

Although I did not read the entire report, what I did read was very interesting and insightful. It seems to have covered all the questions that need to be asked before any projects should be implemented, which seem to be a lot. I find it very exciting as an engineering student seeing a focus on alternative energy rising in this province and the potential of such job opportunities and the huge impact that tidal energy could have on power generation for Nova Scotia.

I personally believe that Nova Scotia drastically needs to begin moving off of power production from fossil fuels and towards renewable and alternatives for our power generation. I was surprised to read that 75% of our power comes from coal, and my guess would be that of the remaining 25%, 24-24.5% would be oil and natural gas with a very small amount coming from wind and hydro. It seems that NS has been moving towards alternatives much slower than other provinces and countries. With such a dependence on coal opposed to oil, NS is not being as affected by the rising oil prices as other places may be. I think this may be negatively impacting our ability to develop and implement alternative sources. Other governments are being pushed towards alternative methods by rising prices, making it economically feasible to research options and implement projects, in Nova Scotia we are not seeing such a push. It is very encouraging that the government is setting regulations requiring utility companies to supply at least 5% of their output from renewable sources by 2010. This is a wonderful start, but I think that the utility companies need to be urged to do more than the bare minimum when it comes to developing renewable energy generation.

I completely support development of tidal power generation in the Bay of Fundy. In pursuing alternative sources to power generation in Nova Scotia, we need to take advantage of our surroundings, one of the biggest energy sources available to us is tidal flow in and out of the Bay. In saying this it is also very important to leave the natural environment as intact as possible. With large (or any) human developments and projects there will always be some impact on the environment and the surrounds, but we need to make substantial efforts to minimize changes to the natural eco-systems. In development of TISEC systems within the Bay there will definitely be some negative results to the eco-system, as well as adjustment periods for many species. The big question that needs to be answered is what amount of impact is acceptable to allow a project to continue and at what point are the effects considered to great to allow further development. As projects are proposed and implemented, their effects and surroundings must be carefully monitored to ensure that the impact remains below the specified levels. Determining these amounts of acceptable impact is going to be a very challenging problem. For such a project, one possibility for determining allowable levels of impact may be to compare the environmental impact of such a tidal project, with the environmental impact that mining, transporting and burning of coal would cause for the same amount of power generation. Of course this also involves a number of challenges, can you really compare the results since the two different scenarios will be affecting different eco-systems and different areas. It may be that the two are not easily (or at all)

comparable, but it may provide a way to estimate an allowable impact for such a development. It is going to be very challenging to minimize environmental impact in the Bay. I imagine the underwater eco-system is very sensitive to human developments, much more than on the land.

A development of this type could provide huge contributions for communities and the province. The development will provide a wide variety of jobs from research positions, construction, monitoring and maintenance. If we are able to generate a substantial amount of power from such projects, less money will be spent importing fossil fuels and the transportation costs associated. There may also be opportunities for exporting the clean energy to other markets, possibly into the States, which could bring increased revenue into the province. But one of the most exciting prospects in my mind is NS becoming a centre of expertise for tidal power generation. As stated in the report, this is very new technology that is greatly untested. If we were able to develop a large-scale project, we could end up pioneering a new technology on large scale. This may result in a centre of expertise for such power generation. As well there is the benefit that if we are able to implement such projects with minimal impacts on the environment, we would reduce the amount of fossil fuel burning for power generation.

This is a very interesting project and I will be following it in the future.

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