

IHL & BoB PROCUREMENT PROTOCOL
FOR
ENERGY MANAGEMENT SYSTEMS / MECHANICAL CONTROLS
December 2011

**NOTICE TO ARCHITECTS, ENGINEERS, AND UNIVERSITY
PERSONNEL:**

As directed by the Commissioner of Higher Education on behalf of the Board of Trustees of the Institutions of Higher Learning, IHL has adopted the procurement protocol as set forth by the Mississippi Department of Finance and Administration / Bureau of Building, Grounds and Real Property Management. This protocol will apply to ALL projects on university campuses and university owned property that are funded with state bond money and/or self generated funds (GS projects and IHL projects). The Bureau of Building procurement protocol is attached herein and shall apply to all projects designated as "Bureau" projects and funded with state bond funds through the Bureau of Building, Grounds and Real Property. Also attached herein is the IHL procurement protocol which shall apply to all buildings funded with university self-generated funds.

PURPOSE: The adoption of this protocol for all university projects, whether Bureau of Building projects or IHL projects, is intended to clarify and standardize the procurement procedures for Energy Management Systems/Mechanical Controls installed on all university campuses. Deviation from this procedure requires prior written approval from the Director of the Bureau of Building (for Bureau projects) or from the Institutions of Higher Learning (for IHL projects).

EXCEPTIONS: Exception to this protocol is as noted and approved by Mr. Kevin Upchurch, Executive Director of the Department of Finance and Administration by letter dated July 30, 2010, included herein. Specifically, the exception shall apply to "critical areas of patient care, research, life safety, clinical areas and connected facilities". Approval of all exceptions for Bureau of Building projects (requests to sole-source) must be obtained as addressed in the Bureau's protocol as attached herein. Approval of all exceptions for IHL projects (requests to sole-source) must be obtained from the Board of Trustees of the Institutions of Higher Learning on a project-by-project basis as addressed in the IHL protocol as attached herein. For IHL projects, this approval request must be in the form of a board meeting agenda item (Form B, Part I) to be submitted to the Office of Real Estate & Facilities as an agenda item for approval of the Board of Trustees at a regularly scheduled Monthly Board Meeting.

Energy Management Systems / Mechanical Controls Procurement
for all
Bureau of Building Projects
15 OCT 2011

PURPOSE

This is written to clarify and standardize procurement procedures for Energy Management Systems on projects managed by the Bureau of Building, Grounds, and Real Property Management. Deviation from this procedure requires prior, written approval for the Director, Bureau of Building, Grounds and Real Property Management.

CONTRACT DOCUMENTS – BID

An allowance for Energy Management Systems will be included in the contract documents for ALL projects without exception. The value of the allowance will be determined by the Design Professional and approved by the Staff Architect. EMS Specifications should be included in the contract documents with clear markings that they are FOR INFORMATION ONLY. The specifications will require the following "**MINIMUM**" information:

1. Interoperability Requirement: The systems supplied must be Native BACnet compliant. Any deviation must have prior approval from the Director, Bureau of Building, Grounds and Real Property Management.
2. Points List: A points list must be included as part of the contract documents.
3. Sequence of Operation: A sequence of operations narrative must be included as part of the contract documents.
4. Controls Consultant: The use of a non-vendor controls consultant is highly recommended but not required.
5. Front-End Requirements: The front-end requirements must be clearly defined. The options are as follows:
 - a. Each contractor is to provide, install, and program its own front-end program. The using agency will have two front-end programs resident on a single machine.
 - b. Each contractor will provide signals and data points to the existing facility front-end. In this case, programming will be done by the using agency through an independent contractor. Non-proprietary routers and interface devices will be supplied and installed by the controls contractors. Proprietary routers and interface devices will be supplied by the using agency. The using agency will be reimbursed for the contract programming and proprietary device purchases.
 - c. Each contractor to provide its BACnet or LON compliant system(s) in the building and not tie-in to a central controller.

- d. The Using Agency will make this decision with approval from the Bureau of Building.
6. Submittal Requirements: The submittal requirements (including the need for timely submittals) must be included. Review and approval will be required from the following parties:
 - a. Mechanical Engineer
 - b. Cx Authority
 - c. Bureau Of Building
 - d. Using Agency

The Energy Management System will be procured and administered by the Mechanical Contractor on the project. Procurement procedures will be as described below.

PROCUREMENT PROCEDURES

After the General Contract has been awarded, proposals should be solicited from no less than two controls contractors. These contractors may be selected by the Using Agency with the firm providing the BEST VALUE proposal being selected. If the Using Agency will agree to award based on price only, the BEST VALUE evaluation is not required. If the site currently has two or more acceptable vendors, no additional proposals will be required.

The criteria for BEST VALUE evaluation must be determined prior to the receipt of proposals and must be quantifiable. Subjective evaluations will not be allowed. In addition to a priced proposal for the Energy Management System (with alternates if needed), each contractor should also provide a priced proposal for recommended spare parts and a proposal for an extended warranty period of four years. These are items that will be used in the BEST VALUE determination and executed by the using agency (at their discretion). The using agency will not be reimbursed for these items.

Once received, the bids will be reviewed by the following parties:

1. Using Agency
2. Bureau Of Building
3. Design Professional(s)
4. General Contractor
5. Cx Authority
6. Mechanical Contractor

Any interface or performance demonstrations by the contractor will take place prior to or during this meeting. Once selected, the contract will be awarded to the approved contractor by the Mechanical Contractor on the project.

EXISTING SYSTEMS

In buildings with existing HVAC control systems, the following procedure shall apply:

1. 25% or less of HVAC System Renovated:

Practical, technical considerations make the competitive procurement of controls systems where an existing system is changed by less than 25% non-viable. With required Public Procurement Review Board approval, the renovated controls system can and should be procured via single-source procurement. Approval must be obtained prior to bidding.

{% Change = (Estimated Cost of Renovations, \$)/(Estimated Value of Existing System, \$)}

2. 25% - 50% of HVAC Controls System Renovated:

HVAC controls systems being modified by more than 25% and less than 50% may be procured via single source procurement provided that prior approval is obtained from the Director, Bureau of Building and the Public Procurement Review Board. Approval must be obtained prior to bidding.

{% Change = (Estimated Cost of Renovations, \$)/(Estimated Value of Existing System, \$)}

3. More than 50% of HVAC Controls System Renovated:

HVAC controls systems being modified by more than 50% should be procured via competitive procurement unless significant technical and economic justification is provided. The justification shall be submitted to Director, Bureau of Building and the Public Procurement Review Board. Approval must be obtained prior to bidding.

{% Change = (Estimated Cost of Renovations, \$)/(Estimated Value of Existing System, \$)}

Energy Management Systems / Mechanical Controls Procurement
for all
IHL Projects
December 2011

PURPOSE

This is written to clarify and standardize procurement procedures for Energy Management Systems installed on projects managed by the Institutions of Higher Learning (IHL). Deviation from this procedure requires prior, written approval from the Board of Trustees/Institutions of Higher Learning.

CONTRACT DOCUMENTS – BID

An allowance for Energy Management Systems will be included in the contract documents for ALL projects without exception. The value of the allowance will be determined by the Design Professional and approved by the Using Agency. EMS Specifications should be included in the contract documents with clear markings that they are FOR INFORMATION ONLY. The specifications will require the following "**MINIMUM**" information:

1. Interoperability Requirement: The systems supplied must be Native BACnet compliant. Any deviation must have prior approval from the Using Agency.
2. Points List: A points list must be included as part of the contract documents.
3. Sequence of Operation: A sequence of operations narrative must be included as part of the contract documents.
4. Controls Consultant: The use of a non-vendor controls consultant is highly recommended but not required.
5. Front-End Requirements: The front-end requirements must be clearly defined. The options are as follows:
 - a. Each contractor is to provide, install, and program its own front-end program. The using agency will have two front-end programs resident on a single machine.
 - b. Each contractor will provide signals and data points to the existing facility front-end. In this case, programming will be done by the using agency through an independent contractor. Non-proprietary routers and interface devices will be supplied and installed by the controls contractors. Proprietary routers and interface devices will be supplied by the using agency. The using agency will be reimbursed for the contract programming and proprietary device purchases.
 - c. Each contractor to provide its BACnet or LON compliant system(s) in the building and not tie-in to a central controller (with the approval of the system by the Using Agency).

6. Submittal Requirements: The submittal requirements (including the need for timely submittals) must be included. Review and approval will be required from the following parties:
 - a. Mechanical Engineer
 - b. Cx Authority (if applicable)
 - c. Using Agency

The Energy Management System will be procured and administered by the Mechanical Contractor on the project. Procurement procedures will be as described below.

PROCUREMENT PROCEDURES

After the General Contract has been awarded, proposals should be solicited from no less than two controls contractors. These contractors may be selected by the Using Agency with the firm providing the BEST VALUE proposal being selected. If the Using Agency will agree to award based on price only, the BEST VALUE evaluation is not required. If the site currently has two or more acceptable vendors, no additional proposals will be required.

The criteria for BEST VALUE evaluation must be determined prior to the receipt of proposals and must be quantifiable. Subjective evaluations will not be allowed. In addition to a priced proposal for the Energy Management System (with alternates if needed), each contractor should also provide a priced proposal for recommended spare parts and a proposal for an extended warranty period of four years. These are items that will be used in the BEST VALUE determination and executed by the using agency (at their discretion). The using agency will not be reimbursed for these items.

Once received, the bids will be reviewed by the following parties:

1. Using Agency
2. Institutions of Higher Learning/Office of Real Estate & Facilities (review of proposed BEST VALUE awards only)
3. Design Professional(s)
4. General Contractor
5. Cx Authority (if applicable)
6. Mechanical Contractor

Any interface or performance demonstrations by the contractor will take place prior to or during this meeting. Once selected, the contract will be awarded to the approved contractor by the Mechanical Contractor on the project.

EXISTING SYSTEMS

In buildings with existing HVAC control systems, the following procedure shall apply:

1. 25% or less of HVAC System Renovated:

Practical, technical considerations make the competitive procurement of controls systems where an existing system is changed by less than 25% non-viable. With required IHL/Board of Trustees approval (Form B, Part I), the renovated controls system can and should be procured via single-source procurement. Approval must be obtained prior to bidding.

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2. 25% - 50% of HVAC Controls System Renovated:

HVAC controls systems being modified by more than 25% and less than 50% may be procured via single source procurement provided that prior approval is obtained from IHL/Board of Trustees (Form B, Part I). Approval must be obtained prior to bidding.

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3. More than 50% of HVAC Controls System Renovated:

HVAC controls systems being modified by more than 50% should be procured via competitive procurement unless significant technical and economic justification is provided. The justification and request for approval shall be submitted to IHL/Board of Trustees (Form B, Part I). Approval must be obtained prior to bidding.

{% Change = (Estimated Cost of Renovations, \$)/(Estimated Value of Existing System, \$)}



STATE OF MISSISSIPPI
HALEY BARBOUR, GOVERNOR

DEPARTMENT OF FINANCE AND ADMINISTRATION
KEVIN J. UPCHURCH
EXECUTIVE DIRECTOR

July 30, 2010

Dr. Hank Bounds
Commissioner of Higher Education
Institutions of Higher Learning
3825 Ridgewood Road
Jackson, MS 39211-6453

Dear Dr. Bounds:

I am in receipt of your letter dated July 22, 2010 in which you were requesting, on behalf of the University of Mississippi Medical Center (UMMC), approval to use a dual vendor control system. I have reviewed the proposed policy with my staff and we are of the opinion that it is both appropriate and workable. The proposed policy simply makes good sense and it sets a solid foundation for both of the needed objectives to be met on the UMMC's campus – (1) it can potentially remove or reduce risks for critical areas of patient care, research, life safety, clinical areas and connected facilities, and (2) it can assure that there are opportunities for competition, savings and increased efficiencies in areas such as classrooms and non-critical administrative support facilities.

We would recommend one enhancement to the policy which would include board approval for each project on which the single vendor solution is approved. This is consistent with statute and is good practice for management of projects, and it also makes the decision transparent and open. The Public Procurement Review Board (PPRB) recently approved using a single source vendor (TRANE) for a portion of the Energy Management System upgrade at Mississippi Valley State University and is proceeding on this basis.

I very much appreciate your leadership on this controversial and often contentious issue. I look forward to continuing to work with you to find solutions that are good for Mississippi!

Sincerely,

A handwritten signature in cursive script that reads "Kevin J. Upchurch".

Kevin J. Upchurch