

## On Top of a Monster

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SAIN JOHN – Energy Minister Jack Keir is launching an aggressive wind energy strategy that could drive New Brunswick to double its entire power supply by 2025 simply with wind power.

Keir told a Saint John conference on Thursday that the province could add as much as 4,500 megawatts of wind power onto the provincial grid by 2025. Keir's pronouncement is a staggering figure considering NB Power's total load is now just shy of 4,000 megawatts.

A report by Denmark-based EA Energianalyse's illustrates a bold future for wind power generation, one that Keir told the Telegraph-Journal editorial board that he embraces.

"Even if they are half right, even if it is 1,250 to 2,000 (megawatts), the opportunities there are wonderful," Keir said. "Not only for the ratepayers of electricity but the environment and a new industry could be built in New Brunswick on this opportunity/"

New Brunswick's entire electricity load is 3,980 megawatts so if the government added 4,500 megawatts to the grid by 2025 that means it could technically replace all existing generators that power the province. In reality that is impractical because wind generation needs back up power supplies for times when the wind is not blowing and Keir is looking to export some of this power into New England and other Maritime provinces.

There are transmission bottlenecks and legal irritants in New England that must be resolved, but Keir said they can be overcome. The energy minister bristled at the suggestion additional wind power might face intense competition in New England.

"Don't think we can't compete. It bothers me when people think New Brunswick can't compete," Keir said.

"...The Lower Churchill for goodness sakes has to run an underground cable underneath the sea to get to us and the capital costs associated with that are going to be a little bigger than the fact that New Brunswick is located on top of a monster. We are right here. We just shoot it down through Maine. They have to shoot it across how many miles of underwater sea calbe."

Despite the transmission obstacles, the economics of wind power are improving as the price of oil escalates deeper into uncharted territory.

Guided by the assumption oil stays near \$120 a barrel, Kaare Sandholt, a partner with EA Energianalyse, said it is viable to switch to wind generators and turn off traditional thermal stations.

“So it is a good basis to build new nuclear or wind power to replace existing oil-fired, coal-fired and natural gas-fired power plants,” Sandholt said.

It is premature to begin discussing whether New Brunswick’s thermal generators are vulnerable. That picture will become clear when the province learns of the future costs of carbon dioxide emissions and carbon capture technology.

Yves Gagnon, the K.C. Irving Chair in Sustainable Development at the Université de Moncton, said Keir is signaling an important shift in the province’s renewable energy future. And Gagnon’s work on mapping the province’s wind regime indicates that 4,500 megawatts is one-tenth of the potential resource.

“What the minister presented is a bold vision that is realistic and that will contribute to making New Brunswick a true energy hub in the sense that all regions of New Brunswick will participated in being that energy hub,” Gagnon said.

New Brunswick is on pace to plug 400 megawatts of wind into its power grid by 2010, a target that is already ahead of its original schedule. Only one year ago, the New Brunswick System Operator indicated a cap should be placed on wind power to allow study on how that electricity source impacts system reliability.

Now the NBSO is squarely behind the studes and enthusiasm for this new wind regime. Keir admits wind has not always been a mainstream power option and there has been some reticence in the past over moving too quickly with it.

“The NBSO saw the opportunity, saw what could be done here and pushed forward aggressively and maybe dragging NB Power along kicking and screaming. But I can tell you now they are not kicking and screaming any more everyone sees the opportunity,” he said.

Michel Losier, the managing director of corporate affaris for NB Power, said the corporation is working in tandem with the government and NBSO on the wind file.

“We are talking the longer term, there are a series of studies that will be undertaken on export potential and grid integration. There is a lot of work to be done on this file,” Losier said.