Statement of Robert H. Davis
President, Forest Energy Corporation
Member, Future Forest LLC

to the

Joint Oversight Hearing
Subcommittee on Forests and Forest Health
Subcommittee on Energy and Mineral Resources

House Resources Committee

On

The Effects of High Energy Costs on Jobs and The Potential for Expanded Use for Biomass Energy

February 8, 2006

Mr. Chairmen and Members of the Subcommittees:

Thank you for the opportunity to testify at this joint oversight hearing. I appreciate the interest of your two Subcommittees in exploring and developing responses to issues related to the utilization of forest biomass for energy production. I would like to bring some perspectives and suggestions, based on my fifteen years of experience in developing a private company focused on producing biomass fuels from forest resources.

Forest Energy Corporation and the White Mountains Stewardship Project

Founded in 1991, Forest Energy Corporation's mission is to produce refined biomass fuels from forest resources. We currently operate a pellet plant in Show Low, AZ that began production in 1992 and a have a new plant coming on line in the summer of '06 in Espanola, NM. We produce 65,000 tons of biomass fuel pellets annually at the Show Low facility, utilizing 150,000 green tons of raw material, and the production and utilization at the New Mexico facility will be comparable. The fuel provides clean biomass heat that can be used every day, including those noncompliant air quality days or "No Burn Days" in western cities. Our annual production just from Show Low facility displaces approximately 9.6 million therms of natural gas or 7.7 million gallons of fuel oil annually. There are approximately 65 pellet plants in North America that will produce 1.6 million tons this season.

Future Forest LLC is a partnership between Forest Energy Corporation and WB Contracting. It was formed exclusively for the purpose of performing the White Mountain Stewardship Project on the Apache-Sitgreaves National Forest. The 150,000-acre, 10-year project is the first large-scale stewardship contract in the U.S and was awarded in October 2004. Although we were able to enter the forest for only 45 days during the first six months, due to abnormally wet conditions, during the 8 months thereafter we have treated 7,000 + acres. We have increased our in-woods work force from 2 crews to 6 crews by utilizing other local subcontractors. Due to the award of the contract, a small diameter sawmill has been constructed and came on line just last month.

We feel very fortunate that the project was prepared and is being carried out by the Forest Service Region 3 office and the Apache-Sitgreaves National Forest. Several factors have contributed to this project coming to fruition and to its success to date. The determination shown by the two Forest Supervisors on the Apache-Sitgreaves, leading up to the award of the stewardship contract and during the implementation to date, to find methods to accomplish the goals of forest restoration and fire hazard mitigation was the major component that moved this project forward. Additionally, the support of the local counties and the area's federal Congressional delegation also contributed to the decision to carry out the project. But in large part, the past and ongoing success is due to the collaboration between many local groups and the individual people that comprise those groups.

There are currently approximately 90,000 acres that have been NEPA-approved for this project and no appeals have been filed to date. This is the result of a rebuilding of trust that began on many separate fronts several years ago. The Natural Resource Working Group, the Governors' Forest Health Oversight Council, the Four Corners Sustainable Forest Partnership, and the Southwest Sustainable Forest Partnership have all contributed to building this collaboration. For our part, I began building relationships with several conservation groups in the Southwest 7 - 8 years ago. I would have lunch with people for the Southwest Center for Biodiversity or the Grand Canyon Trust, just to try to understand their positions and concerns and I wanted them to understand our intentions regarding the forests and the sustainable utilization of forest resources and I

wanted our industry to be transparent. That effort has been rewarded by a higher level of trust between us and in very strong support from the conservation community of the Southwest for our efforts to perform the contract and to utilize the available materials responsibly and profitably.

When we joined with WB Contracting, they shared our goals of working toward ecologically sustainable solutions and of continuing to work together with all interested parties to scientifically determine the best and most cost effective methods of restoring and maintaining the ecosystems of the White Mountain region. But above all, we wanted “to get things done”. We wanted to protect the forest that we both grew up in from wildfire and forest health threats. We wanted to create permanent jobs and the healthy local economy that is such an important component of sustaining the region’s forest ecosystem. And the only way we saw to do that was to collaborate, to be transparent, and to create sustainable industries that could develop and then find ways to help pay the cost of restoring and maintaining healthy forests. That meant that the industries that developed had to be appropriately sized to match the long term sustainable resource availability. Industries that are appropriately sized to the sustainable resource will also provide long-term social and economic benefit for the local communities. The success of the contract is also dependent on both Future Forest and the other developing industries making a profit. With the low value of the resources that need to be removed in Southwestern ponderosa pine forests, it may be difficult to ever reach a point where it will be totally self-sustaining, but that is the goal.

The future forest will look different than it does today and different than it did in the past. All the parties in the White Mountains must help to develop those new industries to efficiently utilize the resources that should be removed from the forest for health or fire hazard reasons on a sustainable basis. All the parties must recognize that that resource is very different than in the past and may change in the future. We must find viable economical uses for the resources.

Challenges of Developing Local Economic Infrastructure

As we establish a similar facility in New Mexico, we find very little existing capacity to treat the large acreages that science dictates should be treated. We are working to find appropriately sized industries that can profitably restore and maintain the forests. This applies to both the in-woods industries and the utilization industries. In many cases due to reduced staffing in the Forest Service, the acreages aren’t prepared and the local harvesters are dramatically under-equipped with the most cost effective equipment. Most being relatively small wood industries, they have difficulty finding the capital to obtain this equipment. There is still reluctance on the part of the banks and the businesses to go out on a limb to purchase the equipment without assurances of having the access to the forests to do the restoration which would enable the use of the equipment long enough to pay for it. Organizations like the Four Corners Sustainable Forest Partnership and its successor in Arizona and New Mexico the Southwest Sustainable Forest Partnership have made significant contributions to the development of capacity through grants, training, providing industry consultation by experts and by offering forums where local and regional partners may work together to create compatible solutions. But their funding is never certain and most of the economic development funding has been reduced in the past few years.

Forest Energy Corporation has been in business for 15 years, we are profitable, our existing markets, which are renewable energy, are growing to the point where we can not meet demand, and I have been working on financing the New Mexico plant for 2 years. Although we have purchased a majority of the major equipment without financing, the agreements on the land we will use is settled and the markets continue to grow, the balance of the required funding is still not finalized. Our plant in Show Low was financed 15 years ago by a firm from Japan, due to total disinterest and skepticism from U.S. financial entities. There has been no strong indication from the government that a program to restore and reduce fire hazard in the forests will be carried out on a consistent basis. There has been no strong indication by the government that renewable energy is a strong priority. There has been little indication that our government has an interest in converting to renewable fuels themselves or in utilizing this renewable forest resource in the most prudent manner. In my opinion that use is local biomass heating with chips and pellets.

Federal funding assuring the start to forest restoration and to these new industries is also uncertain for periods longer than one year and generally lacking. Even on the White Mountain Stewardship Contract, the first large scale, long-term stewardship contract, there hasn’t been adequate funding for the goal of 15,000 acres annually and the funding is declining. How can industry plan if the resource is uncertain?

Incentives for Various Renewable Energy Technologies

The renewable materials from our forests are not waste materials and they aren’t free. They are now and will in the future be even more a valuable resource, which we must put to prudent use. The solutions that we create now must look to that day when energy costs are much higher and renewables are in much wider use. Policies that provide uneven or unfair incentives for the various uses of this resource will not result in the best solutions. We must look at the highest and best use of the resource without subsidies and encourage those uses to develop, or provide parity and let the most efficient and economically sound solutions rise to the top.

The current incentives for renewables are very skewed as they relate to different technologies. Parity among all technologies —wind, solar, biomass, etc., as well as both electrical and thermal energy—will result in better long term-solutions. In reality the use of biomass actually provides much greater benefit than other renewables. It offers firm capacity of energy production and reduces alternate forms of biomass disposal that either burden landfills or contribute to regional air pollution. It restores and maintains healthy forests, as well as providing for ongoing jobs in rural communities and resilient regional economies. It protects the safety of our communities. But today, there is little acknowledgement of these public benefits of biomass utilization.

Additionally the current incentives for renewable energy encourage development of facilities that are an inefficient use of the resource, require large ongoing subsidies, and do nothing to advance the technology. It is widely accepted that stand-alone biomass electrical generation utilizing the resources from the thinning is not economically feasible. It requires a large subsidy that can never be removed and pays little toward restoring forests. And yet due to the high level of subsidy, stand-alone biomass electrical facilities are being built. These are not combined heat and power facilities or co-firing with coal, but stand-alone facilities that will operate at 24% efficiency at best. Renewable generating plants often receive 3 – 5 cents / kwh subsidy for the renewable energy credits plus production tax credits, and in the case of biomass, they still expect someone else to pay a large majority of the cost of their fuel. They are able to pay only $ 12 – 14 / green ton, when the cost of removal of the small biomass segment is $30 – 50 / green ton. This provides little to help restore the forests, creates an ongoing demand and subsidies for an inefficient use of the resource and to date has been utilizing old technology. Due to their low efficiency, they also displace much lower amounts of fossil fuels per ton of biomass.

Heating with wood pellets—or thermal biomass energy—on the other hand, will displace 2 – 3 times more fossil fuel per ton than electrical power generation and is much more likely to pay a major portion of the cost of harvesting the resource now and in the future. And yet, there is virtually no recognition of these high efficiencies and there are very few and very minor incentives for thermal energy .

The recently passed Energy Bill included rebates for the installation of high efficiency wood heating systems. To my knowledge, this is the first national legislation encouraging renewable thermal energy. This will be beneficial, if it is funded, and it would provide greater ease in implementation if the rebate were changed to a tax credit. The newest wood combustion technologies in the world have extremely clean emissions and very high efficiencies, but they aren't U. S. technologies. We haven't created the atmosphere for these advances to be made. Our incentives in many cases have ignored efficient utilization of biomass resources, focusing on "how do we get rid of this waste". That attitude must be reversed. The energy cost of the inefficient use of this resource, may well exceed the value of the energy it produces. We must go into the forest to harvest and transport the material exclusively for the use of a plant, all of which utilizes energy. We have to find the most efficient uses and we must achieve a net effect of reducing our use of the maximum amount of fossil fuels. Perhaps the production of thermal energy for use locally is the most prudent use of this local forest resource.

Summary

- The White Mountain Stewardship Contract is succeeding in achieving the intended acreages of forest restoration – 7,243 acres to date and increasing.
- The success of the contract is due to collaboration among many local/regional parties
- Our positive movement towards large scale restoration of the forests has been enhanced by the collaboration and trust we have development with the conservation community
- The continued success is contingent on consistent funding for the contract
- Parity of incentives for the production of all renewable energy will provide more sustainable solutions
- We must continue to attract appropriately sized, competitive wood utilization businesses

In my opinion, the following items would be beneficial policy directions for forest health and national energy situations

Forest Health

- Acknowledge the public benefits of restoring and maintaining healthy forests and the sustainable, economical utilization of the biomass residues
- Assure funding for restoration
- Provide a federal incentives program to assist harvesting companies and utilization companies develop their capacity. Make the program easy to use, many of these entities are small.
- Base assistance on highest and best use of the resource

Energy

- Create parity in incentives between all renewable technologies and for both electrical and thermal energy
- Create incentives that reward

High efficiencies

Low emissions

High net energy gain

High displacement of fossil fuels / ton of biomass resource

We have a valuable renewable resource and an opportunity to create efficient energy from it while creating and maintaining healthy forests. I appreciate your help in achieving these goals.

Robert H (Rob) Davis
President / Owner
Forest Energy Corporation
1001 N 40 th Street
Show Low, AZ 85901
928-537-1647 x 204