STATE OF MARYLAND

PUBLIC SERVICE COMMISSION

January 18, 2022

PSC# 01.05.22 — Geothermal RFP for HB 1007-2021 Implementation

To Whom It May Concern:

The Public Service Commission of Maryland ("Commission") issuing this Request for Proposals (RFP) in order to hire a qualified consultant to help us implement new geothermal Renewable Energy Credit (REC) requirements for commercial systems that must be in place by Jan 1, 2023 per HB 1007-2021.

During the 2021 Session of the Maryland General Assembly, House Bill 1007 (HB1007) concerning renewable energy portfolio standard and geothermal hearing and cooling systems was introduced. On May 18, 2021, Governor Hogan approved and signed HB1007, which among other things, alters the renewable energy portfolio standard for post-2022 to require a certain percentage of energy from Tier 1 renewable sources each year to be derived from certain geothermal heating and cooling (GHC) systems; requires a certain percentage of energy required to be derived from certain GHC systems to be from systems installed on certain property; and clarifies that energy from certain geothermal heating and cooling systems is eligible for inclusion in meeting the renewable energy portfolio standard. HB1007 also requires the Maryland Public Service Commission (MDPSC) to determine the methods for calculating energy savings to determine the annual amount of renewable energy credits (RECs) awarded for the geothermal heating and cooling system as described below:

§ 7–704

(3) To determine the energy savings of a geothermal heating and cooling system for a residence, the Commission shall:

(i) identify available energy consumption calculators developed by the geothermal heating and cooling industry;

(ii) collect the following data provided in the renewable energy credit application that:

1. describes the name of the applicant and the address at which the geothermal heating and cooling system is installed; and

2. provides the annual BTU energy savings attributable to home heating, cooling, and water heating; and

(iii) in determining the annual amount of renewable energy credits awarded for the geothermal heating and cooling system, convert the annual BTUs into annual megawatt hours.

(4) To determine the energy savings of a nonresidential geothermal heating and cooling system, the Commission shall:

(i) use the geothermal heating and cooling engineering technical system designs provided with the renewable energy credit application; and

(ii) in determining the annual amount of renewable energy credits awarded for the geothermal heating and cooling system, convert the annual BTUs into annual megawatt hours.

While on-line calculators are available to calculate energy savings to determine residential geothermal RECs, these calculators cannot be used for non-residential systems. The Commission intends to establish an application process for non- residential GHC systems no later than January 1, 2023; thus, **the final approved report required by this solicitation is due to the Commission within twenty weeks of the Contract commencement date.** The final report is not complete until the Contract Manager approves it in writing.

To support a robust review of this request, the Commission is seeking an experienced consultant in geothermal field that has the expertise in design, installation oversight and commissioning for a wide range of GHC systems and the ability to provide engineering analysis in the context of existing Maryland regulations. *NOTE: The legislation concerning renewable energy portfolio standard and GHC systems is specified in HB1007 Chapter 164, which is available online at https://mgaleg.maryland.gov/2021RS/Chapters_noln/CH_164_hb1007e.pdf.*

As part of the determination to be considered reasonably susceptible of being selected for award, the Offeror must document in its Proposal that, within the last five (5) years, the following Minimum Qualifications have been met:

A. Conducting surveys, studies and analyses related to GHC system for buildings;

B. GHC design, installation oversight and commissioning for a wide range of geothermal heat exchangers including open loop, closed loops, hybrid loops for load balancing and heat exchangers;

C. load profile calculations, thermal conductivity testing and analysis, heat flow balancing calculation and energy saving calculation; and

D. Presenting before a regulatory or governmental oversight body and/or filing written subject matter testimony or reporting to such authorities.

Required Documentation: As proof of meeting this requirement, the Offeror shall provide with its Proposal three (3) references that collectively attest that the prospective consultant has met these requirements within the last three (3) years. For each reference, the prospective consultant must provide:

1. Client name and contact information (phone number, email address),
2. Project name (time frame of project, results achieved),
3. Description of the project (explain how the project meets the listed requirements).

Offerors shall submit Proposals in two separate volumes (or envelopes) entitled:

- Volume I – Technical Proposal for PSC# 01.05.22 Geothermal RFP for HB 1007-2021 Implementation
- Volume II – Financial Proposal for PSC# 01.05.22 Geothermal RFP for HB 1007-2021 Implementation

It is preferred that the name, email address and telephone number of the Offeror be included on the outside of the package for each volume. Each Volume shall contain an unbound original, so identified, two (2) bound copies and an electronic version (CD/DVD/USB). The Commission's preference is for the one (1) sealed Volumes to be submitted together in a single package including a label bearing:

- The RFP title and number,
- Name and address of the Offeror, and
- Closing date and time for the receipt of the Proposal

Volume I - Technical Proposal shall include a concise description of the Offeror's Proposal to meet the requirements of the Scope of Work as described below. Offerors may be required to make oral presentations to State representatives. Offerors must confirm in writing any substantive oral clarification of, or change in, their Proposals made in the course of discussions. Any such written clarifications or changes then become part of the Offeror's Proposal and are binding if the Contract is awarded. The Procurement Officer will notify Offerors of the time and place of oral presentations if required.

Scope of Work Requirements

The Consultant shall:

A. Perform an analysis and prepare a comprehensive written report that covers the following tasks within twenty (20) weeks of the Contract award date. The comprehensive written report must demonstrate completion, in accordance with Task E, of the analysis related to Tasks A(1) – A(3) below.

1. Develop a spreadsheet method to calculate the energy consumption for non-residential GHC systems. Information about the annual energy savings will permit direct quantification of the efficiency of the systems and determine the amount of renewable energy credits (RECs) to be awarded, converted from BTUs to kilowatt-hours while considering system capacity, usage factors and any other relevant factors.

2. Design a standard template(s) for collecting relevant data from different GHC systems (e.g. open loop, closed loops, hybrid loops) to estimate the energy savings and RECs to be generated by the systems. A standardized template(s) shall be used to obtain information

required from the applicants pursuant to Maryland Public Utilities Article §7-704 and calculation methodology to determine the amount of RECs to be awarded.

3. Assist the Commission's Information Technology (IT) group, as necessary in developing a web portal for non-residential GHC systems. The web portal shall incorporate the calculation methodology and standard template(s) developed by the Consultant. The web portal shall enable the applicants to register their non-residential GHC systems with the MDPSC and maintain all data and application processes associated with GHC certification.

B. Develop a training plan for the Commission's Staff that includes at least one (1) in-person training session and one (1) video recorded training designed by the Consultant prior to January 1, 2023. The training plan must provide training materials and technical support to ensure that the Commission's Staff demonstrates mastery of the content related to the application processes described in Tasks A(1) – A(3).

C. Review the application processes described in Tasks A(1) - A(3) for a period up to one year after the January 1, 2023 rollout to help answer questions that may arise as Commission Staff becomes familiar with the process and also upon request to help assess the usability and functionality of the web portal and systems and processes associated with data collection and calculation method. The Consultant shall engage with the Commission's IT group to resolve any potential corrective issues as necessary. Customers may have privacy concerns about providing some of the information required for this task. The Consultant must be willing to sign a non-disclosure agreement (NDA) for access to confidential GHG customer data.

D. Participate in any rulemaking proceeding that may be required to codify the GHC application requirements in the Maryland regulation that shall occur no later than December 31, 2023.

E. Submit a Final Report including a written analysis, and may be accompanied by spreadsheets, tables, charts, and other appendices as necessary. A draft of the Final Report must be submitted to the Contract Manager for review and written approval within three months of the Notice to Proceed Letter. Any required revisions must be submitted to the Contract Manager within 5 business days of requested revision. After approval of the draft and any revisions by the Contract Manager, the Final Report must be submitted to the Contract Manager within 5 Business Days of the Contract Manager's approval and will be considered complete upon receipt of written approval from the Contract Manager.

Vendors not responding to this solicitation are requested to submit the "Notice to Vendors" form, which includes company information and the reason for not responding (e.g., too busy, cannot meet mandatory requirements, etc.).

Proposals should be prepared simply and economically and provide a straightforward and concise description of the Offeror's Proposal to meet the requirements of this RFP. The State will not be responsible for any costs incurred by any Offeror in preparing and submitting a Proposal, in making an oral

presentation, providing a demonstration, or performing any other activities related to submitting a Proposal in response to this solicitation.

Forms to be completed and submitted with the Technical Proposal – Volume I – package #1

- Bid/Proposal Affidavit
- Conflict of Interest Affidavit

Volume II - Financial Proposal shall include a financial proposal price that is fully loaded including all costs/expenses associated with the provision of services as required. The cost proposal price shall include, but is not limited to, all: labor, profit/overhead, general operating, administrative, and all other expenses and costs necessary to perform the work. Travel expenses will not be reimbursed under this RFP. Provide no pricing information in the Technical Proposal.

All questions, including concerns regarding any applicable MBE or VSBE participation goals, shall identify in the subject line the Solicitation Number and Title PSC# 01.05.22 — Geothermal RFP for HB 1007-2021 Implementation RFP, and shall be submitted in writing via e-mail to the Procurement Officer at least three (3) days before the Proposal due date. The Procurement Officer, based on the availability of time to research and communicate an answer, shall decide whether an answer can be given before the Proposal due date.

Answers to all questions that are not specific only to the requestor will be distributed via the same mechanism as for RFP amendments and posted on eMMA and the Commission website under Procurement and Contracts. The statements and interpretations contained in responses to any questions, whether responded to verbally or in writing, are not binding on the Commission unless it issues an amendment in writing.

If the RFP is revised before the due date for Proposals, the Commission shall post any addenda to the RFP on eMMA and shall endeavor to provide such addenda to all prospective Offerors that were sent this RFP or are otherwise known by the Procurement Officer to have obtained this RFP. It remains the responsibility of all prospective Offerors to check eMMA for any addenda issued before the submission of Proposals.

Acknowledgment of the receipt of all addenda to this RFP issued before the Proposal due date shall be included in the Transmittal Letter accompanying the Offeror's Technical Proposal. Addenda made after the due date for Proposals will be sent only to those Offerors that remain under award consideration as of the issuance date of the addenda.

Acknowledgment of the receipt of addenda to the RFP issued after the Proposal due date shall be in the manner specified in the addendum notice. Failure to acknowledge receipt of an addendum does not relieve the Offeror from complying with the terms, additions, deletions, or corrections set forth in the addendum, and may cause the Proposal to be deemed not reasonably susceptible of being selected for award.

It is the State's intention to obtain goods and services, as specified in this RFP, from a Contract between the selected Offeror and the State. The anticipated duration of services to be provided under this Contract is for a period of two (2) years, with no option to renew. The Contract resulting from this solicitation is a small procurement, Category III (not to exceed $50,000.00) in accordance with COMAR 21.05.07 and shall be a fixed price contract in accordance with COMAR 21.06.03.02 for the selected services. The Commission intends to make a single award as a result of this RFP. An Offeror, either directly or through its subcontractor(s), must be able to provide all goods and services and meet all of the requirements requested in this solicitation and the successful Offeror (the Contractor) shall remain responsible for Contract performance regardless of subcontractor participation in the work.

In order to receive a contract award, a vendor must be registered on eMMA. Registration is free. Go to emma.maryland.gov, click on "New Vendor? Register Now" to begin the process, and then follow the prompts.

The Commission must receive your proposal by 4:00 p.m. Local Time on February 25, 2022. Please send your proposal to:

Maryland Public Service Commission,
Attn: Devan B. Perry, Procurement Officer
6 St. Paul Street, 16th Floor
Baltimore, MD 21202

If you are unable to submit a proposal, please respond with that information to be removed from this solicitation mailing list.

Minority Business Enterprises Are Encouraged to Respond to this Solicitation.

Thank you and the Commission looks forward to receiving your proposals,

Devan B. Perry

Devan B. Perry,
Procurement Officer
410-767-8009
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