



Request for Proposals

All enquiries related to this Request for Proposals, including any requests for information and clarification, are to be submitted by **September 16th, 2022** and directed, in writing, to procurement@bcogc.ca, who will respond if time permits. Information obtained from any other source is not official and should not be relied upon. Enquiries and any responses will be recorded and may be distributed to all Proponents at the Commission's option.

RFP # 51223004

Seismic Line Ecological Recovery Analysis

Closing Time: Proposal must be received electronically **before 2:00 PM Pacific Time on: 23rd September, 2022**

Delivery of Proposals

Proposals must be submitted electronically.

To: <https://procurement.bcogc.ca/>

Proponent's Meeting

A Proponent's meeting will not be held.

Organization Overview

The BC Oil and Gas Commission (Commission) is an independent, single-window regulatory agency with responsibilities for overseeing oil and gas operations in British Columbia. Regulatory responsibility is delegated to the Commission through the *Oil and Gas Activities Act* and includes specified enactments under the *Forest Act*, *Heritage Conservation Act*, *Land Act*, *Environmental Management Act*, and *Water Act*. The operating costs of the Commission are funded through industry fees and levies on a cost recovery basis.

The Commission's core roles include reviewing and assessing applications for industry activity, consulting with First Nations, ensuring industry complies with provincial legislation and cooperating with partner agencies. The public interest is protected by ensuring public safety, protecting the environment, conserving petroleum resources and ensuring equitable participation in production.

The regulatory responsibility of the Commission extends from the exploration and development phases of oil and gas activities through to facilities operation, and ultimately decommissioning of industry projects. It is charged with balancing a broad range of environmental, economic and social considerations.

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A. Definitions and Administrative Requirements

1. Definitions

Throughout this Request for Proposals, the following definitions apply:

- a) "Contract" means the written agreement resulting from this Request for Proposals executed by the Commission and the Contractor;
- b) "Contractor" means the successful Proponent to this Request for Proposals who enters into a written Contract with the Commission;
- c) "Must", or "mandatory" means a requirement that must be met in order for a proposal to receive consideration;
- d) "Proponent" means an individual or a company that submits, or intends to submit, a proposal in response to this Request for Proposals;
- e) "Commission" means the Oil and Gas Commission;
- f) "Request for Proposals" means the process described in this document; and
- g) "Should" or "desirable" means a requirement having a significant degree of importance to the objectives of the Request for Proposals.

2. Terms and Conditions

Submitting a proposal indicates acceptance of all the terms and conditions set out in the RFP, including those that follow and that are included in all appendices and any Addenda.

A proposal must be signed by a person authorized to sign on behalf of the Proponent with the intent to bind the Proponent to the RFP and to the statements and representations in the Proponent's proposal. A scanned copy of the signed cover page of this RFP is acceptable as is a cover letter identifying the Proponent, identifying the RFP and including a signature of an authorized representative of the Proponent that confirms the Proponent's intent to be bound. For proposals submitted to an electronic proposal constitutes the signature of an authorized representative of the Proponent and is acceptable without additional signature.

3. Electronic Submissions

For electronic submissions the following applies:

- a) The Proponent is solely responsible for ensuring that the complete electronic Proposal, is received before Closing Time;
- b) The maximum size of each attachment must be 500 MB or less and uploaded in a single attachment;
- c) Proponents should submit proposal submissions in a single upload and avoid sending multiple submissions for the same opportunity;
- d) Attachments must not be compressed, must not contain a virus or malware, must not be corrupted and must be able to be opened. Proponents submitting by electronic submission are solely responsible for ensuring that any emails or attachments are not corrupted. The Commission may reject proposals that are compressed, cannot be opened or that contain viruses or malware or corrupted attachments.

4. Additional Information Regarding the Request for Proposals

All subsequent information regarding this Request for Proposals, including changes made to this document will be posted on the BC Bid website at www.bcbid.ca. It is the sole responsibility of the Proponent to check for amendments on the BC Bid website.

5. Late Proposals

Proposals will be marked with their receipt time once submitted. Only complete proposals received and marked before closing time will be considered to have been received on time. Proposals that are received late will be marked late and will not be considered or evaluated. In the event of a dispute, the proposal receipt time as recorded by the electronic date stamp shall prevail whether accurate or not.

6. Eligibility

- a) Proposals will not be evaluated if the Proponent's current or past corporate or other interests may, in the Commission's opinion, give rise to a conflict of interest in connection with the project described in this Request for Proposals. This includes, but is not limited to, involvement by a Proponent in the preparation of this Request for Proposals. If a Proponent is in doubt as to whether there might be a conflict of interest, the Proponent should consult with the Commission Contract Management Analyst prior to submitting a proposal.
- b) Proposals from not-for-profit agencies will be evaluated against the same criteria as those received from any other Proponents.

7. Evaluation

Evaluation of proposals will be by a committee formed by the Commission and may include employees and contractors of the Commission. All personnel will be bound by the same standards of confidentiality. The Commission's intent is to enter into a Contract with the Proponent who has the highest overall ranking.

8. Negotiation Delay

If a written Contract cannot be negotiated within thirty days of notification of the successful Proponent, the Commission may, at its sole discretion at any time thereafter, terminate negotiations with that Proponent and either negotiate a Contract with the next qualified Proponent or choose to terminate the Request for Proposals process and not enter into a Contract with any of the Proponents.

9. Debriefing

At the conclusion of the Request for Proposals process, all Proponents will be notified of the award by BCBid. Unsuccessful Proponents may request a debriefing meeting with the Commission.

10. Alternative Solutions

If alternative solutions are offered, please submit the information in the same format, as a separate proposal.

11. Changes to Proposals

By submission of a clear and detailed written notification, the Proponent may amend or withdraw its proposal prior to the closing date and time. Upon closing time, all proposals become irrevocable. The Proponent will not change the wording of its proposal after closing and no words or comments will be added to the proposal unless requested by the Commission for purposes of clarification.

12. Proponents' Expenses

Proponents are solely responsible for their own expenses in preparing a proposal and for subsequent negotiations with the Commission, if any. If the Commission elects to reject all proposals, the Commission will not be liable to any Proponent for any claims, whether for costs or damages incurred by the Proponent in preparing the proposal, loss of anticipated profit in connection with any final Contract, or any other matter whatsoever.

13. Limitation of Damages

Further to the preceding paragraph, the Proponent, by submitting a proposal, agrees that it will not claim damages, for whatever reason, relating to the Contract or in respect of the competitive process, in excess of an amount equivalent to the reasonable costs incurred by the Proponent in preparing its proposal and the Proponent, by submitting a proposal, waives any claim for loss of profits if no Contract is made with the Proponent.

14. Proposal Validity

Proposals will be open for acceptance for at least 90 days after the closing date.

15. Firm Pricing

Prices will be firm for the entire Contract period unless this Request for Proposals specifically states otherwise.

16. Currency and Taxes

Prices quoted are to be:

- a) In Canadian dollars;
- b) Inclusive of duty, where applicable; FOB destination, delivery charges included where applicable; and
- c) Exclusive of taxes

17. Completeness of Proposal

By submission of a proposal the Proponent warrants that, if this Request for Proposals is to design, create or provide a system or manage a program, all components required to operate the system or manage the program have been identified in the proposal or will be provided by the Contractor at no charge.

18. Subcontracting

- a) Using a subcontractor (who should be clearly identified in the proposal) is acceptable. This includes a joint submission by two Proponents having no formal corporate links. However, in this case, one of these Proponents must be prepared to take overall responsibility for successful performance of the Contract and this should be clearly defined in the proposal.
- b) Subcontracting to any firm or individual whose current or past corporate or other interests may, in the Commission's judgment, give rise to a conflict of interest in connection with the project or program described in this Request for Proposals will not be tolerated. This includes, but is not limited to, any firm or individual involved in the formulation of this Request for Proposals. If a Proponent is in doubt as to whether a proposed subcontractor gives rise to a conflict of interest, the Proponent should consult with the Commission Contact Person listed on page 1 prior to submitting a proposal.
- c) Where applicable, the names of approved sub-contractors listed in the proposal will be included in the Contract. No additional subcontractors will be added, nor other changes made, to this list in the Contract without the written consent of the Commission.

19. Acceptance of Proposals

- a) This Request for Proposals should not be construed as an agreement to purchase goods or services. The Commission is not bound to enter into a Contract with the Proponent who submits the lowest priced proposal or with any Proponent. Proposals will be assessed in light of the evaluation criteria. The Commission will be under no obligation to receive further information, whether written or oral, from any Proponent.
- b) Neither acceptance of a proposal nor execution of a Contract will constitute approval of any activity or development contemplated in any proposal that requires any approval, permit or license pursuant to any federal, provincial, regional district or municipal statute, regulation or by-law.

20. Definition of Contract

Notice in writing to a Proponent that it has been identified as the successful Proponent and the subsequent full execution of a written Contract will constitute a Contract for the goods or services, and no Proponent will acquire any legal or equitable rights or privileges relative to the goods or services until the occurrence of both such events.

21. Contract

By submission of a proposal, the Proponent agrees that should its proposal be successful, the Proponent will enter into a Contract with the Commission in accordance with the terms of the [Commission's General Service Agreement](#).

22. Liability for Errors

While the Commission has used considerable efforts to ensure the information in this Request for Proposals is accurate, the information contained in this Request for Proposals is supplied solely as a guideline for Proponents. The information is not guaranteed or warranted to be accurate by the Commission, nor is it necessarily comprehensive or exhaustive. Nothing in this Request for Proposals is intended to relieve Proponents from forming their own opinions and conclusions with respect to the matters addressed in this Request for Proposals.

23. Modification of Terms

The Commission reserves the right to modify the terms of this Request for Proposals at any time in its sole discretion. This includes the right to cancel this Request for Proposals at any time prior to entering into a Contract with the successful Proponent.

24. Ownership of Proposals

All proposals submitted to the Commission become the property of the Commission. They will be received and held in confidence by the Commission, subject to the provisions of the *Freedom of Information and Protection of Privacy Act* and this Request for Proposals.

25. Use of Request for Proposals

Any part of this document, or any information provided by the Commission in relation to this Request for Proposals may not be used or disclosed, for any purpose other than for the submission of proposals. Without limiting the generality of the foregoing, by submission of a proposal, the Proponent agrees to hold in confidence all information provided by the Commission in relation to this Request for Proposals.

26. Reciprocity

The Commission may consider and evaluate any proposals from other jurisdictions on the same basis that the Commission purchasing authorities in those jurisdictions would treat a similar proposal from a British Columbia supplier.

27. No Lobbying

Proponents must not attempt to convey directly or indirectly with any employee, contractor or representative of the Commission, including the evaluation committee and any elected officials of the Commission, or with members of the public or the media, about the project described in this Request for Proposals or otherwise in respect of the Request for Proposals, other than as expressly directed or permitted by the Commission.

B. Requirements and Responses

1. Summary of the Requirement

The goal of this project is to attribute linear spatial data for 2D seismic lines in northeast BC with information about vegetation coverage and recovery metrics to support tactical and operational restoration planning for future restoration projects.

There are over 200,000km of 2D seismic lines (and 300,000km of 3D seismic lines) fragmenting the landscape in northeast BC. These lines range in width from approximately 1-8 meters depending on the type of cutline. It is widely recognized that these lines have an adverse impact on the ecosystem, generating edge effects, limiting forest patch size, and changing predator prey interactions. This project is focused on evaluating, using currently available spatial data and imagery, the condition of vegetation on 2D seismic lines in northeast BC (3D lines are currently out of scope).

The Commission has a spatial dataset for 2D lines that will be provided for this project. The 2D line dataset is reasonably accurate (+/- 5m approximately). This linear dataset, however, is not sufficiently precise to allow for automated spectral data classification along the linear features. The narrow width of these lines limits opportunities to evaluate the area using mid-resolution optical remote sensing data, and generally requires human (non-AI) approaches to interpret high resolution imagery.

The following attributes will need to be captured by visual analysis of available imagery data for each segment of seismic line:

- Treed or non-treed area (non-treed areas are defined in VRI as having less than 10% crown cover tree species of any size)

For identified treed areas only:

- Estimated canopy coverage (upper tree canopy using a vegetation distribution rating such as Table 1 below)
- Estimated coverage of woody shrubs (mid canopy shrubs, Table 1)
- Estimated line width (not visible, narrow <3m, medium 3-6m, wide >7m)
- Evidence of alternate use (recreational, roads, pipelines, transmission lines, cutblock, other)

Table 1: Vegetation distribution rating for canopy and shrubs

Rating	Description	Example
1	None	
2	Rare, a few sporadic plants	
3	Patchy sporadic plants and clusters	
4	Several patches and sporadic plants	
5	Uniform occurrences or full coverage	

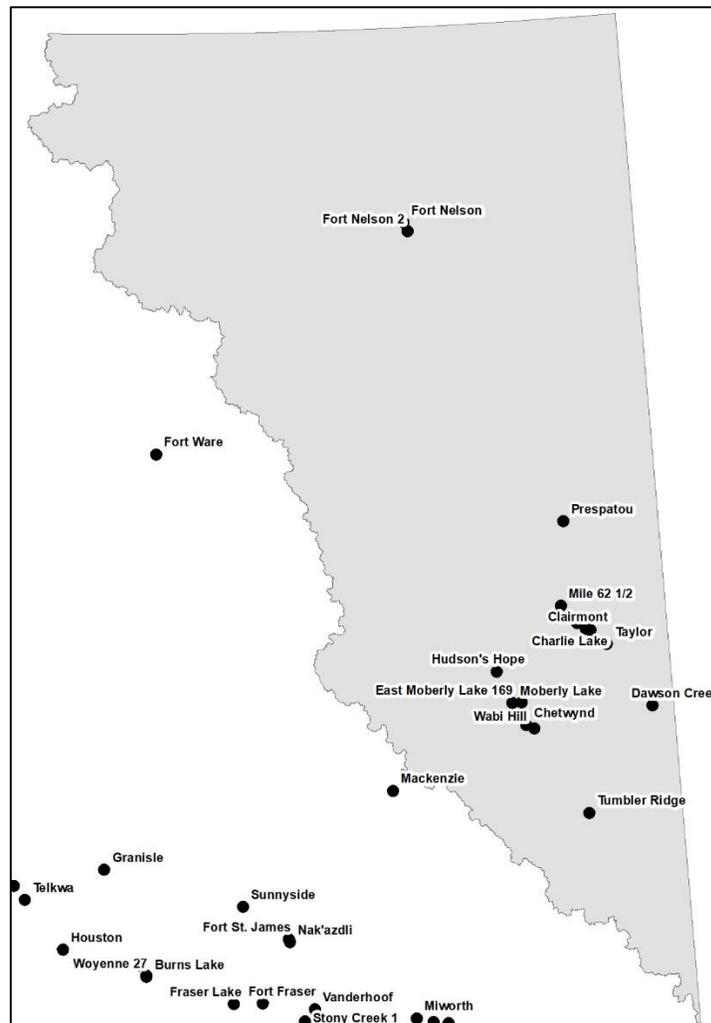
Definition of Segment: The Commission requires attribution for each segment of seismic line. Segment for the purposes of this project is defined as the feature class line segment. Note the lines are currently segmented at any line intersection or change in land use (wetland, forest cover, cutblock, caribou range, forest fire). Segments longer >500m should be reduced in size, such that no segments exceed 500m.

Seismic Line Attribute Data: The 2D seismic dataset that is available for this project has been pre-processed to include local biogeographic values that may be helpful in the processing of the seismic lines. Attributes relate to the adjacent areas and include, cutblock information, forest fire dates, BC Land Classification Data, Tree/Non-Treed from the Vegetation Resource Inventory, NTS Grid reference, adjacent vegetation type and height, soil moisture and nutrient regime, private, elevation and orientation. These variables are sourced from the BC Geographic Warehouse and are not guaranteed to be accurate. This analysis has resulted in small line segments (~1,700,000 segments averaging 120m in length). The raw data is 1,250,000 segments averaging 177m in length. The geographic area covers approximately 115,000km² in northeast British Columbia, Canada (including Fort Nelson, Fort St John, Dawson Creek, Pouce Coupe and Hudson Hope). Lines need to be evaluated in 250m or less

segments. The raw 2D seismic data (feature codes JA08400000) can be sourced from seismic lines in <https://catalogue.data.gov.bc.ca/dataset/trim-miscellaneous-lines>. A copy of the attributed data, as described above, will be shared on request (procurement@bcogc.ca).

Available Data: The Commission acknowledges that there is not sufficient funding for LIDAR data acquisition across northeast BC for this initiative. The Commission can provide access to SPOT data, the BC Vegetation Resource Inventory, and a low-resolution height model to help identify treed-non treed areas, but this data is not sufficiently detailed for the on-line vegetation analysis. The use of publicly available, high-resolution data and/or subscription services to commercial image archives may be useful for this project (e.g., BING, MAXAR or UP42 data). Image data acquired over the past seven years may be used for analysis. The Commission does not need the image data used in this process to be made available in the deliverables, only the attributed seismic line information.

Deliverables: The project deliverables will comprise a fully attributed spatial dataset, built on the publicly available geometry sourced from <https://catalogue.data.gov.bc.ca/dataset/trim-miscellaneous-lines>. The dataset should include all existing attributes and the project derived value-added attributes for vegetation as described above (treed/non-treed, canopy cover, woody-shrub cover, approximate width, and other land-use). The project area is northeast BC. The outline of Northeast BC is available from the Commission and shown in the diagram below (163,035km²).



2. Anticipated Schedule

The following table outlines the anticipated schedule for this RFP. All times identified in the table are in Pacific Time.

Event	Anticipated Date
Enquiries deadline	September 16 th , 2022
Request closing time	September 23 rd , 2022
Interviews and reference checks, as required	September 26-30, 2022
Preferred Proponent selected by	October 3 rd , 2022
Commencement of work	October 5 th , 2022

3. Commission Situation/Overview

The Commission is the provincial regulatory agency for permitting and overseeing oil and gas activities, from exploration and development through to operations and ultimately decommissioning of oil and gas industry projects under British Columbia jurisdiction. The Commission's current legislated mandate, regulatory framework, core activities and organizational structure are described in the [2021/22 – 2023/24 Service Plan](#) available on the Commission's website at www.bcogc.ca.

3.1 Commission Responsibility

The purposes of the Commission, outlined in Section 4 of the Oil and Gas Activities Act, are briefly summarized as follows:

- (a) to regulate oil and gas activities in British Columbia in a manner that
 - (i) provides for the sound development of the oil and gas sector, by fostering a healthy environment, a sound economy and social well-being,
 - (ii) conserves petroleum and natural gas resources,
 - (iii) ensures safe and efficient practices, and
 - (iv) assists owners of petroleum and natural gas resources to participate equitably in the production of shared pools of petroleum and natural gas;
- (b) to provide for effective and efficient processes for the review of applications for permits and to ensure that applications that are approved are in the public interest having regard to environmental, economic and social effects;
- (c) to encourage the participation of First Nations and aboriginal peoples in processes affecting them;
- (d) to participate in planning processes;
- (e) to undertake programs of education and communication in order to advance safe and efficient practices and the other purposes of the commission.

3.2 Background

The oil and gas sector have established seismic lines across northeast BC over the past sixty years to allow seismic programs to capture digital image data that allows specialists to image the structure of subsurface geological formations for exploration purposes. Seismic methods have transitioned from 2D simple lines to 3D based programs that capture data in a grid-matrix configuration on the land base.

The level of clearing for seismic lines has changed over time, from open wide straight mechanically cut (cat cut) lines to lower impact seismic lines that are cut by mulchers or by hand. The recovery of vegetation on these lines is critical for the regional ecology and important for caribou and other threatened species in northeast BC. More information about seismic programs can be found [here](#).

The Commission is committed to understanding the amount of vegetation recovery on seismic lines to help support restoration programs and ensure that the land base is managed effectively. Understanding the location and current vegetation status on 2D lines is an important step in this process. This project prioritizes 2D seismic lines as they typically have a more notable lasting impact on the land base. Over time Commission hope to review 3D lines as well.

4. Requirements

4.1 Summary of Services

The successful Proponent who enters a written contract with the Commission is expected to provide the following services:

1. Analysis of remotely sensed data to determine vegetation coverage metrics for each line segment. This includes the following attributes will need to be collected for each segment of seismic line:
 - For all line segments:
 - Treed or non-treed area (non-treed areas are defined in VRI as having less than 10% crown cover tree species of any size)
 - For identified segments in treed areas only:
 - Estimated canopy coverage (upper tree canopy using a vegetation distribution rating such as Table 1 below)
 - Estimated coverage of woody shrubs (mid canopy shrubs, Table 1)
 - Estimated line width (not visible, narrow <3m, medium 3-6m, wide >7m)
 - Evidence of alternate use (recreational, roads, pipelines, transmission lines, cutblock, other)
2. Delivery of a full attributed spatial dataset (file geodatabase) with the line attributes listed above.
3. A summary report and metadata document that describes the attributes, the methods used to capture data, and an assessment of the data limitations and accuracy.

4.2 Proposal Content Requirements

To respond to this Request for Proposals, Proponents are required to submit the following mandatory information:

- A summary of the contractors' approach to the problem and how they expect to derive information.
- A summary of the data that will be used to analyse the condition of seismic lines.
- A documented example (delivered as a zipped shapefile or ESRI geodatabase with Word or PDF report) showing the results for a 5x5km area in NTS 94A (Fort St John – Hudson Hope area in British Columbia). IMPORTANT our email will not accept ZIP files so please contact the Commission for FTP delivery guidance at procurement@bcogc.ca.
- A summary of similar project work completed by the proponent.
- A list of staff and specialists that will be involved in the project work and their credentials.
- An estimate of project cost and timeline.
- A breakdown of project milestones.

4.3 Proposal Format Requirements

The following format, sequence, and instructions should be followed in order to provide consistency in Proponent response and ensure each proposal receives full consideration. With all pages consecutively numbered, the proposals should contain the following parts:

- a) Table of contents with page numbers.
- b) One-page executive summary.
- c) The body of the proposal in accordance with the above content requirements. This part is not to exceed 10 pages of combined text, tables, graphics, and other written presentation in support of the content requirements.

5. Evaluation

The evaluation of responses will be conducted by a team consisting of employees and/or contractors of the Commission. All members of the team will be bound by the same standards of confidentiality.

This section details all of the mandatory and desirable criteria against which proposals will be evaluated. Proponents should ensure that they fully respond to all criteria in order to receive full consideration during the evaluation.

The lowest price or any Proposal will not necessarily be accepted. The Commission reserves the right to refuse any proposed based on quality, service, price, reputation, experience and other criteria.

The Preferred Proponent will be the Proponent scoring the most points after evaluation. The evaluation process will consist of the following stages:

- Stage One – Mandatory Criteria
- Stage Two – Interviews (optional)
- Stage Three – Reference Checks

5.1 Mandatory Criteria

Proposals not clearly demonstrating that they meet the following mandatory criteria will be excluded from further consideration during the evaluation process:

- **The Proposal must be sent and received before the designated closing date and time.**
- **The Proposal must be in English and submitted electronically to <https://procurement.bcogc.ca/>**
- **Example spatial data must be uploaded to FTP site (ref procurement@bcogc.ca).**
- **The Proponent must confirm that any personal information received, collected or held over the course of the review will be stored and used only in Canada.**
- **The Proposal must contain an independence and objectivity statement by the Proponent.**

Please note that any in person meetings, if needed, will require all attendees to comply with the Commission's Covid-19 vaccine policy.

Failure to meet all mandatory criteria above will disqualify the Proponent's Proposal from further review.

5.2 Desirable Criteria

The Commission seeks to enter into an agreement with the Proponent who, in the opinion of the Commission, has the resources, knowledge and competence to provide the greatest value. Proposals meeting all of the mandatory criteria will be further assessed against desirable criteria.

Desirable Criteria	Weight
Proponent's Qualifications and Relevant Experience	20%
Suitability of Proposed Approach and Test Area Example	60%
Pricing Provide a firm, fixed, all inclusive price for all services proposed.	30%

5.3 Interviews

The top ranking (to a maximum of three) Proponents may be asked to attend a video-conference interview with the evaluation team at a Commission location nearest to the Proponent. The Proponent's team leader is to attend in person. During the interview, the evaluation committee may clarify and/or verify statements made in the written Response.

Interview Criteria	Weight
Understanding of the requirements.	30%
Understanding of the Commission's environment.	10%
Approach to meeting the requirements.	40%
Suitability of the Lead Resource (including ability to handle situations and to communicate effectively, and to assign appropriate resources).	20%

The highest scoring Proponent (Preferred Proponent) will be selected by adding the scores from the desirable criteria and the interview.

The requirement for interviews is optional. The Commission reserves the right to complete the evaluation process without Proponent interviews.

The contract is expected to start in October 2022 and all the deliverables are expected to be made available to the Commission before March 15, 2023. All proposals should be less than \$1,000,000CDN.

5.4 Reference Checks

The references of the Preferred Proponent may be contacted to validate any part of their responses. The Commission reserves the right to conduct such independent reference checks or verifications as they deem necessary to clarify, test, or verify the information contained in the responses and confirm the suitability of the Proponent. The Commission will not enter into a contract with any Proponent whose references are found to be unsatisfactory.