

Fundy Tidal Energy Demonstration Project

Environmental Monitoring Advisory Committee (EMAC)

TERMS OF REFERENCE

Mission

To provide independent expert scientific and traditional ecological knowledge advice to the Fundy Ocean Research Centre for Energy (FORCE) on the environmental effects monitoring programs related to the Fundy Tidal Energy Demonstration Project.

Objectives

- To provide a forum for the review of the Environmental Effects Monitoring (EEM) results generated by the EEM Program identified in Section 3.1 under the Terms and Conditions for Environmental Assessment Approval for the Fundy Tidal Energy Demonstration Project.
- To review and make recommendations in respect of the EEM programs, based on monitoring results, and applications of existing and new technologies and monitoring protocols, to better define the environmental effects of the Tidal In-Stream Energy Conversion (TISEC) technologies.
- To communicate advice in a timely manner to FORCE on any recommended changes to the Environmental Effects Monitoring Program (EEMP).

The Environmental Monitoring Advisory Committee is not a consensus based group or policy focused committee, but rather a technical Committee which is intended to provide practical direction and advice to FORCE and the TISEC developers, to better measure and interpret environmental effects associated with the Project. This advice will be directed to the Project's Environmental Effects Monitoring programs, and not fundamental research programs, although linkages to research programs will be identified and established to ensure the most effective EEM strategies are utilized by the project.

This direction and advice will be based on “adaptive management” principles, defined as: “an iterative process of planning and implementing an action, monitoring, evaluating and making adjustments as needed. Adaptive management is a decision process that allows adjustment to the program in the face of uncertainties as the results from monitoring become known. Adaptive management also recognizes the importance of natural variability in ecological systems.

Adaptive management is not an end in itself but rather a means to more effective decisions and outcomes”.

The Committee may decide to review and make changes to the Terms of Reference, with the concurrence of FORCE, and approval of Nova Scotia Department of the Environment and Fisheries and Oceans Canada (the Regulators).

It is FORCE’s responsibility:

- To provide the EEM Plans and EEM monitoring results and reports, as these become available, for the Committee’s review; and
- To ensure reports of the EMAC’s progress and recommendations to FORCE are provided in a timely manner to Nova Scotia Department of the Environment and Fisheries and Oceans Canada.

Organization

Chair

The Chair of the Environmental Monitoring Advisory Committee will be an individual who is knowledgeable in environmental monitoring and interested in tidal energy, and independent of FORCE, TISEC developers and federal and provincial regulatory agencies.

EMAC will provide FORCE with nominations for the EMAC Chair. FORCE may appoint or reject a nominee, but may not appoint a person who is not nominated by the Committee. Each Chair appointment shall have a term of two years, after which the Chair may be renewed. The Chair will be provided with an annual stipend determined by FORCE.

Membership

EMAC will have representation from relevant scientific disciplines, including academia, other recognized experts (e.g. retired government researchers), and from the local fishing community and the Mi’kmaq of Nova Scotia. Both scientific and traditional ecological knowledge will be provided as it relates to environmental monitoring. EMAC will have a maximum membership, including the Chair, of twelve (12) members.

The membership may include individuals from:

- Academia
- Recognized Scientists
- Fishers
- Mi’kmaq of Nova Scotia

- Government (non-regulatory agencies)

Any documents or information obtained through EMAC will be kept strictly confidential by the members, unless prior approval to disclose is obtained in writing from FORCE.

Committee members will participate on a voluntary basis, and they will be reimbursed for reasonable expenses only (e.g. mileage expenses) if they are not covered by their parent organization.

Membership on EMAC does not constitute support or endorsement of the Fundy Tidal Energy Demonstration Project.

Term

Committee members will have a term of two years, and may be renewed upon approval of FORCE for an additional two years.

EMAC will exist as long as FORCE exists.

Observers

FORCE and regulatory agencies may appoint one or more observers including, in the case of FORCE, one or more berth holder representatives.

Observers are not members of the Committee but may attend all meetings and their presence and status shall be recorded in the minutes. The Chair, on behalf of the Committee, may require the observers to leave the meeting during deliberations and all observers present shall leave. Their absence shall be recorded in the minutes.

Observers may assist the committee by providing technical information and explaining or informing the committee of matters within the responsibilities of FORCE or the regulators as the case may be.

Other Participants

Other participants, such as consultants or presenters, may be invited by the Chair to attend EMAC meetings for specific purposes, as appropriate.

Sub-committees

Sub-committees may be established to address specific issues at the discretion of the Chair, and in consultation with EMAC members. Experts outside the Committee may be contacted as identified by the Committee. The same provisions of confidentiality, as noted above, will apply to external experts.

Communication

Internal EMAC discussion and Meeting Notes will be confidential to EMAC, FORCE and the Regulators. Progress Reports on EMAC activities will be available to the public on the FORCE website (www.fundyforce.ca), along with information such as the EMAC Terms of Reference and membership.

Before EMAC Recommendations on the EEM programs are finalized, the Committee may request further information from FORCE. EMAC's recommendations will remain confidential until reviewed by FORCE. FORCE will endeavour to respond to the recommendations within 30 days, but not later than 60 days, following receipt of the EMAC Recommendations.

EMAC Recommendations, along with FORCE's response to the recommendations, will be posted on the FORCE website, within 60 days of the EMAC submitting its recommendations.

Administration

The Secretariat will serve as an ex-officio member of EMAC and will be provided by FORCE. The Secretariat will be responsible for the preparation and distribution of meeting minutes (action items/decisions), arrangement for conference calls and meetings, and logistics associated with the Committee's operations; and, as well, provide liaison between FORCE and the Committee, and updates to the Committee on FORCE's environmental effects monitoring program and other related initiatives on a routine basis.

The normal distribution of information will be via E-mail. Meetings will be done by conference call whenever possible, but face to face meetings will be required from time to time and will be called at the discretion of the Chair. EMAC members will meet face to face at least twice per calendar year.

All costs associated with the operation of EMAC will be the responsibility of FORCE.

Final Revised TORs - approved 23/Nov/11