

This is a response to the call for public input on the matter of the Fundy Tidal Power SEA being conducted by the OEER. We have decided to address two of the topics listed on the OEER website:

- Whether these technologies can be developed without significant socio-economic impacts on fishers and the fisheries and on other marine and coastal resource users;
- What contribution ocean renewable energy technologies can make to community and regional economic development in Nova Scotia.

Several things have to be taken into consideration before this project can go ahead to ensure there will be no large negative socioeconomic impacts for fishers in the Bay of Fundy. One of the most important things covered in this Environmental Assessment is the cumulative effect of numerous small projects. This phenomenon is not very obvious to many people, and the fact that it is being addressed within this report is commendable. It is imperative that the final plan for the generation of renewable power in the Bay of Fundy is designed in such a way that:

- it will not severely alter current eco-systems,
- it will not physically impede current fishery practices,
- it will take into account realistic possible developments for the future.

Direct effects of these TISECs on particular species in the Bay of Fundy are fairly straight-forward to determine (as was conducted for this report), but serious consideration has to be given to any future endeavors to ensure the best integration of this particular renewable energy strategy.

One possible way to study the effects of multiple small developments in the same area would be to look at areas in which this has actually happened already. In my research I have found that several TISEC “farms” are in development or in the planning stages including Cook Inlet, Alaska, and in the New York Harbour.¹ Environmental Assessments have been conducted for these projects, and experts in marine life had been consulted for the writing of the documents. A report by the Electric Power Research Institute (EPRI) has stated that they believe TISEC devices will be relatively safe for fish in that the rotational speed of the turbines is very slow (~10rpm for an 18m blade), and that the machines are self-limiting in terms of speed. Furthermore, an interesting way to lessen the impact of the TISECs on fish migration that has been explored in the New York setting is to physically remove the turbines from the water for several weeks to both let the fish through, and to use the opportunity to perform maintenance on the turbines. This strategy would also allow the management to remove the turbines quickly in the case of an environmental issue arising.

¹ Tidal Power Draws Interest, <http://www.petroleumnews.com/pntruncate/651701080.shtml>

Ultimately, any negative socioeconomic effects on fishers in the region will mean a decrease in the economic development of the region. There is a delicate balance between any decrease in revenue from fishing, and the projected increase in revenue from this tidal power plant. We discuss the topic of regional economic development in the next portion of this document.

To encourage Danish investment in wind power, families were offered tax exemptions for generating their own electricity. This usually involved the purchase of shares in wind turbine cooperatives that invested in community wind turbines. This co-operative model for community investment has spread to Germany and the Netherlands. Opinion polls show that this direct involvement has helped the popularity of wind turbines, with some 86% of Danes supporting wind energy when compared with existing fuel sources.² Similarly, Nova Scotia has a wind power cooperative known as Scotian WindFields which is currently calling for investors.

On the Government of Nova Scotia's economic development website, they state that they are trying to increase the amount of capital invested in Nova Scotia to 5% by 2010. Statistics Canada indicates that \$600 million are invested into RRSP's by Nova Scotians. Only 2% is invested into Nova Scotia. An increase in local capital will create a favorable environment for local entrepreneurs and will create a beneficial ripple effect.

In order to increase the amount of local capital, the Nova Scotian Government established the Nova Scotia Equity Tax Credit in 1993, which was enhanced to the Community Economic Development Investment Fund. Currently, there are 41 CEDIFs in Nova Scotia that have successfully closed at least 1 offering.³ Through a total of 67 offerings, \$25 million in assets are managed.

According to the Scotian WindFields website⁴,

“Investments in a CEDIF are eligible as a RRSP contribution and for 30% non-refundable Nova Scotia Equity Tax Credit against Nova Scotia taxes payable if held for 5 years. Shareholders may qualify for subsequent tax credits in the 6th (20%) and 11th (10%) year after making the initial investment if the CEDIF meets the additional requirements under the NS Equity Tax Credit legislation to qualify the CEDIF's shareholders for these tax credits.”

Income is generated from interest, dividends and capital gains. Long-term investment is encouraged and rewarded. Local citizens will be more accepting of the project as it has potential for financial gain.

² The world's leader in Wind Power, <http://www.scandinavica.com/culture/nature/wind.htm>

³ Economic Development – CEDIFs, <http://www.gov.ns.ca/econ/cedif/funds/default.asp>

⁴ Renewable Energy investment opportunity for HRM residents, http://www.scotianwindfields.ca/Joomla/index.php?option=com_content&task=view&id=55&Itemid=72

The advantages of a CEDIF are more than economical. The Nova Scotian government is committed to increasing local investment to 5% by 2010 as well as increasing renewable energy by 5% in 2010, 2011 and 2012. Local benefits include the appointment of 6 community directors for the Fund. A local co-operative with local investors and directors will increase public opinion for the project.

Some drawbacks of a CEDIF are the financial and professional input required for successful management. A Simplified Offering Document must be completed to outline what the investor is purchasing. This is a legal document and care should be taken in its completion (legal aid is suggested). Persons involved in the management of the fund should be familiar with ETC Regulations from the Dept. of Justice and Investment Pacing from the Dept. of Finance.

It would be necessary to generate a poll of potential investors and see how many people are interested. This is an exciting project with big financial benefits but may also seem risky in the eyes of the future shareholders. Public meetings should be held to receive questions and generate talk about the investment.

This tidal power project satisfies many of the criteria for a CEDIF in that it is not for charity, but rather for profit, and is not non-taxable. It has the potential to create a large amount of revenue, and therefore would be a very attractive investment for the citizens of Nova Scotia. A minimum dollar investment can be set for the project, which would allow the investment client base to be controlled, if necessary.

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