

Windstream windmills whirling in China

Wind generators designed by Thermax Corporation Energy Systems of Vankleek Hill, Ontario, have been sold to the China Industrial Development Corporation.

The small renewable energy firm has signed a contract, initially worth \$18 000 to supply the Chinese corporation with 20 of its nine-kilogram, 12 volt wind generators. If the generators prove marketable in the country, Thermax will form a joint venture with the Chinese

government to manufacture them in China. The company expects future wind-generator sales to the Orient to reach 1 000 units.

The windmill-like units, which convert mechanical energy into electricity, will be demonstrated in Mongolia. Complete with batteries, towers, voltage regulators and current monitors, "they'll power fluorescent lights, water pumps, radios and televisions", said Thermax vice president of engineering, Colin Kerr.

Thermax began in Canada in 1976 as a product research and development company and in 1977 opened a US subsidiary to manufacture its wind generators and ac-



Thermax's windmill-like Windstream generator converts mechanical energy into electricity in remote areas.

cessories. The small company currently has a staff of five, with two in the US. The wind generators are marketed by five dealers in Canada and 20 in the US.

In 1984, the company sold 1 000 of its models, Windstream and Helius. Some 300 were sold in Canada and the majority were exported. At the present time, the company is looking to increase sales in developing countries, said Mr. Kerr.

Various uses

The Windstream generator supplies an average of 138 kilowatt hours per year of emergency power with an average 20-kilometre

wind. Its main value is to provide power for emergencies or for areas with no power.

"This type of machine can power a cottage and is definitely meant for remote locations where there's no power," said Mr. Kerr. With one or two marine-type batteries, the Windstream could generate enough power to run a cottage's lights, waterpump and television for a weekend, he said.

A company in New Mexico purchased 18 Windstreams and installed them on lakes to warn sailboats when the water gets choppy. The generators were outfitted with strobelights, as on the wingtips of airplanes, and when the wind reaches 24 kilometres an hour, the strobelights flash.

The Listowel District Secondary School in Listowel, Ontario bought a Helius wind generator in kit form to be used in conjunction with renewable energy courses at the school. The students learn how electricity works and are able to construct the wind generator and monitor its performance.

Further research

Currently Thermax is working to develop some new products. One is a new speed indicator which the company hopes to sell to airports and meteorology stations as a replacement to the three-dish type anemometer.

Another is a high-power, electronically-controlled, fully-automatic one-kilowatt wind generator with a projected capacity of 2 200 kilowatt hours per day. "It's designed for the export market for places like North Africa, India, China and other areas which would otherwise have to use diesel generators for their power," said Mr. Kerr.

New defence minister

Erik H. Nielsen was appointed minister of national defence by Prime Minister Brian Mulroney on February 27. He replaces Robert Coates, who resigned on February 12.

Born in Regina in 1924, Mr. Nielsen was first elected to the House of Commons in 1957. He has served as the member of Parliament for the Yukon and in a number of capacities for the Progressive Conservative Party since then. He was a pilot in the Royal Canadian Air Force and earned a Distinguished Flying Cross for his efforts in Europe during the Second World War.

Mr. Nielsen was appointed deputy prime minister and president of the privy council on September 17, 1984. He will retain the position of deputy prime minister and Ramon John Hnatyshyn will assume the duties as president of the privy council. Mr. Hnatyshyn will continue to hold his current portfolio as government house leader.



Colin Kerr, vice president of engineering (right), and Barry Moreton, production manager, check Windstream propellers.

Russ Mant, The Citizen photos