RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO

REQUEST FOR PROPOSALS FOR

NON-UTILITY GENERATION (NUG)

FROM SMALL HYDRO PROJECTS

IMPORTANT NOTICE TO PROPONENTS

This RFP 92-195 replaces RFP 92-151 issued by Newfoundland and Labrador Hydro in April 1992. RFP 92-195 is being issued to clarify the eligibility of projects: where the Proponent already has the water rights and hence does not require a waiver of Newfoundland and Labrador Hydro's franchise; and for projects that exceed 10 MW but do not exceed 15 MW. Proponents should note the following:

- Proponents who have submitted Preliminary Submissions in response to RFP 92-151 and wish to have these submissions considered for this RFP must indicate this intention by completing and signing Schedule C included in this document. However, Proponents wishing to change any information in their original proposal are required to re-submit the entire Preliminary Submission.

- Proponents proposing projects for which they claim to already have the water rights are required to submit the supporting documentation as outlined in section 4.1 of this RFP. If this documentation is the only change in the Proponent's submission, the Proponent need only submit this documentation along with a completed Schedule C.

- Proponents who did not make a Preliminary Submission in response to RFP 92-151 and who wish to enter the process now are required to submit a complete Preliminary Submission as outlined in section 4.5.1 of this RFP.

- The overall Project Selection and Project Implementation time tables originally set out in RFP 92-151 will not change as a result of this RFP. Proponents must have submissions in response to this RFP 92-195 to Newfoundland and Labrador Hydro no later than 3:00 pm on November 2, 1992. All other dates and deadlines will be the same as for RFP 92-151.

- **As noted, this RFP replaces RFP 92-151 and to assist Proponents all changes in text from RFP 92-151 have been denoted by an asterisk (*) in the margin and have been highlighted in a bold print.**

TABLE OF CONTENTS

PAGE

1. **INTRODUCTION** 1

2. **DEFINITIONS** 2

3. **ABBREVIATIONS** 4

4. **INSTRUCTIONS TO PROPONENTS** 5

4.1 Eligible Projects 5

4.2 Liability for Incurred Costs 6

4.3 Project Flow Chart 6

4.4 Real Time Schedule 7

4.5 Submissions by the Proponent 8

4.5.1 Preliminary Submission 8
4.5.2 Project Proposal 9
4.5.3 Submission Dates and Time 9
4.5.4 Address for Submissions 10
4.5.5 Number of Copies Required 11
4.5.6 Confidentiality 11

4.6 Projects in NLP Service Areas 11

4.7 Contact with NLH 12

4.7.1 Telephone Contact 12
4.7.2 Written Contact 12

4.8 Provincial Preference 12

5. **INFORMATION TO PROPONENTS** 14

5.1 Pricing Structure and Power Contract 14

5.2 Interconnection Requirements 15

PAGE

5.2.1 Physical Requirements 15
5.2.2 Operating Requirements 16
5.2.3 Equipment Requirements 17
5.2.4 Protection and Control Requirements 19

5.3 Project Evaluation 20

5.4 Licences and Permits 22

6. **SCHEDULES** 24

SCHEDULE A1 25

SCHEDULE B1 30

SCHEDULE B2 34

SCHEDULE B3 36

SCHEDULE B4 38

SCHEDULE B5 40

SCHEDULE B6 42

SCHEDULE B7 44

* **SCHEDULE C** 47

1. INTRODUCTION

Newfoundland and Labrador Hydro (NLH) wishes to purchase a maximum of 50 MW of generation from Non-Utility Generators (NUGS) and seeks proposals through this Request for Proposal (RFP). Only small hydro generation projects with capacities not to exceed 15 MW and with capacity factors in excess of 40% will be considered. Projects must be located on the Island of Newfoundland and supply electricity to the interconnected power system.

This RFP document supplies Proponents with the necessary information to determine eligibility and complete a submission for NLH review. It is suggested that Proponents read this document, in its entirety, including schedules, prior to completing a submission. NLH shall in no way be responsible for any costs that are incurred by the Proponent in preparing Submissions in reply to this RFP.

2. DEFINITIONS

Avoided Costs means the cost savings to NLH resulting from purchases of capacity and energy rather than self-generation. Avoided cost in the short term generally involves savings in fuel costs. In the long term avoided cost includes the capital cost associated with new plant. Avoided costs vary depending on project specific items such as in-service date, project life, annual, monthly and on-peak/off-peak energy deliveries and plant reliability.

In-Service Date means the date on which the project is expected to be available for power generation in accordance with the Project Proposal.

Net Sales means electricity delivered to NLH after internal energy requirements at the generating site are met, i.e. transmission losses and the Proponent's own consumption.

Non-Utility Generator (NUG) means any individual, firm or corporation other than a regulated utility within the province or its corporate affiliates, which generates electricity for internal use or for sale to a regulated utility.

Preliminary Submission means the duly completed Schedule A1 that the Proponent submits to NLH **November 2, 1992.**

Project means the electrical generating facility for which the Proponent is submitting a Project Proposal and includes all agreements, licences, permits, contracts, and other business arrangements necessary to enable the Proponent to perform in accordance with the terms and conditions of the Project Proposal.

Project Life means the date on which the Project ceased to be available for power generation in accordance with the Project Proposal.

Project Proposal means the duly completed schedules, B1 to B7 inclusive, complete with supporting documents that the Proponent submits to NLH **July 28, 1993.**

Proponent means the individual, company or consortium responding to this Request for Proposals. The terms Proponent and Non-Utility Generator (NUG) are used interchangeably in this document.

Schedule means each form in Section 6 of this document which must be completed by the Proponent and included in the submissions.

Submission means either the Preliminary Submission or the Project Proposal, as appropriate.

Submission Date means the date by which a Submission must be received by NLH.

3. ABBREVIATIONS

The abbreviations used in this document are listed below:

kV:	kilovolt
kW:	kilowatt
kWh:	kilowatt hour
MW:	Megawatt
MWh:	Megawatt hour
NLH:	Newfoundland and Labrador Hydro
NLP:	Newfoundland Light and Power Company Ltd.
NUG(S):	Non-Utility Generator(s)
O&M:	Operation and Maintenance
RFP:	Request for Proposal

4. INSTRUCTIONS TO PROPONENTS

4.1 Eligible Projects

As stated previously, NLH is seeking to purchase a maximum of 50 MW of generation through this RFP. In order to be eligible for consideration, a Preliminary Submission must meet the following minimum requirements:

- Proponents must be Non-Utility Generators (NUGS).

- **Proposals must be for small hydro generation projects with capacities not to exceed 15 MW.**

- Project shall have capacity factors in excess of 40%.

- Projects are to be located on the Island of Newfoundland and must supply electricity to the main interconnected power system.

- **Proponents shall have either:**

  - **Applied for and have been granted in its favour, a waiver of NLH's franchise rights to the site; or**

  - **For sites which NLH does not have the franchise rights, Proponents must submit with the Preliminary Submission proof that it possesses the hydroelectric development rights for the site tendered. These hydroelectric development rights must permit the Proponent to sell the power and energy generated to NLH without any restrictions.**

Proponents are also required to submit with the Project Proposal in July 1993 all documentation confirming to the satisfaction of NLH that they possess the hydroelectric development rights.

NLH's current projections for the Island indicate no requirement for new base load generation until 1996 at the earliest. As a result, projects should have in service dates no earlier than October 1996 and no later than December 1997.

Project Proposals which do not meet all of the above requirements will not be considered.

4.2 Liability for Incurred Costs

Submissions shall be prepared at the sole cost of the Proponent and NLH shall not re-imburse the Proponent for any costs or expenses incurred in the preparation of its submission. NLH has the right not to proceed further following release of the RFP and is not bound to accept any submission.

4.3 Project Flow Chart

A project flow chart which shows the sequence of events for this RFP is given in Figure 1. The project schedule is comprised of two main segments, the Project Selection Phase and the Project Implementation Phase.

During the Project Selection Phase (Month 0 to Month **13**) NLH will receive and evaluate both Preliminary Submissions and final Project Proposals. NLH, should it decide to proceed to the Project Implementation Phase, will notify successful Proponents by Month **13**.

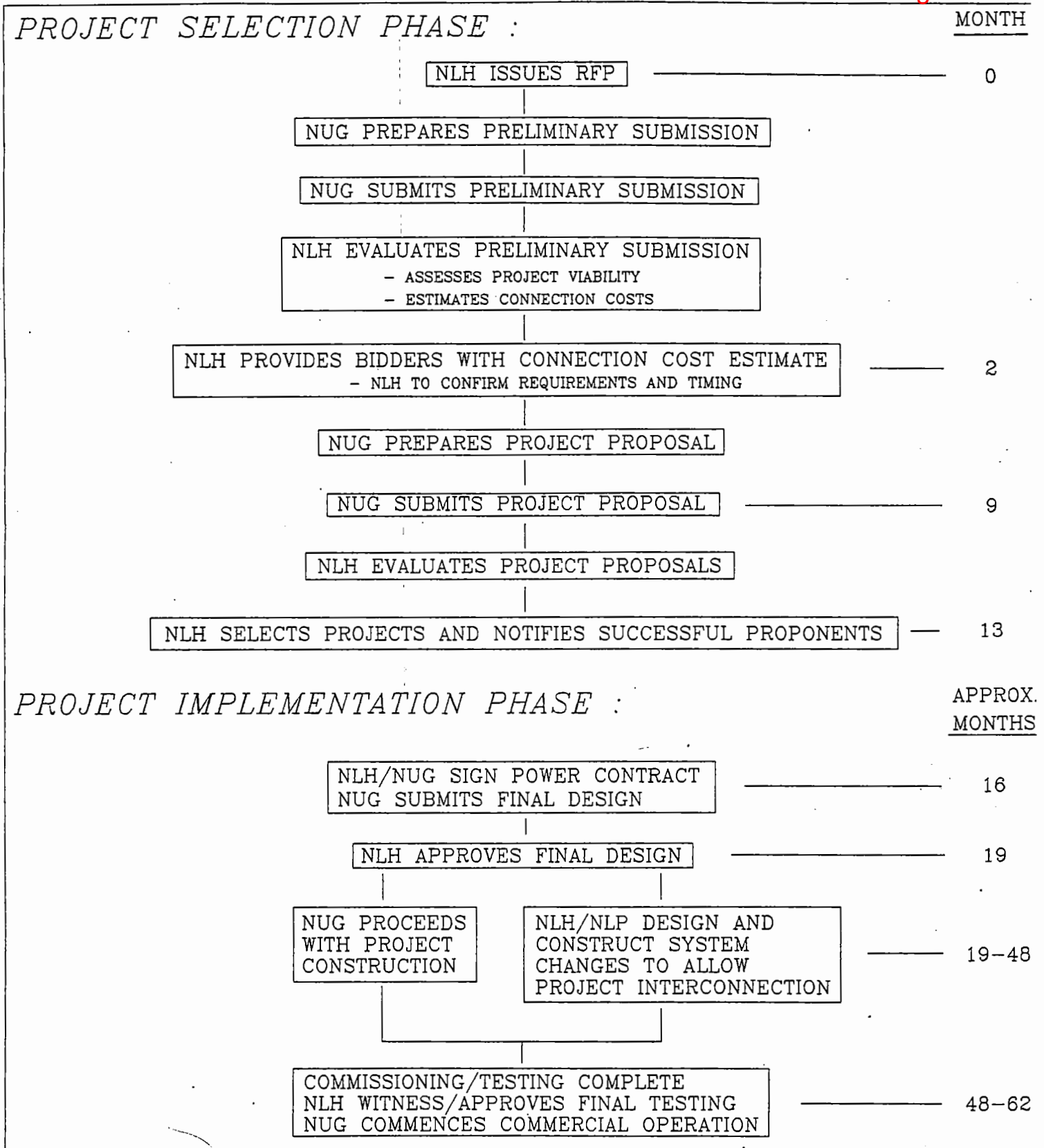

FIGURE 1
PROJECT SELECTION AND IMPLEMENTATION FLOW CHART

The Project Implementation Phase will run from Month **13** to Month **48** and depending upon the construction schedule, this phase can be extended to Month **62.** Power contracts will be executed by NLH and each successful Proponent by the end of Month **16** and these Proponents will proceed with the final design and construction of their Projects.

4.4 Real Time Schedule

The information provided in the project flow chart and elsewhere in this document is given in months from the date of issue of the RFP. Real time (calendar) dates for key events are as follows:

Project Selection Phase	Month	Date
- NLH issues RFP	0	**Oct. 17, 1992**
- NUG submits Preliminary Submission	**0**	**Nov. 02, 1992**
- NLH performs preliminary screening and provides an estimate of connection costs	**2**	Dec 92
- NUG submits Project Proposal	**9**	28 Jul 93
- NLH selects projects	**13**	Nov 93
Project Implementation Phase		
- NUG submits detail design for approval/ NLH and NUG sign power contract	**16**	Feb 94
- NLH approves detailed design	**19**	May 94
- Construction complete	**46**	Aug 96
- Commissioning/Testing complete (NLH witness/approve final testing) NUG commences commercial operation	**48**	Oct 96

Dates given for the Project Implementation Phase are typical and will be determined for each project by month **13**, in conjunction with the Proponent. NLH shall not interconnect projects prior to Oct 1996, however, proposals for projects coming into service up to Dec 1997 will be considered.

4.5 Submissions by the Proponent

During the Project Selection Phase there are two submissions required from the Proponent; the Preliminary Submission and the Project Proposal. Only Proponents who have successfully completed the Preliminary Submission will be eligible to submit a Project Proposal.

4.5.1 Preliminary Submission

Proponents are to make the first submission to NLH by **Nov. 02, 1992.** This submission should be completed using the forms supplied in Schedule A1 of this document.

This Preliminary Submission serves as a Project definition which gives sufficient information to evaluate the technical aspects of interconnecting the Project to the power system. All costs incurred by NLH and/or NLP in interconnecting a Project to the power system shall be the responsibility of the Proponent. An estimate of these costs will be returned to the Proponent by the end of month **2.** The Proponent is responsible for estimating the costs of all items outlined in Section 5.2.3 of this document.

It is very important that the Preliminary Submission be as complete as possible and that it be accompanied by a single line diagram and a map

showing the location of the Project and the proposed transmission line routing and interconnection point.

Following the preliminary evaluation NLH will indicate projects that are judged to be non-viable.

4.5.2 Project Proposal

The Project Proposal should be completed using the forms supplied in Schedules B1 through B7 of this document. Proponents should submit this Project Proposal to NLH no later than the end of month **9**. All schedules must be completed and Proponents are encouraged to provide any additional information which clarifies the scope, design and cost of the project. The information in this proposal will be used to assess the viability of the Project as well as to rank the various Project Proposals in order of preference. No more than 50 MW of new generation shall be approved from the proposals submitted in response to this RFP.

4.5.3 Submission Dates and Time

Submissions will be received at the Materials Management Department, 4th Floor, Hydro Place, Columbus Drive and Captain Whalen Drive, St. John's, until 3:00 pm local time on **November 02, 1992** for the Preliminary Submission and July 28, 1993 for the Project Proposal. Submissions will be opened immediately following the specified closing time at the 2nd level, Hydro Place.

4.5.4 **Address for Submissions**

Submissions should be addressed as follows:

RFP 92-195

Materials Management Department
Newfoundland and Labrador Hydro
Hydro Place, 4th Floor
Columbus Drive & Capt. Whalen Drive
P.O. Box 12400
St. John's, Newfoundland
A1B 4K7

Attention: Manager of Materials Management

Proponents may submit Submissions by telefax using the telefax number shown in Section 4.7.2. Submissions by telefax will be subject to the following:

i) proof, satisfactory to NLH, that the original Submission has been forwarded to NLH and is out of the possession and control of the Proponent prior to the time set for receipt of the Submission;

ii) its arrival prior to the time set for receipt of Submissions;

iii) the telefax being a duplicate of the completed Submission; and

iv) the original Submission and copies must be received by NLH not later than 4:00 pm on the fifth working day following the time set for receipt of the Submission.

4.5.5 **Number of Copies Required**

Submissions shall be submitted in 6 copies (1 original and 5 copies), sealed and marked with the Proponent's name and the following:

"PROPOSAL FOR NON-UTILITY GENERATION - PRELIMINARY SUBMISSION"

or

"PROJECT PROPOSAL FOR NON-UTILITY GENERATION"

as appropriate.

The name and return address of the Proponent shall also appear on the outside of the submission.

4.5.6 **Confidentiality**

All information provided by Proponents will be regarded as confidential, except for information that NLH may be required to divulge by law or regulation. In cases where the Proponent requires connection to the NLP system, copies of the submissions will be made available to NLP.

4.6 **Projects in NLP Service Areas**

Proponents who identify eligible projects that must be connected to the NLP system are requested to submit these projects to NLH as part of this RFP. NLH will supply NLP with copies of these proposals and co-ordinate the preparation of an estimate of interconnection costs which will include both NLH and NLP costs.

4.7 Contact with NLH

4.7.1 Telephone Contact

The designated NLH contact for this RFP is:

Sr. Planning Engineer, Generation and Rural
Telephone: (709) 737-1236

4.7.2 Written Contact

Written communication should be addressed to:

RFP 92-195

Materials Management Department
Newfoundland and Labrador Hydro
Hydro Place, 4th Floor
Columbus Drive & Capt. Whalen Drive
P.O. Box 12400
St. John's, Newfoundland
A1B 4K7

Telephone: (709) 737-1335
Fax: (709) 737-1795

4.8 Provincial Preference

Owner's evaluation will take into account all relevant legal, technical and financial matters, and will be made in accordance with:

- **the latest Guidelines and Instructions for the Implementation of the Provincial Preference Policy;**

- the Public Tender Act, Revised Statutes of Newfoundland, 1990, Chapter P-45 and its Regulations amended;

- the Provincial Preference Act, Revised Statutes of Newfoundland, 1990, Chapter P-33 and its Regulations as amended;

- the Memorandum of Agreement between the Atlantic Provinces to reduce interprovincial trade barriers regarding government procurement made as of September 30, 1992 as amended ("Atlantic Provinces Procurement Agreement").

Only Tenderers and their subcontractors that have a Provincial Overhead Allowance (P.O.A.) Percentage assigned by the Newfoundland Government Purchasing Agency, Department of Works, Services and Transportation within five (5) days from the Tender closing date will receive the benefit of such a percentage in the Tender evaluation. If a Tenderer does not have a P.O.A. Percentage it should contact the Newfoundland Government Purchasing Agency, Department of Works, Services and Transportation.

Preference will be given to Newfoundland contractors and subcontractors and to products manufactured, fabricated or processed in the Province of Newfoundland in accordance with the legislation and policy guidelines and the Atlantic Provinces Procurement Agreement outlined in this Article.

5. INFORMATION TO PROPONENTS

5.1 Pricing Structure and Power Contract

NLH has developed a pricing structure based on its Avoided Costs. This pricing structure is detailed below and again in Schedule B4 of this document and represents the maximum NLH will pay Proponents for proposals submitted under this RFP. The pricing structure has both a demand and energy component and offers an incentive for winter production. The demand portion of the rate will be escalated to the in service date of the plant and then remain constant over the life of the power contract. The escalation index proposed for the demand is the Statistics Canada Hydroelectric Generating Stations Index (catalogue 62-007, Table 12.1). The energy portion of the rate will be escalated annually using the Statistics Canada Consumer Price Index - All Items (Canada) (catalogue 62-001, Table 3). This increase will be limited to a maximum of 6% in any one year.

NLH'S MAXIMUM PRICE

PERIOD	ENERGY COMPONENT Cents/kWh	DEMAND COMPONENT Cents/kWh	TOTAL AMOUNT Cents/kWh
Winter 1 Nov. - 31 Mar. (3624 hours)	3.58	4.50	8.08
Summer 1 Apr. - 31 Oct. (5136 hours)	3.58	2.11	5.69

Rates are in 1992$.

NLH will accept competitive pricing proposals from Proponents but will not consider front loaded pricing schemes or any proposal which provides for NLH paying more than the maximum prices quoted above.

Successful Proponents will be required to execute a power contract with NLH by
* Month **16**, which will be of 20 to 30 years duration, and which will provide the terms and conditions upon which NLH will purchase power and associated energy from the Proponent.

5.2 Interconnection Requirements

This section is intended to give Proponents an indication of the factors which may influence the interconnection of a small hydro plant to the power system. Many of the interconnection requirements for a particular development will be site specific and as such cannot be finalized until after the Proponent has made a Preliminary Submission. NUGS which are connected to NLP rather than NLH shall be required to satisfy the requirements of both NLP and NLH and pay for the associated connection costs. The following sub-sections will highlight some of the general interconnection requirements as well as define some of the Proponent's responsibilities.

5.2.1 Physical Requirements

The location of the Project will affect the cost of connecting the Project to the interconnected power system. Affecting the interconnection cost will be such factors as the distance between the Project site and the electrical interconnection point, the voltage at which the interconnection is made, the project capacity (kW), the associated transformation, the complexity of the

interconnection and the degree to which changes are required in the existing NLH/NLP systems.

5.2.2 **Operating Requirements**

i) The NUG will normally operate in parallel with the interconnected power system.

ii) Under certain conditions it may be necessary for the NUG to operate in an isolated mode, disconnected from the power system.

iii) All NUGS connected to the power system are required to control generation as directed by NLH/NLP as applicable for reasons of safety and security.

iv) The connection of a NUG to the power system shall not result in any reduction in the quality of service being provided. In the event that system problems are experienced as a result of the operation of a NUG, the NUG will be disconnected from the system until the problem is corrected. Such problems would include but not be limited to high/low voltage, voltage flicker, or harmonic distortion.

v) A NUG shall not adversely affect the voltage control of the power system. The NUG shall have sufficient voltage control to minimize regulation requirements.

Variations from nominal voltage shall be limited to a $\pm$ 10% voltage deviation.

vi) As the Newfoundland system is isolated from the North American grid, variations in frequency may be larger than would be normally expected. As such, a NUG shall be capable of withstanding these variations without incurring damage and preferably without separation from the system. Frequency variations of up to ± 2 Hz could be experienced.

vii) The NUG must meet all Federal and Provincial safety and fire regulations and applicable electrical codes.

viii) The NUG shall have suitably qualified staff available for synchronizing and switching duties at the direction of NLH and/or NLP.

ix) The Proponent should be aware that adjustment of the system configuration or generation output may be requested at short notice and the Proponent shall adhere to such requests.

x) Reliable communications with the NUG facility are required 24 hours per day, 7 days per week.

5.2.3 **Equipment Requirements**

i) NLH/NLP reserves the right to identify the optimum location for interconnection of a NUG to the respective power systems.

ii) The Proponent shall be responsible for the design, supply, installation, operation and maintenance of all equipment on the NUG side of the interconnection. The NUG side is defined as everything from the generator, including transmission lines, up to the isolating disconnect

switch at the point of interconnection to the existing system. All this equipment must be designed and constructed to acceptable utility standards.

iii) The Proponent shall be responsible for the cost of all changes and additions which NLH/NLP have to make to their systems to permit the interconnection of the NUG.

iv) NLH will supply, install and maintain all revenue metering equipment required to meter the transactions with the NUG. The Proponent shall provide adequate space at the generation site or at the point of interconnection for the installation of the NLH metering equipment. This space will be provided at no cost to NLH and the Proponent shall allow NLH free access to the site for the purpose of installing, maintaining, calibrating and reading meters.

v) The Proponent shall, when requested to do so, provide adequate space at the generation site for the installation of NLH telecontrol equipment. This equipment will allow NLH to automatically monitor generation at the NUG site. The conditions for the supply, installation and maintenance of this equipment will be the same as for the metering equipment.

vi) While there is no general requirement regarding transformer winding configuration for generation transformers, NLH reserves the right to require a change in the proposed configuration or require that the Proponent add a grounding transformer for protection purposes.

5.2.4 **Protection and Control Requirements**

i) The Proponent is advised that prior to purchasing any equipment, detail design and plans must be submitted to NLH for review and approval.

ii) Proponents shall be responsible for all protection of their own equipment.

iii) The Proponent shall use utility grade devices for protection and control. This applies to circuit breakers, isolating switches, relays, etc.

iv) The protection and control scheme adopted by the Proponent must be coordinated with and approved by NLH and, if applicable, NLP.

v) The Proponent shall be responsible for the supply, installation and maintenance of any protective devices that NLH deems should be added to the NUG system to protect the power system.

vi) Protection and control requirements will be site specific. However, the following list is typical of what may be required for a design acceptable to NLH. This list is provided for guidance only and will vary from site to site.

- gang-operated isolating switch with padlocking facilities.
- generator fault interrupting device.
- generator tripping for NUG and system faults.

- generator isolating or step-up transformers complete with transformer protection.
- protection and control scheme for when line is disconnected from main power system, i.e. NUG Islanded.
- facilities for synchronizing NUG to the power system.
- capacitor bank for power factor correction.

5.3 Project Evaluation

The Projects submitted in response to this RFP will be ranked based on the information provided in the Project Proposal and only the more preferred Projects, up to a maximum of 50 MW, will be accepted. Projects which have been determined by NLH to be non-viable shall be eliminated. NLH's decision in this regard is final.

The purpose of this section is to indicate to Proponents factors which will be taken into account in the evaluation and ranking of Projects. As the ranking will be based on the information supplied by the Proponents in the Project Proposal, it is important that the Project Proposals be as detailed as possible and include copies of all engineering studies completed to date.

From a project construction or technical point of view, NLH will be evaluating Project Proposals based on the level of engineering on the following:

i) site hydrology and operating regime;

ii) design and engineering studies;

iii) site layout;

iv) dam location and structure;

v) powerhouse location;

vi) penstock layout;

vii) generation technology to be used; and

viii) major equipment items associated with the Project.

Additional items which will be included in the evaluation are:

- degree to which environmental concerns have been addressed and pertinent environmental studies identified; and

- status of water use authorization.

From an economic/financial point of view, NLH will evaluate the Project Proposals based on the following:

i) competitiveness of the rates proposed by Proponents;

ii) degree to which the NUG financial structure has been defined; and

iii) extent to which sources of finance have been identified.

From an organization and management perspective, NLH will evaluate the Project Proposals based on the following:

i) company structure and ownership;

ii) company's prior experience with projects of this nature;

iii) status of site acquisition;

iv) status of applications for the necessary permits and licences;

v) project schedule;

vi) project management plan; and

vii) qualifications and experience of companies participating in design, project management and operation.

In addition to the above, NLH may base its evaluation of Project Proposals on any other factor or factors which it deems relevant.

5.4 **Licences and Permits**

It is the responsibility of the Proponent to determine which licences and permits may be required by Federal, Provincial or Municipal laws and regulations. The following list indicates legislation under which licences and permits may be applicable but is not intended to be all-inclusive:

Federal

- Navigable Waters Protection Act
- Fisheries Act
- Canadian Environmental Protection Act

Provincial

- Environmental protection and assessment legislation
- Location protection and conservation legislation (for specific locations)

Municipal

- Local planning requirements

6. SCHEDULES

This section contains schedules that must be completed by Proponents and included in their submissions.

Schedule A1 must be included in the Preliminary Submission. Schedules B1 through B7 must be included in the Project Proposal.

Proponents shall complete all items of each Schedule and are encouraged to provide any additional information which clarifies the scope, design and cost of the Project.

Proponents requiring additional sheets or providing additional information should provide the following identification at the top right hand corner of the extra sheet(s).

Project Name: _____

Proponent: _____

Date: _____

Proponents should read the entire RFP document before attempting to complete any Schedule.

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE A1
Preliminary Submission

Project Name: _____

Proponent: _____

Page 1 of 4

Date: _____

****

1. Project Name: _____

_____

2. Proponent Identification

Name _____

Address _____

_____

_____

Telephone# _____

Fax # _____

Person to Contact _____

Position/Title _____

RFP 92-195

SCHEDULE A1
Preliminary Submission

Project Name: _____

Proponent: _____

Page 2 of 4

Date: _____

****

3. Project Location/Site Data

Project is located at _____
Connection to power system is required at _____

Please attach a map indicating NUG location, transmission line routing and interconnection point.

Please attach preliminary single line diagram.

Indicate status of environmental impact/assessment studies

_____

_____

_____

_____

4. Project Characteristics

Head	Gross	_____	m
	Net	_____	m
Average Water Flow		_____	m^3/sec
Minimum Water Flow		_____	m^3/sec
Maximum Water Flow		_____	m^3/sec
Catchment Area		_____	km^2
Storage Capacity		_____	m^3
Installed Capacity		_____	kW
Rated Flow Capacity		_____	m^3/sec

RFP 92-195

SCHEDULE A1
Preliminary Submission

Project Name: _____

Proponent: _____

Page 3 of 4

Date: _____

****

4. Project Characteristics (Cont'd)

Estimated Average Annual Energy	_____	MWh
Average Annual Energy Available for Sale	_____	MWh[1]
Type of Turbine to be Installed	_____	
Turbine Efficiency at Rating	_____	
Number of Turbine/Generators to be Installed	_____	
Number of Transformers to be Installed	_____	
Voltage at which Connection Required	_____	kV

5. Proposed Schedule

Project Selection Phase:	**Month[2]**
NLH Issues RFP for NUG	0
NUG Preliminary Submission	0
NLH Responds to NUG Preliminary Submission	2
NUG Submits Project Proposal	9
NLH Selects Projects	13

[1] after deduction of energy used by Proponent + transmission losses

[2] Refer to Section 4.4 for calendar dates.

RFP 92-195

SCHEDULE A1
Preliminary Submission

Project Name: _____

Proponent: _____

Page 4 of 4

Date: _____

****

5. Proposed Schedule (cont'd)

	Month
Project Implementation Phase:	
Environmental Studies/Assessment Complete	_____
Permits/Licences in Place	_____
Site Acquisition Complete	_____
Project Finance in Place	_____
Detailed Engineering Complete	_____
Construction Starts	_____
NUG In-Service (commercial operation)	_____

6. Cost Estimate (1992$)

Capital Cost Estimate

Hydro Development	_____	$
Transmission Line	_____	$

Annual O&M Cost Estimate _____ $/year

7. Project Life

Estimate Project Life _____ Years

TO BE SUBMITTED WITH PRELIMINARY SUBMISSION

****

(Fox execution by a Corporation)

Signed and sealed on behalf of _____

_____ Proponent

_____ _____ _____
(Signature of Witness) (Signatures of Signatories)

_____ _____
(Offices of Signatories)

(Corporate Seal to be affixed)

Dated at _____ this _____ day of _____ 19 _____.

(For execution other than by a Corporation)

Signed and sealed on behalf of _____
(Proponent)

this _____ day of _____ 19_____.

_____ _____ _____
(Signature of Witness) (Signatures of Signatories)

_____ _____
(Offices of Signatories)

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B1
Project Summary (Update to Preliminary Submission)

Page 1 of 4

Project Name: _____

Proponent: _____

Date: _____

****

1. Project Name: _____

_____

2. Proponent Identification

Name _____

Address _____

_____

_____

Telephone# _____

Fax # _____

Person to Contact _____

Position/Title _____

RFP 92-195

SCHEDULE B1
Project Summary (Update to Preliminary Submission)

Project Name: _____

Proponent: _____

Page 2 of 4

Date: _____

****

3. Project Location/Site Data

Project is located at _____

Connection to power system is required at _____

Please attach a map indicating NUG location, transmission line routing and interconnection point.

Please attach preliminary single line diagram.

Indicate status of environmental impact/assessment studies

_____

_____

_____

_____

4. Project Characteristics

Head	Gross _____	m
	Net _____	m
Average Water Flow	_____	m^3/sec
Minimum Water Flow	_____	m^3/sec
Maximum Water Flow	_____	m^3/sec
Catchment Area	_____	km^2
Storage Capacity	_____	m^3

RFP 92-195

SCHEDULE B1
Project Summary (Update to Preliminary Submission)

Project Name: _____

Proponent: _____

Page 3 of 4

Date: _____

****

4. Project Characteristics (Cont'd)

Rated Flow Capacity	_____	m^3/sec
Installed Capacity	_____	kW
Estimated Average Annual Energy	_____	MWh
Average Annual Energy Available for Sale	_____	MWh[3]
Type of Turbine to be Installed	_____	
Turbine Efficiency at Rating	_____	
Number of Turbine/Generators to be Installed	_____	
Number of Transformers to be Installed	_____	
Voltage at which Connection Required	_____	kV

5. Proposed Schedule

Project Selection Phase:	**Month**[4]
NLH Issues RFP for NUG	0
NUG Preliminary Submission	0
NLH Responds to NUG Preliminary Submission	2
NUG Submits Project Proposal	9
NLH Selects Projects	13

[3] after deduction of energy used by Proponent + transmission losses

[4] Refer to Section 4.4 for calendar dates.

RFP 92-195

SCHEDULE B1
Project Summary (Update to Preliminary Submission)

Project Name: _____

Proponent: _____

Page 4 of 4

Date: _____

****

5. Proposed Schedule (cont'd)

	Month
Project Implementation Phase:	
Environmental Studies/Assessment Complete	_____
Permits/Licences in Place	_____
Site Acquisition Complete	_____
Project Financing in Place	_____
Detailed Engineering Complete	_____
Construction Starts	_____
NUG In-Service (commercial operation)	_____

6. Cost Estimate (1992$)

Capital Cost Estimate

Hydro Development	_____	$
Transmission Line	_____	$
Annual O&M Cost Estimate	_____	$/year

7. Project Life

Estimate Project Life _____ Years

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B2
Project Cost Estimate

Project Name: _____

Proponent: _____

Page 1 of 2

Date: _____

****

1. **CAPITAL COSTS** **$**

Direct Costs

1.1	Site and Services	_____
1.2	Civil Works (dam and powerhouse)	_____
1.3	Mechanical/Electrical Equipment (powerhouse)	_____
1.4	Electrical Equipment (switchyard, substation, protection, transformers, interconnection)	_____
1.5	Transmission Lines	_____
1.6	Interconnection Cost Payable to NLH/NLP	_____
1.7	Spares	_____
1.8	Engineering, Procurement & Project Management Services	_____
1.9	Administrative, Environmental & Legal Services	_____
1.10	Other (specify) _____	

Indirect Costs

1.11	Indirect Construction Costs	_____
1.12	Interest During Construction	_____

RFP 92-195

SCHEDULE B2
Project Cost Estimate

Project Name: _____

Proponent: _____

Page 2 of 2

Date: _____

****

1. **CAPITAL COSTS**

Indirect Costs (cont'd)

1.13 Escalation _____

1.14 Other (specify) _____

Total Capital Cost [redacted]

All direct costs are in 1992$.

2. **ANNUAL OPERATION & MAINTENANCE COSTS** $

2.1 Administration _____
2.2 Operation and Maintenance _____
2.3 Interest _____
2.4 Insurance _____
2.5 Other (specify) _____
2.6 Other (specify) _____

Total Annual O&M Costs [redacted]

All costs are in 1992$.

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B3
Power Delivery Schedule

Project Name: _____

Proponent: _____

Page 1 of 2

Date: _____

****

1. Estimate of Delivered Energy (MWh)

SEASON
Winter (3624 hrs) 1 Nov - 31 Mar
Summer (5136 hrs) 1 Apr - 31 Oct

The above table specifies the number of hours associated with Winter and Summer periods. The value of energy delivered in winter is higher than in summer.

1.1 Estimated energy generated during winter (3624 hours) _____ MWh

1.2 Estimated energy generated during summer (5136 hours) _____ MWh

1.3 Total estimated energy generated during year (8760 hours) _____ MWh

2. Estimate of Delivered Capacity (kW)

2.1 Winter _____ kW

2.2 Summer _____ kW

SCHEDULE B3
Power Delivery Schedule

Project Name: _____

Proponent: _____

Date: _____

****

3. Dispatchability

Indicate the expected degree of dispatchability of this project (check one).

- generation under NLH control on a daily basis _____
- generation under NLH control on a weekly basis _____
- generation not under NLH control _____

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B4
Proposed Electricity Pricing

Project Name: _____

Proponent: _____

Page 1 of 2

Date: _____

****

1. NLH's Maximum Price

PERIOD	ENERGY COMPONENT Cents/kWh	DEMAND COMPONENT Cents/kWh	TOTAL AMOUNT Cents/kWh
Winter 1 Nov. - 31 Mar. (3624 hours)	3.58	4.50	8.08
Summer 1 Apr. - 31 Oct. (5136 hours)	3.58	2.11	5.69

Rates are in 1992$.

1.1 Proponent elects to submit NLH Maximum Price.[5] YES / NO

1.2 If NO, Proponent will complete table below with an alternative price.

[5] Proponents are advised that the above table represents the maximum rate payable by NLH. NLH will not approve Proposals which are in excess of these rates.

SCHEDULE B4
Proposed Electricity Pricing

Project Name: _____

Proponent: _____

Date: _____

****

2. Proponents Pricing Proposal

PERIOD	ENERGY COMPONENT Cents/kWh	DEMAND COMPONENT Cents/kWh	TOTAL AMOUNT Cents/kWh
Winter 1 Nov. - 31 Mar. (3624 hours)			
Summer 1 Apr. - 31 Oct. (5136 hours)			

Rates are in 1992$.

3. Inflation (Escalation) Index

3.1 The demand portion of the rate will be escalated to the in service date of the plant and then remain constant over the life of the power contract. The escalation index proposed for the demand is the Statistics Canada Hydroelectric Generating Stations Index (catalogue 62-007, Table 12.1). The energy portion of the rate will be escalated annually using the Statistics Canada Consumer Price Index - All Items (Canada) (catalogue 62-001, Table 3). This increase will be limited to a maximum of 6% in any one year.

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B5
Operation & Maintenance

Project Name: _____

Proponent: _____

Page 1 of 2

Date: _____

****

5.1 Operation & Maintenance

Proponent plans to contract with an experienced company to operate and maintain the plant. YES / NO

Proponent plans to employ own staff to operate and maintain the plant. YES / NO

Indicate the staffing level envisaged at this site.

(a) Permanent _____

(b) Part-time (specify) _____

_____

_____

5.2 Maintenance Schedule

Indicate whether Proponent will allow NLH to schedule annual maintenance period. YES / NO

What is the expected annual maintenance duration for this plant. _____ Days

SCHEDULE B5
Operation & Maintenance

Project Name: _____

Proponent: _____

Date: _____

****

5.3 Spare Parts

Proponent will maintain on site the necessary spare parts to minimize down time. YES / NO

Proponent will contract with supplier who will carry spares to minimize down time. YES / NO

Other (specify) _____

_____

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B6
Schedule of Attachments

Project Name: _____

Proponent: _____

Page 1 of 2

Date: _____

****

The following attachments are included with this Project Proposal.

6.1	Feasibility Study including: - Project Description - Location Map - Layout Drawings, etc.	YES / NO
6.2	Single Line Diagram up to Connection with NLH System	YES / NO
6.3	Statement of Company Structure & Ownership	YES / NO
6.4	Statement of Financial Structure and Sources of Finance	YES / NO
6.5	Indication of Individuals and/or Companies participating in Design, Project Management and Operation	YES / NO
6.6	Manufacturer's Data (specify)	

_____

_____

_____

RFP 92-195

SCHEDULE B6
Schedule of Attachments

Project Name: _____

Proponent: _____

Page 2 of 2

Date: _____

****

6.7 Other (specify)

_____

_____

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B7
Provincial Content

Project Name: _____

Proponent: _____

Page 1 of 2

Date: _____

****

In accordance with the Provincial Preference Act, **Revised** Statutes of Newfoundland, **1990, P-33**, as amended, Proponents shall provide the following information to be considered in the evaluation of the Project Proposal. Proponent's may be required to substantiate this information.

1. Total Value of Provincial Labour defined as follows: $_____

   The estimated dollar value of labour cost to be:

   a) incurred directly in the mining or harvesting of any raw material or resource indigenous to the Province of Newfoundland; and

   b) incurred directly in the further manufacturing and processing of any raw material or resource indigenous to the Province of Newfoundland, or any partially manufactured material or component imported into the Province of Newfoundland for the purpose of further manufacturing or processing.

2. Value of Provincial Material defined as follows: $_____

   The estimated dollar value of any indigenous raw material mined or harvested in the Province of Newfoundland.

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE B7
Provincial Content

Page 2 of 2

Project Name: _____

Proponent: _____

Date: _____

****

3. Provincial Overhead Allowance (P.O.A.)
as estimated by the Government Purchasing Agency,
Department of Works, Services and Transportation,
Government of Newfoundland and Labrador: $_____

Material	Local Manufacturer	Price	Provincial Labour	Provincial Materials

RFP 92-195

TO BE SUBMITTED WITH PROJECT PROPOSAL

****

(Fox execution by a Corporation)

Signed and sealed on behalf of _____

_____ Proponent

_____ _____ _____
(Signature of Witness) (Signatures of Signatories)

_____ _____
(Offices of Signatories)

(Corporate Seal to be affixed)

Dated at _____ this _____ day of _____ 19 _____.

(For execution other than by a Corporation)

Signed and sealed on behalf of _____
(Proponent)

this _____ day of _____ 19_____.

_____ _____ _____
(Signature of Witness) (Signatures of Signatories)

_____ _____
(Offices of Signatories)

RFP 92-195

NEWFOUNDLAND AND LABRADOR HYDRO
REQUEST FOR PROPOSAL FOR
NON-UTILITY GENERATION

SCHEDULE C
Confirmation of Validity
of Proposal

Page 1 of 1

Project Name: _____

Proponent: _____

Date: _____

****

The Proponent, _____, hereby confirms and agrees
(Name of Proponent)

that the Preliminary Submission for _____ dated _____
(Name of Project)

which was submitted in repsonse to the earlier Request for Proposals for Non-Utility Generating (NUG) from Small Hydro Projects (RFP 92-151) is hereby re-submitted its Preliminary Submission with respect to the current Request for Proposals for Non-Utility Generation (NUG) from Small Hydro Projects (RFP 92-195). The Proponent confirms that it has read RFP 92-195 and re-submits its Preliminary Submission in accordance with the requirements of the current Request for Proposals.

_____ _____ _____
(Signature of Witness) (Signatures of Signatories)

_____ _____
(Offices of Signatories)

Note: Proponents not possessing a waiver of NLH's franchise rights to the site must submit with this Confirmation, proof that it possesses hydroelectric development rights as outlined in Section 4.1 of this RFP.