



Date: January 26, 2021

Title: Energy Audit and Microgrid Feasibility Assessment of the Embassy of Canada to Haiti

Solicitation Number: 21-178705

The following supplements and/or supersedes the solicitation document. This addendum forms part of the contract documents and is to be read, interpreted, and coordinated with all other parts. Any change to the cost of the work as a result of this addendum is to be included in the price proposal.

Addendum # 1

1. Request for Proposal, Title Page, A8. Price Proposal

DELETE:

“All the information required in section SR6 must appear on Section “II” - Price Proposal ONLY and be sealed in a separate document marked “Price Proposal”. Failure to comply will result in the entire proposal being declared non-compliant and rejected from further consideration.”

INSERT:

“All the information required in section SR6 must appear on Section “III” - Price Proposal ONLY and be sealed in a separate document marked “Price Proposal”. Failure to comply will result in the entire proposal being declared non-compliant and rejected from further consideration.”

2. Section “II”, Evaluation and Basis of Selection, 6.1

DELETE:

“All the information required in section SR5 must appear on Section “II” - Price Proposal ONLY and be included in a separate document marked “Price Proposal”.”

INSERT:

“All the information required in section SR5 must appear on Section “III” - Price Proposal ONLY and be included in a separate document marked “Price Proposal”.”

3. Section “II”, Evaluation and Basis of Selection, 6.2 Fixed Price

DELETE:

“6.2.1 Proponents shall quote an all inclusive Fixed Price (excluding the cost of The Minister’s services and equipment\ furniture) on the form attached as Section “II” - Price Proposal.”

INSERT:

“6.2.1 Proponents shall quote an all inclusive Fixed Price (excluding the cost of The Minister’s services and equipment\ furniture) on the form attached as Section “III” - Price Proposal.”



4. Annex “A”. Statement of Work, 5.3. (Fixed Price Preliminary Energy-Use Analysis)

DELETE:

“5.3.1 The Preliminary Energy-Use Analysis will include a review of utility billing, including cost and consumption history compiled from utility bills. The utility bills must cover a minimum of 18 months of continuous data. DFATD will provide this to the Consultant.”

INSERT:

“5.3.1 The Preliminary Energy-Use Analysis will include a review of the Embassy’s energy documentation. DFATD will provide this to the Consultant.”

5. Annex “A”. Statement of Work, 6. (Scope of Component C – Microgrid Feasibility)

DELETE:

“6.1 The Consultant will provide a feasibility assessment for the implementation of a permanently reliable and sustainable islanded (grid-independent) with a microgrid (hybrid solar + energy storage + diesel generator) that will have the capacity to power the Chancery compound. The purpose is to reduce the Embassy’s current reliance on diesel generators with a sustainable, long-term solution.”

INSERT:

“6.1 The Consultant will provide a feasibility assessment for the implementation of a permanently reliable and sustainable islanded (grid-independent) solution with a microgrid (hybrid solar + energy storage + diesel generator) that will have the capacity to power both sites (the Chancery compound and Official Residence). The purpose is to reduce the Embassy’s current reliance on diesel generators with a sustainable, long-term solution.”

6. Annex “A”. Statement of Work, 6.5 (Preliminary Technical Design Costs and Configuration)

DELETE:

“6.5.1.3 What additional investments/challenges in utility infrastructure may be required to allow the proposed Microgrid to reconnect to the utility grid?”

INSERT:

“6.5.1.3 The report will identify additional investments/challenges in utility infrastructure that may be required to allow the proposed Microgrid to reconnect to the utility grid.”

7. Annex “A”. Statement of Work, 6.7 (Structural Requirements)

DELETE:

“6.7.1.1 All new structural systems designed and installed shall meet all applicable codes, standards and regulations of the authority having jurisdiction or the National Building Code of Canada 2015 (NBCC 2015), whichever is more stringent.”



INSERT:

“6.7.1.1 All new structural systems designed and installed shall meet all applicable codes, standards and regulations of the authority having jurisdiction or the National Building Code of Canada 2015 (NBCC 2015)¹, whichever is more stringent.”

8. Annex “A”. Statement of Work, 6.7.3 (Deliverables and Drawings)

DELETE:

“6.7.3. Deliverables and Drawings

6.7.3.1 Narrative on all structural considerations for the installation of PV panels (or any other type of equipment).

6.7.3.2 All impacts on other disciplines should be outlined. Geotechnical should also be addressed, in case of a new structure built on the ground.

6.7.3.3 For PV panels (or any other type of equipment) installed on an existing structure: results of assessment of existing structures along with sketches of reinforcing details, as required.

6.7.3.4 For PV panels (or any other type of equipment) installed on a new structure: sketches showing location of new structures and design intent shall be provided.

6.7.3.5 Provide a simplified equipment layout diagram include location of the Distributed Energy Resources (DER).

6.7.3.6 Provide a simplified one-line diagram of the proposed microgrid, including utility interconnection points. Identify new and existing infrastructure that will be part of the microgrid.

6.7.3.7 Provide the distribution System modelling simulation.

6.7.3.8 Transient and steady state stability studies under all scenarios of operation considered.

6.7.3.9 Provide soil resistivity test as per IEEE 81.

6.7.3.10 Provide preliminary grounding required.

6.7.3.11 Provide a full description of the electrical and thermal loads served by the microgrid when operating in islanded and parallel modes: Peak KW, Average KW, annual/monthly/weekly KWh, annual/monthly/weekly BTU (consumed and recovered) and identify the location of the electrical loads on the simplified equipment layout and one-line diagrams.

6.7.3.12 Proposed equipment information (brochures or cut sheets).

6.7.3.13 Provide short circuit calculation, protection coordination and arc flash analysis of all the possible scenarios under which the microgrid will operate.

6.7.3.14 Battery sizing and parasitic losses estimates.

6.7.3.15 Cyber security and Information Technology: Provide description of the IT/Telecommunications Infrastructure (wide area networks, access point, Ethernet switch, cables etc.) and protocols.

6.7.3.16 Identify the IT and telecommunications infrastructure on the simplified equipment layout diagram. Differentiate between new and existing infrastructure.”

INSERT:

“6.8 Deliverables and Drawings

6.8.1 Narrative on all structural considerations for the installation of PV panels (or any other type of equipment).

6.8.2 All impacts on other disciplines should be outlined. Geotechnical should also be addressed, in case of a new structure built on the ground.

¹ Should the project extend past the publication of NBCC 2020, the requirements of NBCC 2020 will apply, particularly its significant updates pertaining to but not limited to seismic, new structural design requirements, earthquake load effects, and new building efficiency standards.



- 6.8.3 For PV panels (or any other type of equipment) installed on an existing structure: results of assessment of existing structures along with sketches of reinforcing details, as required.
- 6.8.4 For PV panels (or any other type of equipment) installed on a new structure: sketches showing location of new structures and design intent shall be provided.
- 6.8.5 Provide a simplified equipment layout diagram include location of the Distributed Energy Resources (DER).
- 6.8.6 Provide a simplified one-line diagram of the proposed microgrid, including utility interconnection points. Identify new and existing infrastructure that will be part of the microgrid.
- 6.8.7 Provide the distribution System modelling simulation.
- 6.8.8 Transient and steady state stability studies under all scenarios of operation considered.
- 6.8.9 Provide soil resistivity test as per IEEE 81.
- 6.8.10 Provide preliminary grounding required.
- 6.8.11 Provide a full description of the electrical and thermal loads served by the microgrid when operating in islanded and parallel modes: Peak KW, Average KW, annual/monthly/weekly KWh, annual/monthly/weekly BTU (consumed and recovered) and identify the location of the electrical loads on the simplified equipment layout and one-line diagrams.
- 6.8.12 Proposed equipment information (brochures or cut sheets).
- 6.8.13 Provide short circuit calculation, protection coordination and arc flash analysis of all the possible scenarios under which the microgrid will operate.
- 6.8.14 Battery sizing and parasitic losses estimates.
- 6.8.15 Cyber security and Information Technology: Provide description of the IT/Telecommunications Infrastructure (wide area networks, access point, Ethernet switch, cables etc.) and protocols.
- 6.8.16 Identify the IT and telecommunications infrastructure on the simplified equipment layout diagram. Differentiate between new and existing infrastructure.”

9. Annex “A”. Statement of Work, 7.4 (Component B – Energy Audit)

DELETE:

“7.4.1 One draft energy audit report per site (see Table 1) will be provided in Word format for review by DFATD staff. The draft reports must include all information and documentation specified in Section 5.”

INSERT:

“7.4.1 Two draft energy audit reports (66% and 99%) per site (see Table 1) will be provided in Word format for review by DFATD staff. The draft reports must include all information and documentation specified in Section 5.”

10. Annex “A”. Statement of Work, 7.5 (Component B – Microgrid)

DELETE:

“7.5.1 One draft microgrid feasibility report per site (see Table 1) will be provided in Word format for review by DFATD staff. The draft reports must include all information and documentation specified in Section 6.”

INSERT:

“7.5.1 Two draft microgrid feasibility reports (66% and 99%) per site (see Table 1) will be provided in Word format for review by DFATD staff. The draft reports must include all information and documentation specified in Section 6.”



11. Annex “A”. Statement of Work, 7.5 (Component C – Microgrid)

DELETE:

“7.5.4 The consultant will give a presentation summarizing findings and recommendations to the project team following the completion of the final reports.

7.5.5 CAD drawings must follow the Computer-Aided Design and Drafting guide issued by Public Services and Procurement Canada available here (<https://www.tpsgc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html>) and DFATD’s layer standard (to be provided by DFATD).”

INSERT:

“7.6 The consultant will give a presentation summarizing findings and recommendations to the project team following the completion of the final reports.

7.7 All drawings produced as part of the deliverables will be provided in both CADD (.dwg) and PDF formats. CADD drawings must follow the Computer-Aided Design and Drafting guide issued by Public Services and Procurement Canada available here (<https://www.tpsgc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html>) and DFATD’s layer standard (to be provided by DFATD).”

12. Annex “A”. Statement of Work, 8. (Anticipated Schedule)

DELETE:

“8.4 The successful bidder will be required to do a site visit at a time coordinated with Embassy staff. Consultants may request an additional site visit to further verify site conditions, but the visit must be coordinated to ensure minimal disruptions. Security escorts are required at all times to accompany consultants conducting inspections. These will be provided by the Embassy but must be coordinated in advance within a five business day notice. All other costs related to the contract shall be the responsibility of the proponent.”

INSERT:

“8.4 The Consultant will be required to do a site visit at a time coordinated with Embassy staff. Consultants may request an additional site visit to further verify site conditions, but the visit must be coordinated to ensure minimal disruptions. Security escorts are required at all times to accompany consultants conducting inspections. These will be provided by the Embassy but must be coordinated in advance with at least five business days’ notice. All other costs related to the contract shall be the responsibility of the Consultant.”

13. Annex “A”. Statement of Work, 8. (Anticipated Schedule)

DELETE:

“8.6 The 66% draft reports must be provided to DFATD within one forty-five days of the last day of site visits (deadline to be identified by DFATD). DFATD reserves the right to request a telephone or videoconference to review the draft report with the consultant/contractor.”

INSERT:

“8.6 The 66% draft reports must be provided to DFATD within forty-five days of the last day of site visits (deadline to be identified by DFATD). DFATD reserves the right to request a teleconference or videoconference to review the draft report with the consultant/contractor.”



14. Annex “A”. Statement of Work, 8. (Anticipated Schedule)

DELETE:

“8.9 All invoices must be submitted to GAC by the contract end date (date to be identified by DFATD).”

INSERT:

“8.9 All invoices must be submitted to DFATD by the contract end date (date to be identified by DFATD).”

15. Annex “A”. Statement of Work, 11. (Notes on Site Visit/Travel)

DELETE:

“11.1 The consultant is responsible for their own safety during travel to, in, and from Haiti.

11.2 All travel and living costs for the Contractor’s resources required to travel must be in accordance with the National Joint Council Travel Directive: <https://www.njc-cnm.gc.ca/directive/d10/v238/en>.

11.3 All travel and transportation costs of the Contractor and his associates and/or subcontractors in the performance of the Work are considered part of the Contract fee (as per Section “III” – Price Proposal) and are the sole responsibility of the Contractor.”

INSERT:

“11.1 The Consultant and any subcontractor(s)/partner(s) are responsible for their own safety during travel to, in, and from Haiti.

11.2 All travel and living costs for the Consultant’s resources required to travel must be in accordance with the National Joint Council Travel Directive: <https://www.njc-cnm.gc.ca/directive/d10/v238/en>.

11.3 All travel and transportation costs of the Consultant and their associates and/or subcontractors in the performance of the Work are considered part of the Contract fee (as per Section “III” – Price Proposal) and are the sole responsibility of the Consultant.”

The following Questions & Answers is in link with the solicitation document mentioned above.

Questions & Answers # 1

Q1. “Does this consulting work require any particular certification and licensing? (Referring to section 4.3). We are NZ based consultancy firm having diverse experience in renewable energy and energy efficiency, currently working on 11 Caribbean islands including Haiti, for the Microgrid projects. However, we do not fulfill North America certification and licensing. Please advise.”

A1. North American (United States and/or Canada) certifications (qualifications/licenses/credentials) are required because the consultant must be familiar of the Canadian building code and electrical code to meet the minimum requirements of the *Canadian Labour Code*.

For example, the Canadian Standards Association (CSA) Z462: Workplace Electrical Safety Standard is based on and was developed in parallel with the U.S. National Fire Protection Association (NFPA) standard NFPA 70E: Standard for Electrical Safety in the Workplace. A consultant with a valid licence from either the United States and/or Canada will meet this minimum requirement because our codes are very similar.



In addition, sections 7.4.3 and 7.5.3 on page 40 of the Request for Proposal (RFP) states that: “The final reports must be stamped by a Professional Engineer.”; therefore, there must be at least one professional engineer in the group.

- Q2.** “If a company provides a proposal and is the winning vendor for this RFP does this prevent them from being able to quote or provide the actual solution (equipment) for the project?” **and** “Regarding solicitation number 21-178705 for the energy audit and microgrid feasibility study we had a question – does providing the audit and feasibility study prevent that company from bidding on the project, assuming that the study leads to a bid to implement the findings of the audit/study?”
- A2.** The winning bidder for this process (21-178705) will not be prevented from bidding on any future contracts related to this project; however, participation in this process is not a guarantee of work for the next step nor will it provide any bidders with an advantage in any future processes.
- Q3.** “For the Corporate Experience mandatory requirement [Section “II” Evaluation and Basis of Selection], if a bidder is a joint venture between two companies who each have six years of experience, will this meet the minimum of ten years of experience requirement?”
- A3.** Yes, if it is a joint venture or a consortium but not if one of the companies is a subcontractor.
- Q4.** “Is any information available about the utility bills and diesel usage/costs for the two sites?”
- A4.** Information on fuel consumption is available but there are no traditional utility bills given that the sites are 100% relying on generators. This information will not be shared with Proponents as it is not required in order to submit a proposal. Should the winning bidder have questions or require access to this information after contract award, they may request information from the Departmental Representative at that time.
- Q5.** “Is it the responsibility of the Contractor to update the as-built drawings based on what is found during the site visit?”
- A5.** The Contractor will not have to update DFATD’s existing drawings but the drawings submitted by the Contractor, as per the deliverables in the Statement of Work, must reflect current installations. To further clarify item 6.4.1 of the Statement of Work, the existing drawings for electrical will not reflect more recent additions to the electrical system and will require verification by the Consultant, but existing structural drawings should be mostly up-to-date (but verification is still recommended where applicable).
- Q6.** “How granular is the diesel data that is available?”
- A6.** The data held by DFATD is broken down monthly.



Q7. “The Official Residence is not pictured on the site plan, is it right next to the Embassy?”

A7. No, the Official Residence is not located next to the Embassy. We have not provided a site plan for the Official Residence. The address is provided in the Statement of Work, in Table 1: List of properties to be assessed.

All other conditions and requirements remain unchanged.