Addendum #3

Contract Number: AA14-PR-4863
Speedtype: 144772
Title: Design & Construction Administration for an Electrical Substation and Associated Ductbank & Electrical Work

The attention of the 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 proposal submitted.

All bidders responding to this RFP must incorporate these items into their response. Failure to do so may disqualify the bidder.

Item 1 Please be advised that the bid opening date has been extended from October 25, 2013 to November 1, 2013. Time and place remain the same.

Item 2 Please be advised that additional final 26 questions will be addressed via addendum 4 the week of October 28, 2013.

Note: Please find attached questions and responses for addendum 3.

End of Addendum #.3_

By: John O. Martin
Director of Procurement
1. What are the design standards for the new substation that UME wants used example e.g., IEEE, NEC, ANSI? Design to IEEE, NEC/NFPA 70. All equipment must be UL rated. Please refer to UMA Physical Plant Electrical Utilities Standards V3.0. available on web site. The following is the link to the most recent UMA standards: http://www.umass.edu/physicalplant/documents/UMA_UEM_Stds.pdf

2. Is this location a new or a preexisting substation site? The selected site for the substation is currently an undeveloped parcel of land in the vicinity of the abandoned power plant on Tilson Farm Road.

3. Is the substation outside or inside? The new substation will be an outside facility.

4. Does UMass-Amherst desire a local control house at the substation site or would it be in the same location as the two new switchgears? UMA will control its system from either of the two modular switchgear control houses, therefore, a local control house will be unnecessary.

5. If a control house is needed then the protection equipment would need an HVAC system for cooling the equipment. Would that include an air flow study on the building? NA, see Question 4 response

6. Does the control house need a battery backup system? NA, see Question 4 response

7. Does the control house need a fire system? NA, see Question 4 response.

8. Would URS receive an Aspen Model file from WMECO for the protection system? We do not anticipate WMECO providing an Aspen Model File.

9. Would URS write the equipment specifications and perform the procurement process for the new equipment example breaker, re-closers, transformers, control panel, control house, protection relay, construction sub-contractor? Please refer to the RFP pages 4 – 6 for the General Scope of Services requested. The 100% Construction Documents are to include all equipment specifications and construction drawings. Please refer to Question 57 response regarding designers procurement assistance requirements.

10. What version of Auto CADD do you want the drawing on? UMA is currently utilizing AutoCAD 2012.

11. Is URS responsible for doing any as build drawing to either the Powerhouse, Westside or Eastside Substations not included in the scope of the RFP? UMA will provide as built for those facilities, designer is responsible for verification of information provided.

12. Does UMass-Amherst have its own SCADA system on campus? Currently UMA utilizes the following SCADA systems on campus:

   Rockwell Automation for CHP SCADA, Solar for load shedding, and Square D Powerlogic for electric metering, and a Johnson Controls Metasys Building Automation System.
13. Are the two new switchgears going into new or existing buildings? **The intent is to install the switchgear in two, new modular buildings.**

14. Will URS need to do a lighting study? **Residential homes are within 300 feet of the proposed site. The close proximity of the residences should be a consideration in the design of the lighting.**

15. Will URS need to write an Outage Plan? **Yes, UMA expects minimal interruptions to the campus operations. Therefore the selected design team will need to coordinate with WMECO, UMA, and owners commissioning agent.**

16. Does UMass-Amherst desire a design which would include a spare set of breakers (primary & secondary) so that it would simpler to add a new transformer? **Please refer to the RFP; in particular Page 2 – III. Project Description, Paragraph A – Scope where this is clearly defined.**

17. Does UMass-Amherst desire a design which would include a spare transformer pad? (This would be in addition to the third one? **At this time, UMA intends to provide “space” for the possibility of third transformer which would more likely be in the event requiring an emergency transformer. Therefore a spare transformer pad is not required – but the site shall be designed to allow this in the future.**

18. Does UMass-Amherst desire oil cooled or gas cooled breakers? **UMA is prefers the best available and reliable technology and looks to the design team to provide such. Discussions as to type will take place during the design phase.**

19. Does UMass-Amherst desire oil cooled or air cooled transformers? **Refer to response to Question 18.**

20. It appear the design will include a new transfer switch will that need to be tied into the communication network or would this be a stand-alone device? **This shall be decided during the design process.**

21. It appears the civil design will include a trench system in the yard, is that correct? **At this time it is anticipated that a drainage system may be required. However this will require further evaluation during the design process.**

22. Does the site have any preexisting environmental issues? (Asbestos, soil contamination or pre remediation work needed) **At this time there are no known environmental issues. This shall be evaluated during the design process by the environmental consultant. The site is clear of Bordering Vegetated Wetlands.**

23. Is it located next to a stream or cliff? **The site does have neighboring streams. UMA highly recommends that a site visit take place to familiarize the consultants with the present topography.**

24. Does the substation need landscaping or a retaining wall or sound barrier? **This shall be decided during the design process. Please refer to RFP, in particular page 2 regarding**
sound ratings for equipment. Although minimal landscaping is anticipated at this time the limits and extent of landscaping and appurtenances will be discussed during the design phase.

25. Where does the water/ snow drain, to a public sewer or drainage ditch? This topic will be discussed during schematic design.

26. Will the new station need a security fence? It’s not mentioned in the RFP. It is the intent of this project to provide a security fence around the substation.

27. Does UMass-Amherst know the approximate area of the new station? UMA anticipates the foot print of the substation to be approximately 200 ft x 200 ft.

28. Will UMass-Amherst need an ARC flash study done on the new switchgear? Yes.

29. Lastly could you send a photo of the site so URS can determine if anything else may be needed in the proposal. Similarly to the response to Question 23 it is highly recommended that a site visit is done by all potential design teams prior to submitting proposals.

30. Would you provide a one-line diagram of the existing system? The one line diagram will be made available to the selected consultant.

31. Would you provide a map of the area, including the sites within the scope of work (Tilson substation, Eastside substation, and Westside substation)? UMA will provide all necessary mapping to the selected consultant.

32. What power system software is to be used? Currently UMA utilizes Square D Powerlogic for electric metering, and SKM load modeling software.

33. Are there any preliminary one line and general arrangement diagrams available? Refer to response to Question 30, this information will be made available to the selected consultant.

34. Please clarify if the stated transformer rating of 50 MVA is the desired self-cooled rating or the top force cooled rating. Is there a desire for on-load tap changing? This information will be clarified and made available to the selected consultant.

35. Is there an anticipated system configuration for the station when the third line and transformer are installed in the future? Not at this time.
36. Please confirm the two-line configuration arrangement of the substation to be:
   a) Two lines with breakers.
   b) One tie breaker on substation side of breakers.
   c) Isolation switches for above breaker.
   d) Utility revenue metering transformers and meters.
   e) Disconnect/Isolation switch for transformer primary terminals.

The above two line configuration is correct and will be verified during design process.

37. Who is responsible for the design and foundation support of: (Will it be the design team or WMECO?)
   a) Line Termination Structures.
   b) Line termination hardware.
   c) Isolation switches at breakers (which are stated as supplied by WMECO).
   d) 115 kV bus and supports.
   e) 115 kV Line breaker controls and relays.
   f) Substation SCADA RTU for report to WMECO System Control Center.
   g) Transformer connection/isolation device(s).

WMECO will be responsible for the 115kv side, and the selected UMA consultant for the project will be responsible for the 13.8kv side.

38. Please confirm which entity will be procuring the major station equipment (University directly/ Installing Contractor): (We are concerned about lead time here to meet the published schedule) If the items are Contractor Furnished, do you anticipate an early release package?
   a) Transformers
   b) 13.8 kV Switchgear

As part of the design and preparation of construction documents it may be agreed that pre-purchasing of proprietary equipment may be necessary.

39. Are there existing University 13.8 kV lines near the proposed substation location to serves as source(s) of Station Service power? There are no existing 13.8 kv lines in the vicinity of the proposed substation.

40. Is there a requirement for local generation to support station control power during loss of normal Station Service? Although there are no requirements, it is typical to use battery backed 120vdc control power.

41. Please confirm power factor correction is to be performed at 13.8 kV? This is correct.

42. Does the University presently have a power system automation control system to which this new substation must interface? See response to Question 12. The systems must be modified to integrate the new substation.

43. Will the two transformers operate in parallel at any time, either in the substation or at the receiving end of their feeders? Yes, refer to the RFP for further clarification.

44. Will the new substation require relocation of utility interconnection protection relaying from the West Substation to the new substation, or will there be additional protection requirements due to the generation moving up to the transmission system from the distribution
Please refer to the RFP, in particular pages 3 and 4. The protective relays on the existing feeders will require modification for the new feeder capacities.

45. It is stated that WMECO will provide protection and operational controls for the primary 115kV breakers and tie; additionally under the agreement, the university will design and install the 13.8kV side of the substation; Who will provide protection and operational controls to the 115kV transformers? It is assumed that provisions for transformer parallel operation will be required. It is agreed that WMECO will be providing the protection. The assumption that parallel transformer operation will be required is correct and provisions shall be made for such.

46. The RFP states that a capacitor bank may be required for pf correction, It is assumed that the capacitor bank design is for a 13.8kV unit, not 115kV. That assumption is correct.

47. Is there a site plan available for determining the conceptual routing of the 13.8kV duct bank. UMA will provide available campus and utility maps to the selected consultant. Please note that the RFP has requested that the selected consultant evaluate multiple paths from the new Tilson Substation to the East Substation.

48. What relaying is presently used for the 17k3 and 17k7 feeders, is a system 1-line and relay 1-line available? Note that the current feeders are referred to as 17k3 and 17k7. At the present time UMA has GE model 750 protective relays. As stated above the one line to be provided to selected consultant.

49. The specification notes “University Standards”; are these standards available? UMA standards are available on the Physical Plant web site under the resources tab http://www.umass.edu/physicalplant/resources/index.html

50. Is the existing load shed data or operational description available? This information will be made available to the selected consultant.

51. Has any major equipment been procured? Transformers, Circuit Breakers, and Switchgear? At the current time UMA has not procured any equipment for this project. During the design phase this option will be evaluated and may be imposed by UMA to secure long lead time and/or major proprietary equipment.

52. Will major equipment specifications and/or procurement assistance be required? Refer to the RFP for the scope and requirements through the completed Construction Documents. The consultant will provide UMA with electronic versions of the completed plans and all technical specifications for upload to which the front end will be added by UMA contracts manager.

53. Is there a preferred Relaying manufacturer? UMA has a preference toward GE.
54. Is there a topographical survey of the location where the new substation is being proposed? Does it have wetlands delineated on it? The topographic survey is within the scope of the selected designer. UMA will procure directly with a Wetland Scientist to assist in flagging and required permitting of wetlands once the duct bank route has been established. The University’s Wetland consultant will handle all permitting aspects relating to wetlands.

55. Since we were unable to attend the October 2 pre-proposal briefing, Cannon Design has no way of determining the land survey limits-of-work. The RFP mentions 5,000 L.F. of duct bank, together with multiple corridor studies. Can U Mass supply Cannon Design a plan (Google Earth aerial for example), of the land survey limits-of-work. The land survey limits will be determined based on the selected route of the duct banks. This is part of the RFP and the proposed routes will be reviewed with the selected consultant.

56. Drawings of existing systems

This information will be provided to the selected consulting team.

57. The General Scope of Services states that the consultant will be responsible for “General Administration of the Construction Contract...” Could you please define these responsibilities in more detail? UMA prepares the construction contract. Consultant prepares all technical specifications including Summary of Work. To view a sample of a current Chapter 30 project out to bid, please refer to UMA Amherst procurement website and view Project No. UMA 14-03, Project No. 13-000033.

58) Is the project expected to be completed and online by May 2015 or September 2015? The project will be online by September 1, 2015.

59. The east west tie has an area near the campus center needing re-working.

a. What is the estimated length of new ductbank required to complete the east-west tie? Approximately 500 feet.

b. How many conduits are required for the new ductbank? 100% redundancy was discussed for the new ductbank, is the intent to provide redundancy for the area being re-worked at the campus center? UMA electrical standards require 100% redundancy for all new install of duct banks.

60) Are the transformers required to be located in the buildings with the switchgear? No.

61) Is the tie breaker required to be separated from the two separated switchgear? Yes.

62) What are the buildings desired characteristics for the:

   c. Building and roof materials?
   d. Heating/cooling requirements?
   e. Sound rating?
   f. The intent is to install two modular buildings. Items d and e will be evaluated during the design process based on equipment/materials selected.
63) Regarding the project organization submission requirements on page 8 of 11 of the RFP, the Principal-in-Charge and Project Manager only need to be listed of the prime firm submitting the proposal, correct? This is incorrect; Paragraph VIII clearly states that the information shall be provided for not only the Prime Consultant but all sub-consultants. Each required discipline, regardless of in-house or subbed out must include resumes of all key personnel.

64) Are there any existing single line drawings or diagrams that could be shared with bidders in order to more clearly delineate the existing conditions and/or the desired outcome of the project, thereby defining the scope of work in more detail? As stated above, the one line diagrams will be made available to the selected designer. Any conceptual drawings that have been prepared may be made available to the selected consultant.

65) How will the 17.9% participation goal of the MBE/WBE requirement calculated? The participation goals are intended to encourage MBE/WBE inclusion in the consulting team. Consultants should make every attempt to meet this goal and if not feasible, describe the efforts associated in achieving this effort in their proposal.

66) Is there a site layout drawing or diagram of either the existing conditions and/or the desired outcome? Yes, it will be made available to the selected consultant.

67. Is there a duct bank drawing or diagram of either the existing conditions and/or the desired outcome? The existing utilities drawings will be made available to the selected consultant. The intent of the RFP is for the selected design team to evaluate and propose a route from the new substation to the East Substation.

68. Please confirm that the scope of work includes construction administration only, and does not include procuring construction services? UMA will procure the construction services. The Consultant will provide the technical specifications to be provided in the contract. Please refer to the response to Question 57.

69. Concerning the 115kV WMECO portion of work, will there be/is there a requirement for 115kV switches for the transformers? Will those be included with the transformers? This should be decided in the design process, and carefully coordinated with WMECO.

70. With the addendum to be issued this Thursday, just 6 days before the proposal deadline, Parsons respectfully requests and would appreciate a 1 week extension to the proposal deadline. Refer to addendum 1, which extended the bid opening to October 25th, 2013 and final day for questions to October 16th at midnight. This addendum further extends the RFP deadline to Friday, November 1, 2013.