Geothermal Resource & Technology Feasibility Study

REQUEST FOR QUALIFICATIONS

Issued by:

Wyoming Energy Authority
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Additional copies of this solicitation are available from the Wyoming Energy Authority website at https://www.wyoenergy.org/news/

This program is subject to the Civil Rights Act of 1964, the Wyoming Fair Employment Practices Act (Wyo. Stat. Ann. §§ 27-9-101 - 106), the Americans with Disabilities Act, 42 U.S.C. § 12101 - 12213, and the Age Discrimination Act of 1975, 42 U.S.C. § 6101 - 6107, and any rules or regulations promulgated under these state and federal anti-discrimination statutes. Funding recipients shall not discriminate against any individual on the grounds of age, sex, sexual orientation, creed, color, race, religion, national origin, ancestry, pregnancy, or disability in connection with funding under this Request for Proposals.

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1. INTRODUCTION

The mission of the Wyoming Energy Authority (WEA) is to advance Wyoming's energy strategy by driving data, technology, and infrastructure investments. The WEA is issuing a request for qualifications (RFQ) from service providers, consultants, and other interested entities who can provide a feasibility study for geothermal opportunities characterized by geothermal utilization technology and its effectiveness in certain Wyoming regions.

2. SPECIFICATIONS AND SCOPE OF WORK

A. Purpose

The purpose of this solicitation is to secure services from qualified organizations that can perform a comprehensive feasibility study on geothermal opportunities in Wyoming. This solicitation provides for the submission of documents and information intended to verify that the vendor meets or exceeds the minimum criteria set forth herein.

B. Scope of Work

The required services include:

1. Description of available geothermal utilization technologies
   a. Determine the location and quality of geothermal resources in Wyoming.
   b. Develop a list of available geothermal utilization technologies with a detailed description of technology type and its attributes, an explanation on how it can be used (electricity production, direct use, heating and cooling), and the scale of use (residential, commercial, industrial, utility, etc.).
   c. Define, analyze, and explain the practicality of Dry Steam, Flash Steam, and Binary Cycle power plants in Wyoming.
   d. Evaluate the effectiveness of heat pumps, direct heating systems, enhanced geothermal systems, deep direct-use technologies, and low-temperature and co-produced geothermal technologies in Wyoming.
   e. Determine the expected electricity output or energy savings equivalent for each geothermal utilization technology. Define the expected useful life for each geothermal utilization technology.
   f. If appropriate, explain the feasibility of geopressed, hot dry rock, and magma geothermal utilization technologies in addition to hydrothermal.

2. Geothermal utilization technology assessment by Wyoming region
   a. Provide a regional analysis, and a city-level analysis when possible, on geothermal production potential for each available geothermal utilization technology. Geothermal production potential should include factors such as geology, geography, altitude of installation site, and the effects of typical Wyoming weather patterns.

3. Financial analysis by geothermal energy type
   a. Determine the average payback period of each geothermal utilization technology in terms of energy cost savings.
   b. For utility-scale geothermal power plants, calculate the cost per kilowatt-hour using the expected useful life of the power plant. Provide a total cost breakdown by fixed capital cost, variable maintenance cost, and other costs relating to the construction of geothermal power plants.

4. Environmental effects
   a. Determine by geothermal energy type the effect on carbon and methane emissions reductions. Emissions reductions can be determined as a direct energy offset for residential or commercial buildings, as an electricity generation replacement for other generation facilities in Wyoming, or another way that is scientifically appropriate.
b. Provide an explanation of the environmental effects of geothermal energy; including potential seismic activity, effects on groundwater, production of foul odors, effects on soil subsidence, and any changes in land use. When appropriate, quantify and explain any additional costs associated with environmental controls and mitigation for geothermal resources and utilization technologies.

5. Barriers to entry
   a. Research, identify, and explain the legal and regulatory frameworks enabling or restricting utility-scale development of geothermal energy generation in Wyoming.
   b. Research, identify, and explain any legal barriers to geothermal installation for residential, commercial, and industrial purposes.
   c. If prudent, survey public interest in geothermal energy by city, county, or region.

3. PROJECT PERIOD

The final draft of the feasibility study is expected to be completed within four months of the project start date. This is subject to change as the project progresses.

4. APPLICANT ELIGIBILITY

Participation in this program is open to companies, organizations, and individuals that can undertake such an engagement.

5. 5. RFQ Q&A (QUESTIONS AND ANSWERS)

If you have questions regarding this solicitation or if you need more information, please email: Kaeci Daniels, SEP Program Coordinator, at kaeci.daniels2@wyo.gov with “Geothermal RFQ Query” in the subject line.

6. SCREENING AND EVALUATION PROCESS

A. Screening

The Wyoming Energy Authority will screen all submissions prior to official review to ensure completeness and compliance with the requirements of this solicitation. Those submissions that do not comply, or are otherwise deemed to be non-responsive, will be returned to the Applicant with an explanation of the submission’s deficiencies. All accepted submissions will be reviewed by the agency. Applicants may be contacted directly if the WEA requires clarification or more information.

B. Evaluation Criteria

Submissions will be evaluated according to the criteria described below:

- Applicant’s qualifications, experience, demonstrated capabilities, understanding of requirements, and references.
- The suitability of the proposal to fulfill the requirements.
- Flexibility and willingness to accommodate the various deadlines and requirements from various project demands.
- Ability to complete the feasibility study within four months from the project start date.
- Cost for services including a not-to-exceed monthly maximum, and any other related fees.
- Responsiveness – The degree to which the applicant has responded to the purpose and scope of the specifications, the flexibility to meet the agency’s needs, conformance in all material respects to this request for qualifications, etc.
- Responsibility – The applicant has the capability to perform fully the contract requirements, and the moral and business integrity and reliability which will assure good faith performance
as required.

- Compliance - Compliance with all state and federal entities that govern business operations; including, but not limited to, maintaining sufficient general liability insurance, possessing good standing with the respective Secretary of State, and having no indictments or convictions resulting in suspension and debarment for federal funding.

The Wyoming Energy Authority will rank the submissions according to the guidelines. The Wyoming Energy Authority reserves the right, without limitation or qualification, to consider any other criteria or factors that the agency deems relevant to provide the best services. **NOTE: Decisions of the Wyoming Energy Authority are final and are not subject to appeal.**

C. Applicant Notification

All Applicants will be notified by email regarding the outcome of the evaluation process and final project selections by the dates indicated in Section 7 “Dates.”

7. DATES

All dates and times are Mountain Time and are subject to change at the sole discretion of the Wyoming Energy Authority. Proposals received after the time and date specified will not be considered.

Issue Date: December 15, 2021
Closing Date: 5:00 p.m. January 21, 2022
Final Project Selection: No later than February 4, 2022

8. RIGHTS AND DISCLAIMERS

The Wyoming Energy Authority reserves the right, without limitation or qualification and at its sole discretion, to terminate this solicitation process at any time. The Wyoming Energy Authority reserves the right, without limitation or qualification, to reject any submission at any part of this solicitation process. All decisions made by the Wyoming Energy Authority are not subject to appeal.

9. SUBMITTAL INFORMATION

All costs incurred in the preparation and presentations of the submission, are the applicant’s sole responsibility. All documentation submitted with the submission will become the property of the Wyoming Energy Authority.

**Submission method:** Upload submissions via email to kaeci.daniels2@wyo.gov. The subject line of the email should read “Geothermal RFQ Proposal - [Company Name]”. A confirmation email acknowledging receipt of the proposal will be sent within the next business day of submission. The submission time and date will be based on the timestamp of the proposal submission email.

**Confidentiality:** The proposer shall clearly identify all information that is considered confidential (Wyoming Public Records Act, W.S. 16-4-201 through 16-4-205). Identify each confidential page with “CONFIDENTIAL” in capital, bold letters centered at the bottom of each page, and preface each line that is confidential with an asterisk (*). Information not clearly marked may be considered public. Proposal information is restricted and not publicly available until after award.

**Submissions must include:**

- Signature Page, signed by the proper official
● Description of organization and statement of qualifications - this statement must also include:
  ○ Company profile to include specific experience (background, qualifications, etc.)
  ○ Any associated organizations that would be involved in providing services
  ○ Resumes of key personnel
  ○ One or more examples of closely related feasibility studies that demonstrate the applicant’s ability to perform the requested work.
  ○ Two to five references from past consulting work.
● Total cost estimate to complete the Scope of Work. Cost breakdown of all materials and services for the anticipated four months of the project; including staff name, respective hourly rate, and estimated working hours.
● A proposed project timeline that project deliverables such as the kick-off meeting, stakeholder meetings, draft report date, and final report date.
● Commitment that demonstrates flexibility and willingness to accommodate the varying demands and timelines that arise from complex projects.

Optional items may be included, but are not required:

● An option for alternative services that the submitter believes will enhance the ability for the Wyoming Energy Authority or other state agencies and partners to secure additional outside funding
● Additional information your company wishes to share. This is limited to a maximum of 1 additional page.
SIGNATURE PAGE

The undersigned agrees to provide a statement of qualifications to provide a geothermal resource and technology assessment by location.

By submission, the proposer certifies:

- Prices in this submission have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be by the submitter to induce any other person or firm to submit a proposal for the purpose of restricting competition.
- The person signing this submission certifies that he/she is authorized to represent the company and is legally responsible for the decision as to the price and supporting documentation provided as a result of this solicitation.
- Applicant will comply with all Federal regulations, policies, guidelines and requirements, as applicable.
- Prices in this proposal have not been knowingly disclosed by the submitter and will not be prior to award to any other submitter.
- Direct purchases of material by the State of Wyoming are exempt from Wyoming Sales or Use Tax. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- Terms: Net 45; (Wyoming Statute § 16-6-602)
- The undersigned certifies and agrees that this request for qualifications is submitted in accordance with all applicable Wyoming laws.
- By signing below, the submitter certifies that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency in accordance with 2 CFR Part 180.
Verification

I certify under penalty of perjury, that I am a responsible official (as identified above) for the business entity described above as applicant, that I have personally examined and am familiar with the information submitted in this disclosure and any attachments, and that the information is true, accurate, and complete.