



Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers
autorisés de l'Ontario

August 25, 2010

Barry Duffey
Manager
Ministry of the Environment
Environmental Programs Division
Program Planning and Implementation Branch
135 St. Clair Ave.
Floor 4
Toronto Ontario
M4V 1P5

Re: EBR Registry Number 011-0089 – Approval of Off-Shore Wind Turbine Projects

Dear Mr. Duffey:

The Registered Nurses' Association of Ontario (RNAO) is the professional organization for registered nurses who practise in all roles and sectors across Ontario. RNAO's mission is to speak out for health, health care, and nursing. Like all Ontarians, registered nurses have become increasingly concerned about the impact of poor air quality on conditions such as asthma, lung cancer, cardiovascular disease, allergies and many other health problems.¹ Ontario's coal-fired electricity generators alone cause 250 deaths a year and about 125,000 minor illnesses, such as asthma attacks. By 2014, the government's announced date for closing the coal plants, a further 1,000 Ontarians will have died as a direct result.² It is crucial that clean, green alternatives be found to end Ontario's dependence on dirty coal and nuclear power. It is in this context that we appreciate the opportunity to comment on the proposed comprehensive rules governing off-shore wind turbines.

There are two aspects to the proposed regulation. First, is the blanket prohibition of any off-shore wind turbines within five kilometres of the shoreline. Second, the regulation would establish a comprehensive application process for any off-shore wind turbine development that is beyond the five kilometre exclusion zone. This proposed process includes:

1. Ensuring the lakebed is available for a renewable energy project under the *Public Lands Act*,³
2. Minimizing negative impacts to endangered and threatened species and habitat, other users of Crown land and flooding and erosion;
3. Meeting coastal engineering study requirements;
4. Addressing potential negative environmental effects to significant wildlife habitat, noise assessments and drinking water;
5. Consulting with the public, municipalities and Aboriginal communities; and,
6. Complying with federal environmental assessment requirements for off-shore wind projects, including a federal environmental assessment under the *Canadian Environmental Assessment Act*.⁴

In addition to the above, the provincial Ministry of Natural Resources is reviewing the process for making Crown land available for wind projects, which will likely result in further areas being removed from future off-shore development.

RNAO welcomed the *Green Energy and Green Economy Act, 2009* and the government's commitment to creating new jobs by expanding clean, green sources of energy such as wind, water,

solar, biomass and biogas. This was an important step to cutting the province's dependence on dirty coal, improving air quality and reducing the greenhouse gases that are a major cause of dangerous climate change. Wind, in particular, has huge potential to deliver clean, plentiful and relatively affordable power; it is estimated that wind will meet at least 20 per cent of Canada's power needs by 2025, up from the current one per cent.⁵

However, the RNAO is concerned that the five kilometre exclusion area in addition to the complex application process for all off-shore wind developments could have the unfortunate effect of undermining the government's policy goal of expanding renewable wind power in Ontario.

While opponents of particular wind turbine projects have raised health and other concerns about wind turbines located close to residential areas, current evidence does not support the contention that there is any significant inherent danger to wind turbines. For example:

- Ontario's Chief Medical Officer of Health acknowledged that some people living near wind turbines may report symptoms such as headaches and sleep disturbance, but a comprehensive review of existing scientific evidence found no causal link between wind turbine noise and adverse health effects at common residential setbacks;⁶
- Chatham-Kent public health unit concluded that as long as the Ministry of Environment guidelines for location criteria of wind turbines are followed, the impact on local residence would be "negligible": "Although opposition to wind farms on aesthetic grounds is a legitimate point of view, opposition to wind farms on the basis of potential adverse health consequences is not justified by the evidence;"⁷
- A study of 24,000 properties within eight kilometres of wind farms found that property values had increased rather than decreased for those properties within sight of a wind farm;⁸
- Wind power has the least impact on wildlife, compared to coal, oil, natural gas, nuclear and hydro.⁹ Contrary to myth, far more birds are killed colliding with office tower windows than by wind turbines.¹⁰

It is not clear why the five-kilometre set-back is necessary in the proposed regulation, given the additional application requirements that would determine whether, in the individual case, a greater or lesser set-back could be appropriate. By requiring a minimum five kilometre set-back in all cases, regardless of individual factors, the regulation would, for example, bar any wind development off the shore of Toronto in Lake Ontario, where the need for renewable energy is greatest.

RNAO supports assessment of wind turbine projects, including appropriate set-backs, on a case-by-case basis under the comprehensive Ministry of Environment guidelines. ***A blanket ban on wind turbines within five kilometres of the shoreline is arbitrary and inappropriate and should be removed from the proposed regulation.***

Thank you for the opportunity to comment on the important proposed regulation governing future off-shore wind projects in the province. RNs look forward to continuing to work with the Ministry to achieve cleaner energy and a healthier environment for all Ontarians.

Sincerely,



Doris Grinspun, RN, MSN, PhD, O.ONT.
Executive Director, RNAO

¹ Environment Canada. (2006). *Health, Environment and the Economy*. Retrieved January 17, 2010 from <http://www.ec.gc.ca/cleanair-airpur/default.asp?lang=En&n=D8331ABC-1>

² Ontario Clean Air Alliance. (March 2010). Finishing the coal phase out: An historic opportunity for climate leadership. Author.

³ *Public Lands Act*, R.S.O. 1990, c.P.43.

⁴ *Canadian Environmental Assessment Act*, S.C. 1992, c.37.

⁵ Pembina Institute. (2010). Wind Power Realities: Putting Wind Power Myths into Perspective. Author.

⁶ Chief Medical Officer of Health of Ontario. (May 2010) *The Potential Health Impact of Wind Turbines*. Toronto: Author. 10.

⁷ Chatham-Kent Public Health Unit. (June 2008). *The Health Impact of Wind Turbines: A Review of the Current White, Grey and Published Literature*. Chatham: Author. 17.

⁸ Sterzinger, G., Beck, F. and Kostjuk, D. (2003). The Effect of Wind Development on Local Property Values. Renewable Energy Policy Project (REPP). Washington.

⁹ Pembina Institute. (2010). Wind Power Realities: Putting Wind Power Myths into Perspective. Author.

¹⁰ Pembina Institute. (2010). Wind Power Realities: Putting Wind Power Myths into Perspective. Author.