GUIDELINES *for Permitting of a Pre-Commercial Demonstration Phase for Offshore Renewable Energy Devices (Marine Renewables) in Nova Scotia*

Introduction:

The guidelines outline the application of the regulatory process for approval procedures for all pre-commercial marine renewable energy generation devices in Nova Scotia territorial waters. It does not address the procedures for larger commercial scale wave, wind and tidal stream projects, tidal lagoons or barrages.

Background:

The offshore renewable energy industry is in its infancy and at the pre-commercial stage which requires sites for installation of demonstration devices to validate the technologies used and demonstrate these technologies in Nova Scotia's offshore. Guidance on the regulatory process is intended to assist developers and stakeholders to understand how approvals are granted.

The permitting of demonstration devices needs to be appropriate and proportionate to the risk and scale of the potential impacts of the devices involved so that the industry is given an opportunity to develop in a sustainable manner.

A demonstration (or pre-commercial) project is defined as being a project, the primary purpose of which is to test, prove and validate new or innovative uses of technology or combinations of technologies.

A demonstration project may have a number of objectives:

1. development and validation of engineering and technical aspects of devices and demonstration of their commercial potential.
2. development of understanding of the environmental impacts of devices and their potential impacts on other uses or users of the marine area, through monitoring and research.
3. evolution and refinement of the regulatory process and adaptation as appropriate to new technologies and their impacts.

The Province's goal is that the demonstration phase be an information gathering and sharing phase for all parties, to acquire knowledge and put it into the public domain, monitor environmental impacts and further develop and prove new or innovative uses of technology in preparation for possible commercial development.

Location of Projects:

The choice of a site for a demonstration project will be put forward by the developer and will depend on the requirements of the device concerned. Final site approval will be made by the Province pending the results of the Strategic Environmental Assessment (SEA).

Developers are expected to have sufficient knowledge and understanding of the local environment, its sensitive areas and risks.

Environmental Regulation:

a) Strategic Environmental Assessment (SEA)

A strategic environmental assessment (SEA) will be conducted prior to the permitting of a demonstration project. This is a strategic assessment of the potential impacts of marine renewable energy technology on the environment and socio-economic impacts of marine renewable development in Nova Scotia. The SEA applies a broad sustainability lens through which to evaluate potential development scenarios. The results from the SEA will inform the development and implementation of the Province's strategy for future marine renewable energy developments.

b) Provincial Environmental Assessment/Industrial Approvals

All demonstration projects will require site specific environmental assessments (EA). Developers are encouraged to consult on scoping for individual projects so as to ensure the views of stakeholders are considered in preparing those EAs. EAs will need to be comprehensive to provide clarity on the likely impacts and the risks associated with them. Proponents can refer to the Department of Environment and Labour's Guide to Environmental Assessment at the following link: http://www.gov.ns.ca/enla/ea/docs/EAProponentsGuide.pdf for more information on the environmental assessment process.

c) Federal Canadian Environmental Assessment (CEAA)

A federal environmental assessment under CEAA may be triggered. There may then be a joint environmental assessment review process.

Projects must provide levels of data for the EA that are proportionate to the risk and scale of potential environmental effects. Where greater risks are identified, assessment requirements will be more rigorous, and any mitigation measures and monitoring requirements will be more onerous. It will be important for a dialogue with stakeholders to be maintained during the life of the projects to enable proper assessments of the data gained.

Completion of an SEA will be a pre-condition for the start of any demonstration phase and must include full public consultation.

The EA process will ensure that site decisions are made in a way that recognizes and avoids any significant adverse environmental effects of projects, including effects on other users of the ocean or on the marine environment.

Regulatory Framework:

The framework flow chart (available on the website) details both the governance regime and process for the issuance of authority for industry initiated offshore energy generation site(s).

The Province initiates a request for proposals (RFP) for the development of a test or commercial site(s). The RFP will provide an information package detailing criteria which must be addressed by all interested parties.

The proposals will be submitted to the provincial Department of Natural Resources (DNR). An evaluation will be conducted by an Interdepartmental Provincial Review Committee (Review Committee) comprised of representatives of DNR, Department of Energy (DOE), Department of Environment and Labour (DEL), Agriculture and Fisheries (A&F), technical experts and other representatives as required. No proposal will be considered unless the applicant can provide proof of technical and financial feasibility and insurability.

The Review Committee will select the successful proponent(s). DNR will notify the proponent of the award and, if accepted, will cause public notification of the award and the commencement of a 30-day public comment period.

One-Window Standing Committee

The Nova Scotia government and federal government have agreed upon a process to ensure that the regulatory process for offshore renewable energy demonstration projects is coordinated, efficient and streamlined as much as possible. A One-Window Standing Committee (Standing Committee) has been established. This consists of key federal and provincial regulators and government departments including the following: Natural Resources Canada (NRCan), Environment Canada (EC), Fisheries and Oceans (DFO), Canadian Environmental Assessment Agency (CEAA), Transport Canada (TC), NS Environment and Labour, NS Energy, NS Fisheries and Aquaculture, and NS Department of Natural Resources.

The proponent will meet with the Standing Committee to discuss and review the project. The proponent will then submit an application for development of the site to each of the regulators noted (including other applicable regulators as noted in the regulatory framework).

Provincial legislation that may be applicable to these types of projects include the *Crown Lands Act*, *Environment Act, Beaches Act, Endangered Species Act*, *Parks Act*, Integrated Resource Management (IRM) Review, *Fisheries and Coastal Resources Act*, *Electricity Act*, *Public Utilities Act; Municipal Government Act* and *Assessment Act*, new *Sustainability Act*.

Federal legislation that may be applicable include the *Fisheries Act; Migratory Birds Convention Act; Oceans Act; Species at Risk Act; Navigable Waters Protection Act; Canadian Environmental Assessment Act; Canadian Environmental Protection Act;*

Approvals from DNR:

a) Letter of Authority:

Upon expiry of the 30-day public comment period, DNR may issue a Letter of Authority for a two year term with an option to renew for a further two years. The Letter of Authority will contain a condition prohibiting installation of devices until DNR receives copies of all written approvals and permits. The fee for the letter of authority will be $200.00. The Letter of Authority may be amended, from time to time to contain special conditions directed by the regulators.

Subsequent to installation, a monitoring program by all regulators will be implemented. Should there be non-compliance with the terms and conditions of the Letter of Authority, the project may be suspended or terminated. Should the Province consider the project not to be in the “best interests” of the Province, the Letter of Authority may be terminated without compensation to the holder of the Letter of Authority. In the case of cancellation or termination, the operators of the devices shall immediately remove the devices and rehabilitate the site in a manner approved by the Province.

If the testing of the device proves to be successful and there are no significant adverse effects to the province and a proponent is prepared to move to a commercial stage, the Department of Natural Resources may issue a call for commercial proposals for a long-term lease in particular area. The applications/proposals shall be subject to entry into the one window process, all regulatory approvals, the 30-day public comment period and aboriginal and public consultation. Approval to demonstrate at a site does not guarantee any rights to that site for commercial development.

Monitoring and Research

Plans for monitoring and research:

i) conditions will be attached to Letters of Authority requiring monitoring of demonstration devices to be carried out during the demonstration phase.
ii) the federal and provincial governments may supplement the developers' project level research and development with generic research to help answer important knowledge gaps.
iii) financial support to developers may be considered where monitoring and research will provide generic (rather than project specific) knowledge.

Precise monitoring conditions imposed on developers will vary between devices, projects and sites.

A research program will be established to raise questions that should be addressed, define what monitoring should be carried out, and what research projects should be commissioned. Input from developers, stakeholders and government will be necessary to design the research program. The Province's goal will be to put as much of this information in the public domain, excluding confidential/proprietary information.

Decommissioning

Prior to installation of any device, the Province will need to be satisfied that appropriate planning and financial security arrangements are in place to decommission marine energy devices if the project is suspended/terminated at any time or at the end of the device's working life.

The DNR Letter or Authority will include conditions that govern the early decommissioning of a device before the end of its working life in the event that it has unacceptable impacts on the environment and it is not possible to successfully modify it to adequately mitigate them.

Timing of Regulatory Process

It is not possible to give a precise indication of the time it will take for a project to receive approval. Much will depend on the completeness of the information supplied by the Proponent. Timing will depend on many factors including the choice of site; the nature of the device; the number of different impacts (related to site choice and type of device); and the potential significance of the impacts of the project.

A developer has the ability to influence the time taken to reach project approval and the time taken to reach a decision depends on the scope of their project.

The requirement for and scope of both the EA and consequent monitoring conditions will be proportionate to and adequate for the risks associated with potential adverse impacts of a project which are related to scale, duration and location. This should help reduce the time it takes to complete the approvals process which is likely to be shorter than for a commercial scale project.

Review of Guidelines

Due to the evolving nature of this industry and the technologies involved, along with government's increased knowledge and understanding of the impacts of these devices over the next few years, these Guidelines will be reviewed annually. This review will not adversely affect demonstration projects which have already been approved.

Some of the issues to address in an annual review of the policy could include:

I. Progress of the industry and adequacy of the policy described in this guidance for the needs of the industry.
II. Ensuring that the monitoring conditions attached to consents/Letters of Authority are appropriate. Monitoring conditions may be changed or added to as a result of the review.
III. Data on impacts of devices.

Contact Information:

If you have any questions with respect to these Guidelines, please contact the following persons:

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