

# Howard's Knob site of project

## Windmill to be built near Boone

By DAVID STACKS  
Staff Writer

**HOWARD'S KNOB** — This inaccessible peak in the Blue Ridge Mountains of Northwest North Carolina soon will have a superlative to draw visitors from near and far.

Officials of Blue Ridge Electric Membership Corp. and the U.S. Department of Energy have announced plans to build the world's largest windmill atop Howard's Knob, a 4,420-

foot ridge overlooking the town of Boone.

Scheduled to be operational later this year, the wind turbine will be attached to two rotor blades with a 200-foot span mounted on a 150-foot tower. The blades will have 50-foot ground clearance.

The project is part of a federal program researching alternate sources of energy, according to Bud Ayers, engineering director with the Lenoir-based Blue Ridge Electric.

Ayers and his staff have been monitoring winds on Howard's Knob since December 1976 on a tower visible from most vantage points in Boone. The wind turbine will replace the present structure.

The windmill will be constructed on a six-acre tract leased from the Watauga County Board of Commissioners, Ayers said. The nearest house is 800 feet away. But the only way to reach the summit is on foot or in a four-wheel-drive vehicle because the only road is unpaved and ungraded.

Ayers said the N.C. Department of Transportation has promised road improvements before construction of the windmill begins.

The rural electric cooperative will supply engineers to monitor the research station and perform minor repairs after it is completed, Ayers said. But only a handful of staff engineers

will be needed to keep an eye on the fully automatic station because equipment on Howard's Knob can be monitored from Blue Ridge Electric's Lenoir office, he said.

"It's all gears and a generator," the engineer said. "We hope it will produce 2,000 kilowatts per hour when the wind blows at 24.6 mph."

But even with roaring winter winds, Ayers said the generator and an adjoining substation will generate less than 10 percent of the power the cooperative needs to supply its almost 30,000 members in eight counties.

"Ten percent is rather optimistic," he said.

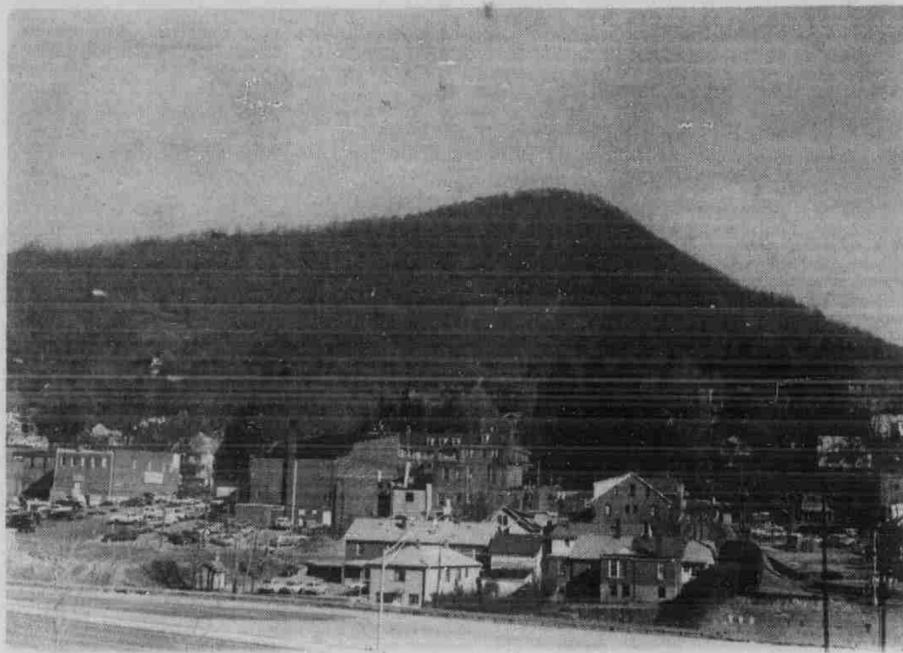
"A source that depends solely on the wind will never replace the hydroelectric power plant."

Maurice Rhodes, Blue Ridge Electric's communications director, said the wind generator will help the company cut costs during the winter.

"The greatest winds are in January and February," Rhodes said. "That's also when people use the most power. Ironically, the coldest winds will help us keep people warm during our peak-load period."

While imposing variables on the amount of electricity the wind generator produces, Rhodes said high-speed gusts could cause other problems.

"Part of the experiment is to see if this big monster will fall over or tear itself



In the background is Howard's Knob, overlooking Boone, which has been chosen as the location of the world's largest windmill. The windmill is part of a research project examining new sources of energy. Officials hope to achieve 2,000 kilowatts of energy per day under ideal wind conditions. Photo by Cameron Davis.

up," Rhodes said. "People have asked what would happen if a blade should break in a 35-mile-an-hour wind. I don't know, really. But just how far is a 20,000-pound steel blade going to fly?" Ayers said he doubts the blades will break. The pitch and yaw controls cause them to "feather out" in high winds, making the blades hang still in 35 mph gusts.

Rhodes said an important aspect of the windmill is its public accessibility.

He said Blue Ridge Electric officials hope to study how persons feel about living within sight of such a huge machine.

He said environmentalists have raised the most fuss about the windmill project.

"Environmentalists are strange creatures," Rhodes said. "They scream for non-polluting alternate sources of energy. But they don't want it in their backyard."

Part of a \$20-million research project, the Howard's Knob generator is one of four windmills modeled after a smaller prototype at NASA's Lewis Research Center in Ohio. The Howard's Knob model will be the largest, costing \$3 million.

The three other windmills, when completed, will be in New Mexico, Puerto Rico and on Block Island off the coast of Rhode Island.

### weather

national service. If large discrepancies exist between the reports from each service, Carpenter says he calls each one to find out why.

Dan Salgado, meteorologist at a bureau of the National Weather Service at the Raleigh-Durham Airport, says if a forecast on WTVD is different from a forecast on WRAL-TV in Raleigh it confuses the public. WRAL uses only the National Weather Service.

"We at the National Weather Service may forecast rain or snow and they come out on a limb and say snow," Salgado says. "It fouls things up. ACCU-Weather should work for us or us for them. But we're bigger," Salgado says.

Bob DeBardelaben, weatherperson at WRAL in Raleigh, says he would not criticize ACCU-Weather. But he says it is money down the drain to pay for ACCU-Weather when the information

from the national service is free.

"Why pay for it when you can get the National Weather Service information for nothing?" he says. "You have to believe in the people you are working with and for. The National Weather Service has a tremendous wealth of information."

DeBardelaben says if it snows in North Carolina and the National Weather Service fails to predict it, as it did just before Christmas, people who expect 100 percent reliability automatically say the National Weather Service is no good. ACCU-Weather predicted the snowfall.

Susan Datz, reporter for WCHL in Chapel Hill, says she is not familiar with the ACCU-Weather service. But she says the information she uses from the National Weather Service is sufficient and accurate. "I have no complaints about the service," Datz says.

Continued from page 1

2:30  
4:45  
7:00  
9:15  
NO  
PASSES

**CLINT EASTWOOD**  
**THE GAUNTLET**

**Carolina Twin**  
EAST FRANKLIN STREET

**WE ARE NOT ALONE**  
**CLOSE ENCOUNTERS OF THE THIRD KIND**

1:15  
4:00  
6:45  
9:40  
NO  
PASSES

**Plaza 1**  
Held Over  
4th Big Week  
Sorry No Passes

**"SEMI-TOUGH"**

**Plaza 2**  
Last Day  
"TELEFON"

**OMEGA 2000**  
From the STARS & WORLDS of Another Galaxy - A FUTURISTIC FANTASY for Adults

STARTS  
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**Plaza 3**  
Held Over  
4th Big Week  
Sorry No Passes

**the GOODYE GIRL**

**Varsity**  
Held Over  
Sorry No Passes

**THE FEVER IS SPREADING.**  
JOHN TRAVOLTA  
**SATURDAY NIGHT FEVER**

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## UNC patrolman claims unfair promotion

By DAVID STACKS  
Staff Writer

Security Director Ted Marvin has used inconsistent methods of selecting police officers for advancement in each of three promotions made in the past two years, a University Police officer has charged under grievance provisions of the state personnel law.

Patrol Officer Fred Giles filed a formal complaint with the University Personnel Department Jan. 3 after Marvin appointed Patrol Officer Walter Dunn to the rank of detective sergeant.

Giles and five other patrol officers unsuccessfully applied for the job Marvin awarded to Dunn.

Giles also is charging police officials with ignoring a merit selection system that stresses applicants' education, training and experience more than seniority.

"They (police officials) are manufacturing a set of ironclad rationales that are not consistent from case to case," Giles said.

The promotion standards practiced by University Police are fair to applicants, Marvin said.

"I don't know if you would call it a science or an art," Marvin said. "But making promotions is difficult. We haven't had a vacancy in two years without having several applicants who could handle the job."

Marvin said the police administration reviewed the seven applicants for the detective's position and recommended one of them to the personnel department.

Although Marvin would not disclose the name of the police administration's recommendation, he said it was not Dunn. Personnel officials, however, reviewed the applications and recommended Dunn, who was then chosen for the post.

The security director said Dunn's promotion was made after an examination of each applicant's length of service, evaluation by the applicants' commanding officers and the amount of job-related education each applicant had.

The plainclothes detective sergeant's job is one of the most coveted in the 32-member police force.

Two promotions were made after a uniformed sergeant's position became vacant in 1976 and a lieutenant's post opened in 1977. The third promotion, which took effect last week, was Dunn's.

Marvin and police coordinator Maj. E. B. Riggs interviewed candidates for the uniformed sergeant's job in 1976. A four-member review board consisting of uniformed police officers helped select the lieutenant in 1977. Marvin and chief investigator Lt. Charlie Mauer made the decision to promote Dunn.

Even though different selection methods were used in the three promotions, Marvin said the minimum standards for each vacancy remained the same.

But Giles said police administrators rated applicants for the detective's post in a manner inconsistent with educational standards set up under state guidelines. The patrol officer said the minimum qualifications University Police requires of its personnel should be at least as stringent as those of the N.C. Criminal Justice Training and Standards Council.

Under University regulations, applicants for the detective's post are required to have a high school diploma, basic police training, a basic criminal-investigation course and one year of experience as a police officer.

In addition to requiring these same minimum qualifications, the state training council requires officers to have an associate or bachelor's degree, or a specified number of years of seniority certified by the council as equivalent to a college degree.

Marvin said he did not use the state guidelines because they are not part of University policy.

Giles charged police administrators with setting aside the results of a merit selection system established to assign point values on the basis of each applicant's experience, training and education.

Marvin said administrators did not rely on the point system because several applicants had almost the same number of total points. Instead, he said the applicants' length of service with the University was the deciding factor in the promotion.

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