Leading Collaborative Petroleum and Renewable Energy Research.

Request for Proposals

Energy Storage Policy and Practices

RFP Release Date: 21 January, 2022

Proposal Due Date: 22 February, 2022 (5 pm AST)

Contact

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OERA
Leading Collaborative Petroleum and Renewable Energy Research.

1. Introduction

OERA is an independent, not-for-profit research organization that funds research aimed at reducing risk and encouraging the sustainable development of Atlantic Canada's energy resources. OERA supports research into renewable energy technologies, cleantech initiatives and geoscience by facilitating collaborative, made-to-order teams of experts. As a member of the 50-30 Challenge. OERA is committed to increasing workforce diversity in the energy sector.

OERA is requesting a study to examine grid-scale energy storage policy and practices both internationally and locally. These policies and practices will help provincial policymakers and other regulators evaluate options for possible implementation in Nova Scotia. This work is sponsored by the Nova Scotia Department of Natural Resources and Renewables (formerly called the Department of Energy and Mines).

2. Context

Recent energy initiatives announced by the government of Nova Scotia intend to accelerate the province's transition to a clean energy future. These initiatives include:

- Commitment to an 80% renewable energy standard by 2030; and
- Coal plant closures by 2030.

To achieve these outcomes, increased integration of renewable-sourced energy into the province's electrical grid will be required over the next several years. To accommodate expanded renewable energy production and accelerated coal plant closures, Nova Scotia's electricity grid will require additional resources that can store energy and provide reliability. This will include for example grid-scale batteries and other energy storage resources applicable to Nova Scotia.

3. Objectives

The objective of this study is to prepare a comprehensive report that can be used by policy makers and other regulators to develop an energy storage framework for the Province of Nova Scotia, in service of achieving Nova Scotia's renewable energy objectives.

4. Scope of Work

The Scope of Work includes the following tasks:

1. Complete a scan of grid-scale energy storage policy and practices in other jurisdictions to determine which policy and practices are being applied elsewhere, what worked/didn't work in other jurisdictions, and which approaches could be applied in Nova Scotia;

2. Provide an overview of Nova Scotia's current legislation and regulations to determine potential barriers, required clarifications, and suggested regulatory improvements to enable energy storage implementation;

3. Arrange and conduct targeted discussions with key stakeholders to solicit information that will help in the development of the energy storage framework. Key stakeholders will include individuals from the Nova Scotia Department of Natural Resources and Renewables (NRR), local industry and the Nova Scotia Utility and Review Board (UARB) as well as industry, regulatory, and government stakeholders from other jurisdictions that have expert knowledge of energy storage policy and practices. Stakeholders (apart from NRR staff) will be determined by the proponent and should be described in the proposal. As a minimum the discussion subjects must include:

    a. Pathways - including but not limited to, for example, procurement - that are expected to result in the best value for rate payers,

b. Current legislative and regulatory barriers to efficient and effective energy storage implementation and related required changes or additions to legislation and regulation,

c. Energy storage policy and practices (e.g., regulations, procurement, etc.),

d. Process for determining service and locational requirements (e.g., peak management, fast frequency response, spinning reserve, and anything else that may be required for system stability),

e. Interconnection study requirements, and

f. Process for evaluating the costs and benefits of an energy storage project, including consideration of technoeconomic parameters as well as other characteristics such as, for example, the provision of ancillary services.

4. Produce a report in draft and final versions for the Province, which will include an overview of findings and proposed options for a framework for grid-scale energy storage policy and practices in Nova Scotia. The proponent will schedule a meeting with the review committee to present the draft findings then incorporate committee comments into the final report. The proponent should also consider making a similar presentation to the key stakeholders at the draft deliverable stage, if the proponent feels that additional value will be gained from such a presentation and discussion with the stakeholders.

5. Deliverables

The proponent will provide:

(1) A report that presents the findings of Tasks 1-3. The report may be provided in either standard text or PowerPoint format. As noted above, both a draft version and final version are required with the opportunity for the review committee to recommend reasonable changes to the draft version for inclusion in the final version before the project ends.

(2) At project end, a presentation (in PowerPoint) formatted for public consumption and outreach that summarizes the project and its main findings.

6. Timelines

The proponent is expected to host the kickoff meeting and subsequent project status meetings via video conference. The following timeline outlines OERA's current expectations with respect to timing.

RFP release date:	Jan 21, 2022
Proposal due date:	Feb 22, 2022 (5 pm AST)
Award:	by Mar 4, 2022
Project kickoff:	Week of Mar 14, 2022
Draft Final Report:	May 27, 2022

7. Funding

Funding available for this project is capped at a maximum of CAN $90,000 excluding taxes. Proposals that exceed this amount will not be considered. Note that proposals will be rated first in terms of team experience + approach and second in terms of value (rates per hour). Please note that OERA reserves the right not to proceed with project award.

8. Proposal Requirements

- The proposal should be concisely worded with clearly described objectives, tasks, budget, schedule, and deliverables. Maximum 12 pages excluding appendices, title page, and cover letter. Please assemble all components into a single PDF document.
- The proposal should include a provisional list of stakeholders that will be consulted during Task 3.
- The proposal should include a description of the proponent's company and its relevant experience with similar projects. The proponent must also describe the relevant work experience of the key staff assigned to this project and their roles on the project. This

material should be summarized in the body of the RFP and can be presented in more detail, if needed, in the appendix. Detailed CVs are not required.

- Please provide a project organizational chart showing the roles and reporting hierarchy of staff and project partners, and reporting lines to the OERA review committee.
- Please include hourly or daily rates in the proposal, along with a cost task breakdown showing total hours or days allocated to the project.
- A single electronic document is sufficient. Please ensure the proposal is signed by an officer or equivalent with authority to bind the proponent to the statements made in the proposal.

The electronic copy should be uploaded in PDF format to the OERA FTP site at https://oera.sharefile.com/r-r911bdf8bbbd44d08a919699b8a783d74. The file name should include the proponent's company name.

9. Questions and Clarifications

OERA will accept questions from interested proponents on an ongoing basis until 5 pm ADT, Monday Feb 14, 2022 – one week before the proposal is due. Questioners will receive a direct email response from OERA and all questions and answers will be posted anonymously on the OERA website https://oera.ca/opportunities/request-proposals/energy-storage-policy-and-practices. Proponents are encouraged to check the website for updates to the Q&A document. The Q&A page will only be posted if content-related questions have been received.

Please submit your questions by email to Kathleen Mifflin (kmifflin@oera.ca). Please do not contract the NRR with questions.

10. Evaluation

This project will be administered through OERA on behalf of NRR. Proposals will be reviewed by a committee consisting of OERA and NRR staff with possible input from NRCan. As shown below, proposals will be quantitatively evaluated against a set of criteria.

Factor	**Weight**
Experience and Knowledge: Qualifications, experience and capabilities of the company and delivery team; demonstration of local knowledge and information sources relevant to this study. Team organisation is clear and scale is appropriate for this project.	40%
Project Plan, Approach and Methodology: Proponent demonstrates an understanding of the project service requirements and has outlined a clear and effective work plan. Proposal describes the objectives, methodology, milestones and deliverables, and a sound approach in undertaking this project. Communication format and frequency between the proponent and OERA are clearly described. Proponent describes an achievable schedule with well-defined milestones and demonstrates the ability to complete the work on or before the desired completion date.	30%
Proposal Presentation and Organization: The proposal includes all RFP requirements, demonstrates attention to clarity, grammar, and presentation.	10%
Value: The project will offer good value for the proposed budget. The budget is clear, convincing, and well-described.	20%
Total:	100%