

June 28, 2013

The Public Utilities Board  
Attention: Mr. Hillis Singh  
Executive Director and Board Secretary  
400-330 Portage Ave.  
Winnipeg, MB R3C 0C4

Dear Mr. Singh:

**Re: Response to Board Order 67/13**

I am responding to procedural Order 67/13 on behalf of Green Action Centre and Pattern Energy and updating information. Pattern Energy operates the St. Joseph wind farm in Manitoba and wishes to collaborate with us to insure due consideration of Manitoba's wind potential and to participate in the review of Manitoba Hydro's NFAT filing and in the provision of evidence on technical and economic aspects of wind generation.

*Pattern Energy Group is one of North America's leading independent wind and transmission companies. Our mission is to provide our customers with clean, renewable energy, which we seek to achieve by developing, constructing, owning and operating projects that are built for lasting success. We identify high-value opportunities in the renewable energy sector and then create and implement a plan to convert those opportunities into operating assets. This allows us to deliver exceptional results for the benefit of all our stakeholders. We have projects totaling over 1,155 MW in operation and under construction. In addition, we are growing and building on our current development pipeline, which includes over 3,000 MW of wind power and multiple transmission projects in the United States, Canada and Latin America.*

**Updated Information**

Green Action Centre recently held its AGM and subsequently elected a new slate of officers. In addition, this weekend marks a transition in the Executive Director position. Retiring ED Randall McQuaker will be replaced by our new ED Tracy Hucul. The information on our application form should be updated to show these changes as well as the Pattern Energy contact.

Executive Committee of the Board of Directors of Green Action Centre

President	William Dowie
Vice-President	Peter Miller
Secretary	Sara Thrift
Treasurer	Sarah Neufeld

Executive Director of Green Action Centre (please add to the NFAT circulation list)

Tracy Hucul [tracy@greenactioncentre.ca](mailto:tracy@greenactioncentre.ca)

Contact for Pattern Energy (please add to the NFAT circulation list)

Colin Edwards [colin.edwards@patternenergy.com](mailto:colin.edwards@patternenergy.com)

### **State of Our Work Plan and Budget**

The PUB's draft timetable (attached) set August 30, 2013 (two weeks after the filing of Manitoba Hydro's evidence on August 16) as the deadline for the submission of intervener budgets. A scan of the transcript of the prehearing conference held May 16 does not suggest otherwise. It was thus with considerable surprise that we read in procedural order 67/13 that a draft budget with witness retainers was due on June 28. While we understand the Board's desire to encourage intervener planning and negotiation, we have been unable to complete this process in the time allotted.

The time since Order 67/13 was released has been a period of transition within Green Action Centre requiring an intense focus on organizational matters. In addition, our lawyer, Bill Gange, was married last weekend and has been unavailable for the past week and a half. And although Pattern Energy approached us as a potential collaborator two weeks ago, it was only yesterday that our schedules meshed to make contact and confirm their participation with us in the NFAT. As a consequence, we are not in a position to present a detailed work plan or budget. What we can do is describe our intentions and beg permission to delay our more detailed submission until Tuesday, July 9th (mindful that this and next weekend are holiday long weekends in Canada and the U.S. respectively).

### **Addressing Green Action Centre Issues**

Green Action Centre has had preliminary discussions and email exchanges with MIPUG and CAC-MB and with our new collaborator, Pattern Energy, about cooperation in the presentation of evidence. This has led to two agreements about witnesses, to be specified below.

In our application at the pre-hearing conference on May 16th, Green Action Centre identified ten issues of concern. In Order 67/13, nine of the issues were consolidated into four and the tenth (long-range planning beyond a 20-year horizon) was ruled out of scope and will be addressed in a later section.

The four consolidated issues considered to be within the scope of the Terms of Reference of the NFAT Review are:

- (a) Forecasts and risks associated with domestic load, export commitments and export pricing;
- (b) Use of Demand Side Management and alternative energy initiatives;
- (c) Marginal costs of Manitoba Hydro's Preferred Development Plan ("PDP") and alternatives including DSM; and
- (d) Alternatives to Manitoba Hydro's PDP together with integration into a diversified portfolio and consideration of such contributions to Risk Management.

Issue (a) is directly related to item 1.d. (forecasts) and 2.e. (risks) in the Terms of Reference. Issues (b), (c), and (d) are all linked to the second major topic in the Terms of Reference:

*2. An assessment as to whether the Plan is justified as superior to potential alternatives that could fulfill the need*

A. Green Action Centre proposes to pursue DSM alternatives by again, with CAC, co-sponsoring evidence from Philippe Dunsky, who is well-known to the PUB and previous PUB participants. Mr. Dunsky's work plan and draft budget will be filed with the CAC submission.

B. The main alternative generation resource is wind. Indeed both Manitoba Hydro and the PUB in Order 67/13 contemplate the production and testing of a number of different scenarios involving wind. Green Action Centre and Pattern Energy hope to identify a wind expert able to guide interrogations and produce evidence on the

technical and economic aspects of wind generation and its integration into the grid. Such an expert has yet to be identified.

C. Solar-thermal, solar electric, biomass and geothermal are alternative renewable fuels and technologies, whereas natural gas is the most common alternative to electricity in gas-served areas. Fuel switching from or to any of these to or from grid electricity will affect Manitoba's domestic load (as well as costs to customers, the gas utility, the electric utility; cash flows into and out of Manitoba; and net global GHGs). Paul Chernick's discussion of Manitoba Hydro's fuel-switching report<sup>1</sup> initiated this topic in the last GRA. It is directly relevant to load forecasting (1.d.), reshaping demand (2.) and socio-economic and environmental impacts (2.i and j.). We intend for Paul Chernick to extend his evidence in the context of assessing alternatives for the NFAT. We will need to connect with Mr. Dunsky to understand which, if any, of these technologies will be included in his evidence, which in turn may depend upon which are considered within Manitoba Hydro's DSM potential study.

D. The PUB approved issue (c) marginal cost comparisons of the PDP and alternatives. In our application, we noted a variety of frames or approaches for determining marginal costs of hydropower, including (a) the long term value of incremental exports, (b) the long-term cost of incremental supply from construction of new hydro generation and associated transmission, (c) medium term cost of incremental supply as reflected in operating and carrying costs/kWh for the first 10-20 years of new supply. We would like clarity on the alternatives and their appropriate application in drawing comparisons between different resource alternatives. We intend for Mr. Chernick to tackle this issue.

E. We want to consider the role of alternatives to the PDP in risk mitigation and risk management. We will need to determine if this topic is adequately covered in the other filed proposals.

F. Finally we, like other interveners, will be required to understand and assess all relevant issues to make our recommendations at the conclusion of the process, not just those on which we produce evidence. We intend to allocate time to Mr. Paul Chernick to help identify issues, answer questions, provide guidance for written and oral questions and interpret results.

G. Our budget will also include time for the services of our lawyer Mr. Bill Gange. This will have to be proportionate to the nine weeks of the hearing, in addition to preparation, the paper exchange of questions and answers and evidence beforehand and final summation at the end.

### **Long-Range Planning Beyond the Capacities of Keeyask Generating Station and Conawapa Generating Station**

In our topics of concern we identified long-range planning beyond a 20-year horizon. Indeed most of the relevant forecasts of this exercise go well beyond 20 years. Indeed Figure 2 of the 2012/2013 Power Resource Plan shows the demand curve extended 35 years to 2047/2048 and exceeding the new capacities of Keeyask and Conawapa added to the system. Mr. Cormie testified that the capacity of the Nelson to meet Manitoba load will last until around 2050 (Dec. 10, 2012 Transcript p. 249). Our Hydro resource is finite. Sustainable development requires managing finite resources for the long term. We submit that, for a variety of reasons, the rate at which we exploit our finite hydro resource relative to other alternatives is a relevant consideration in determining " If the Plan has been justified to provide the highest level of overall socioeconomic benefit to Manitobans, and is justified to be the preferable long-term electricity development option for Manitoba when compared to alternatives."

At the same time we appreciate the PUB's concern to remain within a tight schedule and to conserve resources spent on the hearing. We do not plan to produce special evidence on this topic or engage in lengthy interrogation, but it would be an awkward constraint in a discussion of sustainability if there were zero tolerance for gaining insight into the long-range power resource planning and decision-making that take place, which convert hydroelectric capacity into a preferred development option.

<sup>1</sup> *Economic, Load, and Environmental Impacts of Fuel Switching in Manitoba* at [https://www.hydro.mb.ca/regulatory\\_affairs/electric/gra\\_2012\\_2013/Appendix\\_26.pdf](https://www.hydro.mb.ca/regulatory_affairs/electric/gra_2012_2013/Appendix_26.pdf)

Thus we ask, consistent with principles of sustainable development, that the PUB permit some discussion of the utility's planning and management around its available hydro-electric resource.

**Macro-Environmental Impact**

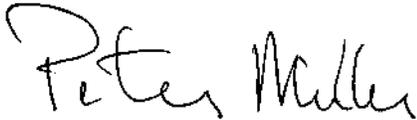
We intend to look at comparative GHG (and consequent climate change impacts) of alternatives as one example

We do not plan to offer an interpretation of Socio-Economic Impact nor an adequate definition of Macro-Environmental Impact and will look forward to what other parties come up with. We will only note that we intend to look at comparative GHG impacts as one consideration in the assessment.

We look forward to others' interpretations of these terms.

That concludes our incomplete submission at this date.

Sincerely,

A handwritten signature in black ink that reads "Peter Miller". The signature is written in a cursive, slightly slanted style.

Peter Miller  
Vice President of Green Action Centre  
and Policy Committee Chair