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TOWARD A ‘MORE PLANNED APPROACH’ TO IPP PROJECTS IN BC: Backgrounder on Strategic Environmental Assessment

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1. Introduction

1.1 West Coast's IPP Projects Series

In May 2009, West Coast Environmental Law (“West Coast”) published a Backgrounder on Independent Power Producers (IPPs) Power Projects in British Columbia¹ (“IPP Backgrounder”), the first in West Coast’s series of law and process reform publications on IPP projects. That Backgrounder examines the climate change context and the land-use controversies associated with the development of clean or renewable electric power generation by IPPs in British Columbia.

One of the key conclusions of the *IPP Backgrounder* is that the BC government has not done a *strategic environmental assessment* to determine where IPP projects should, and should not, be located.

This conclusion raises the question of what is a strategic environmental assessment (“SEA”) and what it might look like in relation to IPP generation projects in BC.

1.2 Purpose of this Backgrounder

The platform of *Recommendations for Responsible Clean Energy Development in BC* that West Coast co-authored (released in December 2009) points to solutions to resolve the shortcomings in BC’s regulatory regime for IPP projects, including the lack of strategic environmental assessment. The purpose of this Backgrounder is to examine the principles that inform an SEA and the manner in which SEAs are implemented. The objective is to provide background for the *Recommendations* platform, and for public discussion in BC about whether and how to adopt a ‘more planned approach’ to IPP power projects in BC.

There are many existing regulatory and planning processes that impact the development of IPP power projects in BC. Examples include provincially-mandated land use planning, project-specific environmental assessment, Crown consultation and accommodation with First Nations, Crown land and water decision-making, utility power acquisition, and electric utility regulation. The scope of this publication, however, is limited to SEA.

1.3 Organization of this Backgrounder

After this brief introduction, the objectives, rationales, types and principles of SEA are discussed in Part 2.

Part 3 of this Backgrounder, “Examples of SEA,” covers early Canadian SEA-like processes, examples of regional and sectoral SEAs, federal SEA of policies and programs, the BC Salmon Aquaculture Review, and examples of SEA of renewable energy development in the UK, Scotland, New Brunswick and Nova Scotia.

Part 4 is a case study of the Nova Scotia Fundy Tidal Energy SEA.

Brief conclusions are set out in Part 5.

¹ www.wcel.org/articles/IPP-QandA.pdf.

A list of references and links is at the end.

2. Theory of Strategic Environmental Assessment

2.1 *The objective of SEA*

Strategic Environmental Assessment (“SEA”) is a type of process that has been widely implemented in Canada and other jurisdictions around the world.

The concept of SEA has its roots in regional development and land use planning initiatives.

The International Association for Impact Assessment states that a “good-quality” strategic environmental assessment process

...informs planners, decision makers and affected public on the sustainability of strategic decisions, facilitates the search for the best alternative and ensures a democratic decision making process. This enhances the credibility of decisions and leads to most cost- and time-effective EA at the project level.²

Commenting on the Canadian strategic assessment experience, Stephen Hazell and Hugh Benevides state:

The ultimate objective of SEA is to systematically integrate environmental considerations into government planning and decision-making processes relating to proposed policies, plans and programs.³

2.2 *Reasons for SEA*

Many reasons to undertake a strategic environmental assessment have been identified, including:

- to optimize positive environmental effects and minimize or mitigate negative environmental effects from a proposal,
- to consider potential cumulative environmental effects of proposals,
- to implement sustainable development strategies,
- to save time and money by drawing attention to potential liabilities for environmental clean-up and other unforeseen concerns,
- to streamline project-level environmental assessment by eliminating the need to address some issues at the project stage, and
- to promote accountability and credibility among the general public and stakeholders, and to contribute to broader governmental policy commitments and obligations.⁴

² International Association for Impact Assessment, *Strategic Environmental Assessment Performance Criteria* (January 2002). Online at: www.iaia.org/publicdocuments/pdf/sp1.pdf.

³ S. Hazell and H. Benevides “Federal Strategic Environmental Assessment” *Journal of Environmental Law and Practice*. 7 J. Env. L& Prac. 349.

2.3 Types of SEA

One way to subdivide strategic environmental assessment is between *sector* environmental assessments and *regional* environmental assessments.⁵

The World Bank defines *Sectoral EA* as follows:

*Sectoral EA: An instrument that: examines environmental issues and impacts associated with a particular strategy, policy, plan, or program, or with a series of projects for a specific sector (e.g., power, transport, or agriculture)...; evaluates and compares the impacts against those of alternative options; assesses legal and institutional aspects relevant to the issues and impacts; and recommends broad measures to strengthen environmental management in the sector. Sectoral EA pays particular attention to potential cumulative impacts of multiple activities.*⁶

The World Bank defines *Regional EA* as follows:

*Regional EA: An instrument that examines environmental issues and impacts associated with a particular strategy, policy, plan, or program, or with a series of projects for a particular region (e.g., an urban area, a watershed, or a coastal zone); evaluates and compares the impacts against those of alternative options; assesses legal and institutional aspects relevant to the issues and impacts; and recommends broad measures to strengthen environmental management in the region. Regional EA pays particular attention to potential cumulative impacts of multiple activities.*⁷

Both of those descriptions emphasize that SEA is focused more on policies, plans and programs than traditional environmental assessment, which focuses on individual projects.

2.4 Principles of effective SEA

Celesa L. Horvath and Jeffrey L. Barnes identify the following basic principles of an effective regional environmental assessment:

- early application, before calls for bids, licensing or other similar decisions, or once exploration results have made development/production activity likely,
- appropriate regional scale, including clearly defined spatial and temporal boundaries for the assessment (for regional EAs),
- fulsome scoping of issues to be considered in the assessment, through meaningful public participation,

⁴ Government of Canada, "Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals" (reissued 2004). www.ceaa-acee.gc.ca/016/directive_e.htm

⁵ Horvath, Celesa L. and Jeffrey L. Barnes "Applying a Regional Strategic Environmental Assessment Approach to the Management of Offshore Oil and Gas Development" (2004) online at: www.jacqueswhitford.com/site-jw/media/1_fd1a_Barnespaperoffshoreoilgas104%20_2.pdf.

⁶ Cited in Horvath, Celesa L. and Jeffrey L. Barnes. See Note 5.

⁷ *Ibid.*

- consideration of a realistic and comprehensive development scenario,
- consideration of the full range of other projects, activities, and environmental trends contributing to environmental effects within the region,
- consideration of environmental, social, and economic sustainability objectives for the region,
- use of sound, accepted EA practices,
- documentation of areas, issues, effects, and mitigation that are well understood and those that are uncertain,
- specification of areas within or conditions under which development may or should not take place, and
- specification of requirements for further assessment and/or mitigation, and meaningful public participation.⁸

The same principles, with some modifications, would also be applicable to an effective *sectoral* environmental assessment.

2.5 Sustainability Assessment

One modern articulation of strategic environmental assessment is referred to as “sustainability assessment,” described by Professor Robert Gibson and colleagues.⁹ Prof. Gibson summarizes the common characteristics of sustainability assessment as follows:

- positive contribution to sustainability as the basic criterion for evaluations and decisions;
- scope that is comprehensive of all requirements for progress towards sustainability, and their interrelations (and therefore includes all factors that may affect prospects for meeting these requirements);
- focus on net gains as well as avoidance of significant (especially, permanent) losses;
- selection of case-specific purposes informed by “contribution to sustainability” objective;
- focus on identifying the best option, achieved in part by comparative consideration of possibly reasonable alternatives;
- attention to the full set of global and regional as well as local sustainability concerns, achieved chiefly through application of generic criteria;
- sensitivity to the particular context (ecological, cultural, socio-economic, etc.), achieved in part through direct engagement of stakeholders in identifying key case-specific

⁸ Horvath, C.L and Jeffrey L. Barnes. See Note 5.

⁹ See Gibson, Robert B. and Selma Hassan, *Sustainability assessment: criteria and processes*, (London; Sterling, VA : Earthscan, 2005).

concerns and priorities, and using these to supplement and/or elaborate the generic criteria;

- efforts to achieve multiple, mutually reinforcing gains in all the interrelated areas of sustainability concern, in addition to serving core project purposes;
- explicit attention to, and open rationales for, trade-offs among the recognized objectives;
- contribution to sustainability through the assessment process itself as well as through the better decisions that result, achieved in part through incorporating open participative approaches, respecting different interests, and integrating different kinds of knowledge; and
- treatment of assessment as an approach to decision making (in the conceptualization, planning, design, evaluation, approval, implementation and monitoring and eventual decommissioning of undertakings), not just a review at a particular stage.¹⁰

Prof. Gibson also sets out a useful list of the “essential overall requirements for progress towards sustainability”:

- socio-ecological system integrity;
- livelihood sufficiency and opportunity;
- intragenerational equity;
- intergenerational equity;
- resource maintenance and efficiency;
- socio-ecological civility and democratic governance;
- precaution and adaptation; and
- immediate and long term integration.¹¹

As an example, the principles of sustainability assessment were applied to the topic of how to increase citizen participation in the follow-up stage of environmental assessment processes. In a 2003 report¹² published by the Canadian Environmental Assessment Agency, Carol Hunsberger, Prof. Gibson and colleagues examined three case studies: citizen environmental monitoring in Comox Valley, British Columbia; community-based monitoring in Lutsel K'e,

¹⁰ Gibson, Robert B., “Sustainability-based assessment criteria and associated frameworks for evaluations and decisions: theory, practice and implications for the Mackenzie Gas Project Review,” Report prepared for the Joint Review Panel for the Mackenzie Gas Project, January 26, 2006, at pp.3-4.

¹¹ *Ibid.*

¹² Hunsberger, Carol, Robert Gibson and Susan Wismer with case studies by Carol Hunsberger, Tyler Shaw and Thalia Santisteban, “Increasing Citizen Participation In Sustainability-Centred Environmental Assessment Follow-Up: Lessons from Citizen Monitoring, Traditional Ecological Knowledge, And Sustainable livelihood initiatives,” prepared for the Canadian Environmental Assessment Agency Research and Development Monograph Series, 2003. www.ceaa.gc.ca/015/001/031/index_e.htm

Northwest Territories; and community lobster fisheries management in Eastport Peninsula, Newfoundland. They concluded

*... community involvement in determining the purpose, scope and priorities of follow-up activities helps to produce results that are locally meaningful. Adopting a broad temporal, geographic and topical scope through ongoing monitoring and compliance assurance activities, watershed-based analysis, and integration of social and ecological variables leads to several benefits. Follow-up programs with these characteristics are able to track cumulative effects of multiple projects, assess changes in local quality of life, and respond to detected changes with adaptive design and management strategies. In particular, environmental assessment follow-up in many cases could benefit from adopting a focus that is broader than the effects of a single project.*¹³

In another example, the principles of sustainability assessment were used as a framework for a critique of an *Integrated Power System Plan* (IPSP) created by the Ontario Power Authority (OPA). The OPA had filed its IPSP with the Ontario Energy Board, claiming that it complied with the principles of sustainability assessment. Prof. Gibson and colleagues prepared a report¹⁴ for the Green Energy Coalition, the Pembina Institute, and the Ontario Sustainable Energy Association, which were intervenors in the OEB proceeding. The report provides a detailed exposition of the principles of sustainability assessment, and an equally detailed analysis of eight core areas in which the IPSP failed to meet the principles.

3. Examples of Strategic Environmental Assessment

3.1 Early SEAs in Canada

Although the term “strategic environmental assessment” is more recent, commentator Bram F. Nobel traces the beginnings of SEA in Canada back to the early 1970s. Although not referred to as SEAs at the time, Nobel views the following processes as setting the stage for SEA in Canada:

- the Mackenzie Valley Pipeline inquiry (1974-1977),
- the Beaufort Sea hydrocarbon review (1982-1984), and
- the Atomic Energy of Canada Limited’s nuclear waste management concept (1988-1994).¹⁵

¹³ *Ibid.*

¹⁴ Gibson, Robert B., Mark Winfield, Tanya Markvart, Kyrke Gaudreau, and Jennifer Taylor, “An Analysis of the Ontario Power Authority’s Consideration of Environmental Sustainability in Electricity System Planning,” prepared for: Green Energy Coalition, Pembina Institute, Ontario Sustainable Energy Association, filed August 1, 2008 with the Ontario Energy Board in the matter of an application by Ontario Power Authority regarding the Integrated Power System Plan. www.environment.uwaterloo.ca/research/sustasmt/GEC-Pembina-OSEA%20IPSP%20sust%20asmt.pdf

¹⁵ Nobel, Bram F. “Promise and dismay: The state of strategic environmental assessment systems and practices in Canada. *Environmental Impact Assessment Review* Vol. 29 (2009) 66, at p. 65.

3.2 Regional SEAs

Alex Gryzbowski & Associates gives a number of examples of *regional* studies of environmental effects that have been undertaken in Canada over the last two decades:¹⁶

- the Hudson Bay Program, Ontario and Quebec (1992),
- the Salmon Aquaculture Review, BC (1995-1997).
- the Northern River Basins Study, Alberta (1996),
- the Banff–Bow Valley Study, Alberta (1999),
- the Oak Ridges Moraine Area Planning Study, Ontario (1999),
- the Kluane National Park and Reserve Management Plan, Yukon (1999),
- the Moose River Basin Environmental Information Partnership, Ontario (2001),
- the Niagara Escarpment Plan, Ontario (2001), and
- the West Kitikmeot/Slave Study, Northwest Territories (2001).

3.3 Federal SEA of policies and programs

Strategic environmental assessment has also been formalized into federal Canadian government planning, at least in theory. The Government of Canada *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* was issued in 1990, re-issued in 1999 and re-issued again in 2004.¹⁷ The Directive calls for SEAs to be conducted for any policy, plan, or program proposal that is submitted to a Minister or to Cabinet for approval and that is likely to have important environmental effects, positive or negative.

A March 2008 report by Canada's Commissioner of the Environment and Sustainable Development concluded that "The government is still not complying with a Cabinet directive on the environmental assessment of policy, plan, and program proposal."¹⁸

The Directive has, nonetheless, provided a starting point for discussion of the use of SEAs in Canada.

3.4 The Salmon Aquaculture Review in BC

In 1995, the British Columbia government ordered a moratorium on the issuance of new salmon farm tenures and announced its plan to conduct a review of the salmon aquaculture industry.

¹⁶ A. Gryzbowski & Associates, *Regional Environmental Effects Assessment and Strategic Land Use Planning in British Columbia* (undated). Prepared for the Research and Development Monograph Series, 2001, at p. 10.

¹⁷ The Directive was issued in 1990 and was described in the February 1993 document "The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals." The Directive was issued in 1999 and then again in 2004.

¹⁸ Office of the Auditor General of Canada, "Government's progress on strategic environmental assessment and guidance for greening operations is unsatisfactory," March 6, 2008. www.oag-bvg.gc.ca/internet/English/mr_20080306_e_30179.html

The “Salmon Aquaculture Review” (SAR), which was conducted by the BC Environmental Assessment Office (EAO) from 1995 to 1997, is the most high profile BC example of what could be called a strategic environmental assessment.¹⁹

The review culminated in August 1997, with a five-volume final report published by the BC EAO. The report contains 49 recommendations (ten of which have to do with the siting of farms).²⁰

The SAR was conducted pursuant to section 40 of the then BC *Environmental Assessment Act*. That version of the Act was subsequently repealed and replaced with a new *Environmental Assessment Act* in 2002.²¹ However, section 49 of the current Act continues to provide a legislative basis for conducting a strategic environmental assessment in BC. It provides:

49 The minister may direct the Environmental Assessment Office, in accordance with terms of reference established by the minister,

(a) to undertake an assessment of any policy, enactment, plan, practice or procedure of the government, and

(b) to provide a report and recommendations to the minister at the conclusion of the assessment.

Although section 49 of the current Act is ‘on the books,’ it has never been used.²²

3.5 SEA and energy development

There appears to be a trend worldwide to conduct strategic environmental assessments in relation to energy development. The following is an overview of some of these SEAs.

3.5.1 United Kingdom

In early 2006, the UK Government commenced work on an integrated SEA of a “Draft Plan/Programme” that addressed three offshore energy issues in order to increase the UK’s security of gas supply (the “Offshore Energy SEA”):

- further oil and gas licensing;
- further offshore wind leasing; and
- offshore gas storage.²³

¹⁹ Although not invoked under the *BC Environmental Assessment Act* or specifically labeled an SEA, two initiatives in BC have also been described as “SEA-type” processes: the BC offshore oil and gas moratorium public review (2004), and the Capital Regional District regional growth strategy (2003). The BC offshore oil and gas moratorium public review consisted of three discrete reviews/reports concerning First Nations views (the “Brooks Report”), the underlying science (the “Royal Society Report”) and public consultations generally (the Priddle Report”).

²⁰ BC Environmental Assessment Office, *Salmon Aquaculture Review - Report of the Environmental Assessment Office* (1997)

a100.gov.bc.ca/appsdata/epic/documents/p20/1186609093726_73facd1f02894e2a8fdef90032d76550.pdf.

²¹ *Environmental Assessment Act*, SBC 2002, c.43.

www.bclaws.ca/Recon/content/site?id=freeside&xsl=/Recon/template/toc.xsl/group-E/.

²² Personal email from A. Wrona, Policy and Legislation Advisor BC Environmental Assessment Office (May 6, 2009).

The Offshore Energy SEA was the ninth sectoral SEA conducted by the UK since 1999 that considered offshore energy issues. There had previously been SEAs of further licensing on the UK Continental Shelf for oil and gas exploration, and one SEA for a previous round of wind energy project leasing.

3.5.2.Scotland

The Scottish Government carried out a Marine Renewables Strategic Environmental Assessment (SEA) in the mid-2000s. The final report was issued in March 30, 2007.²⁴ In October 2008, the Scottish Government commissioned another clean energy SEA, this time for “Offshore Wind.”²⁵

3.5.3. New Brunswick

In 2007, New Brunswick commissioned an SEA of In-Stream Tidal Energy Generation Development in New Brunswick’s Bay of Fundy Coastal Waters.

The final report – “Strategic Environmental Assessment of In-Stream Tidal Energy Generation Development in New Brunswick’s Bay of Fundy Coastal Waters” - was released to the public on November 19, 2008.²⁶ The report was written by a third party entity, the Bay of Fundy Ecosystem Partnership. The report made 19 recommendations to the Province on moving forward with in-stream tidal energy based on stakeholder feedback and preliminary research. The New Brunswick Government issued its response to the SEA final report in March 2009.²⁷

3.5.4. Nova Scotia

At about the same time that New Brunswick commissioned its tidal energy generation SEA, Nova Scotia announced that it would be conducting a similar SEA concerning Tidal Energy Generation in the Bay of Fundy. (The Bay of Fundy is partly in Nova Scotia and partly in New Brunswick.) To some degree the two SEAs were done in conjunction, although separate reports were issued.

²³UK Department of Energy & Climate Change, “Offshore Energy SEA” *Strategic Environmental Assessment* website www.offshore-sea.org.uk/consultations/Offshore_Energy_SEA/index.php.

²⁴ www.seaenergyscotland.co.uk/.

²⁵ The Scottish Government “Potential of offshore wind energy” *News Release* (October 29, 2008) www.scotland.gov.uk/News/Releases/2008/10/29112030.

²⁶ Dr. Barry C. Jones, on behalf of the Marine Energy Working Group, Bay of Fundy Ecosystem Partnership (July 25, 2008). www.bofep.org/PDFfiles/nbsea_report.pdf.

²⁷ -New Brunswick Department of Energy, *New Brunswick Joint Response To the Bay of Fundy Ecosystem Partnership’s Strategic Environmental Assessment* (March 2009) www.gnb.ca/0085/pdf/NBGovernmentResponseSEAMar09E.pdf.

4. Case Study: The Nova Scotia Fundy Tidal Energy Strategic Environmental Assessment

4.1 Background

Like British Columbia, Nova Scotia has undertaken several initiatives in the last few years to mitigate climate change and to cultivate its renewable energy sector.²⁸ These initiatives are outlined in Nova Scotia's "2009 Energy Strategy" and its companion piece, the "Climate Change Action Plan." Among other things, the Nova Scotia 2009 Energy Strategy has set a target of at least 25 percent renewable energy for Nova Scotia by 2020.

Nova Scotia is predicting that it will reach its renewable energy target primarily through wind projects, several of which are already operating or will soon be operating. However, it has also identified tidal energy projects in the Bay of Fundy as a possible source of renewable energy.

In order to inform its decision-making on the potential for tidal energy generation development in the Bay of Fundy, the Nova Scotia government commissioned the Nova Scotia "Fundy Tidal Energy SEA" in 2007.

Nova Scotia's decision to conduct the Fundy Tidal Energy SEA was based on an SEA for tidal energy that had been conducted in Scotland.²⁹ Representatives of the Nova Scotia government had visited the Tidal Test Centre (EMEC) in Orkney, Scotland in 2006, and had met with various government agencies and industry representatives in that country. Impressed with what they saw, the government decided to conduct the Fundy Tidal Energy SEA in Nova Scotia.³⁰

4.2 Purpose

The stated purpose of the Fundy Tidal Energy SEA was to:

(1) Determine, through a consultative process:

Whether ocean renewable energy technologies, and specifically tidal in-stream technologies, could be developed in the Bay of Fundy without significant impacts on the marine ecosystem;

Whether these technologies could 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 could make to community and regional economic development in Nova Scotia, and

(2) Advise the Government of Nova Scotia on:

²⁸ For example, the *Environmental Goals and Sustainable Prosperity Act*, S.N.S. 2007. c. 7 came into force on June 7, 2007. Section 4(2)(e) establishes a legislated goal of reducing GHG emissions by 10 percent by 2020 (compared to 1990 levels).

²⁹ Personal email from Sandra Farwell, Manager of Policy and Planning, Strategic Policy, Planning & Services, Nova Scotia Department of Energy (March 9, 2009). Ms. Farwell was a member of the SEA Technical Advisory Group.

³⁰ Personal email from Sandra Farwell. See Note. 23.

Whether, and under what conditions pilot projects should be permitted;

What ongoing research and monitoring is required to gather the information needed to make decisions about commercial developments; and

Other steps required to determine whether, where and how commercial projects should be developed, regulated and managed.³¹

4.3 Activities and events

The following provides an overview of the key components of the Nova Scotia Fundy Tidal Energy SEA:

The Nova Scotia Department of Energy commissioned a third party - the Offshore Energy Environmental Research Association (OEER) - to carry out the SEA in early 2007.

OEER established a Technical Advisory Group (TAG) consisting of 14 stakeholders (including government). The two co-chairs were professors at Dalhousie University.

The TAG appointed a "Process Lead" who was responsible for facilitating community forums, chairing meetings of the Roundtable and authoring the SEA report in cooperation with the SEA TAG.

In May 2007, the TAG, co-funded by New Brunswick, retained environmental consulting firm Jacques Whitford to prepare a background report that identified bio-physical and socio-economic aspects of the Bay of Fundy's tidal energy resource. The background report addressed the following topics:

- Nova Scotia and New Brunswick's current energy demand and supply situation, policies, programs and renewable energy goals,
- the existing biophysical and socioeconomic environment,
- the location and properties of high renewable energy potential locations,
- types of ocean renewable energy technology,
- potential pilot and commercial development scenarios,
- potential interactions between renewable technologies and the biophysical and socioeconomic environments,
- cumulative effects,
- the contribution of ocean renewable energy to economic development in Nova Scotia and New Brunswick and to community economic development in coastal areas, and
- information gaps and recommendations for addressing them.

³¹ Offshore Energy Environmental Research Association (OEER) "Fundy Tidal Energy SEA Process", online at: www.offshoreenergyresearch.ca/OEER/StrategicEnvironmentalAssessment/NovaScotiaSEAProcess/tabid/120/Default.aspx.

Several public participation events were held, including community forums, a Participation Support funding process, and Roundtable meetings. In August 2007, community forums were held in different communities. Written submissions were also accepted.

Aboriginal engagement was undertaken through a separate consultation process.

Participation of several organizations in the Bay of Fundy region was also encouraged through the creation of the Participation Support Fund (PSF). The PSF awarded small grants for seven projects that investigated research areas such as First Nations fisheries, integrated resource management in the Bay of Fundy, and submerged ice.

In September 2007, a Stakeholder Roundtable was appointed by OEER. Twenty-four members were appointed through a sectoral nomination process.

The Roundtable met seven times between October 2007 and April 2008 to advise the TAG on the scope and implementation of the SEA, on the significance of the research and consultation findings, and on the recommendations included in the final Fundy Tidal Energy SEA Report. The minutes of all meetings were made publicly available.

The final SEA report was submitted to the Nova Scotia government at the end of April 2008.³² The 83-page report contained 29 recommendations and covered an array of social, economic and environmental issues. The general thrust of the report was that Nova Scotia should move forward “with tidal energy development in a cautious manner, including ongoing research and monitoring and stakeholder involvement.”³³

A second round of six community forums was held to gather feedback on the final SEA report. Public feedback was recorded and submitted to the government in a Community Response Report.

On June 26, 2008, the Nova Scotia government published its response to the Final Report,³⁴ providing specific responses to each of the Report’s 29 recommendations.

In January 2009, Nova Scotia released its Energy Strategy.³⁵ Notably, the Energy Strategy states that in relation to renewable energy Nova Scotia will “act on commitments made in response to the tidal Strategic Environmental Assessment (SEA).”

4.4 Evaluation

To our knowledge, the Nova Scotia Department of Energy did not prepare a formal evaluation of the Nova Scotia Fundy Tidal Energy SEA.³⁶

³² Offshore Energy Environmental Research, *Fundy Tidal Energy Strategic Environmental Assessment: Final Report* (April 2008), www.oreg.ca/docs/Fundy_SEA.pdf.

³³ Offshore Energy Environmental Research Association (OEER), “OEER completes strategic assessment for marine renewable energy in the Bay of Fundy.” Media Release (May 1, 2008).

³⁴ Nova Scotia Department of Energy, “Bay of Fundy Tidal Energy: A Response to the Strategic Environmental Assessment,” www.gov.ns.ca/energy/resources/EM/tidal/Tidal-SEA-Report-screen.pdf.

³⁵ Nova Scotia Department of Energy *Toward A Greener Future: Nova Scotia’s 2009 Energy Strategy* (January 2009), at p. 5. Online at www.gov.ns.ca/energy/resources/spps/energy-strategy/Energy-Strategy-2009.pdf.

³⁶ The Nova Scotia Department of Energy did prepare a case study dated January 15, 2009, but the study does not provide an assessment of the value of conducting the SEA.

However, the three representative members³⁷ of the SEA Technical Advisory Group that we interviewed each stated that there was significant value in conducting the SEA. Among other things, they noted that the extensive public consultation allowed the public “to be heard” and to be better informed about renewable energy, and that it will likely lead to a decrease in “NIMBY” opposition to tidal energy projects in Nova Scotia.

5. Conclusions

There is no one way to conduct a “strategic environmental assessment.” The term encompasses a range of processes, with some focusing on specific regions and others on specific sectors.

However, the key core components of any good quality SEA include: the collection of sufficient baseline data, strong public engagement, transparency, the consideration of cumulative impacts, a full canvassing of the various alternative that exist, and the creation of a plan or framework that can guide decision-makers going forward.

The SEA concept is not unknown to BC. This is evidenced by the Salmon Aquaculture Review (1995-1997), which was invoked under the BC *Environmental Assessment Act*, and the BC offshore oil and gas moratorium public reviews (2004).³⁸

There is now a trend in many jurisdictions around the world to conduct SEAs in order to assess and guide clean or renewable energy development. The recent SEAs in the UK, Scotland, New Brunswick and Nova Scotia have focused on specific types of clean energy development (wind and tidal) within specific areas.

In the BC context, this could translate, by way of example, to an SEA of:

- run-of-river development in the Sunshine Coast area;
- land-based wind projects in the Peace region; or
- offshore wind power development in Hecate Strait.

The SEAs discussed above have numerous benefits. However, the SEA concept is not without problems. Some examples:

1. SEAs, as seen in the examples noted in this backgrounder, tend to be long in duration – measured in years, not months.
2. SEAs usually require a significant time commitment from participating stakeholders.
3. To be done well, SEAs usually require a significant budget, typically from the public purse.
4. The success of an SEA may be contingent on the amount of political risk a government is willing to take. Most of the SEA processes examined above were mandated by a

³⁷ The people interviewed were: (1) Dr. Josh Leon, Dean, Faculty of Engineering, Dalhousie University and co-chair of the TAG; (2) Sandra Farwell, Manager of Policy and Planning Strategic Policy, Planning & Services Nova Scotia Department of Energy; and (3) Andy Sharpe, Science Coordinator, Clean Annapolis River Project.

³⁸ See footnote 13.

government (or multiple governments). Because the outcome of an SEA cannot be predicted with certainty, an SEA can carry considerable political risk. In order to reduce this risk, governments may be tempted to artificially narrow the scope of the SEA at the outset. This can result in the SEA not sufficiently addressing the underlying public concerns about the issue being examined.

References and Links

References

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