ELTON ENERGY CO-OPERATIVE

C/O Elton Municipality
Forrest, MB.
R0K 0W0

January 28, 2014

NFAT ('Needs for Alternatives To') Review
Manitoba Public Utilities Board
400 – 330 Portage Avenue
Winnipeg, MB R3C 0C4
Email: publicutilities@gov.mb.ca

Dear 'Needs for Alternatives To' Review Committee:

Elton Energy Cooperative (EEC) was formed in 2006 to allow residents throughout Manitoba to directly invest in commercial scale renewable energy projects. We created a model that facilitates direct investment in the emerging renewable energy industry, including wind, photovoltaic solar, biomass and biogas. Our goal is to reduce the economic leakage of more than $5 billion/year that leaves our province every year for non-renewable oil, natural gas and coal. We seek to ensure that renewable energy policy, as it develops, favours ordinary Manitoba residents rather than outside entities. Our initial proposed project is a modest 5-20 MW wind farm, for which we are seeking a power purchase agreement with Manitoba Hydro.

EEC has reviewed the Needs For Alternatives To (NFAT) submission filed by Manitoba Hydro to the Manitoba Public Utilities Board (PUB). We applaud the initiative to review options for Manitoba's long-term sustainable energy future, and we believe that investment industrial scale, community-based wind, solar, biomass and biogas facilities that are directly owned by ordinary Manitobans will result in a highly reliable, least cost energy future, while maximizing long-term, sustainable rural economic development.

As the PUB sets the stage for our energy future, we encourage consideration of the following:

- **The costs per kWh of non-hydro renewable energy continues to be economically competitive compared to non-renewables and large hydro.** Solar power in the U.S. is now 60% cheaper than it was in early 2011, according to a report by the U.S. Solar Energy Industries Association (SEIA). Wind turbine prices have dropped nearly one-third since 2008 according to a study by Lawrence Berkeley National Laboratory. Biofuel technology is rapidly progressing, with the US Energy Department's Pacific Northwest National Laboratory receiving national recognition for developing a process to turn algae into bio-crude oil in just minutes.

- **Community-owned renewable energy projects maximize economic benefits to rural communities**. A study by the US Department of Energy shows that locally-owned wind projects result in three times the economic benefits compared to projects that are owned by out-of-area firms. The Toronto Renewable Energy Cooperative now offers 5% returns on solar projects, and has sold more than $3 million worth of solar bonds, putting renewable energy dollars directly into the pockets of provincial residents. With its abundant wind, solar and biofuel resources, Manitoba has a golden opportunity to leverage emerging renewable energy technology to directly benefit its residents.

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- **Natural gas is problematic.** Methane, which is the major component of natural gas, is a very potent greenhouse gas. A landmark paper that was published in the April 2011 journal Climatic Change ("Methane and the greenhouse-gas footprint of natural gas from shale formations") concluded that burning natural gas was worse for the climate than burning coal. Fracking is also causing concerns about groundwater contamination. Finally, infrastructure isn't planned for natural gas deployment in many rural areas in Manitoba.

- **Non-hydro renewable energy can serve as a valuable complement to hydroelectricity.** By using hydro and non-hydro renewable sources together, Manitoba Hydro can take advantage of the sun, water, wind and biofuels to ensure Manitoba's electricity grid is reliable and resilient.

EC welcomes opportunity to present its model and further discuss option for building a long term, reliable and sustainable energy system for Manitobans. We seek to apply for "presenter" status in the NFAT of Manitoba Hydro's Preferred Development Plan.

Sincerely,

Dan Mazier
Elton Energy Cooperative