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PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Security, Financial and Other Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work and the Basis of Payment.

1.2 Summary

By means of the RFP, NRCan is seeking proposals from bidders to provide programming and engineering services for an ABB Freelance DCS.

The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.



PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) (2016-04-04) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation with the modifications to the text below. If there is a conflict between the provisions of 2003 and this document, this document prevails.

- **In the complete text content (except Section 3) Delete:** Public Works and Government Services Canada” and **Insert:** “Natural Resources Canada.” **Delete:** “PWGSC” and **Insert:** “NRCan”
- **Section 2: Delete:** “Suppliers are required to” and **Insert:** “It is suggested that suppliers”
- **Subsection 1 of Section 8:**
Delete: Unless specified otherwise in the bid solicitation, bids may be submitted by facsimile. The only acceptable facsimile number for responses to bid solicitations issued by PWGSC headquarters is 819-997-9776 or, if applicable, the facsimile number identified in the bid solicitation. The facsimile number for responses to bid solicitations issued by PWGSC regional offices is identified in the bid solicitation
Insert: Unless specified otherwise in the bid solicitation, bids may be submitted by facsimile. The only acceptable facsimile number for responses to bid solicitations is the facsimile number identified in the bid solicitation.
- **Under Subsection 2 of Section 20:** Not applicable

Subsection 5.4 of [2003](#) (2016-04-04) Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 90 days

2.2 Submission of Bids

It is the Bidders responsibility to ensure that proposals are sent to the following e-mail address, by the time and date indicated on page 1 of this RFP document:

serge.tshimanga@canada.ca

IMPORTANT

It is requested that you write the following information in “Subject” of the e-mail:

131795 – RFP# NRCan-500023128 (Control System Integration)

The financial proposal should be presented, and identified, in a separate document/file from the technical proposal.

NRCan will not assume responsibility for proposals directed to any other email and not be responsible for any failure attributable to the use of this mode of transmission.



The onus is on the Bidder to ensure that the proposal is submitted correctly to the above address. Not complying with the above instructions may result in NRCan's inability to ascertain reception date and/or to consider the bid prior to contract award. Therefore, NRCan reserves the right to reject any proposal not complying with these instructions.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than **ten (10)** calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.5 Improvement of Requirement during Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least **10** calendar days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.6 Basis for Canada's Ownership of Intellectual Property

Natural Resources Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following grounds: where statutes, regulations or previous obligations of Canada to a third party or parties preclude contractor ownership of the Intellectual Property Rights in Foreground Information.



PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

File I: Technical Bid and Certifications (1 electronic copy)

File II: Financial Bid (1 electronic copy) in a separate file

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Technical Bid

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment in Annex "B".

Certifications

Bidders must submit the certifications required under Part 5.



PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

Mandatory Technical Criteria

Criterion ID	Mandatory Criteria	Proposal Page #	Pass/Fail
M1	<p>The Bidder must have a minimum of 5 years of system integration experience within the past 10 years. Projects or work related examples to be provided including at least the following:</p> <ul style="list-style-type: none"> - Brief description; - Period (from/to); - Client's name and point of contact (Name and telephone) <p><i>Note: NRCan reserves the right to contact the client for validation purpose only.</i></p>		
M2	<p>The Bidder must have experience with ABB Freelance Distributed Control Systems. Project or work related example (s) to be provided including at least the following:</p> <ul style="list-style-type: none"> - Brief description; - Period (from/to); - Client's name and point of contact (Name and telephone) <p><i>Note: NRCan reserves the right to contact the client for validation purpose only.</i></p>		

Evaluation of Price

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

4.2 Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the total lowest evaluated price will be recommended for award of a contract.



PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Declaration of Convicted Offences

As applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Bidder must provide with its bid, a completed [Declaration Form](http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

5.2.1 Integrity Provisions – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.



5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability.

5.2.3.2 Rate or Price Certification

The Bidder certifies that the price proposed is not in excess of the lowest price charged anyone else, including the Bidder's most favoured customer, for the like quality and quantity of the goods, services or both.

5.2.3.3 Education and Experience

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

5.2.3.4 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;



- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c. C-17, the *Defence Services Pension Continuation Act*, 1970, c. D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c. R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c. R-11, the *Members of Parliament Retiring Allowances Act*, R.S. 1985, c. M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c. C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes** () **No** ()

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2012-2](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes** () **No** ()

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;



g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

5.2.3.4 Aboriginal Designation

An Aboriginal business, which can be:

- i. a band as defined by the Indian Act
- ii. a sole proprietorship
- iii. a limited company
- iv. a co-operative
- v. a partnership
- vi. a not-for-profit organization

in which Aboriginal persons have at least 51 percent ownership and control,

OR

A joint venture consisting of two or more Aboriginal businesses or an Aboriginal business and a non-Aboriginal business(es), provided that the Aboriginal business(es) has at least 51 percent ownership and control of the joint venture.

This is to confirm:

- Our Company is an Aboriginal Firm, as identified above
- Our Company is NOT an Aboriginal Firm

Signature of Authorized Representative

Date



PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirements

No applicable.



PART 7 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

7.1 Requirement

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A" and the Contractor's technical bid entitled _____, dated _____.

7.2 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

7.2.1 General Conditions

[2035](#) (2016-04-04), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

As applicable, replace references to Public Works and Government Services Canada (PWGSC) with Natural Resources Canada (NRCan).

7.2.2 Supplemental General Conditions

The following clauses apply to this contract:

7.2.2.1 Dispute Resolution

Mediation

If a dispute arising from this contract cannot be settled amicably through negotiation, then the parties agree in good faith to submit the dispute to mediation as administered by the Arbitration and Mediation Institute of Canada Inc. (AMIC). The parties acknowledge receipt of the rules of AMIC. The cost of mediation shall be borne equally by the parties.

Arbitration

If the parties cannot resolve the dispute through mediation within sixty (60) days, the parties agree to submit the dispute to arbitration pursuant to the Commercial Arbitration Act (Canada). The party requesting such arbitration shall do so by written notice to the other party/parties. The cost of the arbitration and fees of the arbitrator shall be borne equally by the parties. The arbitration shall take place in the city where the contractor carries on business before a single arbitrator to be chosen jointly by the parties. If the parties cannot agree on the choice of arbitrator within thirty (30) days of written notice to submit the dispute to arbitration, each party will choose a representative who will select the arbitrator. The parties may determine the procedure to be followed by the arbitrator in conducting the proceedings, or may ask the arbitrator to do so. The arbitrator shall issue a written award within thirty (30) days of hearing the parties. The award may be entered in any court having jurisdiction and enforced as a judgment of that court.

Meaning of "Dispute"

The parties agree that the word "dispute" in this clause refers to a dispute of fact or of law, other than a dispute of public law.



The parties understand that the Procurement Ombudsman appointed pursuant to Subsection 22.1(1) of the *Department of Public Works and Government Services Act* will, on request or consent of the parties to participate in an alternative dispute resolution process to resolve any dispute between the parties respecting the interpretation or application of a term and condition of this contract and their consent to bear the cost of such process, provide to the parties a proposal for an alternative dispute resolution process to resolve their dispute. The Office of the Procurement Ombudsman may be contacted by telephone at 1-866-734-5169 or by e-mail at boa.opo@boa.opo.gc.ca.

7.2.2.2 Basis for Canada's Ownership of Intellectual Property

Natural Resources Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following grounds: where statutes, regulations or previous obligations of Canada to a third party or parties preclude contractor ownership of the Intellectual Property Rights in Foreground Information.

7.3 Security Requirements

There is no security requirement applicable to this Contract.

7.4 Term of Contract

Period of the Contract

The period of the Contract is from date of Contract to _____ inclusive.

7.4.2 Option to Extend the Contract

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to **one (1) additional one (1) year period** under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least **fifteen (15)** calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

Note: this option is related to Part 5 of the Statement of Work.

7.5 Authorities

7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name:
Title:
Organization: Natural Resources Canada
Address:
Telephone: _____
Facsimile: _____
E-mail address: _____

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform



work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

7.5.2 Project Authority

The Project Authority for the Contract is:

Name:
Title:
Organization:
Address:
Telephone: ____-____-_____
Facsimile: ____-____-_____
E-mail address: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority; however, the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

7.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a [Public Service Superannuation Act](#) (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with [Contracting Policy Notice: 2012-2](#) of the Treasury Board Secretariat of Canada.

7.7 Payment

7.7.1 Basis of Payment – Limitation of Expenditure

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Annex B , to a limitation of expenditure of \$ _____. Customs duties are included and Applicable Taxes are extra.

7.7.2 Limitation of Expenditure

1. Canada's total liability to the Contractor under the Contract must not exceed \$ _____. Customs duties are included and Applicable Taxes are extra.
2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - a. when it is 75 percent committed, or
 - b. four (4) months before the contract expiry date, or



- c. as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work, whichever comes first.
3. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

7.7.3 Method of Payment

Monthly Payment

Canada will pay the Contractor on a monthly basis for work performed during the month covered by the invoice in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work performed has been accepted by Canada.

7.7.4 Time Verification

Time charged and the accuracy of the Contractor's time recording system are subject to verification by Canada, before or after payment is made to the Contractor. If verification is done after payment, the Contractor must repay any overpayment, at Canada's request.

7.8 Invoicing Instructions

Invoices shall be submitted using **one of the following methods:**

<p><u>E-mail:</u></p> <p>NRCan.invoice_imaging-service_dimagerie_des_factures.RNCan@canada.ca</p> <p>Note: Attach "PDF" file. No other formats will be accepted</p>	<p>OR</p>	<p><u>Fax:</u></p> <p>Local NCR region: 613-947-0987 Toll-free: 1-877-947-0987</p> <p>Note: Use highest quality settings available.</p>
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Please do not submit invoices using more than one method as this will not expedite payment.

Invoices and all documents relating to a contract must be submitted on the Contractor's own form and shall bear the following reference numbers: Contract number: _____.

Invoicing Instructions to suppliers: <http://www.nrcan.gc.ca/procurement/3485>

7.9 Certifications

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the additional information, or if it is determined that any certification made by



the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

7.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

7.11 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) The Articles of Agreement;
- (b) The supplemental general conditions;
- (c) The general conditions 2035 (2016-04-04), General Conditions - Higher Complexity - Services;
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment;
- (f) The Contractor's bid dated _____.

7.12 Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

7.13 Contract Administration

The parties understand that the Procurement Ombudsman appointed pursuant to Subsection 22.1(1) of the *Department of Public Works and Government Services Act* will review a complaint filed by [*the supplier or the contractor or the name of the entity awarded this contract*] respecting administration of this contract if the requirements of Subsection 22.2(1) of the *Department of Public Works and Government Services Act* and Sections 15 and 16 of the *Procurement Ombudsman Regulations* have been met, and the interpretation and application of the terms and conditions and the scope of the work of this contract are not in dispute. The Office of the Procurement Ombudsman may be contacted by telephone at 1-866-734-5169 or by e-mail at boa.opo@boa.opo.gc.ca.



ANNEX "A" STATEMENT OF WORK

Control System Integration for Pressurized Fluid Bed Combustion Facility Pilot Scale Facility

1.0	Description of Requirement
Natural Resources Canada – CanmetENERGY has a requirement for a system integrator to provide programming and engineering services for an ABB Freelance DCS. The system integration will be in support of the oxygen fired pressurized fluid bed combustion (Oxy-PFBC) facility at Building 4 of the Bells Corners Complex (BCC) in Ottawa, Ontario.	

2.0	Objective
The overall objective for Natural Resources Canada – CanmetENERGY is the construction and operation of a 1MW _{th} nominal Oxy-PFBC pilot facility. The successful contractor will be working with the instrumentation and control technologist to program the ABB Freelance DCS for the pilot plant facility.	

3.0	Specifications
The contractor will provide engineering services to program the OxyPFBC ABB Freelance DCS for the new pilot facility. The scope of work is based on the I/O list and Process and Instrumentation Diagrams.	

4.0	Scope of Work
Part 1 – General	
A. Scope of Work	
<ul style="list-style-type: none">a. Programming and configuration of the DCS system (Engineering and Workstations) is by Owner Representative, herein defined as System Integrator. System Integrator shall perform all specific programming for this project; assist in Pre-Operational Testing, Operational Testing and Commissioning.b. The System Integrator will be actively engaged in Pre-Operational Testing, Operational Testing and Commissioning. These efforts shall be combined efforts of the System Integrator, Electrical Contractor, and Natural Resources Canada.c. The System Integrator shall facilitate commissioning activities for the DCS system such that hardware, software and application programming are tested completely and all applicable test documentation is completed. The Contractor shall assume 120 hours will be required to assist in this task.d. DCS programming is for basic control and operator feedback only. Programming is to include basic manual and stand-alone automatic functionality for PID loop controls, Analog indications, Digital Indications, On/Off motor control, On/Off Solenoid control, VFD Control I/O.e. Programming will not include process interlocks, response to alarm conditions, advanced control structures, or sequenced operations. These will be implemented at a later date based on the final control narrative that is being developed and is not part of this contract for the purpose of this bid.f. The Process and Instrumentation Diagram (P&ID) drawings will be the basis for programming and graphic display development. The combination of this information and this document shall be used to facilitate DCS programming, testing and preparation.	
B. Quality Assurance	
DCS programming and integration performed under this Section shall be by System Integrator who has been regularly engaged in control integration of ABB Freelance DCS systems.	



Part 2 – Products

- A. The DCS software, and all associated drivers and licenses, will be supplied by Natural Resources Canada and installed, loaded, configured by the System Integrator

Part 3 – Execution

- A. The programming, setup, and configuration of DCS Controller and Operations workstations shall be done by the System Integrator.
- B. The System Integrator shall setup and configure all graphic screens, alarm management screens, and trend screens for the DCS system.

Part 4 – Supplemental Information

- A. Graphic Screens
 - a. Graphic screens will be modeled after the P&IDs as provided. If a screen is busy and/or cluttered the screen shall be split into two or more screens for easy use and readability.
 - b. Setup colour convention shall be as shown/noted below:
 - i. Background colours:
 - 1. Window – TBD
 - ii. Switch colours:
 - 1. Off – Grey
 - 2. Auto/On – Green
 - iii. Pump and equipment colours
 - 1. Run – Green
 - 2. Off – Grey
 - 3. Alarm/Fail – Yellow
 - iv. Valve colours
 - 1. Closed/Off – Grey
 - 2. Open – Green
 - 3. Modulating – Purple
 - 4. Alarm/Fail - Yellow
 - c. Display all analog values on the graphics screens.
 - d. All equipment shown on the graphics screens shall look similar to the device supplied in the field. All equipment symbols shall be 2D representations.
 - e. Graphics screens shall display main parameters in the process flow format similar to that shown on the P&IDs.
 - f. Provide alarm summary screen listing all alarms as shown on the PIDs. Flashing alarm indication. Acknowledge button to acknowledge alarms displayed.
 - g. Provide historical alarm and event information screen listing all alarms and events.
 - h. All values shall be displayed with SI engineering units.
 - i. Analog values shall be displayed in ###.# format.
 - j. Display indication of a new alarm regardless of the screen currently being displayed. This could be accomplished with alarm banner.
 - k. Menu screen with jump buttons to all screens.
 - l. Jump button displayed on all screens to go to a menu screen.
 - m. Jump button displayed on all screens to go to the previous and next screen.
 - n. Provide the following graphic screens:
 - i. Overview of plant
 - ii. Process Gas supply - Oxygen
 - iii. Process Gas supply - Nitrogen
 - iv. Process Gas supply - Carbon Dioxide
 - v. Process Gas supply - Natural Gas
 - vi. Combustion Air Supply



- vii. Water Supply
- viii. Solid Fuel Supply
- ix. Solid Sorbent Supply
- x. Bed Material Supply
- xi. PFBC
- xii. Process Gas Treatment
- xiii. Glycol Cooling System
- xiv. Thermal Fluid System
- xv. Emissions Monitoring
- xvi. Alarm page with alarm management.
- xvii. Trending screens for each analog device.

Part 5: Future work (***Option to extend the contract***)

- A. Review and validate Process Control Narrative
- B. DCS programming for advanced control strategies based on Control Narrative including addition of interlocks, sequences, calculations, and additional control programming.

5.0 Deliverables

The following services will be supplied by the successful contractor for this project:

- 1. Project Management**
 - a. Site Visits (3)
- 2. Preliminary Engineering:**
 - a. Validate with Owner existing DCS programming standards – Loops, Analog signals, Motors, Valves, Alarming Strategy
 - b. Validate with Owner existing DCS graphic display standards – Navigation, Color schemes, Alarming, Trending
 - c. Cross reference I/O List
- 3. DCS Programming**
 - a. PID Loops – 1 AI and 1 AO
 - b. Analog Indicators – 1 AI
 - c. Discrete Indication, Switches, Alarms – 1 DI
 - d. Motors – 1 DO, 2 DI
 - e. Solenoids – 1 DO
 - f. VFDs – 1 DO, 3 DI, 1 AO, 1 AI
 - g. Communication Interface to exchange data between ABB Freelance DCS with Koyo DL-06, AB Compact Logix and AB Control Logix PLC.
 - h. Interlocks, Sequences, Totalizers, Calculations are excluded from DCS programming for the purpose of this bid.
- 4. Graphics Development**
 - a. DCS Database
 - b. Navigation, Alarming, Trending
 - c. 16 Graphics screens
 - i. Plant Overview
 - ii. Alarm page with alarm management
 - iii. Process Gas supply - Oxygen
 - iv. Process Gas supply - Nitrogen
 - v. Process Gas supply - Carbon Dioxide
 - vi. Process Gas supply - Natural Gas
 - vii. Combustion Air Supply
 - viii. Water Supply



- ix. Solid Fuel Supply
- x. Solid Sorbent Supply
- xi. Bed Material Supply
- xii. Pressurized Fluidbed Combustor
- xiii. Process Gas Treatment
- xiv. Glycol Cooling System
- xv. Thermal Fluid System
- xvi. Emissions Monitoring

5. Commissioning Support

- a. Maximum 120 hours



ANNEX “B” BASIS OF PAYMENT

Cost details:

1) Engineering services (Deliverable 1 and 2):

A	B	C	D (BxC)
Category of Personnel	Hourly Rate(s)	Estimated number of hours	Total Costs for Professional Fees
1.	\$		\$
2.	\$		\$
3.	\$		\$
4.	\$		\$
Sub-Total 1			\$

2) DCS Programming (Deliverable 3):

A	B	C	D (BxC)
Category of Personnel	Hourly Rate(s)	Estimated number of hours	Total Costs for Professional Fees
1.	\$		\$
2.	\$		\$
3.	\$		\$
4.	\$		\$
Sub-Total 2			\$

3) Graphics Development (Deliverables 4):

A	B	C	D (BxC)
Category of Personnel	Hourly Rate(s)	Estimated number of hours	Total Costs for Professional Fees
1.	\$		\$
2.	\$		\$
3.	\$		\$
4.	\$		\$
Sub-Total 3			\$



4) Commissioning Support (Deliverables 5):

A	B	C	D (BxC)
Category of Personnel	Hourly Rate(s)	Estimated number of hours	Total Costs for Professional Fees
1.	\$		\$
2.	\$		\$
Sub-Total 4			\$

Note: Bidder should assume maximum **120 hours** required to assist in this task. Therefore the total number of hours in column C should not exceed 120.

5) Miscellaneous Expenses (if applicable and requires NRCan pre-authorization):

Item	Description	Total Estimated Miscellaneous Expense Cost
1		\$
2		\$
3		\$
4		\$
Sub-Total 5:		\$

6) Optional work (Part 5 of the SOW)

A	B	C	D (BxC)
Category of Personnel	Hourly Rate(s)	Estimated number of hours (for evaluation purposes only)	Total Costs for Professional Fees
1.	\$	120	\$
2.	\$	120	\$
Sub-Total 6			\$

Bidder Total Estimated Price

Bidder total estimated price to perform the work (Total of Sub-Total 1, 2, 3, 4 and 5 above, as applicable).	\$
Bidder total evaluated price for optional periods (Sub-Total 6 above)	\$
Bidder total evaluated price	\$

Miscellaneous Expenses -The Contractor will be paid for pre-authorized reasonable and proper miscellaneous expenses supported by appropriate receipts at actual cost without allowance thereon for overhead or profit. All miscellaneous expenses must have prior authorization of the Project Authority.