

Halifax Regional Council October 25, 2005

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

Carl D. Yates, M.A.Sc., P.Eng., General Manager

Halifax Regional Water Commission

DATE: October 14, 2005

SUBJECT: Wind Turbine – Lake Major Watershed

INFORMATION REPORT

ORIGIN

Energy and Underground Services Committee Meeting of September 9, 2005.

BACKGROUND

Over the last year, HRWC staff has been in dialogue with Renewable Energy Services Limited (RESL) and HRM staff over the prospect of constructing a wind test turbine within the Lake Major Watershed. Initially, HRM planning staff indicated that a zoning change would be required for a test turbine in accordance with land use policy. After reviewing HRM policy, the HRM planning department indicated that a test turbine could be considered if the power was taken directly by the Water Commission in the operation of its treatment plant. HRWC reviewed this scenario and agreed with the concept subject to the other requirements previously discussed with RESL. These requirements included the completion of an environmental assessment, negotiation of successful commercial terms, and public consultation with neighboring communities.

DISCUSSION

At the Halifax Regional Water Commission Board meeting of August 10, 2005, HRWC staff put forward a recommendation to the Board to approve the construction of a 150 metre access road to the proposed test turbine site such that RESL could begin their environmental screening. In order to comply with watershed regulations, the road had to be constructed by September 30, 2005. The road was to be constructed to HRWC forestry road standards subject to the conditions outlined in the staff report of August 5, 2005 (copy attached). As part of the process, with the concurrence of the HRWC Board, staff were going to seek approval from HRM Council at a future meeting to ensure Council were aware of the implications of the access road construction.

At the August 10, 2005, meeting, the Commissioners had extensive discussion with regard to the possible environmental impacts on the watershed and the difficulty with installation of the test turbine without clear policy developed by HRM. As a result, a motion was put forward and passed at the Board meeting to postpone construction of the test turbine until HRM staff had developed a policy pertaining to wind turbines throughout HRM, including installations on watershed property.

HRM has commenced development of a Wind Energy Functional Plan and has issued an RFP to engage a consultant to assist in development of:

- A. An assessment of the potential to accommodate the development of large scale, commercial wind generated energy projects within HRM, including a review of financial incentives and the regulatory framework applicable to the industry. This assessment will include a review of how wind energy projects are regulated in other Canadian jurisdictions in the context of the various regulatory approaches available to HRM.
- B. Recommendations as to the appropriate regulatory mechanism to accommodate this land use and govern the location and physical aspects of wind energy facilities. These recommendations will include, regulation of height, separation distances (from property lines and other land uses), noise, ancillary uses and structures and ground clearances for wind energy facilities. The recommendations will also address appropriate means for protecting significant public viewplanes and vistas, and best practices for minimizing impacts related to site disturbance, tower and blade failure and for addressing impacts related to site abandonment and reclamation.
- C. An assessment of the existing potential to develop small scale individually-owned and operated wind turbines as auxiliary power sources in conjunction with any uses permitted under current regulatory framework. This will include an assessment of the potential impacts and recommendations for the Municipality to consider in adopting appropriate changes to existing land use regulations in order to minimize potential impacts.

- D. An assessment of the potential for developing wind energy projects on municipally owned properties such as: the Lake Major Watershed, Pockwock Watershed, Tomahawk Lake Watershed, Otter Lake Landfill, Sackville Landfill, Western and Mainland Commons as well as a general discussion of municipal partnership opportunities.
- E. An assessment and documentation of wind energy development potential across the municipality, to serve as a resource to wind energy project developers within HRM. This assessment will include prevailing winds, topography, access to power transmission lines, compatibility of adjacent land uses, environmental conditions and cultural conditions.

HRWC will be consulted as a stakeholder throughout the development of the Wind Energy Functional Plan.

ATTACHMENTS

HRWC staff report of August 5, 2005.

Report Prepared by: Carl D. Yates, M.A.Sc., P.Eng., General Manager, HRWC, 490-4840

Cathie O'Toole, Manager, Environmental Management Services, 490-7061



TO:

Mr. Donald L. Mason, P. Eng., MCIP, Chair, and Members of the

Halifax Regional Water Commission Board

SUBMITTED BY:

Reid Campbell, P. Eng. - Plant Operations Manager

APPROVED:

Arl Xates, M.A.Sc., P. Eng. - General Manager

DATE:

August 5, 2005

SUBJECT:

Access Road Construction Lake Major Water Supply Plant

ORIGIN

HRWC staff discussions with Renewable Energy Services Limited (RESL) and HRM staff. HRWC Board reports of September 28, 2004 and July 19, 2004.

RECOMMENDATION

That the HRWC Board approve the construction of approximately 150 meters of access road on watershed land near the Lake Major Water Supply Plant. This road is to be constructed to HRWC forestry road standards subject to the following conditions;

- > That the proponent, RESL, executes an access agreement with HRWC that indicates that all risk for the road construction costs is with RESL and approval of the road does not guarantee approval of the test turbine.
- > That RESL obtain permits required from Nova Scotia Environment and Labour (NSEL) for road construction as stipulated in the Lake Major Protected Water Area Regulations.
- > That road construction be completed by September 30, 2005.

BACKGROUND

An information report prepared for this meeting (3-I) describes the background for this project and recent developments.

DISCUSSION

In accordance with direction from the HRWC Board, the proponent, RESL is required to achieve certain milestones prior to staff seeking approval from the HRWC Board for construction of the test turbine. These milestones include;

- > Conducting environmental investigations and screening.
- > Negotiation of successful business terms.
- > Public consultation.

In order to access the site for construction but also to undertake the environmental investigations required prior to HRWC Board approval, the proponent must construct approximately 150 meters of access road from the existing HRWC road near the Lake Major Water Supply Plant to the proposed turbine site. Road construction in the Lake Major watershed is regulated in the Lake Major Protected Water Area Regulations under the Nova Scotia Environment Act. These regulations require that the proponent consult with the Lake Major Watershed Advisory Board prior to NSEL granting an approval and that road construction take place no later than September 30th in any given year.

The proponent is seeking approval to construct the 150 meters of access road at this time in order to be able to satisfy the other conditions specified by the HRWC Board and to still construct the turbine in late 2005 or early 2006. As indicated in the recommendations, the approval to construct the road would be conditional on RESL executing an access agreement with HRWC that clearly places all risk for constructing the road with RESL and that they satisfy the requirements of the permit to be issued by NSEL including the requirement to finish road construction no later than September 30, 2005. Construction of the access road does not guarantee approval of the test turbine.

Should the HRWC Board approve this recommendation, approval will be sought from HRM Council at the September 6, 2005 meeting for construction of the access road.

BUDGET IMPLICATIONS

There are no budget implications associated with this recommendation as all road construction cost will be borne by RESL.

ALTERNATIVES

NA

ATTACHMENT

None