest Service's (FS) Renewable Energy Program. The FS' written response to the draft report is included as exhibit D with excerpts, and the Office of Inspector General's (OIG) position incorporated into the relevant sections of the report.

Based on the written response, we have accepted FS' management decision for all the report's recommendations, except for Recommendations 2 and 11. We will be able to accept your management decision for the remaining recommendations when you provide us with additional information as outlined in the OIG Position section of this report.

In accordance with Departmental Regulation 1720-1, please furnish a reply within 60 days describing the corrective actions taken or planned and the timeframes for completion of the recommendations for which management decisions have not yet been reached. Please note that the regulation requires a management decision to be reached on all recommendations within a maximum of 6 months from report issuance. Please follow your internal agency procedures in forwarding final action correspondence to the Office of the Chief Financial Officer.

We appreciate the courtesies and cooperation extended to us by members of your staff during the audit.

Attachment

# ***Executive Summary***

## ***Forest Service's Renewable Energy Program***

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### **Results in Brief**

We evaluated the Forest Service's (FS) Renewable Energy Program to assess its effectiveness and to determine if FS' efforts are meeting the objectives of the 2005 Energy Policy Act. Overall, we concluded that FS has made strides towards increasing renewable energy production—especially in using woody biomass—but still needs to develop a national strategy for renewable energy resources in national forests. Further, FS needs to more effectively track renewable energy resources to ensure it meets goals established in the National Energy Policy and the President's Advanced Energy Initiative.

The Government Performance and Results Act requires Federal agencies to set goals for program performance and to report results to Congress and the public. However, FS has not established measurable goals and objectives for some renewable resources (wind, solar, hydropower, and geothermal) because the agency considers them less significant relative to its primary source, woody biomass. Although FS has developed a national strategy for using woody biomass, the strategy lacks annual performance measures. In addition, regional plans with quantifiable performance measures for achieving national goals need to be established. One FS region (region 6) has developed a strategic plan for renewable energy, but it does not include quantifiable performance measures for any of its renewable energy resources.

To effectively measure performance, FS should develop a national strategic plan for all applicable renewable energy resources (e.g., wind, solar, hydropower, geothermal, and woody biomass) and corresponding regional strategic plans. Without these, FS lacks a proactive plan to increase the use of renewable energy resources and cannot measure its success in increasing production.

FS has also implemented woody biomass renewable energy programs inconsistently in its regions. To implement the National Energy Policy and the President's Advanced Energy Initiative, FS made its regions responsible for the woody biomass programs but gave no guidance about how to implement them or what staff resources to allocate (i.e., full-time or part-time collateral duty). As a result, officials in each region (coordinators) managed the program differently. This led to significantly less renewable energy activity and production in those FS regions with only part-time (as opposed to full-time) renewable energy coordinators.

Since FS does not have a consistent, comprehensive strategic plan with measurable goals and objectives, the agency has not developed systems

adequate to quantify important information pertaining to the renewable energy program. For example, FS records in its database only that woody biomass comes from its hazardous fuels reduction projects, not the amount, which means FS cannot determine how much of the resource is available for renewable energy. Enhancing the databases that capture such information (or creating a new one) will improve FS' ability to measure its effectiveness in implementing the program. The information gathered will also help FS focus its efforts where they are most needed and the agency will be able to report quantifiable, specific, and relevant accomplishments to demonstrate its progress.

We also determined that FS lacks controls to ensure that the reimbursements to Woody Commercial Biomass Utilization Program grant recipients match the expenses incurred by them. This occurred because FS does not require grant recipients to submit receipts to support the amount reimbursed. Instead the agency relies on vendor quotes submitted with grant applications (i.e., before the expense is incurred). We found problems with reimbursements for two of the five recipients (40 percent) whom we selected for review. This limited sample points to the potential for fraud and abuse when expenses are reimbursed without supporting receipts, which, between fiscal years (FY) 2005 and 2007, was the case for reimbursements totaling \$14.7 million.

Finally, FS does not have formal procedures to ensure that its research projects do not duplicate other USDA research projects. FS relies on information recorded in the Current Research Information System (CRIS) to prevent research from being duplicated. However, the agency has not developed guidance on when its research units should enter their research projects into CRIS or use CRIS to check for duplicative research. As a result, FS has reduced assurance that its research projects are not duplicated by other USDA agencies and that these agencies are aware of similar research projects performed by FS. To strengthen FS' ability to prevent duplicate research, FS should document its procedures for entering research projects into CRIS and for reviewing CRIS for duplicative research.

## **Recommendations In Brief**

To improve its strategic planning and reporting for the renewable energy program, we recommend that FS:

- Develop a national strategic plan for renewable energy that includes measurable goals, methods to achieve those goals, and quantifiable performance measures for all applicable renewable energy resources.
- Require regions to develop strategic plans with measurable goals for renewable energy programs that tie into the national strategic plan and designate a national renewable energy staff to oversee and coordinate the implementation of strategic plans.

- Assess the need to dedicate more staffing resources to the woody biomass renewable energy program and, then, allocate resources accordingly.
- Develop a standard position description for regional renewable energy coordinators that establishes responsibilities, prioritizes tasks, and sets performance goals.

To improve its ability to track renewable energy resource information, we recommend that FS:

- Modify current database systems (or develop a new one) to track the total amount of green tons of biomass material harvested in all forest activities and to detail relevant information about its use.
- Modify existing computer systems (or develop a new one) to track the megawatt capacity and production from wind, solar, hydroelectric, and geothermal resources.

To ensure grant funds are spent for their intended purpose and to avoid duplicative research, we recommend that FS:

- Require periodic spot check reviews of grant recipients' receipts to verify that their claims for reimbursement are allowable and accurately reported.
- Require all FS research scientists review CRIS for duplicate research and certify that they have done so before projects are approved and monitor all FS research units to ensure that they timely enter their research projects into CRIS.

**Agency Response**

In its written response to the draft report, dated July 25, 2008, FS generally concurred with the recommendations in the report and stated its belief that the corrective actions to implement the recommendations will benefit the overall renewable energy program. The complete written response is shown in exhibit D of the audit report.

**OIG Position**

Based on FS' written response, OIG accepts FS' management decision on all but two of the audit recommendations. Additional FS actions are needed in order to reach management decision on the remaining recommendations.

## ***Abbreviations Used in This Report***

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CDW	Corporate Data Warehouse
CRIS	Current Research Information System
FACTS	Forest Activity Tracking System
FS	Forest Service
FY	Fiscal Year
NFS	National Forest System
OIG	Office of Inspector General
SUDS	Special Use Database System
TIM	Timber Information Management System
USDA	United States Department of Agriculture
WBU	Woody Biomass Utilization Grant Program

# Table of Contents

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<b>Executive Summary</b> .....	<b>i</b>
<b>Abbreviations Used in This Report</b> .....	<b>iv</b>
<b>Background and Objectives</b> .....	<b>1</b>
<b>Findings and Recommendations</b> .....	<b>3</b>
<b>Section 1. Implementation</b> .....	<b>3</b>
Finding 1    FS Needs To Establish National and Regional Renewable Energy Goals.....	3
Recommendation No. 1.....	5
Recommendation No. 2.....	6
Recommendation No. 3.....	6
Finding 2    Full-Time Woody Biomass Coordinators Should Be Considered for All Regions .....	7
Recommendation No. 4.....	9
Recommendation No. 5.....	10
Recommendation No. 6.....	10
Recommendation No. 7.....	11
Finding 3    FS Needs To Track Renewable Energy Resource Information .....	11
Recommendation No. 8.....	13
Recommendation No. 9.....	14
Recommendation No. 10.....	14
<b>Section 2. Payment Controls</b> .....	<b>16</b>
Finding 4    FS Needs To Ensure Reimbursements to Grant Recipients Are Justified .....	16
Recommendation No. 11.....	17
Recommendation No. 12.....	18
Finding 5    CRIS Not Effectively Used to Report Research Projects or to Prevent Duplication .....	18
Recommendation No. 13.....	20
Recommendation No. 14.....	20
<b>Scope and Methodology</b> .....	<b>21</b>
<b>Exhibit A – Summary of Monetary Results</b> .....	<b>23</b>
<b>Exhibit B – Audit Sites Visited</b> .....	<b>24</b>
<b>Exhibit C – Number and Amount of Woody Biomass Grants by FS Region</b> .....	<b>25</b>
<b>Exhibit D – Agency Response</b> .....	<b>26</b>

# ***Background and Objectives***

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## **Background**

In the last few years, several policies have expanded FS' role in promoting the Nation's use of renewable energy resources. In 2001, the President's National Energy Policy gave FS direction for producing more energy sources in an environmentally sound manner by increasing the use of and access to woody biomass, geothermal energy, and wind and solar power. In 2003, the Healthy Forest Initiative authorized FS to offer woody biomass grants to encourage use of the resource, and the 2005 Energy Policy Act emphasized FS' part in furthering renewable energy resources. In 2007, the Advanced Energy Initiative authorized increased funding for wind and solar research. The initiative also called for expanded access to Federal lands for wind energy development.

In light of this direction, FS has developed a national strategic plan for meeting its renewable energy responsibilities. In particular, the plan focuses on identifying opportunities to use woody biomass, and to produce bio-energy and bio-products with material removed from FS' lands.

To meet its mandates and goals, FS has drawn on many of its programs within the National Forest System, State and Private Forestry, and Research and Development, as detailed below.

### **National Forest System**

In FY 2006, FS spent approximately \$500,000 to study the development of a reliable and predictable supply of woody biomass across different forestland ownerships. Woody biomass (tree and plant material) is a by-product of forest management, ecosystem restoration, and hazardous fuel reduction. This biomass can then be used to create heat and power. In general, renewable energy practices work to provide a reliable, sustainable supply of resources while developing new markets and technology. Among other tools to produce more renewable resources, FS is increasing its use of stewardship contracting that meets both land management goals and produces woody biomass.

FS also authorizes the use of Federal lands for a wide variety of renewable energy purposes, such as transmitting energy produced from renewable resources (e.g., hydropower). Processing and authorizing applications for these uses facilitates the distribution of affordable, reliable energy, which was made a national priority by the 2005 Energy Policy Act. In 2006, FS planned to use an additional \$5.5 million from its annual appropriation to conduct work in this program area.



## **State and Private Forestry**

State and Private Forestry programs reach across the boundaries of National Forests to States, Tribes, communities, and non-industrial private landowners. Programs include the Urban and Community Forestry Program to facilitate the planting of shade trees in communities to help reduce energy cost for cooling, the Woody Biomass Utilization (WBU) Grant Program to encourage the development of renewable energy alternatives from the low value materials removed from forest restoration activities and wildland urban interface areas, and an educational outreach program to private landowners and community enterprises interested in forest health and the value added use of materials such as wood for energy purposes.

The Healthy Forest Restoration Act of 2003 established the WBU Grant Program. The program helps improve forest restoration by using and creating markets for small-diameter and low-value trees that are removed during restoration work, such as treating forestlands damaged by weather disasters (e.g., hurricanes). These grants are to help communities, entrepreneurs, and others turn materials left over from restoration work into marketable products. FS is authorized to spend up to \$5 million per year through FY 2008 on these grants.

## **Research and Development**

FS actively participates in a Governmentwide research and development initiative aimed at promoting bio-energy and bio-based products. Research activities include developing sustainable biomass production systems, exploring new processes to convert wood into ethanol, and identifying ways to increase energy conservation through changes in manufacturing and harvesting technologies. These activities will help meet the Nation's future energy needs by increasing the use of renewable energy and by fostering opportunities for energy conservation. In FY 2006, FS planned to use approximately \$12 million from its annual appropriation to conduct work in this program area.

### **Objectives**

Our overall objective was to assess the effectiveness of FS' renewable energy program and whether its expenditures met the objectives of the Energy Policy Act. To determine this, we evaluated key internal controls, such as the eligibility of program participants and the timely processing of participant applications, and FS' efforts to promote renewable energy projects and to monitor program activities. In addition, we examined whether grant recipients under WBU used funds in compliance with laws and regulations.

Details of our audit methodology can be found in the Scope and Methodology section at the end of this report.

# **Findings and Recommendations**

## **Section 1. Implementation**

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FS has developed a National Strategic Plan with overall goals for each of its programs, including some related to renewable energy programs for woody biomass. However, the plan does not fully account for all applicable renewable energy resources (wind, solar, hydropower, geothermal, and woody biomass) and the agency lacks a reliable system to track its renewable energy accomplishments. In addition, FS has not consistently implemented the duties of the woody biomass renewable energy coordinators in its regions. By strengthening its efforts in these areas, FS will be able to increase, measure, and report on its successes in fostering the use of renewable energy.

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### **Finding 1**

#### **FS Needs To Establish National and Regional Renewable Energy Goals**

FS has not established adequate goals and objectives for maximizing the use of five types of renewable energy resources on its land. This occurred because FS considered four of the resources (wind, solar, geothermal, and hydropower) less significant relative to its primary resource, woody biomass. While FS does have a national strategy for woody biomass, the plan does not include annual performance measures for using woody biomass for renewable energy purposes nor does it establish quantifiable performance measures for FS' regions. Although FS had developed performance measures for removing woody biomass from its lands through its hazardous fuels reduction projects, it had not recognized the need to also establish performance measures for using the woody biomass for renewable energy purposes because it considered the use of the woody biomass secondary to its removal and the FS' renewable energy program for woody biomass was still evolving. As a result, FS' success in boosting renewable energy production cannot be measured and FS lacks a proactive plan to increase the use of all its available renewable energy resources.

Increasing the use of renewable energy is a top national priority. For example, one of the National Energy Policy's primary goals is to make greater use of available renewable resources and the President's Advanced Energy Initiative calls for increased funding for the supply and efficiency of renewable energy through research. For such major operations, the Government Performance and Results Act requires agencies to develop strategic plans with goals and objectives, including descriptions of how these are to be achieved.

FS has responded to the challenge by establishing a national strategy with goals and objectives designed to increase the use of its main resource, woody biomass (an energy rich by-product from forest thinning operations).<sup>1</sup> For example, one of the national strategy's four goals is to produce bioenergy and biobased products from the woody biomass removed from FS' lands. However, the strategy lacks annual performance measures and does not establish regional plans with quantifiable performance measures for achieving national goals.

Alongside woody biomass, FS has several other renewable energy resources on its lands, including wind, solar, geothermal, and hydropower. Since the use of these is currently less significant nationwide, FS has not fully addressed them in its national strategy.<sup>2</sup> For example, FS has established a performance measure for the percentage of special use permit applications it wants to process within prescribed timeframes for its other four renewable energy resource types, but it has not quantified relevant factors such as energy production (e.g., megawatts) to track the actual quantities of these other renewable energy resource types produced on FS lands.<sup>3</sup> This may inhibit growth in using these resources because FS cannot identify successful strategies for encouraging private and public use (e.g., marketing and outreach). Further, FS cannot identify successes and failures in meeting established goals and objectives nor reverse downward trends without quantifiable performance measures at both the national and regional levels.

On its own initiative, FS' Region 6 has developed a plan for its renewable energy resources such as woody biomass and hydropower, but the plan does not include quantifiable performance measures for these resources.<sup>4</sup> It only lists goals and desired conditions without ways to enumerate accomplishments. The region had not developed quantifiable performance measures for either resource because it was waiting for the FS Washington Office to first develop the national performance measures for these resources. However, this regional strategic plan is a good start and, can be a model for other regions to follow once it is improved. Since each region has its own configuration of renewable resources, plans should be developed by each of the regions and should include quantifiable performance measures for their respective renewable energy resources in order to establish benchmarks, determine which areas can be improved, and identify which successes can be replicated.

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<sup>1</sup> According to recent research, 73 million of FS' 192 million acres of national forests are at high risk for ecologically destructive wildland fire due to the buildup of excessive fuels or woody biomass. It has also been estimated that these hazardous fuels are accumulating at three times the rate at which they can be removed. FS plans to continue to remove the excessive fuel from its national forests to return the forests to their natural state, regardless of how the excessive fuels are ultimately used.

<sup>2</sup> FS has an immediate need to remove the excessive fuels or woody biomass from its national forests to reduce the risk of wildland fires whereas the agency has no such incentive for its other renewable energy resources. Although FS makes land available for outside parties to use, the agency does not actively market the land. Further, FS has yet to determine the available quantities of the other four types of renewable energy on its lands.

<sup>3</sup> Special use permits allow entities to use Federal forestlands for renewable energy purposes, such as hydropower.

<sup>4</sup> In another region (Region 9) officials informed us that they have begun developing renewable energy strategies for woody biomass, which will tie into the national strategy, but these were not available for review during our audit.

Further, all regions' measures and benchmarks must tie into FS' national renewable energy strategy so that an evaluation can be made of the program's overall progress. The FS Washington Office should review each region's strategic plan to ensure that they are compatible with FS' national goals and objectives. FS Washington Office officials agreed with the need to review regions' strategic plans before they are approved to ensure they are consistent with the national strategic plan. They also agreed that the national strategic plan needed both measurable goals and quantifiable performance measures that the regional plans can tie into.

## **Recommendation No. 1**

Implement a national strategic plan for renewable energy that includes measurable goals, methods to achieve those goals, and quantifiable performance measures for all applicable renewable energy resources.

### **Agency Response**

FS does not fully concur with this recommendation. The current Agency FY 2007-2012 Strategic plan provides performance goals for woody biomass. In addition, FS has a national sustainable woody biomass strategy that was developed cooperatively within the agency and with its partners. The strategy was officially released May 2008. This strategy is subordinate to the Agency FY 2007-2012 Strategic Plan, which provides overall Agency direction, objectives, and performance measures. FS is also developing a strategic framework for climate change, which has been identified as one of the Chief's three priority goals for the agency. The framework will address the increased development of renewable energy resources on national forests and the use of renewable energy in agency facilities to help mitigate atmospheric greenhouse gas concentrations. In addition, FS will begin to update the national strategic plan soon. During the update, FS will add objectives and strategies on renewable energy resources, as appropriate. FS' estimated completion date for this action is July 31, 2009. In the interim, FS will use the climate change strategic framework and the woody biomass strategy for national renewable energy planning.

### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer a copy of its updated National Strategic Plan containing measurable goals, methods to achieve those goals, and quantifiable performance measures for all applicable renewable energy resources.

## **Recommendation No. 2**

Require regions to develop strategic plans consistent with the national plan for the renewable energy resources available in their regions that include measurable goals, methods to achieve those goals, and quantifiable performance measures.

### **Agency Response**

FS does not fully concur with this recommendation. The Rangeland Renewable Resources Planning Act of 1974, National Forest Management Act, and the New Planning Rule require FS to update its Forest Plans periodically. As those forest plans are updated, they will address regional strategies for managing renewable energy resources. As stated in Recommendation 1, FS will begin updating its National Strategic Plan later this year. Regions are responsible for planning and coordinating their activities to achieve the goals and objectives in the Agency Strategic Plan. FS' estimated completion date for this action is July 31, 2009.

### **OIG Position**

We agree with the need for national forests to periodically update their forest plans; however, a forest plan is not a substitute for the strategic plans regions need to effectively administer their renewable energy programs. Unlike the forest plan, the strategic plan establishes specific goals and objectives for the renewable energy program along with quantifiable performance measures that can be tied into the agency's National Strategic Plan for renewable energy. Without the regional strategic plans, FS lacks the mechanism it needs to ensure its ability to meet its overall goals and objectives for the renewable energy program. As was previously noted, two FS regions were already developing strategic plans for their renewable energy programs. To reach management decision on this recommendation, FS needs to require that all its regions develop strategic plans for their renewable energy programs that include measurable goals, methods to achieve those goals, and quantifiable performance measures.

## **Recommendation No. 3**

Designate a national renewable energy staff to oversee and coordinate the implementation of strategic plans.

### **Agency Response**

FS does not fully concur with this recommendation. FS understands the intent of this recommendation is not to create a new staff, but to identify key individuals that will oversee coordination and provide input into renewable

energy resource planning and activities including establishing goals, objectives, and performance measures. FS will identify key individuals to accomplish these tasks. FS' estimated completion date for this action is March 15, 2009.

### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer documentation showing that the agreed upon action has been taken.

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## **Finding 2**

### **Full-Time Woody Biomass Coordinators Should Be Considered for All Regions**

FS did not consistently implement the woody biomass renewable energy program. This occurred because FS made each of its regions responsible, but gave no direction about what staff resources to allocate and how to carry out the program. As a result, some regions were noticeably less productive than others at fulfilling the program's overall intent of fostering collaborative efforts to increase the supply of renewable energy.

One of the National Energy Policy's primary goals is to make greater use of available renewable resources and the President's Advanced Energy Initiative calls for increasing funding for the supply and efficiency of renewable energy through research. To affect these mandates, FS directed its regions to make officials (coordinators) responsible for the woody biomass renewable energy program but gave no guidance about how they were to implement the program. For example, FS did not develop position descriptions that laid out what tasks the coordinators should accomplish or how much time should be allocated to the job. According to the national renewable energy coordinator, FS had not recognized the need for a position description for the woody biomass renewable energy coordinator because when the position was first established, woody biomass renewable energy coordinators generally spent on average only about 20 percent of their time on renewable energy related projects. Therefore, FS did not consider a position description for the woody biomass renewable energy coordinator necessary. The lack of direction combined with the lack of specific goals for woody biomass led to inconsistency in each region's performance in implementing the renewable energy program.

The majority of FS' regions, 7 of 9, assigned the woody biomass renewable energy program as a collateral duty to officials who were given limited time—between 4 and 27 hours per week—to accomplish their work. These part-time

coordinators were left to decide their duties for themselves. As a result, each region's part-time coordinator managed the program differently. Where one region's coordinator focused on developing strategies and working with public entities, another decided that inventorying the region's renewal energy materials and reviewing grant applications was the most effective way to carry out the program. But none were able to implement the program as effectively as the two coordinators who did the job full-time.

The two full-time coordinators have prioritized marketing and outreach, and better organized their renewable energy efforts. For example, the woody biomass renewable energy coordinator in Region 3 participated in the meeting that presented the benefits of collaboration between the different parties involved in hazardous fuel removal in order to speed up the time between planning and removal. This meeting led to developing written guidelines that make it easier for interested parties to participate in the program by informing them of requirements. Further, both full-time coordinators were able to:

- Work with local and State governments to ensure that Federal renewable energy plans fit their needs,
- Participate in reviewing grant proposals before submission to ensure that they were as strong as possible,
- Meet with potential industry partners to determine how FS could provide better support and increase renewable energy production,
- Coordinate with other States and national Forests to see how they could work together to increase biomass removal,
- Participate in task groups related to renewable energy, at the regional, State and national levels, which focused on how to advance renewable energy strategies and technology, and
- Work with national forest staff in wildlife and vegetation management, and fuels reduction to foster the use of biomass removal for renewable energy purposes.

These multi-level marketing and coordinating activities resulted in significantly more effective renewable energy programs. For example, the two regions with full-time coordinators drew in as many biomass grants (31) as the other seven regions combined (see exhibit C). Meanwhile, the region that allocated only 4 hours per week to its part-time coordinator obtained only three grants, which was 5 percent of FS' total. This performance gap may widen in the future since it is likely that these kinds of outreach efforts by the full-time coordinators will yield greater dividends as knowledge about the program and the two regions' efforts to facilitate involvement spread to other potential participants.

All of the part-time coordinators said that soliciting participation and facilitating involvement in the program—as the two full-time coordinators

have done—would make the woody biomass renewable energy program more effective. However, given their collateral duties, they simply lack the time. FS' national energy coordinator agrees that the best scenario would be to have full-time coordinators in each region. To ensure their effectiveness, these coordinators will need to have consistent direction about what responsibilities they are accountable for, what performance standards they are to achieve, and how they are to accomplish the program's goals.

FS did not have renewable energy coordinators for its other four renewable energy resources (wind, solar, geothermal, and hydropower). FS did not believe they were needed since it did not have an active plan to increase energy production on FS lands from these other renewable energy resources. FS believed that the availability of these other renewable energy resources on FS lands was already known to potential investors through other public sources and it would not generate any more interest by actively marketing them. However, we question whether FS has fully assessed the potential for increased production from these other renewable energy resources if the agency actively marketed them to potential investors. FS needs to thoroughly assess the potential for increased production from these other renewable energy sources versus the cost to actively market them to outside investors. If determined cost beneficial, FS will need to expand the regional woody biomass coordinator's role to include these other renewable energy resources or establish separate renewable energy coordinators for the other renewable energy resources.

#### **Recommendation No. 4**

Assess the need to dedicate more staffing resources to the woody biomass renewable energy program and allocate available resources accordingly.

#### **Agency Response**

FS is implementing this recommendation and currently using the regional woody biomass coordinators. The FS will continue to assess staffing needs to meet multiple goals, including renewable energy resources. The Regions, Stations, and Northeast Area will identify key individuals for other aspects of renewable energy resources. FS' estimated completion date for this action is March 15, 2009.

#### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer documentation showing that the agreed upon action has been taken.



## **Recommendation No. 5**

Develop a standard position description for regional woody biomass renewable energy coordinators that establishes responsibilities, prioritizes tasks, and sets performance goals.

### **Agency Response**

FS concurs with this recommendation in that a standardized position description would be valuable for woody biomass/renewable energy coordinators, if these positions are identified through the transformation process. The agency will develop standardized position descriptions as much as possible. If regional woody biomass renewable energy coordinator positions are established, the position description will be standardized. FS will work with Human Capital Management to incorporate duties reflected of 20 percent or greater into standardized position descriptions for regional woody biomass/renewable energy coordinators, if needed. FS' estimated completion date for this action is July 31, 2009.

### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer a copy of the standardized position description developed for the regional woody biomass/renewable energy coordinators.

## **Recommendation No. 6**

Determine the cost benefit of marketing the other four renewable energy resources (wind, solar, geothermal and hydropower) to increase their production on FS lands.

### **Agency Response**

FS does not agree with this recommendation. FS is focused on managing renewable energy resources on National Forest System lands under current authorities and strategic goals. FS is committed to the Nation's energy independence and stewardship of these renewable energy resources. FS will issue guidance to the field to consider the costs and benefits of marketing renewable energy resources in the development of national forest plans as they are updated. FS' estimated completion date for this action is April 30, 2009.

### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer a copy of

the guidance it issues its field units regarding determining the cost benefit of marketing the other four renewable energy resources.

### **Recommendation No. 7**

If determined in Recommendation No. 6 to be cost beneficial, expand the regional woody biomass renewable energy coordinator's role to include the other renewable energy resources or establish separate renewable energy coordinators for the other renewable energy resources.

#### **Agency Response**

FS is implementing this recommendation using the regional woody biomass coordinators. FS will continue to assess staffing needs in meeting multiple goals, in which renewable energy is one. The Regions, Stations, and Northeast Area will identify key individuals for other aspects of renewable energy resources, as needed. FS' estimated completion date for this action is March 15, 2009.

#### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer documentation showing that the agreed upon action has been taken.

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### **Finding 3**

#### **FS Needs To Track Renewable Energy Resource Information**

FS does not adequately track information pertaining to its renewable energy program. This occurred because the agency had not developed a national strategic plan that quantifies specific goals and objectives for all its renewable energy resources. Such a plan would require a database reporting system that could track pertinent information about FS' renewable energy program including its accomplishments. As a result, FS cannot adequately measure its success in implementing the program and therefore cannot accurately report its progress.

FS' National Strategic Plan does not currently contain adequate annual performance measures for the five types of renewable energy sources (woody biomass, wind, solar, geothermal, and hydropower) on its land. As FS further develops these measures and associated goals, the agency will need to ensure it is capable of tracking its performance regionally and nationally. Although FS' databases capture some aspects of its renewable energy resources, they will need to be enhanced to measure the specific goals and objectives developed in the revised strategic plan.

FS currently has four databases that capture some information pertaining to renewable energy resources, but without a national strategic plan with measurable goals and objectives, FS had not seen the need to capture such data. The agency has three databases that capture some information for woody biomass called the Forest Activity Tracking System (FACTS), the Timber Information Management System (TIM), and the Corporate Data Warehouse (CDW). FS also has a Special Use Database System (SUDS) for other resources such as solar and wind. However, as currently configured, none of the systems adequately captures information about FS' renewable energy efforts. They either do not quantify some useful information that is available (FACTS), lack specificity (TIM), or do not capture some relevant data (CDW and SUDS) as detailed below.

#### Forest Activity Tracking System (FACTS) Does Not Capture Green Tons of Biomass

Hazardous fuels reduction work in FS' forests produces green tons of biomass materials (e.g., underbrush) that are renewable energy resources. However, FACTS does not contain a field for these green tons. Instead, it has a checkbox that only allows the user to mark whether or not any biomass materials were produced during the fuels reduction, but not the quantity produced. According to FS, the green tons harvested during fuels reduction currently have little economic value and so are not worth tracking.<sup>5</sup> However, this practice denies FS the opportunity both to track any green tons that are used for renewable energy purposes and to ascertain the amount of potential renewable energy available nationwide from biomass materials harvested even if they are not used.

#### Timber Information Management System (TIM) Does Not Specify Type or Use of Biomass Material

TIM tracks the quantities of green tons of biomass materials harvested, but only from large timber sales. Although the system tracks the quantity harvested, the system does not identify the types of woody biomass materials removed or how the woody biomass materials are used for renewable energy purposes. This information is important because it allows FS to identify the most valuable types of woody biomass materials for renewable energy and to develop marketing strategies based on their use.

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<sup>5</sup> According to FS, the biomass material harvested during hazardous fuels reduction are usually either burned on site or dumped in landfills due to its low economic value. Although the green tons of woody biomass may have little value in the timber market, its value as a renewable energy resource is still evolving as more and more interest is generated in its use for energy production.

### Corporate Data Warehouse (CDW) Does Not Include All Woody Biomass Removed From FS' Lands

Due to growing Congressional interest in the use of woody biomass, FS recognizes the need to collect vital information on woody biomass use and, therefore, issued instructions to its regions in December 2006 to track through CDW the estimated percentage of woody biomass from its large timber sales that will be used for energy production. The collection of such data will assist FS in further developing woody biomass markets and technology. However, the information tracked and entered in CDW only pertains to the large timber sales contained in TIMs. Therefore, it excludes a significant portion of the material that is removed from FS lands through other activities such as hazardous fuels reduction in permits, contracts, and grants and agreements.

### Special Use Database System (SUDS) Does Not Quantify Megawatts Produced by Powerplants

SUDS tracks permits issued for wind, solar, hydroelectric and geothermal powerplant constructions on FS' land as well as inspections, corridors for energy facilities, land use fees, and the status of authorizations. However, this information does not adequately quantify the impact of these power plants relative to renewable energy. Such information is readily available by tracking both the megawatt capacity for the power plants currently listed in the Special Use Permit along with the actual megawatts of energy produced by the power plants. This data will give FS a more accurate measure of its success in increasing renewable energy through its efforts than the number of power plants constructed. FS program officials agreed that tracking both megawatt capacity and actual megawatts produced for each power plant would be the easiest way to show gains in the renewable energy production for these types of renewable energy resources.

Enhancing the four databases (or creating a new one) will improve FS' ability to measure the effectiveness of its renewable energy program. The information gathered will help FS focus its efforts where they are most needed and the agency will be able to report quantifiable, specific, and relevant accomplishments to demonstrate its success.

## **Recommendation No. 8**

Modify current database systems (FACTS, TIM, and CDW) to track the total amount of green tons of biomass material harvested in all forest activities and to detail relevant information about their use.

## **Agency Response**

FS is implementing this recommendation. FS began collecting woody biomass data (green ton) during FY 2007 from all vegetation management activities that utilize woody biomass removed from National Forest System (NFS) lands for energy purposes. All other wood products removed from NFS lands are accounted for and tracked through the same processes and databases. FS will continue to use and modify current data base systems. FS' estimated completion date for this action is July 31, 2009.

## **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer documentation showing that the agreed upon action has been taken.

## **Recommendation No. 9**

Modify existing computer tracking system SUDS to track the megawatt capacity and production from wind, solar, hydroelectric, and geothermal resources as a separate field.

## **Agency Response**

FS does not agree with this recommendation. This information is not needed for land management planning purposes. However, FS will consider the possibility of adding to existing systems. There is the concern of duplication of effort, if other federal agencies are already tracking the same information. FS will examine the feasibility of using SUDS as well as what other agencies are doing to track megawatt capacity generated from renewable energy resources on FS lands. FS' estimated completion date for this action is July 15, 2009.

## **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer documentation showing that the agreed upon action has been taken.

## **Recommendation No. 10**

Develop policies and guidelines in the FS handbook/manual that establish tracking and reporting procedures for the improved automated database system(s).

## **Agency Response**

FS has implemented this recommendation in that it has developed and issued policy and guidelines using a policy letter to field units for woody biomass tracking. The policy letter will be added to the manual/handbook. FS has policies and guidelines for the SUDS tracking system that are already in the manual/handbook. FS will ensure that current policies and guidelines are established in FS manuals/handbooks for all tracking and reporting procedures. FS' estimated completion date for this action is July 15, 2009.

## **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer a copy of the FS manuals/handbooks containing the tracking and reporting procedures for the improved automated database systems.

## Section 2. Payment Controls

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FS can enhance its ability to use renewable energy funds more efficiently by instituting controls to ensure that grants are spent for intended purposes and that research does not duplicate work already being done. Currently, FS does not require those who receive Woody Biomass Utilization (WBU) grants to provide receipts for their expenses. Thus, FS cannot be sure that reimbursements under the program—totaling \$14.7 million—are justified and free from fraud, waste and abuse. Further, FS did not ensure that its renewable energy research projects were entered into the database that tracks such efforts nationwide or that it checked the database for duplicative research before its research projects were approved. As a result, FS lacks assurance that other USDA agencies are not duplicating its work or that it's duplicating theirs. By tightening its control over grant funds and research projects, FS can ensure that renewable energy funds and resources are put to optimal use.

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### Finding 4

#### **FS Needs To Ensure Reimbursements to Grant Recipients Are Justified**

FS lacks controls to ensure that reimbursements to WBU grant recipients match the actual expenses incurred by them. This occurred because, in the absence of direction to the contrary, FS does not require the recipients to submit receipts to support the amount reimbursed, but instead relies on vendor quotes submitted with grant applications. Without receipts, FS lacks assurance that reimbursements under the program—\$14.7 million—are justified which puts the program at risk for fraud and abuse.

Departmental guidance requires agencies to implement appropriate, cost-effective controls for all processes which support the delivery of agency programs and operations.<sup>6</sup> These controls should be included in the policies and procedures used to ensure that programs achieve their intended results and resources are used for intended purposes.

WBU grants are offered to offset costs associated with using biomass as a raw material to produce energy related products such as wood pellets to heat furnaces and wood burning stoves or to produce wood based products such as gardening mulch and fence posts. Although WBU grant recipients must timely produce receipts when FS requests, the recipients are not otherwise required to submit receipts to support their purchases. Instead, FS obligates the funds to reimburse the grant recipients based on vendor quotes submitted in a budget justification accompanying their applications. Afterwards, the

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<sup>6</sup> Departmental Regulation 1110-002 – Management Accountability and Control (April 2004).

recipients request payment and FS pays if the requests are consistent with the vendor quotes.

FS program officials said that since grant applicants submitted vendor quotes with their WBU applications, they did not need to submit receipts at the time of payment. The program officials also pointed out that there were no requirements for FS' staff to match receipts to reimbursements.

In order to test the adequacy of FS' procedures, we selected five grant recipients whom we had visited during fieldwork (since we had seen the equipment they purchased with the WBU grant funds) and we requested that they submit their receipts for WBU funds received between FYs 2005-2007. We found problems with reimbursements for two of the five recipients—40 percent of our limited sample.

One WBU grant recipient has not produced receipts to support \$46,078 of \$243,500 reimbursed in FYs 2006 and 2007 for various purchases, including a specialized saw and kiln used to process lumber. We made several attempts beginning in August 2007 to get the receipts from the applicant. Although the applicant maintains that the reimbursements are valid, the applicant has not provided the receipts to us since our initial request.

Another recipient also received authorization to spend up to \$243,500 from his 2006 WBU grant to purchase a specialized saw. The recipient eventually purchased the saw for \$90,000 less than he had originally planned. However, FS had no means of knowing that this WBU grant had a surplus balance. Fortunately, the recipient informed FS that he was able to purchase the item for less and is now seeking to modify the grant to acquire parts for it.

Between FYs 2005-2007, FS has issued 64 WBU grants totaling \$14.7 million without requiring proof that money received by recipients has been used for its intended purpose. As the two cases above demonstrate, this lack of control over issuing reimbursements can put FS' funds at risk for fraud, waste and abuse. To strengthen the program, FS should perform periodic reviews to spot check the grant recipients' receipts to verify that their claims for reimbursement are allowable under the grant agreement and accurately reported to FS.

## **Recommendation No. 11**

Recover the unsupported costs of \$46,078 from the grant applicant.

### **Agency Response**

FS is examining and auditing the grantee in question and has received several more receipts that were not previously provided. Depending on the outcome



of the audit, FS will follow regulations and take appropriate actions if there are discrepancies in the use of the grant funds. FS' estimated completion date for this action is December 15, 2008.

### **OIG Position**

To reach management decision on this recommendation, FS needs to provide us a copy of the bill for collection it sent to the grant recipient to recover any amount that the audit determined was unsupported.

## **Recommendation No. 12**

Perform periodic reviews to spot check the grant recipients' receipts to verify that their claims for reimbursement were allowable under the grant agreement and accurately reported to FS.

### **Agency Response**

FS has hired a contractor to conduct spot audits of receipts to verify that claims for reimbursement are allowable under the grant agreement. The contractor is auditing roughly 15 to 20 percent of all grantees once each year. FS will continue to review all grants to ensure compliance with terms and conditions of the grant agreement and will do spot audits annually. FS' estimated completion date for this action is June 30, 2009.

### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer documentation showing that the agreed upon action has been taken.

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## **Finding 5**

### **CRIS Not Effectively Used to Report Research Projects or to Prevent Duplication**

FS did not have formal procedures to ensure that its research projects were timely entered into the Current Research Information System (CRIS) and did not duplicate other research projects within USDA. In addition to CRIS, FS relied on a number of other methods to detect duplication such as researchers' knowledge of the field and connections within the scientific community. Therefore, FS did not consider it necessary to formalize any one method. As a result, FS has reduced assurance that research projects are not duplicated by other USDA agencies and that these agencies are aware of similar research projects performed by FS.

CRIS is USDA's system for tracking and reporting ongoing and recently completed research and education projects in agriculture, food and nutrition, and forestry. Projects are conducted or sponsored by USDA research agencies, State agricultural experiment stations, land-grant universities, other cooperating State institutions, and participants in grant programs administered by the Cooperative State Research, Education and Extension Service. This information is available to scientists throughout the United States so they can determine what types of research are being done within USDA and by whom.

FS has implemented a thorough process within each of its research units for evaluating and prioritizing research proposals for approval. However, as part of the pre-award process, the agency's process for checking for duplicated research projects is informal. FS' research scientists are verbally instructed to check CRIS by using keyword searches to discover research proposals with objectives that overlap their own. However, FS has no written guidance requiring the scientists to check CRIS for renewable energy research that their research may duplicate or to certify that they have done so before their projects are approved. Due to the lack of formal guidance, some of the research scientists we interviewed said they did not always check CRIS for duplicate research before submitting their research proposals for approval.

Although not specifically required, FS' research scientists are also supposed to update CRIS at the end of each fiscal year, documenting overall progress and identifying any publications that they issued. FS officials stated that annual CRIS updates and meetings address any results and progress made. This process, however, does not ensure that research results are timely shared with other USDA agencies that might be performing complementary research.

For example, at one FS research unit, data had not been input into CRIS for over 2 years due to the unit's reorganization.<sup>7</sup> As a result, there is a potential that duplicate research may have been done on projects that were already underway or completed by another FS research unit or USDA agency (i.e., research scientists from FS and other USDA agencies may not know about duplicated or relevant research being performed throughout the Department.) To strengthen FS' ability to prevent duplicate research, FS should require its scientists both to review CRIS for duplication before submitting their research applications and to certify that they have done so before their projects are approved. Further, FS should also monitor its research units to ensure that they timely enter their projects into CRIS.

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<sup>7</sup> As of October 2007, FS' Washington office has instructed the station on how to input the data into CRIS with the new, reorganized codes.

### **Recommendation No. 13**

Require all FS research scientists review CRIS for duplicate research before submitting research applications and certify that they have done so before projects are approved.

#### **Agency Response**

FS is implementing this recommendation. CRIS is one source of information that is useful for assessing the appropriateness of a specific study, but it does not cover all existing or ongoing research. FS scientists conduct literature reviews before engaging in new studies or extending existing research studies to build upon existing knowledge. This practice helps to further eliminate duplication. FS will work to ensure that CRIS is used appropriately. The FS manual/handbook will be modified to include a review of CRIS in research planning. FS' estimated completion date for this action is December 15, 2008.

#### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer a copy of the manual/handbook it modified to include a review of CRIS in research planning.

### **Recommendation No. 14**

Monitor all FS research units to ensure that they timely enter their projects into CRIS.

#### **Agency Response**

FS is implementing this recommendation. FS research programs are required to provide information and data for CRIS annually. FS will continue to provide information for CRIS and will work to ensure timely entry of data. A letter will go to all Stations asking their cooperation in timely entering data into CRIS. FS' estimate completion date for this action is December 15, 2008.

#### **OIG Position**

We accept FS' management decision on this recommendation. For final action, FS needs to provide the Office of the Chief Financial Officer a copy of the letter it sent to the Stations asking for their cooperation in timely entering data into CRIS.

# ***Scope and Methodology***

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The purpose of our review was to assess the effectiveness of FS' renewable energy program and whether its expenditures met the objectives of the Energy Policy Act. The scope of our review was from FY 2001 to the present.

To accomplish our audit objectives, we performed audit work at the FS Washington Office in Washington, D.C.; and at two regional offices, four national forests, and two research units (see exhibit B). We also visited the facilities of five grantees participating in FS' WBU grant program administered by FS' Forest Products Laboratory. The five grantees were judgmentally selected based on their location. Fieldwork was performed between April 2007 and January 2008.

Regions 3 and 5 were judgmentally selected based on their levels of renewable energy related activities. For example, Region 3 was awarded the most WBU grants, whereas Region 5 was one of the regions with the fewest (see exhibit C). Within each region, the national forests were also judgmentally selected based on their level of renewable energy related activity.

In developing the findings in this report, we performed the following steps and procedures:

## At Washington Office

- Reviewed applicable laws, regulations, policies and procedures pertaining to FS' renewable energy program.
- Interviewed key FS Washington Office staff, including the national renewable energy coordinator, to determine their roles and responsibilities pertaining to renewable energy.
- Obtained and reviewed FS' national strategy for renewable energy. Also, obtained and reviewed national statistics on FS' renewable energy projects.

## At Selected Regional Offices (see exhibit B)

- Interviewed key FS regional office staff, including the region's woody biomass coordinator, to determine their roles and responsibilities pertaining to renewable energy. Also interviewed the woody biomass coordinators from the remaining FS regions not selected for review to determine their amount of time spent on renewable energy programs within their respective regions.

- Obtained and reviewed the region's strategy for renewable energy. Also, obtained and reviewed statistics on the region's renewable energy projects.
- Ascertained the region's progress in meeting its renewable energy goals.

At Selected National Forests (see exhibit B)

- Interviewed key staff at the national forest to determine their roles and responsibilities pertaining to renewable energy.
- Obtained and reviewed the national forest's strategy for renewable energy. Also, obtained and reviewed statistics on the national forest's renewable energy projects.
- Ascertained the national forest's progress in meeting its renewable energy goals.

At Selected Research Units (see exhibit B)

- At the Forest Products Laboratory, interviewed key FS staff to determine their roles and responsibilities pertaining to the WBU program. Also, reviewed management controls surrounding the Forest Products Laboratory's administration of the WBU program.
- At the Southern Research Station, evaluated FS' policies and procedures related to the selection and approval of renewable energy related research. Also, reviewed controls surrounding FS' use of the database CRIS to track USDA related research.

At Selected Grantees (see exhibit B)

- Toured the grantee's facility and interviewed the grantee to determine the grantee's compliance with the terms of the grant agreement.

We conducted this performance 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 objectives.

## **Exhibit A** – Summary of Monetary Results

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Exhibit A – Page 1 of 1

<b>Recommendation Number</b>	<b>Description</b>	<b>Amount</b>	<b>Category</b>
11	Recovery of unsupported costs from grant applicant.	\$46,078	Questioned Costs, Recovery Recommended

## **Exhibit B** – Audit Sites Visited

AUDIT SITE	LOCATION
FS Washington Office	Washington, DC
<u>Region 3</u> Southwestern Regional Office Santa Fe National Forest Apache-Sitgreaves National Forest	Albuquerque, NM Santa Fe, NM Springerville, AZ
<u>Region 5</u> Pacific Southwest Regional Office Shasta-Trinity National Forest San Bernardino National Forest	Vallejo, CA Redding, CA San Bernardino, CA
<u>Research Units</u> Forest Products Laboratory Southern Research Station	Madison, WI Asheville, NC
<u>WBU Grantees</u> Western Moulding High Country Green Waste W.B. Contracting Cheyenne Log Homes Reidhead Sawmill	Snowflake, AZ Lakeside, AZ Eagar, AZ Eagar, AZ Eagar, AZ

## **Exhibit C** – Number and Amount of Woody Biomass Grants by FS Region

Exhibit C – Page 1 of 1

Region	Number of Grantees	Grant Amount	Ranking
Southwest (R-3)	18	\$4,255,100	1
Pacific Northwest (R-6)	13	\$3,078,106	2
Rocky Mountain (R-2)	9	\$1,900,594	3
Intermountain (R-4)	6	\$1,480,780	4
Southern (R-8)	5	\$1,177,775	5
Northern (R-1)	6	\$1,177,550	6
Pacific Southwest (R-5)	4	\$882,640	7
Eastern (R-9)	3	\$750,000	8
	64	\$14,702,545	



# Exhibit D – Agency Response

Exhibit D – Page 1 of 7



Forest  
Service

Washington  
Office

1400 Independence Avenue, SW  
Washington, DC 20250

File Code: 1430

Date: JUL 25 2008

**Subject:** Response to the Office of Inspector General Audit Report No. 08601-52-SF, "Forest Service (FS) Renewable Energy Program"

**To:** Robert W. Young, Assistant Inspector General for Audit, Office of Inspector General, USDA Forest Service

Thank you for the opportunity to review and comment on the official draft OIG Audit Report No. 08601-52-SF, "Forest Service Renewable Energy Program." The Forest Service generally concurs with the recommendations in the report. Also, the corrective actions to implement the recommendations will benefit the overall renewable energy program. Please refer to the enclosure for actions taken or proposed to implement the recommendations.

If you have any questions, please contact Sandy T. Coleman, Assistant Director for GAO/OIG Audit Liaison Staff, at 703-605-4699 or Art Seggerson, OIG Audit Liaison, at 703-605-4983.

JESSE L. KING  
Chief Financial Officer

Enclosure

cc: Art Seggerson, Bryce Stokes, Paul Johnson



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USDA Forest Service (FS)

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Office of Inspector General (OIG) Official Discussion Draft Audit Report No. 08601-52-SF  
Forest Service (FS) Renewable Energy Program  
Issued July 1, 2008

Response to Official Draft Audit Report

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**OIG Recommendation No. 1:** Implement a national strategic plan for renewable energy that includes measurable goals, methods to achieve those goals, and quantifiable performance measures for all applicable renewable energy resources.

**FS Response:** The Forest Service does not fully concur with this recommendation. The current Agency FY 2007-2012 Strategic plan provides performance goals for woody biomass. In addition, the FS has a national sustainable woody biomass strategy that was developed cooperatively within the agency and with partners. The strategy was officially released May 2008. This strategy is subordinate to the Agency FY 2007-2012 Strategic Plan, which provides overall Agency direction, objectives, and performance measures.

The FS is developing a strategic framework for climate change, which has been identified as one of Chief's three priority goals for the agency. The framework will address the increased development of renewable energy resources on the national forests and the use of renewable energy in agency facilities to help mitigate atmospheric greenhouse gas concentrations. In addition, the FS will begin to update the national Strategic Plan soon. During the update, FS will add objectives and strategies on renewable energy resources, as appropriate. In the interim, the FS will use the climate change strategic framework and the woody biomass strategy for national renewable energy planning.

**Estimated Completion Date:** July 31, 2009

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**OIG Recommendation No. 2:** Require regions to develop strategic plans consistent with the national plan for applicable renewable energy resources available in their regions that include measurable goals, methods to achieve those goals, and quantifiable performance measures.

**FS Response:** The FS does not fully concur with this recommendation. The Rangeland Renewable Resources Planning Act of 1974, National Forest Management Act and the New Planning Rule require the Forest Service to update its Forest Plans periodically. As these forest plans are updated, they will address regional strategies for managing renewable energy resources.

As stated in Recommendation 1, the FS will begin updating its national strategic plan later this year. Regions are responsible for planning and coordinating their activities to achieve the goals and objectives in the Agency Strategic Plan.

**Estimated Completion Date:** July 31, 2009

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**OIG Recommendation No. 3:** Designate a national renewable energy staff to oversee and coordinate the implementation of strategic plans.

**FS Response:** The FS does not fully concur with this recommendation. The FS understands the intent of this recommendation is not to create a new staff, but to identify key individuals that will oversee coordination and provide input into renewable energy resource planning and activities including establishing goals, objectives and performance measures. The FS will identify key individuals to accomplish these tasks.

**Estimated Completion Date:** March 15, 2009

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**OIG Recommendation No. 4:** Assess the need to dedicate more staffing resources to the woody biomass renewable energy program and allocate available resources accordingly.

**FS Response:** The FS is implementing this recommendation and currently using the Regional Woody Biomass Coordinators. The FS will continue to assess staffing needs to meet multiple goals, including renewable energy resources. The Regions, Stations and Northeast Area will identify key individuals for other aspects of renewable energy resources.

**Estimated Completion Date:** March 15, 2009

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**OIG Recommendation No. 5:** Develop a standard position description for regional woody biomass renewable energy coordinators that establishes responsibilities, prioritizes tasks, and sets performance goals.

**FS Response:** The FS concurs with this recommendation and that a standardized position description would be valuable for woody biomass/renewable energy coordinators, if these positions are identified through the transformation process. The Agency will develop standardized position descriptions as much as possible. If regional woody biomass renewable energy coordinator positions are established, the position description will be standardized. The FS will work the Human Capital Management to incorporate duties reflected of 20 percent or greater into standardized position description for regional woody biomass/renewable energy coordinators, if needed.

**Estimated Completion Date:** July 31, 2009

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**OIG Recommendation No. 6:** Determine the cost benefit of marketing the other four renewable energy resources (wind, solar, geothermal and hydropower) to increase their production on FS lands.

**FS Response:** The FS does not agree with this recommendation. The FS is focused on managing renewable energy resources on National Forest System lands under current authorities and strategic goals. The FS is committed to the Nation's energy independence and stewardship of these renewable energy resources.

The FS will issue guidance to the field to consider the costs and benefits of marketing renewable energy resources in the development of National Forest Plans as they are updated.

**Estimated Completion Date:** April 30, 2009

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**OIG Recommendation No. 7:** If determined in Recommendation No. 6 to be cost beneficial, expand the regional woody biomass renewable energy coordinator's role to include the other renewable energy resources or establish separate renewable energy coordinators for the other renewable energy resources.

**FS Response:** The FS is implementing this recommendation using the Regional Woody Biomass Coordinators. The FS will continue to assess staffing needs in meeting multiple goals, in which renewable energy is one. The Regions, Stations and Northeast Area will identify key individuals for other aspects of renewable energy resources, as needed.

**Estimated Completion Date:** March 15, 2009

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**OIG Recommendation No. 8:** Modify current database systems (FACTS, TIM, and CDW) to track the total amount of green tons of biomass material harvested in all forest activities and to detail relevant information about their use.

**FS Response:** The FS is implementing this recommendation. The FS began collecting woody biomass data (green ton) during FY 2007 from all vegetation management activities that utilize woody biomass removed from National Forest System (NFS) lands for energy purposes. All other wood products removed from NFS lands are accounted for and tracked through the same processes and databases. The FS will continue to use and modify current database systems.

**Estimated Completion Date:** July 31, 2009

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**OIG Recommendation No. 9:** Modify existing computer tracking system SUDS track the megawatt capacity and production from wind, solar, hydroelectric, and geothermal resources as a separate field.

**FS Response:** The FS does not agree with this recommendation. This information is not needed for land management planning purposes. However, FS will consider the possibility of adding to existing systems. There is the concern of duplication of effort, if other federal agencies are already tracking the same information.

The FS will examine the feasibility of using SUDS as well as what other agencies are doing to track megawatt capacity generated from renewable energy resources on FS lands.

**Estimated Completion Date:** July 15, 2009

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**OIG Recommendation No. 10:** Develop policies and guidelines in the FS handbook/manual that establish tracking and reporting procedures for the improved automated database system(s).

**FS Response:** The FS has implemented this recommendation in that it has developed and issued policy and guidelines using a policy letter to field units for woody biomass tracking. The policy letter will be added to the manual/handbook.

The FS has policies and guidelines for the SUDS tracking system that are already in the manual/handbook. The FS will ensure that current policies and guidelines are established in Forest Service manuals/handbooks for all tracking and reporting procedures.

**Estimated Completion Date:** July 15, 2009

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**OIG Recommendation No. 11:** Recover the unsupported costs of \$46,078 from the grant applicant.

**FS Response:** The FS does not concur with the premise that the FS lacks controls to ensure that reimbursements paid to Woody Commercial Biomass Utilization Program grant recipients do not match the actual expenses incurred by the grantee. The cost allowability issues, accounting requirements for federal awards and payment of actual expenditures are mandated by OMB Circulars for grantees (NGOs and educational institutions) and by the FAR for commercial organizations.

The FS manuals and handbooks contain procedures to implement these federal statutes. Existing policies and procedures ensure reimbursements to grant recipients are justified. Audits that

identify costs that cannot be supported by documentation will require reimbursement from the grant applicant. Adherence to established OMB circulars, applicable federal statutes, and award terms and conditions are mandatory for grant recipients. Procedures are in place to recover actual cost disallowances via issuance of a bill of collection and/or voluntary repayment by the grant recipient. FS is examining and auditing the grantee in question above. We have received several more receipts that were not previously provided. Depending on the outcome of the audit, FS will follow regulations and take appropriate action if there are discrepancies in the use of the grant funds.

**Estimated Completion Date:** December 15, 2008

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**OIG Recommendation No. 12:** Perform periodic reviews to spot check the grant recipients' receipts to verify that their claims for reimbursement were allowable under the grant agreement and accurately reported to FS.

**FS Response:** The FS concurs with this recommendation. The FS will conduct annual reviews of grantees and documents progress in a public report. Any adjustments that might be required to the work associated with grantee is addressed by the FS representative and/or the grantee themselves. These results are noted in the annual Accomplishment Reports located at <http://www.fpl.fs.fed.us/tmu/index.html>. In-addition to the annual reviews, the FS Regional staffs are in contact with the applicants. We have hired a contractor to conduct spot audits of receipts to verify that claims for reimbursement are allowable under the grant agreement. The contractor is auditing roughly 15 to 20% of all grantees once each year.

The FS will continue to review all grants to ensure compliance with terms and conditions of the grant agreement and will do spot audits annually.

**Estimated Completion Date:** June 30, 2009

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**OIG Recommendation No. 13:** Require all FS research scientists to review CRIS for duplicate research before submitting their research applications and certify that they have done so before projects are approved.

**FS Response:** The FS is implementing this recommendation. The CRIS is one source of information that is useful for assessing appropriateness of a specific study, but it does not cover all existing or ongoing research. The FS scientists conduct literature reviews before engaging in new studies or extending existing research studies to build upon existing knowledge. This practice helps to further eliminate duplication. The Agency will work to ensure that CRIS is used appropriately. The FS manual/handbook will be modified to include a review of CRIS in research planning.

**Estimated Completion Date:** December 15, 2008

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**OIG Recommendation No. 14:** Monitor all FS research units to ensure that they timely enter their projects into CRIS.

**FS Response:** The FS is implementing this recommendation. FS research programs are required to provide information and data for CRIS annually. The FS will continue to provide information for CRIS and will work to ensure timely entry of data. A letter will go to all Stations asking their cooperation in timely entering data into CRIS.

**Estimated Completion Date:** December 15, 2008

Informational copies of this report have been distributed to:

Office of the Chief Financial Officer  
Planning and Accountability Division

Director

(1)

Office of Management and Budget

(1)

Government Accountability Office

(2)