

Tidal Energy Governance: Law and Policy Considerations

A faint, stylized image of a scale of justice is visible in the background, positioned on the right side of the slide. The scale consists of a vertical pillar supporting a horizontal beam with two pans hanging from it. The image is rendered in a light blue color, matching the overall theme of the slide.

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Overview



- Brief History of Tidal Power
- International Law Context
- Constitutional Issues & Granting of Property Rights
- Existing Regulatory Context
- Components of an Effective Governance Regime
 - SEA
 - Integrated Planning
 - Federal Provincial Cooperation
 - Project Decisions
- Conclusion

Brief History of Tidal Power

- Tidal mills in Europe 12th C
- Fundy tidal considered for close to a C
- Three “modern” barrage tidal projects:
 - La Rance (France)
 - Kislaya Guba (Russia)
 - Annapolis Royal (Canada)
- More recently, technology has moved beyond barrage based projects

International Law Context

■ Law of the Sea Convention

- Territorial Sea, EEZ, Continental Shelf (Seabed)
 - Art. 56 (EEZ): Production of energy from currents and wind
 - Art. 80 (Seabed): Jurisdiction over Installations and Structures
- Obligations to protect marine environment (Art. 192)

■ Customary International Law

- Responsibility to prevent transboundary harm
- State Sovereignty

■ Multilateral Environmental Agreements (MEA's)

- CBD re biodiversity
- UNFCCC & KP re climate change

■ Soft Law (non-binding commitments)

- Sustainable development
- Rio Principles (polluter pays, precaution, integration, ecosystem approach, public participation, EIA...)

Constitutional Issues

- ***Canada*** has jurisdiction under UNCLOS, but ***who*** has jurisdiction ***within Canada?***
- ***Territorial limits*** of Nova Scotia Critical “Q”
 - Includes all territory it brought into Confederation
 - Does it go beyond the low water mark?
 - Fairly strong provincial claim in Bay of Fundy
 - If so, where is the line between NS and NB
- Constitutional ***Powers & Responsibilities***
 - ***Federal*** (Fisheries, Shipping and Navigation, Aquaculture)
 - ***Provincial*** (linked to territory: electricity, resources in the province, ...)

Property Rights

- Developers will seek some *security of tenure*
- *Who* can grant such rights will depend on constitutional issues
- In addition, such private rights would be *subject to public rights* of navigation & fishing
- Any *limitation* of such *public right* can only be imposed through *federal legislation*

Existing Regulatory Context



■ Federal

- Fisheries Act (ss. 35-37)
- NWPA
- Oceans Act (MPAs, Integrated Planning, ...)
- Shipping Act
- NEB Act
- SARA
- CEAA

■ Provincial

- Environment Act
- Fisheries and Coastal Resources Conservation Act
- Energy Legislation
- Endangered Species Act and other Nature Protection Legislation

UK Experience

- **2004 Energy Act**
 - Licensing of marine renewable energy
 - Application of civil and criminal law
 - Authority to establish renewable energy zones
- **Development of Tidal in the UK**
 - *Demonstration* phase well under way
 - *Commercialization* phase to follow
 - Demonstration phase as information gathering process
 - SEA a precondition for commercialization
 - Regulatory Process not yet coordinated

Effective Governance

The Role of SEA: *Tidal Energy in the Bay of Fundy*

- Assess various tidal technologies
- Assess their impacts on receiving environments
- Consider how tidal may interact with other uses of affected areas of the oceans and coastal areas
- Determine the role of tidal in SD for NS (&NB?), including:
 - Whether the emerging technologies offer opportunities?
 - Nature of the opportunities?
 - Employment, rural development, cleaner energy, royalties, economic activities...
 - Which technologies?
 - Where?
 - Under what conditions?
 - Who should get access where?
 - Max net contribution to SD as the ultimate test on whether and under what conditions to allow development?

Effective Governance

Importance of Integrated Planning

- Consider Bay of Fundy Region
- Important to objectively assess best use(s)
- Move from considering whether tidal is acceptable to the role of tidal in sustainable use of Bay of Fundy with maximum long term benefits
- Consider role of fishing, aquaculture, biodiversity & nature preservation, tourism, shipping, offshore wind, other industries, any other uses?

Effective Governance

A Cooperative Regulatory Model

- Clear that all levels of government have a legitimate interest
- Mirror legislation needed to deal with constitutional issues
- Offshore Boards a good start for a cooperative regulatory model
- SEA and Integrated Planning Process(es) better carried out first and independently

Effective Governance

Improved Project Decision-making

- SEA and Integrated Planning should allow for streamlined EA process
- Effective EA process should allow for streamlined regulatory process
- Federal-provincial coordination should allow for coordinated regulatory decision making
- Offshore Renewable Energy Board could ensure harmonized regulatory process

Conclusion

- Exciting Opportunities
- Critical Time to Prepare
- Lessons Learned from the Past
 - Do homework before industry is established
 - Bring public along
 - Importance of SEA, Integrated Planning
 - The more effective the up front process(es), the more efficient the project approval process will be & the greater the benefits