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Energy sovereignty

Taos Pueblo fires up county's first biomass heating system

By Rick Romancito Mar 12, 2008



Taos Pueblo Tribal Sheriff Jeff Romancito lit the first fire as the Red Willow Center's Ryan Rose and Garn dealer Bill Althou
Photo by Rick Romancito for The Taos News

Taos Pueblo took a significant leap forward when its Red Willow Education Center fired up for the first time a long-awaited Biomass District Heating System Friday (March 7).

In ceremonies, during which Taos Pueblo Tribal Sheriff Jeff Romancito (brother of Tempo editor Rick Romancito) lit the first flame, it was explained that the Garn heating unit installation was the culmination of a long process that began with a forest fire in the mountains above Taos Pueblo.

The idea for the Red Willow district heating system (DHS), which is designed to heat the center and two adjacent greenhouses, came from “fire mitigation efforts of the (Taos Pueblo) War Chief’s Office following the Encebado Fire in 2003,” according to a statement from the Red Willow Education Center.

A three-year Forest Health Collaborative Grant was awarded to Taos Pueblo that will produce an abundance of small-diameter wood (forest thinnings) that are intended to be the heating fuel for the DHS, the statement said.

This material is referred to as “biomass.” The “district” it heats is the network of three buildings currently being served.

It also came about as the result of projections by “major financial institutions of the rising costs of fossil fuels,” such as propane — which until now was the center’s heating source and which will continue to be kept on-hand as a back-up. And because of concerns at the center “about the cost of food being directly dependent on the cost of fossil fuels.”

The unit basically consists of a specially designed firebox contained within a large metal water tank. The fire heats the water, which then is channeled into a radiant floor heating system in the center and then to radiant systems in the greenhouses. “The DHS was seen as an excellent innovation to add to the infrastructure being developed for the Sustainable Agriculture Initiative, which is centered at the RWEC (Red Willow Education Center), and whose purpose is to revitalize community agriculture at Taos Pueblo, including improving its food security,” the statement continues.

The system is designed to make optimum use of fuel, even so far as to emit very little if any smoke from its chimney, according to Garn dealer Bill Althouse.

According to the center, a project application for funding an innovative Biomass District Heating System was submitted in 2005 for \$73,471, as a joint initiative of the Taos Pueblo Renewable Energy Office and Education and Training Division, and in response to a request for proposals from the Clean Energy Grants Program of the New Mexico Energy, Minerals, and Natural Resources Department. It was awarded \$60,000 for fiscal 2006-07.

The DHS idea came about because cold-area greenhouses are becoming impractical in winter due to rising fuel costs and that biomass was a suitable replacement for propane, the center's statement said. Wildlife habitat restoration efforts planned by Taos Pueblo's Natural Resources Department will also produce small-diameter wood that can be used as biomass fuel.

The heating system was seen as an important addition to the infrastructure being developed for the Sustainable Agriculture Initiative, which is centered at the Red Willow Education Center, and "whose purpose is to revitalize community agriculture at Taos Pueblo, including improving its food security."

Watch video of the DHS ribbon cutting ceremony in The Taos News Media Center online at http://www.taosnews.com/media_center">www.taosnews.com/media_center