





Introduction

Scotian WindFields Inc is pleased to submit information towards the setting of Community Feed In Tariff rates. Scotian WindFields Inc (SWFI) is a community based developer of renewable energy projects.

The focus of this submission is to provide information regarding the various inputs that will be used to calculate the tariff rates for wind energy. SWFI has experience in developing a wide range of wind energy projects. Our project experience ranges from the 30MW Digby Wind Power project, to three Distribution Connected projects awarded in February 2010 (2MW each), to onsite installation of Net Metered wind turbines from 5kW-100kW. Our submission is based on this experience, as well as estimates for future projects that are under development.

The Scotian WindFields family consists of many organizations. Our organization was founded in part by the collaboration of eight local community investment companies, many of which are formed as Community Economic Development Corporations (CEDIFs). In addition to SWFI, this submission also represents the following organizations:

Northumberland Wind Field Inc
Glooscap Wind Field Inc
Chebucto Wind Field Inc
Bay Wind Field Inc
Gold Coast Wind Field Inc
Sou'wester Wind Field Inc

SWFI is also involved with two organizations that will be submitting materials in this process: the Canadian Wind Energy Association and the Nova Scotia Sustainable Electricity Alliance (novaSEA).



General Comments

Scotian WindFields Inc (SWFI) is very supportive of the process undertaken by the UARB and its consultants to determine the Community Feed In Tariff rates. The process has been transparent and open and the discussions regarding each input variable were as objective as possible.

Specifically, SWFI has a high level of confidence that CEDIFs will be able to successfully participate in the COMFIT program

Feed In Tariff Inputs

While SWFI agrees with many assumptions included in the Synapse models, there are still a few key assumptions for small and large wind that do not accurately reflect current or even anticipated market conditions.

As done in previous submissions, SWFI has grouped the various inputs of FIT calculations into two categories: technical and financial. While SWFI agrees with the majority of input assumptions however there are a few that still cause concerns, and if not rectified, could jeopardize the success of the COMFIT program.

Technical Inputs

Technical inputs include all aspects of installation, interconnection, production, operation, and maintenance of renewable energy projects. The following contains discussion and recommendations for specific inputs into the FIT calculator.

Interconnection Costs

Scotian WindFields Inc strongly believes that the assumptions for interconnection of small wind turbines are too low. While the figures provided by NS Power provide an indication of what is required at the point of interconnection, there has been no allowance for the electrical connection between the location of the wind turbine and the existing electrical grid.

In most municipal jurisdictions in Nova Scotia, wind turbines are required to meet various setbacks based on land use bylaws. These setbacks usually require 50kW wind turbines to be between 1x and 5x the turbine total height from houses, roads and other



points of interest. (Town of Hansport – 5x, East Hants 4x, Kings County 3x, Richmond and Pictou 1x).

Assuming a total height of 50m, this leads to interconnection distances between 50m-250m. An average of 150m multiplied by NS Power's recommended rate of \$55,000/km, equals \$8,250. This distance and cost is not accounted for in the current model. In order to remedy this, SWFI recommends the following

RECOMMENDATION: That the interconnection costs for 50kW wind turbines be increased by \$8,250 from \$13,300 to \$21,550.

Operation and Maintenance

Scotian WindFields Inc believes that the operation and maintenance costs assumed for small wind are too low. While the figures included in the models may be accurate for the physical maintenance required on the turbine, there are many items such as: site maintenance (snow removal etc), land lease and accounting and administration costs that should be included as well. So far, there has been no indication from the Department of Energy regarding annual reporting requirements for the COMFIT program, but it is fair to assume that some effort will be required. Specifically regarding land leases, in the extensive experience SWFI has in optioning land for wind development (over 50,000 acres in NS and NB), we have not encountered any land owner that is willing to have a turbine installed on their land without compensation.

Based on this, SWFI still believes that 2-4% of total capital costs should be included in the cash flow analysis of a project for operation and maintenance.

Recommendation: The Site Maintenance, General and Administrative, and Land Lease inputs be increased from \$0 to the following

Site Maintenance	\$1,000
General and Administrative	\$500
Land Lease	\$1,000

[Note: these recommended changes bring the total O&M costs to 1.8% of current capital cost assumptions, still below the standard range of 2%-4%]



Electrical Losses and Availability

Scotian WindFields Inc believes that Synapse has neglected availability and electrical losses in their calculations. While net capacity factors have been considered, the figures assumed are more in line with gross capacity factors, rather than net.

Capacity factors are calculated as a function of swept area, generator capacity and wind speed distribution. The factors included in the models, (23% for small wind, and 31% for large wind) are reasonable assumptions based on these inputs. Availability considers time when the wind turbine cannot produce for reasons other than the wind resource, such as being down for maintenance, local power failure and abnormal weather events. The highest availability rates in the wind industry are in the range of 97% while smaller wind turbines may be as low as 90% or lower. Electrical losses account for energy lost in the transmission of power between the generator and the electrical meter. In general, this amount is 2-4%. Both of these issues will directly affect the revenue generated from these projects, and therefore the ROE achieved.

Recommendation: The output of both large and small wind classes be reduced by 6% to account for availability and electrical losses.

Financial Inputs

Financial inputs include all monetary aspects of the project including: debt:equity ratios, interest rates, depreciation, term, incentives and exchange rates. In general, there is more variability in financial inputs than technical inputs. They can also have a great affect on the final rates and returns; therefore, they need to be considered very carefully.

In general, SWFI feels that the financial assumptions in the formal evidence submission reflect reality far more accurately than draft submission had previously considered. With that in mind, the only input variable SWFI feels is not reasonable is the interest rate.

Interest Rate

There is very little evidence of debt financing of community sized renewable energy projects anywhere in Canada. While Synapse was able to get input from financial institutions of what interest rates would be reasonable if they were providing debt, none of them are able to commit to providing any form of debt financing due to many risk factors. These risk factors include:

- The volunteer nature of CEDIF, Co-ops and Not for Profit boards (therefore no personal covenants from principals).
- The relatively small value of individual transactions, particularly for the small wind class.
- That most of the project entities involved will have very few or no other assets or income basis.
- The structure of each operating entity will likely be unique for each project, and therefore will not lend themselves well to aggregation and risk diversion through redundancy.

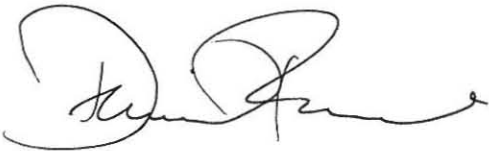
Therefore, SWFI feels that the interest rates assumed in the models for both large and small wind are too low.

Recommendation: That the interest rates for both large and small wind be raised from 8% to 10%.

Conclusion

Once again, Scotian WindFields is pleased to take part in this process, and appreciate the open and transparent nature of the process that has taken place so far. We are available for any questions, clarifications or comments regarding this submission or any other issue in this process.

Respectfully Submitted,



Daniel Roscoe, P Eng.
Chief Operating Officer
Scotian WindFields Inc

And on behalf of:

Northumberland Wind Field Inc
Glooscap Wind Field Inc
Chebucto Wind Field Inc
Bay Wind Field Inc
Gold Coast Wind Field Inc
Sou'wester Wind Field Inc