

The Journal Pioneer - News - Local

Wind turbines to feature energy storage system

Published on November 29th, 2010
Eric McCarthy 

Topics : [Wind Energy Institute of Canada](#) , [Department of Environment](#) , [NORTH CAPE](#) , [Iceland](#) , [Norway](#)

NORTH CAPE - About five more wind turbines could be spinning near the Island's northwestern tip this time next year.

Scott Harper, general manager of the Wind Energy Institute of Canada, said there are plans to develop a 10-megawatt wind energy research and development park in the Norway-North Cape area.

Although purchase negotiations are still ongoing, Harper said the park will likely consist of five turbines, each capable of generating two megawatts of electricity.

Although the turbines' purchase and installation will account for about 85 per cent of the project costs, Harper said it is the project's other component that sets this project apart.

"The real innovative part of this is the storage," he said.

The energy storage component will likely be in the \$3 million range while the wind park will likely cost over \$20 million.

Wind systems produce energy only when the wind is blowing, Harper explained. Storage systems give wind farms the potential to store power for use when energy demands are highest.

He displayed a graph showing wind speeds for a 24-hour period. The highs were when the wind was blowing strong. The lows were when there was little or no wind. For the day he was displaying, there was no wind at all during the hours when energy demands were highest.

WEICan is studying different types of energy storage systems, including compressed air, hydrogen gas, flywheel and different types of battery storage before making a selection.

Harper anticipates wind turbines being delivered to the farm next summer and erected next fall. The energy storage system will likely be installed by the spring of 2012, he said. It will have storage capacity for five to 10 megawatts - energy that can be stored when supply is higher than demand and used when demand is higher than the turbines' output.

Plans for the wind farm and its storage component will be outlined during an Open House and public meeting at the Tignish Fire Hall on Tuesday, Dec. 7, 3 to 5 p.m. and 6 to 8 p.m. The status of the environmental impact study will also be discussed at that time. That document is available for viewing at the P.E.I. Department of Environment, Energy and Forestry and on the department's website.

Harper said the economics of energy storage is of interest to utilities, wind farm operators, regulators and governments.

"So we can start modeling some of this. We can show real numbers," he said. "That's the real interesting part of this that I think the industry is going to like seeing."