



# NEWSLETTER no.2

May 2015

## Wind Resource Assessment

If you have ever stood on the top of a ridge in the B.C. interior, you will probably have experienced first-hand the power of the wind in the area! The potential for using the wind as a source of power is significant in British Columbia. M. K. Ince and Associates Ltd. (MKI), a Vancouver based Wind Energy developer, is developing three potential projects in the area immediately north of Merritt, on the Thompson Plateau.

Currently, two meteorological towers have been installed in order to measure the wind resource in the area. These include the 60 m tower at the Mont Guichon Wind Energy Project, where measurements have been ongoing for six years, and another 60 m tower at the Mount Mabel Wind Energy Project, where measurements have been ongoing for two years. A third meteorological tower is proposed for the Mamette Lake Wind Energy Project, which is still in the early stages of development.

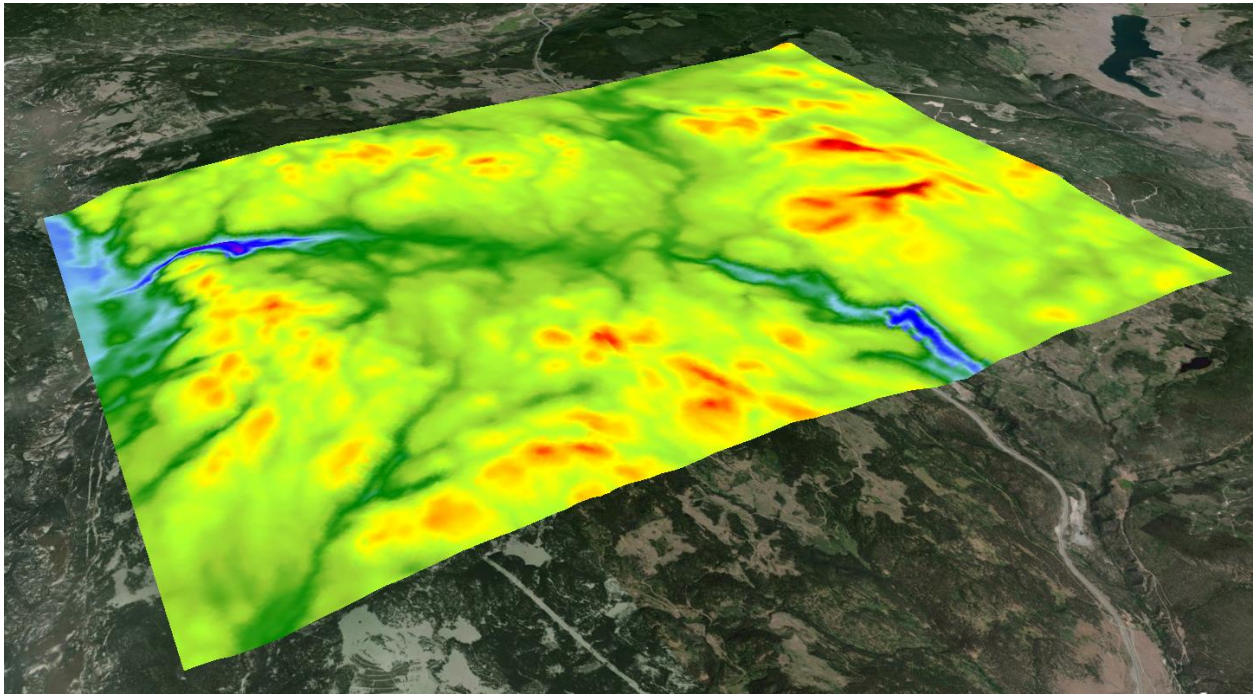
We are using the wind speed and direction information collected from the towers to help plan where wind turbines could be constructed to best capture the wind to produce electricity. The data is brought into "Computational Fluid Dynamics", or "CFD", software, so we can map how the wind flows over the rugged topography of the area. Having accurate mapping of the tree heights in the area is also important for this mapping, as the surface conditions also have an impact on the wind flows. With logging ongoing in the area, having accurate information is important and can be a challenge.

Measurements will continue for a few more years at least. Upgrading the measurement equipment on the towers will be happening during that time. With more information gathered the accuracy of the estimate of the energy production potential will get better. Nevertheless, in order to take into account the potential for year-to-year changes in the wind speeds, we will also use climate data from NASA and the National Oceanic and Atmospheric Administration to try to better predict the long-term energy production potential of a wind farm.

Other work that will be happening while the wind studies continue include electrical interconnection studies, Environmental Assessment, including background studies on bird and bat habitats and species presence, archaeological and traditional-use studies and detailed financial modelling and cost financing.

If all Government approvals are in place and a BC Hydro Electricity Purchase Agreement granted, construction could commence late in 2017.

## Wind Mapping for the Study Area



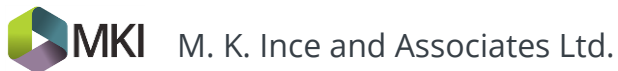
*Average wind speeds are shown overlaid over the topography of the Thompson Plateau north of Merritt. Currently two meteorological towers have been gathering wind speed data for over six and two years respectively. The collected wind speed data is modeled and mapped over the study area using Computational Fluid Dynamics (CFD) software, and corrected for year-to-year variation using NASA and NOAA climate data.*

We will be keeping you informed about the development of the projects and welcome your comments and questions at any time.

### **For more information please contact:**

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