

**COMMITTEE OF THE WHOLE  
MINUTES  
August 17, 2010**

PRESENT: Mayor Peter Kelly  
Deputy Mayor Brad Johns  
Councillors: Barry Dalrymple  
David Hendsbee  
Lorelei Nicoll  
Gloria McCluskey  
Darren Fisher  
Bill Karsten  
Jackie Barkhouse  
Jim Smith  
Mary Wile  
Jerry Blumenthal  
Dawn M. Sloane  
Sue Uteck  
Jennifer Watts  
Russell Walker  
Debbie Hum  
Linda Mosher  
Stephen D. Adams  
Robert P. Harvey  
Tim Outhit  
Reg Rankin  
Peter Lund

REGRETS: Councillor Steve Streach

STAFF: Mr. Wayne Anstey, Acting Chief Administrative Officer  
Ms. Roxanne MacLaurin, Municipal Solicitor  
Ms. Cathy Mellett, Municipal Clerk  
Ms. Krista Tidgwell, Legislative Assistant

TABLE OF CONTENTS

1.	CALL TO ORDER.....	3
2.	APPROVAL OF MINUTES - NONE.....	3
3.	APPROVAL OF THE ORDER OF BUSINESS AND APPROVAL OF ADDITIONS AND DELETIONS .....	3
4.	WIND ENERGY - Staff Presentation ( <i>Deferred August 10, 2010</i> ) .....	3
5.	ADJOURNMENT .....	12

**1. CALL TO ORDER**

The meeting was called to order at 1:36 p.m.

**2. APPROVAL OF THE MINUTES - NONE**

**3. APPROVAL OF THE ORDER OF BUSINESS AND APPROVAL OF ADDITIONS AND DELETIONS**

**MOVED by Councillor McCluskey, seconded by Councillor Sloane, that the Order of Business be approved, as presented. MOTION PUT AND PASSED.**

**4. WIND ENERGY - Staff Presentation (*Deferred August 10, 2010*)**

The following was before Council for their review:

A presentation entitled Wind Energy.

An email dated August 17, 2010 from Daniel Roscoe, Chief Operating Officer, Scotian WindFields Inc. to Council re: an alternative proposal for setbacks in commercial and industrial areas that does not hold wind energy to a higher standard than any other form of development.

Mr. Paul Dunphy, Director, Community Development, delivered an overview of the presentation to Council. He noted that todate Council has not provided direction to staff respecting wind energy land use regulations.

Mr. Shayne Vipond, Senior Planner, Planning Applications, Community Development, delivered the presentation to Council noting that staff had provided an update to Council in the Fall of 2009 respecting the proposed wind turbine locations. During the Fall review, Council had instructed staff to undertake the final round of community consultation and provide a recommended policy for Council's consideration, which is the purpose of today's discussion.

Mr. Vipond provided an overview of the wind turbine categories:

Micro Wind Turbines

- style of turbines include: roof mounted, vertical axis and stand alone
- the height classification is 23 metres (75 feet) and has a potential power generation of 0-10 kilowatts (1-2.5 homes)
- used in residential applications

### Small Wind Turbines

- maximum height limit of 35 metres (115 feet)
- maximum power generation of 50 kilowatts (5-10 homes)
- used in residential and small scale commercial applications

### Medium Wind Turbines

- maximum height limit of 60 metres (200 feet)
- maximum power generation of 300 kilowatts (50-75 homes)
- used primary in commercial and industrial applications
- single medium turbines are typically built at a 100 kilowatt power generation level

### Large Wind Turbines

- large turbines (utility grade) are not typically used as supplemental power sources to support other operations; primary function is to produce power that will be sold back to the electrical grid; often more than one turbine of this scale is interconnected to create a wind farm
- large turbines are defined as any turbine over 160 metres in height and in excess of 300 kilowatts; most large turbines are built to generate 1-2 megawatts (200-400 homes)

Further points noted during the presentation were as follows:

- the total height of a wind turbine is measured from the highest tip of the turbine's blade to the ground
- the integration of wind turbines into the environment in a manner that is satisfactory to all parties is a universal problem to the wind development industry
- there is a lack of evidence that suggests property values are negatively affected by wind turbines; there is also a lack of evidence that suggests that there is a link between negative human health and wind turbine activity
- staff are suggesting an as-of-right process; no case by case decisions or discretionary approvals
- the rules that would enable the applicant to get a development permit could be satisfied at the time the application is submitted
- wind turbines sit on high points of land and cannot/should not be screened because it would impede the turbine's function
- discretionary approvals that are effective at enhancing site function cannot in most cases enhance the wind turbine's site
- discretionary approvals are not effective in mitigating impact of turbines offsite
- discretionary approvals cannot be used as a plebiscite to determine if a wind turbine could be permitted in a location; the decision of the turbine placement is

made at the time of the approval of the policy; if used as a plebiscite, the decision to refuse a turbine could be overturned upon appeal

- the proposed urban wind turbine locations include: commercial campuses, business parks and some marine industrial locations; locations were chosen based on the distances from sensitive land uses (ie. residential dwellings, hospitals and hotels) and where non-sensitive business activity may benefit from the technology
- setback regulations are in place so that should a turbine fall, it would likely fall onto its own property
- the applicant is required to submit proof of insurance with their application
- staff has researched the setback distances and are confident the distances will sufficiently mitigate impact
- large scale wind turbines are not permitted within HRM's urban areas
- all buildings in HRM's rural areas are considered habitable; habitable areas require greater setback distances for wind turbine placement; setback regulations are in place for safety reasons and security for adjacent land owners
- a larger property area allows for a larger turbine
- the Provincial Environmental Assessment (EA) could enhance the 550 metres setback for large scale turbines or wind farms
- the Province is responsible for Environmental Assessments; HRM should not seek to duplicate this effort through this initiative
- the threshold to require an EA is a minimum power generation (total output) of 2 megawatts
- the amount of power a turbine will generate is linked to the number or height of turbines
- most of the wind power projects in Nova Scotia have been built in excess of the 2 megawatt level and have undergone the EA process; staff expects this trend to continue
- all categories of turbines will be permitted in HRM's rural areas with the exception of identified restricted areas
- HRM does not permit an access driveway to be constructed on lands that are not zoned for compatible use

**MOVED by Councillor Rankin, seconded by Councillor Hendsbee, that Halifax Regional Council direct staff to proceed to draft the land use by-law for consideration of the sighting of wind turbines in accordance with the direction outlined in the presentation including as-of-right development (within the designated zones as identified).**

Councillor Rankin requested staff provide a map of the 'rules of context' for wind turbines.

In response to a questions raised by Councillor Rankin, Mr. Vipond advised that it is staff's understanding that once a turbine has been constructed, the turbine site becomes a 'buyer beware' situation. People could choose to construct a building after the turbine has been built. Mr. Vipond further noted that the turbine in Goodwood generates approximately 0.6 megawatt. A turbine of that size does not require an EA. Turbines are permitted within designated business parks and are subject to the setback regulations.

The Chair referenced Mr. Roscoe's correspondence respecting the competitiveness concern within the business parks and other areas. He asked how Council should interpret this information and its accuracy in terms of staff's proposed approach.

Mr. Vipond indicated that there is no set standard for municipalities respecting wind turbine guidelines. Staff is suggesting a safety and security setback regulation of one times the total height of the turbine to assure that the turbine will not fall onto the adjacent property. Certain municipalities have zero meter setbacks, where others are more restrictive. Staff's recommendation is subject to debate during the public hearing and Council can chose to make amendments.

Councillor Hendsbee requested staff provide comparisons regarding what is being practiced/suggested within other parts of Nova Scotia.

The following points, concerns and questions were raised by Councillor Hendsbee:

- what constitutes a wind farm (ie. more than one turbine or a turbine that requires an EA)
- the difference between onsite personal use versus a business use versus a wind farm use
- concern with urban versus rural setback regulations; have an equal standard across the board
- whether there is a concern for residential disturbances in rural areas
- there are greater issues of densification in urban areas
- why is staff differentiating between urban, suburban and rural areas
- the possibility of utilizing tubular/vented cylinder style turbines
- apply different models or rules to different forms of technologies
- there is a lack of information respecting roof top models
- how do roof top models affect the setback regulations (on top of building not adjacent)
- whether the setback regulations could be relaxed to accommodate turbines near power line corridors; encourage developments near power line corridors to plug into the grid system
- how will HRM Bylaw Enforcement address noise complaints
- concern with roof top models that can be purchased at chain stores; smaller models create more noise

- of 12 known turbine projects, 7 are within District 3 (5 residential and 2 commercial)
- provide a mapping of the current turbines and wind apparatuses located within HRM

In response to Councillor Hendsbee's questions, Mr. Vipond advised as follows:

- most municipalities are not seeking to regulate small scale wind turbines; however, HRM staff is seeking to regulate small scale wind turbines because the turbines will be located in specific areas of HRM
- wind farms are defined as an array (more than one) of turbines; however, two five kilowatt turbines would not be viewed as a wind farm
- turbines that generate two megawatts of power are required to undergo the Provincial Environmental Assessment
- wind turbines will not be permitted in residential locations or within the urban core
- urban areas with less sensitive land uses (daytime operations) often emit ambient noise and are suitable locations for wind turbine applications
- there is greater sensitivity within HRM's rural areas and therefore, setbacks requirements are more stringent; staff is seeking to situate wind turbines more centrally to organized rural subdivisions to reduce implications
- setbacks for roof mounted wind turbines are calculated based on the height of the building (foundation to roof) plus the additional height of the turbine on top of the roof; under the micro category, roof mounted turbines in urban areas would be one times the total height to the property line and two times for rural areas
- staff has not considered a relief on power line setbacks but will review this option
- staff chose the setback distances to address/alleviate noise concerns; staff is not looking to impose studies based on decibel levels and will be relying on the setbacks
- staff will provide a mapping of the various turbine locations within HRM

In response to questions raised by Councillor Karsten, Mr. Vipond noted the following:

- during the presentation and proposed by-law review with the Energy and Underground Services Advisory Committee, staff will confirm the clarity of the wording regarding the as-of-right for the proposed designated zones
- staff are suggesting the creation of three new zones called overlay zones (urban, rural and restricted zone); the urban zone boundary lines will be specific to the business parks and commercial campuses for waterfront locations; staff is not prepared to recommend turbines on 30 foot lots in dense areas at this time; once benefit versus impact has been established Council could direct staff to review this option further
- turbines that are presently in operation will receive grandfathering status

In response to a question raised by Councillor Blumenthal, Mr. Vipond indicated that the application of wind turbines offshore is a Federal jurisdiction. This application is becoming increasingly popular but is very expensive.

In response to a question raised by Councillor McCluskey, Mr. Vipond advised that the residents of Pubnico that moved due to the turbine placement were 400 metres from the turbine.

Councillor McCluskey asked whether consideration is being given to levels of health risks residents could have due to the placement of a turbine. She commented that she is in favour of wind turbines but is not in favour of destroying the quality of residents' lives. She further asked how staff determined that the distance is based on the height of turbine.

Mr. Vipond indicated that the large scale turbines (utility scale) are not measured by the height of the turbine but by one specific distance separation of not less than 550 metres from the adjacent lot. This distance was determined through two sources, the *USNM Best Practices Guide* and the Land Use Model By-law. In addition, HRM has also adopted Ontario's EA process.

In response to a question and concern raised by Councillor McCluskey, Mr. Vipond indicated that there are two layers of policy, Provincial and Municipal jurisdictions, regarding the restriction of wind turbines in Regional Parks. He further advised that staff has created a restricted policy boundary that encompasses the urban service boundary, as well as, the boundaries that designate lands for future development within a 25 year time frame.

Mr. Vipond further confirmed that there are other municipalities that have greater setback distances than staff is recommending. There are setback distances up to and including 1.7 kilometres within the United States but staff cannot confirm the rationale for this distance. HRM staff has reviewed the science and documented studies to give an indication of the recommended setbacks for HRM. Staff has not found evidence to suggest that turbines give off a low frequency vibration. He further indicated that staff has interviewed the residents of Pubnico and there were a couple of factors that influenced the particular circumstance; there was a plane of turbines, which could have possibility affected the geological formation.

Councillor McCluskey indicated that she could not support the motion at this time.

In response to a question raised by Councillor Lund, Mr. Vipond indicated that staff has reviewed whether there is enough land available to place turbines within the proposed business parks. There are a number of technologies (roof mounted turbines) that could work on some of the smaller lot configurations. The larger scale higher power turbines



may have more difficulty finding land within the business parks. Staff's objective is to determine what opportunities are available for the wind energy community, as well as, protect adjacent property owners.

Councillor Lund asked the following questions:

- what will trigger a public meeting and allow residents to express their concerns regarding a turbine being installed within their neighbourhood
- how will HRM stop residents from going to a store and purchasing a roof mounted turbine and whether the resident will be required to remove the turbine if a complaint is made under the By-law
- whether residential property owners will be required to obtain a permit to install a turbine on their property

Councillor Lund further expressed concern with regard to setbacks distances for free standing wind turbines but not for roof mounted turbines. Mr. Vipond reiterated that the setback requirements are the same regardless of a roof mounted or stand alone turbine: three times the height of the turbine to the property line or adjacent habitable building for rural areas and one times for urban areas.

Mr. Vipond indicated that all residents are required to have a development permit to install a wind turbine within a residential zone. He further noted that staff is not proposing that the applicant be required to hold a public meeting. There is a community consultation requirement for the Provincial EA process, which is at the discretion of the Minister of Environment. Mr. Dunphy commented that staff is not proposing that there be a process by which a public meeting is held every time a wind turbine is constructed. Staff is asking that Council set a direction for wind turbines, acknowledging that there are nuisance aspects for turbines; however, reasonable measures have been implemented to protect against these aspects. There will always be people who are in support of wind turbines and those who are against them regardless of the location. Public meetings could also give residents under an as-of-right process the misconception that they are participating in a process by which the outcome of the decision would be affected as opposed to providing them with information. Staff suggested that information packages and online information can be made available to residents.

Councillor Smith noted the following points and concerns:

- he supports the opportunity for entrepreneurs to construct wind turbines
- concern for his constituents in the Burnside Industrial Park and rural areas
- there is a great opportunity for wind turbines within the Burnside area; however, through the Regional Plan there is a process in place to separate parts of Burnside (transloading, business, commercial and industrial areas); Burnside should not be seen as one area with one set of rules

- staff should be more restrictive when giving consideration to constructing turbines within the City of Lakes Business Park and along Windmill Road
- projection of wind turbine opportunities for the Burnside Industrial Park
- will a definition be provided for the term “building”; there are different types of buildings within the Burnside Industrial Park (utility, call centres, sheds, main buildings and storage areas)
- will the setback regulations be enforced for horizontal turbines

Mr. Vipond advised that staff met with the Greater Burnside Business Association on two separate occasions to identify the Associations thoughts on boundary lines, suitable distance separation and location. The meetings were productive and the Association seems to be cautiously optimistic about integrating wind turbines into the business park. The Association had expressed concern regarding adequate separation, which he noted is universal to the larger debate. Based on staff’s discussions with the Association and as staff is recommending one set standard across HRM for particular locations, it would be appropriate to look at the Burnside Industrial Park as one entity. He noted that staff is mindful that there are sensitive uses within the Burnside area. There are many opportunities for wind turbines within the Burnside area, particularly for vertical access turbines. However, there is less opportunity for large scale turbines because Burnside is largely developed.

In response to a question raised by Councillor Wile, Mr. Vipond indicated that the access driveways over restricted lands affect some private properties; however, large the lands are largely publicly owned. He further clarified that the applicant has to have the appropriate zoning permissions to negotiate with the land owner to install an access driveway.

In response to a further question raised by Councillor Wile regarding lake installations, Mr. Vipond indicated that there is a separation requirement (66 metre buffer) in the Regional Plan. There is no specific larger scale setback requirement identified for wind turbines along water.

Mr. Vipond further noted that he is not aware of any discussions regarding offshore wind turbine applications.

Councillor Rankin indicated that the public consultation is the public hearing process and that Council can consider amending the setback requirements and other regulations at the time of the hearing.

The following points were noted by Councillor Watts:

- the 550 metres setback is not sufficient but is a good starting point for discussion

- information outlining the implications of wind turbines should be on HRM's website prior to the public hearing process
- HRM cannot rely on the Provincial EA to address the health and safety issues associated with the large scale turbines; Council needs to have confidence in the setback and restriction criteria HRM is putting forward for wind turbines

Councillor Watts referred to the research Ontario has been doing with respect to wind turbines and requested that staff forward the link regarding Ontario's wind turbine regulations and an explanation of the changes they have made to their regulations.

Further points noted by Councillor Watts:

- the importance of holding public hearings and hearing public input
- residents do have health concerns and it is not just based on aesthetics; greater understanding of the impact of wind turbines is required

Councillor Sloane expressed concern with turbines being as-of-right. She noted that there are residents within the urban core of her District that want small turbines. She suggested that Council and staff should be working with the Province and the Federal government for the installation of offshore turbines.

Councillor Lund expressed concern with the criteria of 2 megawatts to have a Provincial EA. He provided an example where there can be three large turbines within the same area that does not produce a power generation of 2 megawatts combined; however, if a fourth turbine were to be added that brought the power generation to 2 megawatts an EA would then be required. He suggested that environmental screening be done regarding the effects on migratory bird pathways.

In response to a question raised by Councillor Lund regarding the construction of turbines prior to the implementation of the new policy and land use regulations, Mr. Vipond advised that By-law Enforcement staff will have to determine whether the turbine has breached a certain level of the regulations. He confirmed that residents have the ability to apply for a variance. A description outlining how the setback requirements were reached could be provided within the policy. It could provide some assistance to the Development Officer and Community Council during the variance process.

Councillor Dalrymple expressed concern with the low attendance during the public information meetings held in his District and others. He suggested that when the report comes back to the Energy and Underground Services Advisory Committee, the Committee could send out an invitation to all Councillors and invite more feedback. In response to a question raised by Councillor Walker, Mr. Vipond indicated that HRM's regulations for wind turbines presently, are regulations that permit by default rather than by intention. However, wind turbines are not permitted by default in all areas of HRM.

Roger Wells, Supervisor, Regional & Community Planning, clarified that whenever there is a by-law or policy change by Council, the new regulations begin to take effect at the date of the first advertisement for the public hearing. Therefore, residents must abide by the rules in place leading up to the advertising date. After the first advertising date, residents would have to meet the requirements of both the existing and the proposed regulations. He further noted that if a resident were legally erecting a wind turbine prior to advertising the public hearing, it is his understanding that the resident's turbine would be grandfathered once the new rules came into effect.

Councillor Fisher commented that all energy sources have impacts and that HRM is behind in wind energy compared to other areas of the world.

In response to a question raised by Councillor Outhit regarding institutional turbine applications in residential/urban area, Mr. Vipond indicated that one of staff's concerns regarding hospitals is the overnight accommodation. Hospitals and nursing homes are larger locations that consume higher levels of energy; however, staff determined that there is too great an opportunity for impact and chose to include hospitals as a sensitive use. In regard to other institutional use, the Nova Scotia Community College (NSCC), which is provincially owned, has erected three to four turbines. These turbines are not within Municipal jurisdiction. Staff is in ongoing discussions with NSCC respecting their turbine project. Mr. Vipond further noted that the universities are located within fairly dense areas on the Peninsula and other locations. From a regulator perspective, staff chose to keep turbines away from dense residential areas even with a large percentage of residents in support of wind energy.

Councillor Rankin called for the question to be put.

**MOTION PUT AND PASSED.**

**5. ADJOURNMENT**

The meeting adjourned at 3:17 p.m.

Cathy Mellett  
Municipal Clerk