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To: "oer@offshoreenergyresearch.ca" <oer@offshoreenergyresearch.ca>
Date: 2008-02-29 3:53 PM
Subject: environmental-impact final report
Attachments: untitled-2

re:

Background Report for the Fundy Tidal Energy Strategic Environmental Assessment by Whitford.

The authors did well to collect that much material and be able to summarize pertinent information to come to very reasonable conclusions in a short time. My compliments.

Critique:

1) In the beginning the committee expresses some enthusiasm for tidal lagoons (my search of the report for "lagoon" counts 42 hits!), but then drops this discussion to focus on TISEC projects.

It was my understanding that this report discusses the environmental impact on TISEC projects only. By launching the idea of Tidal lagoons and then not researching it further they leave open wide gaps in a critical review of this technology and create unrealistic expectations. It should not have been included.

For instance, the impact of such lagoon on the scenery and consequently tourism as well as its impact on commercial and recreational fishery will potentially be huge. Also, I suspect that local communities may not welcome the potential changes in their coastline and changes in flow patterns which may result in erosion.

This approach (tidal lagoon) requires an independent study, if this is seriously considered.

2) Tourism does not get as much attention in the report as it deserves.

Its economic impact on the region is presently and potentially large (it gets some mention). In some regions it is the only economic activity. The authors could have made the point- on the positive side- that TISEC projects could attract tourism through interpretation centres. The authors do not seem to be aware of an excellent report on potential tourism attractions along the Bay of Fundy (NS side) as mentioned in the middle of the government website:

<http://www.nstourismvision.com/vision/FundyReport.php>

"Bay of Fundy, star generator potential"

Interpretation centres on tidal energy and its impact could be part of promoting the Bay as a tourist attraction.

3) the impact of ice (literally and figuratively) on TISEC devices is not explored enough. Given the velocity and mass of 1- 2 m deep stacked ice segments, covering a floor area of big buildings, will produce a huge impact on any supporting structure. To calculate this (resulting force and moment) is not that difficult. It needs to be researched further.

4) finally models of the potential result of removing energy out of this resonance phenomena and its (probable) consequence on the amplitude of oscillation (the tide difference) need to be estimated. I anticipate this to be small, but it will be questioned.

Overall, I agree with the overall conclusion of a staged, cautionary approach.

Greetings,
Gerhard Stroink

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