

Municipal Planning Strategy for the

COUNTY OF RICHMOND



Addressing the Development of Wind Energy

June 2010

Municipal Planning Strategy

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1. INTRODUCTION

1.1 Background

In June of 2008, Council for the Municipality of Richmond resolved that to address the increasing interest in renewable energy and wind turbine development, a by-law addressing wind turbine development be adopted. It was decided that this would be done through a Municipal Planning Strategy and Land Use By-law which would be done in addition to existing local plans in the County, but would cover all of Richmond County and only regulate wind turbine development. This document expresses Council's intentions and desires regarding the regulation of wind turbine development in Richmond County.

1.2 Legislative Mandate

The *Municipal Government Act*, Chapter 18 of the Statutes of Nova Scotia, 1998 gives municipalities the authority to regulate land use and development with their borders. This authority is exercised through the adoption of a Municipal Planning Strategy and Land Use By-law.

The purpose of a Municipal Planning Strategy is to provide statements of policy to guide the development and management of all or part of a municipality. Council may address a broad range of land uses in the Strategy, or may choose to provide for the planning and management of only one use of land. In the preparation of the Municipal Planning Strategy, the Statements of Provincial Interest were reviewed to determine their applicability to this planning initiative. Statements of Provincial Interest form part of the Municipal Government Act, and the Act requires that planning documents must be consistent with them. Council has decided that this Municipal Planning Strategy and Land Use By-law will address only the development of wind turbines within the entire County of Richmond. As such, these documents will not adversely affect the goals and objectives reflected in the Statements. Prior to the adoption of this Planning Strategy, land use planning in Richmond County was in effect over approximately half of the County's geographic area and was regulated by five separate plan area strategies. These existing municipal planning strategies and land use by-laws will not be affected by this County-wide document.

1.3 Municipal Profile

The Municipality of the County of Richmond is a largely rural municipality located on the south-eastern corner of Nova Scotia's Cape Breton Island, and covers 1,244 square kilometers. It is bounded by the Bras D'Or Lake and Cape Breton Regional Municipality to the north, the Atlantic Ocean to the east, Chedabucto Bay to the south and Inverness County to the west. The land area is divided roughly evenly by the St. Peter's Canal, which connects the Bras d'Or Lake to St. Peters Bay and the Atlantic Ocean. Isle Madame is a large island to the southwest of mainland Richmond County which contains about a third of the County's population and is connected by bridge to the mainland.

The most recent census data for Richmond County lists the population as 9,740. Most of this population is concentrated on the western half of the County, with 3,455 living on Isle Madame (whose largest communities are Arichat, West Arichat, Petit de Grat and D'Escousse) and 4,072 living on the mainland west of the St. Peters Canal with the largest communities being St. Peters, Louisdale and Evanston-Whiteside. 1,769 residents live east of the St. Peters Canal, with the largest communities being Red Islands, L'Ardoise and Fourchu. Richmond County's population has declined somewhat in recent years and the median age of the population in 2006 was 47, which is approximately five years older than the provincial average. However there has been some increased subdivision activity and new home construction in some parts of the County, particularly along the Highway 104 corridor between Evanston and St Peters.

Despite its relatively small population, Richmond County has a long settlement history. Europeans first settled the region where the French built a fort near what is now St. Peters, in the 1630's, and a fur trade was established with the Mi'kmaq peoples who were already there. Subsequently French (and Acadian), Scottish, English and Irish settlers moved into the region establishing their own communities. Most population was based along the coast, and many of these villages depended on fishing and boatbuilding. To this day, roughly one quarter of residents list French as their mother tongue and over a third of residents are bilingual. Since the decline of boatbuilding in the 19th Century, the economy ebbed and flowed with the rise and fall of the north Atlantic fishery. Today the fishery is still an important part of the Richmond County economy, particularly in Isle Madame and some eastern parts of the County. Industrial development in the Point Tupper area near Port Hawkesbury, government services and tourism have become crucial economic sectors and employ a significant portion of the County's labour force.

Richmond County has a varied geography, and almost the entire County is within 10 kilometres of the Bras d'Or or Atlantic coast. The County as a whole is heavily forested, with little agriculture. Regarding topography, Richmond County is generally flatter than other municipalities on Cape Breton Island, with most of the County consisting of coastal lowland, though there are hilly areas facing the Bras d'Or Lake at Sporting Mountain as well as in the northern part of the County near Loch Lomond. Wind mapping done for the Province of Nova Scotia indicates that coastal areas of the County, particularly along the Strait of Canso and Chedabucto Bay (Isle Madame and Point Tupper) have the conditions most favourable to wind turbine development. The Loch Lomond uplands and the Atlantic coastline between Point Michaud and Fourchu are also characterized by high wind speeds. It is these areas where Council expects most large scale wind turbine development to occur.

The County is governed by a Council of 10 members and provides a wide range of municipal services. Councillors are elected to four year terms and represent geographic districts. Planning and development services for Richmond County are the responsibility of the Eastern District Planning Commission. Current land use planning has been established as needed in different sections of the County at various times. At the time of this Strategy, the West Richmond, Central Richmond, Shannon Lake, Sporting Mountain,

Richmond County Wind Turbine Policy Municipal Planning Strategy (June 2010)

Isle Madame and St. Peters municipal plans regulate development (or certain types of development, as determined by Council) for the majority of the population of the County. There are plans to extend land use planning regulations to the Louisdale area at some point in the future.

2. REGULATING WIND TURBINE DEVELOPMENT

2.1 General Development Designation

This Municipal Planning Strategy and Land Use By-law will cover the entire Municipality of the County of Richmond. While municipal planning documents often regulate many uses, Richmond County Council has decided that this Strategy and By-law is only going to regulate wind turbine development. In keeping with this objective, Council intends to establish a “General Development” designation which applies to the entire planning area. This designation provides the framework by which wind turbine developments will be regulated within the County; both small and large scale. In defining small turbines (“domestic scale turbines”), Council will use the 100 kilowatt threshold, which would cover most turbines used for residential, farm and small scale business electricity needs. Large turbines “utility scale turbines” will be defined as those with a nameplate capacity greater than 100 kilowatts. In the future, as Council sees fit, this Municipal Planning Strategy can be expanded to address other County-wide issues, either within the General Development designation, or a new one.

Currently, there are four planning areas in place within the County of Richmond: Western, Central, Shannon Lake, Sporting Mountain, Isle Madame and St. Peters. These were each introduced at different times, usually to address a specific planning need, and each have accompanying Municipal Planning Strategies and Land Use By-laws. These existing plans will continue to remain in effect, however will now be considered secondary planning strategies, addressing local concerns. Therefore the wind turbine regulations will be in effect for the entire County, and overlay all currently zoned and un-zoned areas of the County. Where the detailed local plans address wind turbines, those documents’ provisions will supercede those outlined in this Strategy. All development aside from wind turbines will be permitted as of right, but if is located in a locally planned area, it is subject to the requirements set aside in that plan.

Policy R-1

It shall be the policy of Council to establish the General Development Designation. This designation will cover the entire County of Richmond to specifically address wind turbine development. All other development shall be allowed as of right, subject to the existing designations within the secondary plans.

Policy R-2

It shall be the policy of Council to define the West Richmond, Central Richmond, Shannon Lake, Sporting Mountain, Isle Madame and St. Peter Municipal Planning Strategies as secondary plans within the County.

Policy R-3

It shall be the policy of Council to define within the Land Use By-law “domestic scale turbines” as those with a nameplate capacity of under 100 kilowatts and “utility scale turbines” as those with a nameplate capacity greater than 100 kilowatts

2.2 Domestic Scale Turbines

Small wind turbines are becoming increasingly popular and are used to power or help power homes, farms and small businesses. Through the net metering program consumers can connect a small renewable energy source, including wind turbines, to the grid through a special meter that measures electricity flow in two directions and allows domestically produced electricity to display purchased electricity when available. Nova Scotia Power Inc. has recently decided to increase the power limits for this program from 100 kW to 1 Megawatt and consumers will be paid market rate for excess power produced domestically whereas under the old system residents would be credited for such power. This domestic wind energy generation can result in substantial energy cost savings for residents and businesses. Council recognizes their benefits and is supportive of their use. It is the intention of Council to establish within the General Development Designation the General Development (GD-1) Zone which will permit domestic scale turbines through development permit, and establish the requirements which proponents will have to meet. Initially this zone shall cover the entire County. Any existing wind turbine development shall be allowed to continue as a legal non-conforming use, and as such governed by Section 238 of the *Nova Scotia Municipal Government Act*.

Council feels that domestic scale turbines should be set back from all property lines, in order to contain the turbine on the lot if it were to fall, and also protecting neighbouring properties, particularly in more densely populated areas from noise, visual impact or other environmental concerns. While property line setbacks are used to protect neighbouring residents from potential impacts of domestic scale turbines, for a variety of reasons neighbours may be supportive of small turbines located closer to the lot line. As such Council feels it is reasonable that the setbacks be waived if all neighbours within the required setback consent in writing to such a proposal.

Domestic scale turbines come in a variety of sizes, some producing as little as 50 watts of electricity to charge a battery, though most produce in the range of 1-10 kilowatts of electricity. These turbines can be installed as stand-alone structures, or quite often attached to the side wall or roof of a building. The Canadian Wind Energy Association defines the smallest turbines, those with a nameplate capacity under 1 kilowatt (1000 watts) as “mini wind turbines.” These turbines, which are available at some retail outlets in Canada have little impact on surrounding properties, and as such, Council believes that they should be defined separately and that they do not need to be regulated as strictly. Council feels that owners of these small, inexpensive turbines should not be discouraged and that the noise study and limit of one per lot required for larger domestic scale turbines are not necessary for mini turbines.

Policy R-4

It shall be the policy of Council to establish within the General Development Designation the General Development (GD-1) Zone in the Land Use By-law. This zone will be used to implement the General Development Designation and shall cover the entire County. It shall be the policy of Council to permit within the General Resource Zone domestic scale wind turbines as of right and by way of development permit. All other uses, with the exception of utility scale wind turbines shall also be permitted as of right and not subject to development permit.

Policy R-5

Council shall establish a minimum setback requirement from all property lines for domestic scale wind turbines in the General Development (GD-1) Zone, in addition to requirements relating to noise, visual amenities and number per lot. Notwithstanding the specified property line setbacks, where domestic scale wind turbine development is proposed on a lot where the immediately adjacent property is subject to a long term lease for that use, the setback requirement from a property line shall not apply.

Policy R-6

Council shall allow consenting landowners to waive setback requirements for domestic scale turbines.

Policy R-7

Council shall define in the Land Use By-law “mini wind turbines” as domestic scale turbines with a nameplate capacity of less than 1 kilowatt (1000 watts). It is the intention of Council that requirements relating to noise and number per lot be waived.

2.3 *Utility Scale Wind Turbines*

Utility scale wind turbines shall be defined as those with a nameplate capacity of greater than 100 kilowatts and Council expects most utility scale wind turbines to be much bigger than that, often in the range of 750 kilowatts to 2 megawatts, given that these structures are intended to sell their power to the provincial utility. Given their size, as well as the significant infrastructure and capital required for construction and servicing, wind turbines are often constructed in groupings, known as wind farms. Given the size of these developments, Council feels that each utility scale turbine development should be subject to more stringent regulation, open to the feedback of residents who live near the proposed project and subject to the approval of Council. Therefore, it is the intention of Council to establish a Wind Development (WD-1) Zone within the General Development designation. This zone will permit utility scale wind turbines and set out

requirements for any such development. No land will be pre-zoned to Wind Development, but any proponent wishing to build a new utility scale wind turbine project will need to rezone to Wind Development and meet the zone and documentation requirements as specified in the Land Use By-law before receiving a development permit. In order to maintain control over the development, it is Council's intention to rezone only the land required for the placement of the individual turbine, which Council considers to be a circle around the turbine whose diameter will equal the height of the rotor, plus ten metres, although Council may consider rezoning a contiguous expanse of land in cases where a wind farm is being proposed. Before approving a rezoning request, Council will need to be satisfied that environmental concerns are met and in cases that the project might interfere with telecommunications or electromagnetic signals, that it is approved by the appropriate government agencies. Given the small area of land being rezoned for large scale turbines, if the developer wishes at a later time to expand the wind turbine development, that will necessitate a new rezoning application being made.

Given that small increases in wind velocity can have a great impact on energy produced, Council recognizes that the location and design of turbines are very important. Their development will be regulated through setbacks, which seek to address concerns of noise, visual impact, and safety issues regarding surrounding residents. These setbacks shall be of sufficient distance to mitigate most adverse effects the turbines may have on residential uses. Given that larger utility scale wind turbine development may have a greater impact on surrounding residences, Council will establish setback thresholds from residences based on the size of the project. Given that the Nova Scotia Department of Environment and Labour requires turbine developments generating over 2 megawatts of electricity to undergo an environmental assessment, Council believes that projects meeting this threshold should be set back farther from houses than other utility scale turbines. While there is some disagreement between wind industry, adjacent residential and environmental interests as to appropriate setbacks, Council believes this approach will allow for reasonable wind turbine development in the future and also provide a degree of protection to homeowners to continue to enjoy the use of their residential property.

Council has decided that due to the size and narrow nature of many of Richmond County's rural lots, utility scale wind turbines would be primarily regulated through separation distances from nearby houses, as opposed to property line setbacks, although to protect neighbouring properties from the unlikely event of a structural failure of the turbine, Council recognizes that a modest setback should nonetheless be implemented. In instances where contiguous properties are leased for wind turbine development, while the property lines will remain in place, the concern of a wind turbine falling onto the leased land should not apply. Therefore the setback requirement from a property line, where applicable, will be waived where the adjacent property is leased on a long term basis for wind turbine development.

To address environmental concerns by protecting water bodies and preventing erosion, Council believes that in addition to residential and property line setbacks, turbines should also be adequately set back from all watercourses, including coastlines.

In keeping with Council's original intent to regulate only wind turbine development, residential setback requirements will not apply to future residential development locating closely or relatively closely to existing turbines. Council's position is that homeowners who do so will be fully aware of the distance their residence will be to a turbine and will have accepted any adverse effect the turbine may have on them. The same is true of future purchasers of these residents. Existing wind turbine development that does not meet the setback requirements will be allowed to continue as legal non-conforming structures, but an expansion will not be permitted, unless the expansion conforms to the setback requirements.

Policy R-8

Within the General Development designation, it shall be the policy of Council to establish the "Wind Development (WD-1) Zone" in the Land Use By-law. This zone is available only upon rezoning and it shall be the policy of Council to permit within the Wind Development Zone utility scale wind turbines and domestic scale wind turbines as of right by way of development permit. All other uses shall also be permitted as of right and not subject to development permit.

Policy R-9

In considering a proposal to rezone to the Wind Development Zone, it shall be the policy of Council to have regard for the following:

- a) **the adequacy of the area of land being rezoned in relation to the number of turbines being proposed;**
- b) **the potential for electromagnetic interference on radio, telecommunications or radar systems;**
- c) **the proposal meets the setback and other requirements in the Land Use By-law;**
- d) **the proposal meets the implementation criteria listed in Policy I-6.**

Policy R-10

The Wind Development (WD-1) Zone shall regulate the location of utility scale wind turbines by establishing a setback from residential uses. Council shall establish setback thresholds within the Land Use By-law from residential dwellings based on the size of the project and whether it requires an environmental assessment.

Policy R-11

To protect adjacent properties from immediate impacts, Council shall establish setbacks from property lines. These setbacks shall be waived where adjacent properties are also used for utility scale wind turbine development.

Policy R-12

To protect from erosion, Council shall establish a setback for utility scale turbines from all watercourses.

Expansion of Wind Development

There will not be a limit on the number of utility scale wind turbines in any one area. Wind farms will be permitted within the County, provided that all of the turbines meet the setback requirements. As previously indicated, Council will not regulate any development within this document other than wind turbine development. Therefore the setback requirements will not apply to new residential development being located close to any utility scale wind turbine development. If such development does occur, Council is of the opinion that it should not prevent an expansion of the wind turbine development which has been established in conformity with this Strategy. However, the expansion should not be located any closer to the residential development which has been built within the setback.

Policy R-13

Where a residence is constructed within the setback distance of utility scale wind turbine development erected after the effective date of this Strategy, the wind turbine development may expand provided the expansion is not located closer to the residence than the initial wind turbine development.

Removal of Turbine

When the time comes that a utility scale wind turbine development is no longer in operation, the owner shall remove the turbine and all associated equipment from the site within a reasonable period of time. The owner shall also endeavor to restore the site to a reasonable natural condition. Council would like to be informed of the decision to remove the wind turbine as early as possible.

Policy R-14

Council shall establish within the Land Use By-law a time by which inactive wind turbines and all supporting structures must be removed from the site, and the site be restored to a natural condition. Council shall be made aware of decisions to remove any wind turbines and determine a time by which developers must notify Council of such.

2.4 Documentation Requirements for All Turbines

The General Development (GD-1) and Wind Development (WD-1) zones only address wind turbine development. Within this plan, wind turbines are grouped into two sizes: domestic and utility, and these each will have a specific set of requirements. All new wind turbines will be subject to certain site plan requirements assuring a basic level of safety and aesthetic standards, and property owners or developers shall be required to

submit documentation to that effect. These standards will have to be met in order for a development permit to be issued. Council also recognizes that noise from turbines can have an impact on residences. The World Health Organization recommends 30 Decibels as an acceptable noise standard in the interior of a house, which would roughly equate to 40 Decibels outside the home.

Policy R-15

Council shall establish within the Land Use By-law site plan and documentation requirements to assure safety, environmental and aesthetic standards are met in order to receive a development permit.

Policy R-16

Council shall establish within the Land Use By-law noise standards for all turbines, with the intent of minimizing minimal disturbances to surrounding residents.

3. IMPLEMENTATION

3.1 *General*

The Municipal Planning Strategy for the County of Richmond is the policy document providing the framework by which wind turbine development throughout the entire County is encouraged, controlled and coordinated. The policies of the Strategy will be implemented through a variety of means, but generally through the powers of Council as provided by the Municipal Government Act and other statutes that may apply.

Policy I-1

It is the intention of Council that all sections of this document and Generalized Future Land Use Map shall constitute the Municipal Planning Strategy for the Municipality of the County of Richmond.

Policy I-2

In addition to employing specific implementation measures, it shall be the policy of Council to maintain a program of ongoing planning through the Richmond County Planning Advisory Committee and Richmond County Council. Such a program shall include aspects of public information and participation, further study respecting such matters as the drafting or revision of Municipal By-laws which deal with wind energy or any other issues which Council may suggest.

Policy I-3

In order that development control decisions may be based on expert advice beyond that which the Planning Advisory Committee is able to supply, applications for amendment of the Land Use By-law shall be directed to the Eastern District Planning Commission and provincial and federal government agencies for their information and comment, as may be required.

3.2 *Amending the Municipal Planning Strategy*

Policy I-4

It shall be the policy of Council to require amendments to the policies and maps of the Municipal Planning Strategy under the following circumstances:

- a) where any policy intent is to be changed;
- b) where detailed areas or functional strategies are desired to be incorporated into this strategy;
- c) where the Strategy is in conflict with applicable provincial land use policies or regulations, in accordance with the Municipal Government Act.

Policy I-5

Strategy amendments shall require the approval of the Minister of Service Nova Scotia and Municipal Relations and shall be carried out in accordance with the provisions of the Municipal Government Act.

3.3 *Amending the Land Use By-law*

The Land Use By-law is the instrument by which all the policies in this Municipal Planning Strategy dealing with wind turbine development are implemented. The Land Use By-law establishes certain land use zones, identifies their location on a Zoning Map, and indicates the uses permitted and the development standards required. While all lands within the Plan Area are pre-zoned General Development, Policy R-8 of this Municipal Planning Strategy requires developers who wish to construct utility scale wind turbines within the Plan area to apply to Council to amend the Land Use By-law to rezone the subject property to Wind Development. By requiring such a proposal, Eastern District Planning Commission staff, the Planning Advisory Committee, Council and the public will be able to examine the application more clearly. The applicant will also benefit from this, as it will be necessary to give full forethought to what they wish to do and to have proper plans prepared. Given the typical size of utility scale wind turbines, Council expects that all neighbouring land owners be notified of any applications to rezone property to Wind Development.

Policy I-6

In considering amendments to the Land Use by-law, in addition to all other criteria as set out in various policies of this Strategy, it shall be the policy of Council to have consideration of the following:

- a) **That the proposal is in conformance with the intents of this Strategy and with the requirements of all other Municipal by-laws and regulations;**
- b) **That the proposal is not premature or inappropriate by reason of the following:**
 - i) **the financial capacity of the Municipality to absorb any costs relating to the proposal**
 - ii) **the intersection of any access road(s) with any public road and meeting the design and construction specifications of the authority having jurisdiction over public roads;**
 - iii) **the potential for the contamination of abutting watercourses or private wells or the creation of erosion or sedimentation as a result of the development as determined by a qualified person from the appropriate government department;**
 - iv) **the potential impact on protected wetlands or other sensitive habitat and on endangered species in the area of the proposed site.**

Policy I-7

In considering amendments to the Land Use By-law, in light of the above policy, it shall be the intention of Council to require the following information to assist in the assessment of the proposal:

- a) a report from the Eastern District Planning Commission;**
- b) a clear proposal including a detailed site plan drawn to an appropriate scale showing all proposed structures, lot lines and adjacent dwellings;**
- c) authorization documents, if applicable, from any government agency on which the proposed project may relate.**

Policy I-8

In addition to the advertisement for public hearing requirements in the Municipal Government Act, it shall be the policy of Council to require the Municipality to notify all adjacent land owners of applications to amend the Land Use By-law.

3.4 *Plan Review*

Council recognizes that wind turbines are a relatively new technology, and that knowledge and experience in the field may grow with practice. In accordance with the Municipal Government Act, this Strategy may be reviewed when either the Minister of Service Nova Scotia and Municipal Relations or Council deem it necessary.

Policy I-9

Council shall review this Municipal Planning Strategy and Land Use By-law within five years of its adoption. At that time, Council shall examine the number of wind turbines sited, the impact on the landscape and on tourism and any other issues that Council deems necessary.

