REQUEST FOR QUALIFICATIONS

The University of Iowa (University) intends to retain professional engineering services for Energy Management retro-commissioning studies listed below. As described in this document, the University is defining a retro-commissioning study as a hybrid study consisting of (1) identification of low-cost/no-cost energy saving measures with estimated costs and savings, (2) identification of capital energy projects with estimated costs and savings, and (3) identification of maintenance-driven projects that may not save energy directly but would be needed to facilitate the energy savings projects, with estimated costs (and savings if any). Interested and qualified firms are invited to submit an electronic Statement of Qualifications. The University may retain the firm(s) selected to conduct the studies to provide detailed design and construction administration services for follow-up implementation projects of favorable Energy Conservation Measures (ECMs) and Facility Improvement Measures (FIMs) developed during the retro-commissioning studies.

The selection will be qualifications-based, design proposals or design fee proposals are not desired at this time. Further, the University may award all studies to a candidate firm or choose to distribute the projects to more than one firm.

Energy Management Retro-commissioning Studies
Various University Project Numbers

Studies Description

The University’s Facilities Management – Utilities and Energy Management group are tasked with reducing campus energy consumption in accordance with the University of Iowa’s Sustainability Target (Vision 2020) Goal 1 – Achieve Net Negative Energy. Existing building energy consumption has to be reduced to achieve this goal. Retro-commissioning studies will develop building specific ECMs and FIMs. The University will evaluate these strategies and potentially create future capital projects.

The following Retro-commissioning studies have been identified and need to be completed by Friday, March 28, 2014:

- **0498301 Medical Laboratories – Retro-commissioning Study.**
  This facility, built in 1927, is 228,171 square feet and is located at 25 South Grand Avenue, Iowa City, Iowa 52246. Energy consumption summary for 2010 and 2011 is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity (KWh)</th>
<th>Steam (MMBtu)</th>
<th>Chilled Water (MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>6,987,867</td>
<td>52,385</td>
<td>38,504</td>
</tr>
<tr>
<td>2012</td>
<td>6,648,790</td>
<td>57,970</td>
<td>33,672</td>
</tr>
</tbody>
</table>

- **0498401 Medical Education Building – Retro-commissioning Study.**
  This facility, built in 1919, is 105,099 square feet and is located at 500 Newton Road, Iowa City, Iowa 52246. Energy consumption summary for 2010 and 2011 is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity (KWh)</th>
<th>Steam (MMBtu)</th>
<th>Chilled Water (MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1,238,102</td>
<td>11,928</td>
<td>5,970</td>
</tr>
<tr>
<td>2012</td>
<td>1,177,629</td>
<td>10,945</td>
<td>5,170</td>
</tr>
</tbody>
</table>
0498501 Biology Building East – Retro-commissioning Study.

This facility, built in 2000, is 62,347 square feet and is located at 210 East Iowa Avenue, Iowa City, Iowa 52246. Energy consumption summary for 2010 and 2011 is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity (KWh)</th>
<th>Steam (MMBtu)</th>
<th>Chilled Water (MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2,355,733</td>
<td>5,306</td>
<td>6,534</td>
</tr>
<tr>
<td>2012</td>
<td>2,347,773</td>
<td>1,794</td>
<td>5,323</td>
</tr>
</tbody>
</table>

0498601 Hardin Library for Health Sciences – Retro-commissioning Study.

This facility, built in 1974, is 92,637 square feet and is located at 600 Newton Road, Iowa City, Iowa 52246. Energy consumption summary for 2010 and 2011 is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity (KWh)</th>
<th>Steam (MMBtu)</th>
<th>Chilled Water (MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1,698,352</td>
<td>15,610</td>
<td>5,200</td>
</tr>
<tr>
<td>2012</td>
<td>1,796,078</td>
<td>15,400</td>
<td>5,785</td>
</tr>
</tbody>
</table>

0503301 Lindquist Center – Retro-commissioning Study.

This facility, built in 1972, is 174,101 square feet and is located at 240 South Madison Street, Iowa City, Iowa 52246. Energy consumption summary for 2010 and 2011 is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity (KWh)</th>
<th>Steam (MMBtu)</th>
<th>Chilled Water (MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3,074,326</td>
<td>7,327</td>
<td>7,311</td>
</tr>
<tr>
<td>2012</td>
<td>2,736,895</td>
<td>8,104</td>
<td>5,591</td>
</tr>
</tbody>
</table>

Study and Implementation Project Requirements

The selected firm(s) will be responsible to provide the retro-commissioning studies in accordance with the latest University of Iowa Design Standards and Procedures. Refer to the following link for a copy of the 03/30/2012 edition:


In addition to these standards and procedures, the selected firm(s) will furnish the following study services:

1. Review existing building documentation including project record documents, Building Automation System (BAS) trend information, and energy usage data.
2. Conduct detailed field investigations to document the conditions of the mechanical, electrical and building envelope systems.
3. As directed by the University, coordinate with MidAmerican Energy and their designated representatives to share information and align energy saving opportunities with energy efficiency rebate programs.
4. Interview occupants, maintenance staff, and controls technicians as well as environmental health and safety personnel, as needed, to determine how well the building is meeting occupant needs.
5. Develop an energy model of the building conducted using eQUEST version 3.64 or later. The model shall be calibrated using current building occupancy, BAS schedules, and historical energy usage data. The model will establish the baseline conditions to which energy impacts from proposed ECMs and FIMs will be compared. Use of another energy model can be proposed, however the University is developing a preference for eQUEST.
6. Determine potential ECMs and FIMs including analyzing anticipated costs of implementing individual measures including construction cost, project costs and simple payback. Show total energy savings.
as well as itemize savings by energy source i.e. electrical, steam and chilled water, for each measure. Construction cost estimates will identify BAS programming costs. BAS programming may be self-performed by the University.

7. Prepare life cycle cost analysis, as needed, to evaluate potential options such as fluorescent versus LED lighting.

8. Review existing metering and advise on enhancements, if any, needed to measure and verify implementation of ECMS or FIMs as well as to aid in continuous monitoring of building performance.

9. After presentation and review of the pre-final report, complete a final energy model that models the collection of measures selected by the University so that projected energy savings account for interaction of measures.

10. Provide preliminary, pre-final, and final reports containing the agreed upon ECMS and FIMs. Reports are to conform to both University of Iowa Energy Study format, which will be provided to the selected consultant during proposal preparation. MidAmerican Energy requirements must also be met by the report since the studies will be used to qualify the building for applicable rebate programs.

11. Furnish electronic copies of the energy model including input files, output files and assumptions made during model development to the University.

If the University chooses to proceed with implementation of identified project(s) at the completion of the retro-commissioning study, the selected firm(s) may be retained for design and construction services. The selected firm(s) will furnish the following design and construction administration services in addition to the requirements of the University Design Standards and Procedures:

1. Update the energy model of the building to include the selected ECMS and FIMs at the end of preliminary design, construction documents, and substantial completion of construction.

2. Update cost estimates and projected energy savings at the end of preliminary design, construction documents, and substantial completion of construction.

3. Furnish electronic copies of the energy model including input files, output files and assumptions made during model development to the University.

4. Work with a third-party commissioning agent as selected by the University.

The University will utilize the Professional Services Agreement – Special Services to contract each retro-commissioning study listed above. Refer to the following link for a copy of the current edition:


A separate agreement for design and construction services will be executed for any follow-up implementation projects.

**Statement of Qualifications**

The University will recommend an Iowa-based firm(s) as Engineer of Record to the Board of Regents, State of Iowa. The Engineer of Record will manage the overall study as well as potential follow-up project design through construction administration including the work of any sub-consultants.

Firms will be selected to interview on the basis of materials submitted for review by the University, along with an expression of interest in providing services for the studies. A demonstrated ability to handle projects similar to that described above will be important to the selection process.

The submission should include, as a minimum:

- Cover Letter expressing interest in providing services for the projects and including complete firm Iowa contact information.

- A list of the firm’s proposed project team members and their roles. Firms may proposed a separate team for each study.

- University of Iowa projects including the names of the firm’s proposed project team members responsible for those projects, related client references and a summary of project and construction costs related to those projects. (Note whether each project has been completed or is underway.)
- Similar retro-commissioning and/or energy studies that demonstrate the firm’s ability to diagnose and devise solutions to challenging situations, including the names of the firm’s team members responsible for those projects, related client references and a summary of project and construction costs related to those projects. (Note whether each project has been completed or is underway.)

- Retrofit projects that demonstrate the firm’s ability to meet design constraints to successfully implement improvements in complex existing buildings, including the names of the firm’s team members responsible for those projects, related client references and a summary of project and construction costs related to those projects. Highlight work completed in research facilities. (Note whether each project has been completed or is underway.)

- Discussion of the firm’s ability to meet the University’s desire to have the energy modeling conducted using eQUEST and delivery of the model input files at the conclusion of the project.

- A statement of the firm’s ability and commitment to deliver the completed study in a timely manner, and an estimate of the duration of a single-building study from award through final report, assuming timely input from the University. State assumptions.

- Team member resumes showing qualifications related to this project.

Limit Statement of Qualifications to 15 pages plus team member resumes, in single *.pdf file. The University will contact firms if additional information is needed. Firms interested in providing services for this project should email all the requested material, no later than 12:00 pm (Noon) Central Daylight Time on Friday, September 20, 2013 to:

1. Eric Evenson: eric-a-evenson@uiowa.edu
2. Edward Scherrer: edward-scherrer@uiowa.edu
3. Jeffery Gambrall: jeffery-gambrall@uiowa.edu

Interviews with selected firms will take place in early October 2013. Please contact Edward Scherrer at 319-335-0274 or Jeffery Gambrall at 319-384-3200 with any questions.

All firms expressing an interest in the project will be notified of the recommendations of the University and the Board’s selection as those decisions are reached.