

Date: May 22, 2012

**THE COMMONWEALTH OF MASSACHUSETTS  
UNIVERSITY OF MASSACHUSETTS AMHERST  
PHYSICAL PLANT BUILDING  
PHYSICAL PLANT DIVISION  
360 CAMPUS CENTER WAY  
AMHERST, MASSACHUSETTS 01003-9248**

**ADDENDUM # 2**

**Re: Project: Request for Proposal - AA12-PR-4564**  
**W.O. #: 12-011408-000**  
**Account: 139528**  
**Title: RFP - AA12-PR-4564 CHP – SCADA Controls Systems Upgrade**

The attention of bidders submitting proposals for the above subject project is called to the following addendum to the specifications and drawings. The items set forth herein, whether of omission, addition, substitution, or clarifications are all to be included in and form a part of the proposals submitted.

**ACKNOWLEDGEMENT OF RECEIPT OF THIS ADDENDUM (2) MUST BE REFERENCED IN YOUR BID SUBMITTAL ON SECTION 2.6 OF THE INVITATION TO BID AND BID FORM COVER SHEET.**

Item #1: The following questions have been asked:

Q: May 16, 2012. United Automation Asks,

Material list with quantities to cover the instrumentation for monitoring and control of Task 5, CTG inlet cooling.

A: The CTG inlet cooling controls integration states that the bidder will review the P&ID diagram and submit an instrumentation list. Rosemount is the preferred transmitter vendor.

Q: May 17, 2012. TVC Systems Asks.

Specification Section 15900 Paragraphs 1.3.A.3.c and d show bills of material for the existing SLC hardware in the boiler CCS and BMS panels. This list of hardware is not consistent with the COEN drawing 0663-510 Rev B sheet 2 of 18 and the PLC program printout included with the RFP. Please confirm the drawings and program attachments are the prevailing documents for identifying the installed hardware that is to be replaced.

A: The Rentech boilers have two racks of Allen Bradley SLC style PLC's. The CCS plc has a 13 slot rack, it has four, 1746-NI8 analog input modules, four 1746-NO4I analog output modules, two 1746-IA16 digital input module, one 1746-OX8 relay output module, and a SLC 5/05 processor. The BMS plc has a seven slot rack, it has three 1746-IA16 digital input modules, one 1746-OA16 digital output modules, and two 1746-OX8 relay output module, and a SLC 5/505 processor. Page 17 of 925, of Boiler 200 as-built-documents.pdf, panel layout is correct.

Q: May 17, 2012. Superior Controls Asks,

1. Provide the Bid Format in electronic Excel format for the bidding process.

A: BOQ in Excel format provided, other bid forms to be provided by UMass.

2. Provide the instrument part numbers associated with Task 5 CTG as a baseline for the bids.

A: The CTG inlet cooling controls integration states that the bidder will review the P&ID diagram and submit an instrumentation list. Rosemount is the preferred transmitter vendor.

3. Provide the current version of RSBizware installed on site.  
A: Version 9.0
4. Provide the exact number of tags associated with the RSHistorian Classic. The license is stated as 5000, but we need to know what the configured tag count is.  
A: Approximately 4000 tags.
5. Where is the upgraded XLReporter software to be installed?  
A: Engineering Workstation.
6. Can we receive a copy of the stated standard UMA contract?  
A: Go to the following links for the standard contract  
[http://www.umass.edu/procurement/Fill-In\\_Forms/Word%20Source%20Files/CFSL/CFSL\\_Long\\_May2010\\_enabled.pdf](http://www.umass.edu/procurement/Fill-In_Forms/Word%20Source%20Files/CFSL/CFSL_Long_May2010_enabled.pdf)  
[http://www.umass.edu/procurement/Fill-In\\_Forms/CFSA\\_RE\\_060308.pdf](http://www.umass.edu/procurement/Fill-In_Forms/CFSA_RE_060308.pdf)
7. SECTION 3 Project Schedule, 4.3.A: Please define "subject to Delay Damages" as stated.  
A: Liquidated damages will be \$1000.00 per day, if contract deadlines are overrun.
8. SECTION 7 - CONSTRUCTION DOCUMENTS, Section 2: 2.1.A: Can the progress review and application for payment meetings be held by teleconference?  
A: RGV is OK with this. UMass is ok with this.
9. SECTION 7 - CONSTRUCTION DOCUMENTS, Section 2: 2.1.G.1: States, "Refer to the schedule requirements outlined in other sections of this document." What schedule requirements should be referenced with this statement?  
A: Section 3 - Project schedule.
10. SECTION 7 - CONSTRUCTION DOCUMENTS, Section 2: 2.2.B: States, "The Contractor shall prepare and maintain as a minimum the following documentation..." Please define the list of documentation required to be kept for record for 2 years.  
A: All documents outlined in Section 6.
11. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.3: Who is responsible for decommissioning and removing upgraded servers, computers, and related hardware?  
A: The Electrical Contractor is responsible.
12. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.4.3.b.2.b: Should this be one (1) ControlLogix rack with one (1) ControlLogix processor programmed for both the BMS and CCS functions?  
A: There shall be two (2) ControlLogix racks each with a single processor. One shall be programmed for BMS and the other programmed for CCS.
13. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.4.3.c: Are all the CTC Parker screens included in the specification? Seems that not all screens are included based on the navigation buttons on the Main screen.  
A: There are approximately 50 screens in the Rentech boiler, Parker Automation HMI.
14. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.6.b: References the Mechanical contractor to furnish and install instrumentation. Should the "furnish"/provide be included in our scope? Please clarify  
A: The Contractor shall furnish the field instruments for Mechanical Contractor to install. Fitzmeyer & Tocci to confirm.
15. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.5.D.c.1 &.2: Can we assume electronic AutoCAD copies of the RIO control panel drawings will be provided for the integration of the switch alarm contacts?  
A: UMass's current system integrator has the AutoCAD files. UMass will accept red-lined drawings to document these changes.

16. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.5.D.c.1 &.2: Can we assume servers will be rack mounted? Also, can the FT directory and FT activation server be classified as a server since it is specified as a server OS? Can this server be rack mounted in lieu of a desktop computer?  
A: The servers shall be rack mounted. The FT directory and FT activation server shall be classified as a server, since it's a desktop computer it shall be located on the control console in the control room.
17. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.5.2.a.2: The Boilers will be programmed using RSLogix 5000 version 20 and the BOP will remain as is, version 15.5, correct?  
A: Yes.
18. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.5.2.c.1: Can the eight (8) reports be provided as samples for the bidding process?  
A: Contact [sgrden@facil.umass.edu](mailto:sgrden@facil.umass.edu) and he will send you the files via email.
19. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 1.5.3.b.2: Are there existing control narratives for the Boilers 200/300/400 BMS and CCS processors to start from? If yes, can these be provided in electronic Word format?  
A: The BMS/CCS control narratives shall be included in the OEM Operating Manual. UMass to confirm and provide the control narratives.
20. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 2.2F & 2.2G: These seem to contradict each other. Please clarify both in terms of the cut over and Ethernet connections.  
A: 2.2.F is to set up a temporary connection between both SCADA systems and the BOP PLC system during cut over procedures. 2.2.G is to cut over and migrate all PLCs from existing SCADA/Ethernet network to the new SCADA/Ethernet network.
21. SECTION 15900 - SCADA CONTROL SYSTEM UPGRADE, Part 1: 3.4: Can a time allotment be provided for the bid associated with Training required?  
A: Ten (10) man-days.
22. Ethernet Design – Page 15 states the following hardware 1783-MX08T, but the diagram on page 35 lists 1783-MX10T. Which ones should be included in the bid?  
A: 1783-MS10T shall be included.
23. Ethernet Design – Page 15 has a zero (0) quantity listed? Is this included with the switch?  
A: Yes.
24. Ethernet Design – Page 16 defines the Panduit Copper and Fiber hardware. Can we assume the electrical installer has this covered under their scope of supply?  
A: Yes.
25. Ethernet Design – Page 18 shows a diagram that is missing the Engineering Workstation, Historian, and Domain Controller.  
A: The Engineering Workstation, Historian and Domain controller shall be shown on Page 18, Figure 4-1.

Q: May 18, 2012. I&C Engineering Company asks.

1. Please provide Bid Forms in Excel format.  
A: Contact [sgrden@facil.umass.edu](mailto:sgrden@facil.umass.edu) for an emailed attachement.
2. Data Historian – Approximately how many points are configured in the Data Historian?  
A: Approximately 4000 tags.

3. Task 5 – Please provide instrumentation and control valve specification data sheets so that we can provide an accurate bid. The CTG inlet cooling controls integration states that the bidder will review the P&ID diagram and submit an instrumentation list. Rosemount is the preferred transmitter vendor.  
A: The CTG inlet cooling controls integration states that the bidder will review the P&ID diagram and submit an instrumentation list. Rosemount is the preferred transmitter vendor.
4. Task 5 – Specifications require the Instrumentation and Controls Contractor to install instrumentation both Mechanically and Electrically (See 30% Specifications E.2 and Q.2 paragraphs). The other specifications state that installation is by Others. Please advise if we have to include installation scope in Task 5.  
A: The mechanical and electrical contractor will install the instrumentation.
5. Task 5 - Please provide the total number of I/O required for DI, DO, AI and AO points.  
A: The CTG inlet cooling controls integration states that the bidder will review the P&ID diagram and submit an instrumentation list. Rosemount is the preferred transmitter vendor.
6. Source Code - Please provide Allen-Bradley RSLogix 500 and RSLogix 5000 .rss and .acd source files for existing Boiler and BOP PLCs. This will allow us to accurately bid file conversion scope and readdressing scope.  
A: Contact [sgrden@facil.umass.edu](mailto:sgrden@facil.umass.edu) for an emailed attachment.
7. Bid Extension - It would very helpful to extend the bid due date . Please advise.  
A: Not extended.

Q: May 18, 2012. TVC Systems asks.

- 1.) Section 15900 Paragraph 2.1.A.1.a.3 states 16GB DDR3 (double data rate three) memory (8 DIMM slots each with 16GB DDR3). Do you require 16GB total or 128GB? The wording 8 DIMM slots each with 16GB DDR3 seems to indicate 128GB total.  
A: 128GB total.
- 2.) Section 15900 Paragraph 2.1.A.1.a.9 sates one dual-port Broadcom 5716 Gigabit NICs. Is there a requirement to have two ports always available on the server? If the NIC dual port NIC card fails completely, the server would not be able to communicate on the network.  
A: Two dual-port Broadcom 5716 Gigabit NICs shall be provided.

Q: May 21, 2012. TVC Systems asks.

I was reviewing the specs again and I noticed something that I hadn't before. In Paragraph 1.5.D.2.b it identifies 8 total PCs/servers that are required but in Paragraph 2.1.A.1 and 2.1.A.2 there only seem to be 7 PCs/servers identified. I assume we need to provide 8 correct?

A: There shall be four (4) new servers provided by the Contractor: two (2) data servers, one (1) domain server and one (1) historian server. Paragraph 2.1.A.1.a shall be revised.

**END OF ADDENDUM #2 – RFP - AA12-PR-4564 - CHP - SCADA System Controls Upgrade**

**By:**

John O. Martin  
Director of Procurement