Lincoln windmill to harness air power

By Barb Bierman

Construction of a small wind-powered electric generating system north of Lincoln should be completed this week, according to the associate dean of the UNL College of Engineering and Technology.

Donald Edwards, who has been active in promoting wind generators as an alternate energy source, said erection of a Pinson Cycloturbine on the John Carter property at 7300 N 7th St., could provide as much as 38 percent of the power needs of the Carter home.

The generating system is part of the U.S. Department of Energy's (DOE) program for Small Wind Energy Conversion Systems (SWECS), Edwards said, and is

being put up through cooperation with the Lincoln Electric System (LES).

SWECS is administered by Rockwell International and Nebraska is participating in the pilot program in which Rockwell hopes to place two conversion machines in each state.

Edwards said sites were screened throughout Nebraska last summer and the two selected were the Carter property north of Lincoln and the Robert Scott home in Grand Island.

Spiraling costs

In these days of spiraling energy costs, wind as a possible renewable energy source definitely must be explored, Edwards said.

The cycloturbine being erected north of

Lincoln is a horizontal axis machine manufactured by Pinson Energy Corporation of Marston Mills, Mass. According to Edwards, it is not typical of most wind energy converters as it resembles "an egg-beater".

LES is working to connect the system with power lines, using the principle that if the home needs the power, it goes there, otherwise excess power goes into the line, Edwards said.

"It is a complex situation trying to balance those loads," he said.

A different machine will be installed by the Grand Island Utility Department on the Scott property.

The Grand Island site will be used to analyze the acceptance of wind machines in almost urban settings, Edwards said.

"We're trying to see how close to residential areas we can put them in. Factors such as noise, radio and TV interference, and aesthetic value are all things we don't know for sure how to deal with," he said.

Which is best?

Placement of the wind machines is critical, but Edwards said they are not certain which is best.

The Lincoln site is on a hilltop, whereas the Grand Island generator will be located on a flat area.

"Who knows, perhaps updrafts along the bluffs by the Missouri could be our next site to experiment," he said.

Edwards said data from the two sites will be collected and analyzed for the next two years.

"Response to the project has been so favorable that there might be a possibility of getting two more SWECS for Nebraska by mid-1980," Edwards said.

While work on storing wind energy is still in the experimental stage, Edwards said two other researchers at the university are working with projects utilizing wind energy.

Wayne Martin, professor of engineering mechanics, has been trying to reduce the high costs of windmill motors by constructing them out of high-strength concrete. Since costs are 10 to 20 times too high for economical power production, alternative building materials may be the answer.

Nitrogen compounds

Richard Gilbert, professor of chemical engineering, has been experimenting with using wind to create nitrogen compounds

for use in agricultural fertilizers.

Edwards said these projects have potential, not only for wind, but for solar applications as well.

"Solar and wind systems provide a diffused source of energy, while oil, gas and coal are more concentrated," he said. Though most projects are still in experimental stages, the application of older principles to new technology could provide a solution to the energy crunch, Edwards said.

"It would be a tremendous accomplishment if someday 5 to 10 percent of our energy would come from the wind," he added.

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Be careful who you meet going to Walpurgisnacht

By Lucy Bighia

A word of warning to anyone planning to let loose and get into the spirit of things at tonight's Walpurgisnacht festivities: read on before making that possibly fatal decision.

The Union Program Council may be billing Walpurgisnacht as Lincoln's own "All-Night Winter Festival," but the real occasion has a much different history. Walpurgisnacht—German for "Walpur-

gis' Night"—was historically a witches' holiday observed the night before May 1. The holiday, also known as a witches' fire festival, marked an important Sabbath

for witches and sorcerers.

Rumor has it the witches would ride to the Brocken, the highest peak in the German Harz Mountains, on the backs of demons in the form of goats or asses or

through the air on broom sticks.

There they would hail their master,
Lucifer, with cries of "ooroorake,"—from
which the word "eureka" is said to be derived—a shout which conjures up fire.

Those covens (groups of witches) that found the Brocken too crowded for their taste would congregate in open places or at crossroads to perform their rites and re-

affirm their subservience to their master.

The witches supposedly anointed them-

selves with oil made from the fat and marrow of murdered babies to attend their service, which was actually a parody of the Catholic Mass.

Novices were accepted into the coven, and members swore fealty to the master while placing one hand on the head and holding the sole of the foot with the other. The initiate would then receive a new name while being pinched by an imp to make an indelible blue mark.

Then came the real fun.

The witches would feast on stolen food and dance wildly around with their backs to the center of a huge circle. The devil would pick one lucky young lady to be his partner for the evening, while the rest of the witches paired off into couples, and the whole group then engaged in a frenzied orgy until dawn.

The namesake of such merrymaking—an English nun—would probably be scandalized at the turn of events her holiday had taken.

St. Walpurga, who died in 778, was best-known for founding religious houses throughout Germany. Her name later became linked with the Sabbath, much to many Christians' dismay.

So the Christians decided to fight back. They picked up the habit of ringing consecrated bells to ruin the rhythm of the witches' merrymaking.



