

- 1 Q. Please provide the scope of assignment provided to NERA by Hydro for their  
2 two Marginal Cost studies.  
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4  
5 A. Please see the attached.



**Newfoundland & Labrador Hydro**

**Request For Proposals**

**To Provide**

**Consulting Services**

**For The Preparation Of A**

**Marginal Cost Study And Associated Work**

**RFP 31110-0Q**

November, 2005

## **Table of Contents**

	<b>Page #</b>
1. INTRODUCTION.....	1
2. BACKGROUND.....	2
3. OBJECTIVES .....	2
4. SCOPE OF WORK .....	3
5. REQUEST FOR PROPOSALS .....	4
6. MISCELLANEOUS.....	6
7. CHANGE OF SCOPE APPROVALS .....	6
8. SECRECY .....	6
9. GOVERNING LAW AND FORUM.....	7

## **1. INTRODUCTION**

Newfoundland & Labrador Hydro (“Hydro”) is a fully regulated, crown-owned electric utility which owns and operates facilities for the generation, transmission and distribution of electricity to utility, industrial and retail customers in the Province of Newfoundland and Labrador.

On the Island interconnected grid, Hydro has seven hydroelectric plants with a total capacity of 927 MW, one thermal plant with 466 MW capacity, three combustion turbine plants with a total capacity of 118 MW and two diesel plants with a total capacity of 15 MW. Its largest customer is Newfoundland Power which is an investor owned utility that distributes electricity to approximately 90% of the retail customers on the Island portion. Hydro also supplies 4 industrial customers and some 22,000 retail customers from the Island Interconnected system<sup>1</sup>.

On the Labrador interconnected grid, Hydro operates one combustion turbine plant with 25 MW capacity and one diesel plant with 12 MW capacity. It purchases most of its energy requirements to supply one industrial and 9,000 retail customers from Churchill Falls (Labrador) Corporation.

Hydro also operates 23 diesel systems that provide service to 3,300 customers in isolated communities throughout Newfoundland & Labrador.

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<sup>1</sup> A new smaller mine customer is expected by late 2005 and one of Hydro’s existing industrial customers has announced the closure of some paper machine capacity on the Island.

## **2. BACKGROUND**

In 2001 and 2003 Hydro completed public hearings into its first applications since the early 1990s for general rate changes. During that period many changes had taken place including a change in the legislation governing Hydro making it fully regulated by the Board of Commissioners of Public Utilities of Newfoundland & Labrador (PUB), finalizing a cost of service methodology and the commencement of a wholesale demand energy charge to its large wholesale utility customer.

As indicated above, the Island interconnected systems is a larger isolated grid accounting the bulk of electricity customers in the Province. Experts for intervenors at the hearings have expressed concern about the lack of a marginal cost study and the subsequent lack of evaluation of such cost information in the proposed rates. In its 2003 Order, the PUB directed Hydro to undertake a Marginal Cost Study.

## **3. OBJECTIVES**

The primary objective of this Request for Proposals is to select a consulting firm that will provide expert analysis and advice to Hydro in the areas of long run marginal cost analysis, provide expert advice on rate design considerations, and provide expert witnesses as may be required for related PUB hearings. The scope of the marginal cost analysis shall be for generation capacity and energy costs, transmission costs, losses and miscellaneous utility costs. Hydro expects that the consultant will evaluate and choose a marginal cost methodology against a rate design objective of economic efficiency. Analysis pertaining to distribution marginal costs shall be the separate responsibility of Newfoundland Power, the principal distribution company on the Island.

#### **4. SCOPE OF WORK**

Work items to be performed in completion of the objective shall include, but not necessarily be limited to, the following:

4.1 The consultant will be expected to review of previous marginal cost analysis undertaken by Hydro in the early 80's and more recently completed work by Newfoundland Power including comments by other experts at Hydro's recent rate hearing.

4.2 The consultant shall direct and manage the preparation of a Marginal Cost Study. The consultant shall undertake sufficient analysis to calculate and report on long run marginal costs for the Island grid for a given targeted reliability. Aspects of the Marginal Cost Study shall include:

- Determination of an appropriate planning horizon;
- Assessment of load curves;
- Selection of costing periods;
- Selecting a marginal cost methodology against the rate design objective;
- Computation of capacity and energy splits in marginal costs;
- Computation of transmission and other applicable marginal costs;
- Methods for assigning marginal costs to time of use and wholesale utility and industrial classes;
- Seasonal differentiation of marginal costs;
- Daily differentiation of marginal costs.

Hydro expects that two to four marginal cost scenarios will be required based on distinctive power supply and/or demand circumstances across future periods.

Hydro utilizes the conventional system planning analytical routines of Strategist® and the consultant shall be expected to work within its capabilities or supplement where applicable.

Hydro staff will work closely with the consultant personnel to provide data and analyses for the study.

4.3 Provide an evaluation of applicable innovative rate designs in the context of the marginal cost study results, including an assessment of Hydro's existing wholesale and industrial rates. The consultant will be further required to provide an assessment of the economic values of interruptible and curtailable power for the Island grid.

4.4 Provide for a translation of marginal costs into a structure suitable for the economic analysis of demand side management opportunities.

4.5 Expert witness evidence and testimony may be required at a future PUB rate hearing.

## **5. REQUEST FOR PROPOSALS**

5.1.1 The consultant shall submit via fax one copy of the proposal to the following no later than 3:00 pm November 18, 2005 local time. Alternatively, the consultant can deliver two print copies by the closing date and time.

Supply Chain Management  
Newfoundland & Labrador Hydro  
500 Columbus Drive  
P.O. Box 12400  
St. John's, Newfoundland  
A1B 4K7  
Fax: (709) 737-1795  
Attention: Manager, Supply Chain Management  
RFP To Provide Consulting Services For The Preparation Of A Marginal  
Cost Study And Associated Work.

During the proposal preparation period, the respondent may seek written clarification on proposal requirements by contacting: Allan Parsons, Buyer at (709) 737-1761, fax (709) 737-1795, email: [allanparsons@nlh.nl.ca](mailto:allanparsons@nlh.nl.ca). Hydro shall not be responsible for oral

instructions or clarifications and no instructions or clarifications shall be binding unless communicated by Hydro in writing. Each proposal shall remain open for acceptance and irrevocable for a period of ninety days after the deadline for receipt of proposals.

In the proposal regarding the items identified under the scope of work, excluding 4.5, the consultant shall:

- a) describe the scope of work; and
- b) provide a methodology and schedule for completion of individual components and the submission of report(s).

In the proposal regarding section 4.5 identified under the scope of work, the consultant shall identify and provide relevant experience for the designated regulatory witness.

## 5.2 Personnel

The consultant shall identify and provide curriculum vitae for personnel working on the project. The proposal shall clearly identify the responsibilities of these people and their role in the study team.

## 5.3 Financial

The consultant shall provide:

- a) the daily rate of personnel involved in the study,
- b) the relative participation, in days, of each of the people in the study team,
- c) disbursements; and
- d) the relative cost of personnel versus disbursements.

## 5.4 Corporate Experience

The proposal shall include a list of relevant studies undertaken by the company.

## 5.5 Evaluation of Proposals

The evaluation of proposals will be based on the following considerations:



- a) the capability and relevant experience of the personnel assigned to the project;
- b) the capability and relevant experience of the company;
- c) the technical adequacy of the proposal including appreciation of the scope of the project and proposed methodology; and
- d) the basis of remuneration and the proposed cost estimate for performance of the work.

The successful consultant shall be required to enter into an appropriate agreement with Hydro for the performance of the work specified in this Request for Proposals.

## **6. MISCELLANEOUS**

For the purpose of this work, the consultant shall provide monthly invoices that will include the work completed, disbursements and the time for all personnel.

## **7. CHANGE OF SCOPE APPROVALS**

Any deviation in the methodology, scope or assigned staff for the study described in the consultants proposal, must be approved by Hydro.

## **8. SECRECY**

The Consultant shall exert its best efforts to retain as confidential and not divulge, other than to persons specifically designated and approved by Hydro, financial, technical or schedule information or any additional information designated as confidential by Hydro that was furnished to the Consultant by Hydro or was acquired by the Consultant in the preparation and submission of the proposal. The Consultant shall treat all such information as confidential and the foregoing shall not apply to information and data which:

- a) were in the Consultant's possession or was previously known by the Consultant prior to submission of its proposal in response to this RFP; or
- b) becomes known or published through some agency other than the Consultant from third parties not connected with the performance of the Services; or
- c) becomes part of the public domain through no fault of the Consultant.

## **9. GOVERNING LAW AND FORUM**

The contract for the performance of the services and the preparation and submission of the report shall be governed in accordance with the laws of the Province of Newfoundland and Labrador, and every action or other proceeding arising thereunder shall be determined exclusively by a court of competent jurisdiction in the Province of Newfoundland and Labrador, subject to the right of appeal up to the Supreme Court of Canada where such appeal lies.