The University of Northern Iowa (UNI) is seeking qualification statements from design firms for a master plan focused primarily on the institution’s Power Plant in Cedar Falls, IA.

The focus of the study will be on the steam and electrical generation and associated equipment in the Power Plant:

**Phase I- Existing Equipment Assessment**
Perform a review of the condition of the existing equipment and determine the predicted remaining useful life.

**Phase II- Equipment Replacement Plan**
Propose a plan to replace existing equipment including phasing and cost estimates/life cycle costs.

This solicitation for qualifications is open to all qualified firms eligible to do business in the State of Iowa.

**Project Outline**
The focus of the project will be the Power Plant building, incoming electrical service equipment, steam generating equipment, electrical generating equipment and the balance of plant equipment.

A. Power plant building

   The power plant building was constructed in phases as the boilers and turbine were constructed. See equipment information for the building section ages.

B. Steam generating equipment

   Boilers #1&2 were installed in 1969. Each boiler is an Erie City packaged boiler capable of producing 125 PSIG steam at the rate of 60,000 lbs/hr. They are capable of burning natural gas and #2 fuel oil.

   Boiler #3 was installed in 1979 and is a Babcock and Wilcox pulverized coal boiler. This boiler is capable of producing 600 PSIG steam at the rate of 120,000 lbs/hr. Boiler #3 is capable of burning natural gas, coal and #2 fuel oil.

   Boiler #4 was installed in 1989 and is a PyroPower circulating fluidized bed boiler. It is capable of producing 600 PSIG steam at a rate of 105,000 lbs/hr. Boiler #4 burns a mixture of petroleum coke and coal.
C. Electrical generation and incoming power feed

The turbine generator was installed in 1982 and is an Elliot extraction turbine capable of producing 7.5 MW of electricity at 12.5 kV. Steam supply is 600 PSIG and extraction pressure is 125 PSIG.

The main service electrical transformer that connects the campus to Cedar Falls Utilities was installed in 1978 and is a General Electric, 69kV to 12.5 kV, 10,000 KVA transformer.

Scope of Services

Services to be provided by the selected firm are expected to include:

Existing equipment evaluation
- Perform a condition assessment of the existing boilers, turbine generator and the balance of plant equipment.
- Review maintenance records and equipment repairs and replacements data.
- Provide an opinion of the expected life of the existing boilers, turbine generator and the balance of plant equipment.

Steam and Electrical generation equipment replacement
- Review current historical load profiles.
- Recommend 2-3 system replacement options with the main fuel being natural gas.
- Recommend 1-2 regionally available renewable fuels that can be burned in the new systems or separate equipment. Provide financial analysis and greenhouse reduction information for each alternative fuel.
- Provide estimate and life cycle cost analysis for each system type.
- Comment on the permitting requirements for each system and alternate fuel type.
- Comment on natural gas procurement options.

Primary incoming electrical service equipment
- Perform a condition assessment.
- Review maintenance/oil samples/repair records.
- Provide an opinion of the expected life of the existing electrical service equipment and replacement cost estimate.

Final Report
- Develop a report summarizing findings and recommendations based on analysis and implementation of desired-outcomes and preferred option(s).
- Provide a phasing plan of preferred option(s).
Selection Process and Schedule
The university will select a firm to complete the proposed scope of services by way of the following evaluation process:

1. A statement of qualifications from design firms (prime consultant) -
2. The selection process will include interviews of selected finalists by a committee consisting of UNI Facilities Management personnel. UNI anticipates interviewing no more than four selected firms.
3. No site tour for respondents or finalists will be scheduled.
4. Finalists may be asked to provide additional information in advance of their interviews.

Preliminary Selection Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFQ Issued</td>
<td>Friday October 22, 2021</td>
</tr>
<tr>
<td>Written Questions Due</td>
<td>Friday November 5, 2021</td>
</tr>
<tr>
<td>Written Responses Posted</td>
<td>Wednesday November 10, 2021</td>
</tr>
<tr>
<td>RFQ Responses Due</td>
<td>Friday November 19, 2021</td>
</tr>
<tr>
<td>Finalists Notified</td>
<td>Friday December 3, 2021</td>
</tr>
<tr>
<td>Online Interviews for Selected Firms</td>
<td>Week of December 13, 2021</td>
</tr>
</tbody>
</table>

The selected firm is expected to be available to begin work immediately upon selection.

Submission Requirements
Responses should contain the following:
- Cover letter
- Qualifications and projects in support of why your firm is best qualified to assist with this effort
- Proposed team members, with resumes of project leads, and identification of point of contact. Please identify any Iowa-licensed team members.

Proposal responses will be evaluated based on evidence of relevant completed work in the last 10 years in the following areas:
1. Firm experience with university power/heating plant design and analysis.
2. Overall relevant experience of the proposed team members with similar facilities.

Please limit your submission to ten (10) pages or less of written material. Electronic submissions in PDF format are due by 3:00 pm on the date indicated above.

Additional Consultants
This initial selection process is focused on the prime design consultant team. The selected firm will be asked to submit any additional sub-consultants for UNI review.

Questions
Any questions regarding this solicitation should be submitted in writing by the date noted above. Any clarifications or additional information, if needed, will be posted on the UNI website.

Communication
Firms are asked not to contact any UNI personnel regarding this solicitation or the associated selection process.
All questions, correspondence, responses, etc. associated with this Request for Qualifications should be forwarded to the attention of:

John Streicher  
Associate Director Engineering & Utilities  
University of Northern Iowa  
John.streicher@uni.edu

- End of Request for Qualifications -