

Upgrade Utility Plant  
Project No. 658-11-104  
Bidder Inquiries  
Amendment 00006  
Solicitation No. VA246-15-B-0371  
29 April 2015

No.	Dwg. / Spec.	Location	Comment	Reviewer	Harrell Design Group Response	Amd.
001	MP601	Boiler Schedule	Are Johnston Boilers an acceptable alternate as long as they meet all the required specifications?	Mech.	Drawing MP601 Boiler schedule shows Cleaver Brooks as base of design with Superior and B&W as acceptable alternates. Bid as specified.	3
002	CG101, CU103		Will Structures # 18 & #19 be included on the profile page?	Civil	Utilize the drainage summary on sheet CG101 to determine structure heights for structures #18 and #19.	3
003	CG101, CG102	Structure #6	For Structure #6, can the inverts in from Structures # 7, # 8, and # 18 be verified?	Civil	Use the inverts indicated in the drainage summary.	3
004	CG104	Alt. No. 1	For Alternate No. 1, do we use the profiles from the main bid to obtain the heights for the structures?	Civil	Use the drainage summary on sheet CG104 to determine changes in structure heights. All other structures will remain the same.	3
005	CG101, CG102	Structure #16	Structure #16 states "replace existing VDOT DI-3B L=8". Is it to be replaced with the same type of structure with the same throat length?	Civil	The new structure shall be a VDOT DI-3B L=8'. The type and length of the existing structure is not guaranteed and shall be verified by the Contractor.	3
006	CG101, CG102	Structures #2, #6, #7, #8	What are the throat lengths for all the DI-2's? (Structures #2, #6, #7, #8)	Civil	The structures listed (#2, #6, #7, and #8) should be changed to DI-1. There will not be a throat length.	3
007	General	N/A	Can we have a copy of the Geotech Report?	Geo.	See attached Geotechnical Report	2
008	26 12 19	1.6 B	C57.12.29-05, Pad-Mounted Equipment – Enclosure Integrity for <u>Coastal Environments</u> <ul style="list-style-type: none"> <li>Is this standard applicable for this project?</li> </ul>	Elec.	No – enclosure integrity for coastal environments is not required.	3
009	26 12 19	2.1 E	Calls out "...dark green enamel finish coat, except where a different color is specified in section 09 06 00, SCHEDULE FOR FINISHES." <ul style="list-style-type: none"> <li>Is another color required by 09 06</li> </ul>	Elec.	Provide manufacturer's standard ANSI dark green enamel finish.	3

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			00? If not, will standard Munsell Green satisfy the color requirement?			
010	26 12 19	2.1 E	<p>Calls out "All surfaces of the transformer that will be in contact with the concrete pad shall be treated with corrosion-resistant compounds and epoxy resin or a rubberized sealing compound."</p> <ul style="list-style-type: none"> <li>Would a stainless steel transformer base in lieu of the above-mentioned compounds satisfy this requirement?</li> </ul>	Elec.	Provide surface treatment as specified in 2.1E.	3
011	26 12 19	2.4	<p>TRANSFORMER FUSE ASSEMBLY calls out two types of fusing –</p> <ul style="list-style-type: none"> <li>Bay-O-Net in series with liquid-immersed current-limiting fuses</li> <li>Load-break full-range dry-well current-limiting fuses with a comment in 2.4B 3 that transformer sizes above 100A at 5 kV be furnished with clip-mounted live-front fusing</li> <li>Which type should be furnished? <ul style="list-style-type: none"> <li>50 kA dry-well fusing for 750 kVA at 4.16 kV requires parallel dry-well fusing which would be in non-load-break holders (recommended to be mechanically interlocked</li> </ul> </li> </ul>	Elec.	Delete paragraph 2.4.	3

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			<p>with the under-oil two-position switch to prevent removal unless the switch is in the OPEN position).</p> <ul style="list-style-type: none"> <li>• Clip-mounted fusing negates the implied “dead-front” primary construction called out in 2.5 A</li> <li>• If clip-mounted fusing is required, it is recommended that the fuses by “cold-sequenced” with installation a third compartment access to which would be mechanically interlocked with the two-position liquid-immersed switch to prevent opening the compartment and handling the fuses unless the switch is in the OPEN position</li> </ul>			
012	26 12 19	2.5 B	<p>Calls out surge arresters supported by the tank wall. 2.5 A calls out dead-front construction for load-break elbow terminations.</p> <ul style="list-style-type: none"> <li>○ Tank-wall surge arresters would be live-front. Should elbow surge arresters be provided?</li> <li>○ What is the surge arrester rating? (3 kV, 6 kV)</li> </ul>	Elec.	<p>1. Provide elbow surge arresters.  2. Surge arrester rating to be rated at 9 kV.</p>	3

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013	26 12 19	2.6 A	What is the value of the “calculated available fault current shown on the drawings”?	Elec.	Bracing for all medium voltage equipment shall be 500mVA on medium-voltage.	3
014	26 12 19	2.8 A	Calls out a hot stick in the low-voltage compartment. The hot stick would be approximately six feet long and would not fit into the compartment.	Elec.	Omit 2.8A.	3
015	26 12 19	2.9 J. 1. a.	Calls out a “no-load” tap changer. Tap changer furnished would be a de-energized tap changer.	Elec.	Tap changer is designed to be adjusted when de-energized.	3
016	26 12 19	2.9 J. 1. e.	The temperature gauge called out in this section does not include alarm contacts. 3.2 A. 1. c says “Verify that <u>control and alarm settings on temperature indicators</u> are as specified.” Please confirm that alarm contacts are required on the temperature gauge.	Elec.	Omit 3.2.A.1.c. Alarm contracts are not required.	3
017	26 12 19	2.9 J. 1. i.	See 2.8 A above. Hot stick size precludes installation in the low-voltage compartment of a compartmental pad-mount transformer	Elec.	Delete requirement for hot stick in low-voltage compartment.	3
018	26 13 16	1.2 H	Calls out a short-circuit and coordination study. Who will perform this requirement?	Elec.	The study is the Contractor’s responsibility per 26 05 73. Study shall be submitted and approved prior to submittal of switchboards, switchgears, transformers, panelboards, and related distribution equipment.	3
019	26 13 16	1.3 A	Refers to a paragraph in 26 05 11 – we do not have a copy of this section	Elec.	Section 26 05 11 is part of the Contract Documents.	3
020	26 13 16	1.6 D	Refers to current-limiting fuses. S&C Electric Company would quote solid-material power	Elec.	1.6D is general reference to standards.	3

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			fuses			
021	26 13 16	2.1 B and C	<p>See the note below.</p> <p>NOTE: Once the available short-circuit current is known, would low-profile pad-mounted switchgear be considered as a lower cost alternative to free-standing gear? The specified gear as indicated on drawing E601 would consist of three sections 104" high – <u>incoming/source bus-tap bay / switch/fuse bay to feed 750 kVA transformer / spare switch/fuse bay</u> requiring a control power source for heaters. For example, low-profile gear is available that would match existing switchgear at the Salem Veterans Administration Medical Center. Ratings can be 14,000 amperes RMS symmetrical as indicated on the attached S&amp;C Electric Company PMH literature (PMH-7 with one 600A source switch way and two 200A fused feeder ways, 600A main bus). Another low-profile option is Vista gear which is available in ratings of 12,500, 16,000, and 25,000 amperes symmetrical short-circuit.</p>	Elec.	Provide standard height switchgear as specified.	3
022	26 13 16	2.3 A	<p>Calls out special nameplates attached to the switchgear with screws</p> <ul style="list-style-type: none"> <li>Will the nameplates be furnished by the contractor or manufacturer?</li> <li>If the gear is to be installed in an area not restricted to authorized</li> </ul>	Elec.	Nameplates may be furnished by Contractor or manufacturer at Contractor's option. Provide tamper-resistant screws.	3

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			personnel only, use of screws will negate any tamper-resistant rating of the assembly			
023	26 13 16	2.3 A and B	Refers to “Normal Power System” and “Essential Power System”. <ul style="list-style-type: none"> <li>Which applies to the switchgear in this specification?</li> </ul>	Elec.	26 24 13-2.3A and B references do not match inquiry concerning 26 24 13 (2.12A). The application would be normal power system. Use color as indicated for normal system since entire building is served from emergency power.	3
024	26 13 16	3.4 A	Calls out warning signs attached with screws <ul style="list-style-type: none"> <li>If the gear is to be installed in an area not restricted to authorized personnel only, use of screws will negate any tamper-resistant rating of the assembly</li> <li>Manufacturer will furnish industry-standard warning signs of the outdoor-rated decal type</li> </ul>	Elec.	Signs to be attached with screws as specified.	3
025	CU103, CU104	N/A	Please provide us a specification, detail or model number for structure no. 3 “Jellyfish water quality unit”.	Civil	The model number shall be determined by the manufacturer. Basis of design is JF10-12-3 for bidding purposes.	3
026	CU101	N/A	Please provide us a material and size for the relocated gas line that is shown on drawing CU101.	Civil	Relocated line to gas installed valve station shall be by local gas utility company. Contractor shall verify and be responsible for all associated costs if any costs are incurred by the local gas company. New line from gas valve station to building shall be by Contractor.	3
027	ES101	N/A	ES101 indicates an 800-pair copper cable is to be installed from building #2 to the new	Elec.	Provide paired copper cable as called out on documents.	3

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			boiler plant building. Is this pair count correct? If so, can it be installed as multiple cables of smaller pair counts?			
028	ES101	SN # 2	ES101, SN#2 indicates the 800-pair cable is to be terminated in Building 2/Rm 128 on lightning Protection blocks and then extended to 110-blocks. Are these 110-blocks to be located on a wall-field or in a rack? Is this arrangement also needed in the new boiler building?	Elec.	110 blocks to be located on a wall-field.	3
029	ES101	SN # 3	ES101, SN#3 is incomplete. Please clarify.	Elec.	Notes 2 and 3 to read as follows: 2. Room 128 in Building 2, tie-in location for telephone. Terminate new copper on lightning protection isolators. Then extend +/- 60' and terminate cable on frame utilizing 110 blocks. Provide 20' slack in switch room. 3. Appropriate location of CATV head end equipment exact location to be field verified. Connect fiber to existing CATV head end equipment. Sheet keynote 4 is not used.	3
030	EY102	N/A	EY102 – telecommunications outlets at camera locations indicate 1D/1V, whereas riser diagram on E503 indicates 1D. Please clarify.	Elec.	Omit 1V designations at cameras on sheet EY102 requires one data connection	3
031	E503	Detail F3	E503/Detail F3 indicates that a separate government contractor will terminate data	Elec.	Revise Note 2 on F3/E503 to read "All data cable, terminations and testing to be	3

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			cables. Are we to only provide and install the cables but not terminate? If so, who supplies the connectivity (patch panels, jacks, outlet plates)?		included in contract".	
032	23 50 11	2.1A	Paragraph 2.1.A: Please clarify if a spray or tray type DA is required. Specification mentions both types.	Mech.	Contractor needs to provide Tray type DA.	
033	23 50 11	2.1F	Paragraph 2.1.F: Please clarify that the safety relief valves are to be sized to relieve the full capacity of the pressure reducing valve in case of its failure.	Mech.	Safety relief valves are to be size to relieve the full capacity.	
034	23 50 11	2.1P	Paragraph 2.1.P: requires the use of Mercury switches. This requirement is in other sections as well. Mercury is no longer used in switches due to health concerns. Can other types of switches be used. If so what is acceptable?	Mech.	Bid as specified	
035	23 50 11	2.2.C.7	Paragraph 2.2.C.7: Specification call for testing the surge tank to 1.5 times it design pressure. ASME Section IIIV only requires 1.3 times (same as deaerator in paragraph 2.1.D). Is this acceptable?	Mech.	Bid as specified	
036	23 50 11	2.2.F	Paragraph 2.2.F: Is the Blowdown heat recovery to be part of the surge tank? The specification seems to indicate it is. Nothing is shown on the P&ID and nothing is scheduled. Or is this in reference to the blowdown economizer shown on the drawings?	Mech.	Blow down heat recovery is not part of surge tank. Blowdown heat recovery system is shown on drawing MP702 drawing grid 10-F	
037	23 50 11	2.2.H	Paragraph 2.2.H: Specification calls for an	Mech.	A 316 Stainless Steel tank would be	



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			epoxy coating on the inside of the tank. Epoxy is not recommended because it can flake off if not applied correctly and damage the feedwater pumps. Is a Stainless Steel tank acceptable?		acceptable.	
038	23 50 11	2.2.K	Paragraph 2.2.K High and low water level alarms. Are mercury switches allowed? See previous comments.	Mech.	Bid as specified	
039	23 50 11	2.4	Paragraph 2.4: Please clarify if the feedwater pumps are shipped loosed for field mounting on a concrete pad or are to be mounted and pre-piped on the skid?	Mech.	Pumps are mounted on a house keeping pad. See Architectural drawing AE101for pad. Skid mounted DA tank and pumps are not allowed per VA Steam Design Manual.	
040	23 50 11	2.5	Paragraph 2.5: Please clarify if the transfer pumps are shipped loosed for field mounting on a concrete pad or are to be mounted and piped on the skid?	Mech.	Pumps are mounted on a house keeping pad. See Architectural drawing AE100 for pad. Skid mounted Surge tank and pumps are not allowed per VA Steam Design Manual.	
041	23 52 39	2.5.D	2.5 D. economizers are specified to be ASME Section1. Section 1 does not currently allow stainless steel economizers. Standard economizers are Section IIIV with Stainless Steel tubes and either Aluminum or SS fins or ASME Section 1 with Carbon Steel tubes. Please clarify what is desired?	Mech.	Bid as specified which requires 316 stainless steel tubes, header, and inner casing. Outer casing to be galvanized or painted steel.	
042	Specs.	General	There is extensive sheeting required for this project. The sheeting will occur in three locations: 1. basement of the new building 2. utility tunnel 3. adjacent to the stormwater detention	Civil	The shoring system shall be designed based on site conditions by a licensed engineer.	3

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			<p>facility near existing road</p> <p>This could easily cost in excess of \$1,000,000. Please provide a specification for all of the sheeting and shoring required for this project.</p>			
043	GC101/F1 Phase 1A Notes 5-8, CU101	F1, Phase 1A Notes 5-8	Reference F1/GC101 phase 1A notes 5 – 8 & CU101. Is it the contractors responsibility to furnish and install the gas line downstream of the natural gas valve station or is the government handling these costs with the gas company and the contractor is just assisting with coordination? If it is the contractors responsibility must the contractor utilize the gas company to install this work or can an independent contractor be utilized as long as the work is coordinated with the gas company?	Plumbing	In lieu of the routing shown to new bldg. #175, contractor to supply new 6" line from low pressure side of natural gas valve station to building entry point shown on sheet CU101. All modifications to natural gas valve station to be performed by local gas utility.	3
044	MP707/F1	F1	Reference F1/MP707, please confirm everything as boxed in stating "main gas metering & regulating area by others" (i.e. plug valve, filter, ½" port, pressure gauge, PRV, ½" port, pressure gauge, <u>meter</u> and thermometer will be furnished and installed by the government.	Plumbing	Indicated main gas metering and regulating area is owned by local gas utility company.	3
045	CU101, MP707/F1	F1	Reference CU101 & F1/MP707, it does not appear that new building #175 has a dedicated meter serving the total gas load to the building (just dedicated gas meters on ea. boiler drop). Is it not the government's	Civil & Plumbing	New pulse type meter will be installed in existing main gas metering and regulating area by local gas utility company. Connect to SCADA system.	3

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			intent to measure the total load to the new plant (or does the government intend to totalize all four (4) gas meters to determine total consumption)? If a gas meter should be provided should this meter be tied back into the SCADA or back into the existing advanced utility metering system? Division 25 specification was not included with the bid documents, is advanced utility metering not a requirement?			
046	23 52 39, MP707/F1	General	23 52 39 describes the need for propane if there is an interruption in natural gas service. 23 52 39 2.3-H.1 states to provide separate piping with plug-valve, pressure gage, filter and pressure regulator for natural gas and for propane. The propane piping train is not depicted on F1/MP707. Will there be a propane tank "farm" or is it the government's intent to utilize propane quick-connects on each boiler? Will the government be furnishing/installing the propane tanks and protective cage?	Plumbing & Arch.	Provide a 10'-0"x10'-0" concrete slab on grade 4" thick @ 3000psi with a turndown to 24" below grade. Provide a 7'-0" high chain link fence enclosure with a pitched aluminum canopy and a 3'-0" wide man gate that has the ability to be padlocked. Pipe bollards shall be provided at 4'-0"OC along perimeter of chainlink fence. This will be located on the south side of the building between column line 1 and column line 2D on the exterior of the building. See mechanical drawings in this addendum for additional information. Piping will be shown in Amendment 1 on drawings MP103 and MP707.	3
047	23 31 11	2.1.A	Specification Section 23 31 11 2.1.A states "A. Pre-packaged, pre-piped, vertical, down flow, pressure type with automatic controls to operate on sodium cycle. <u>Automatic-alternating triplex units</u> " and specification	Plumbing	4 softeners is the correct number.	3

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			section 23 31 11 2.1.D.1 states "D. Softener Tanks – Support on a molded structural base. Tanks shall have flanged openings for mineral filling and removal. Provide vacuum breaker as indicated in the drawings. 1. <u>Each system shall include three (3) tank(s).</u> Each softener tank shall be 30.0 in. in diameter. The overall tank height (less base) shall be 60.0 in., sufficient to allow for a proper freeboard space above the resin bed for adequate expansion of the resin during backwashing." Drawings PP102 and PP401 show a water softener with four vessels. Should the water softener have three or four 30" vessels?			
048	General	N/A	Please advise if a Victory Energy 700 HP Scotch boiler and a Johnston Boiler with a S.T. Johnson Burner (to meet low nox requirements) will be acceptable alternates as long as they adhere to the performance information as outlined on MP601 and adhere to 23 52 39.	Mech.	Drawing MP601 Boiler schedule shows Cleaver Brooks as base of design with Superior and B&W as acceptable alternates. Bid as specified.	3
049	General	N/A	Is the project tax exempt?	VA	No, this project is not tax exempt.	N/C
050	AE205, AF601	N/A	Ceramic wall tile is shown on the elevations for rooms 105A and 109A on sheet AE205, however, on sheet AF601, these walls are specified to receive only paint. Please clarify.	Arch.	AE205 is correct, modify AF601 to reflect the ceramic wall tile as shown on the AE205.	N/C
051	Bid Schedule	Item No. 8	Bid item #8: Please clarify if this also includes eliminating the demolition of the	Arch.	Boiler Building shall not be demolished. Demolition is only for equipment in the	3

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			existing boiler building, as the bid form says to "delete demolition of the existing boilers and associated electrical work in building 13."		building.	
052	Specs.	Plumbing	No spec requirement on insulating domestic cold water, soft water, rain leaders. Please advise.	Mech.	All pipe to be insulated as required for ice water.	N/C
053	MP103, MP104	Note 11, Note 4 Respectively	Per drawing MP103 sheet keynote #11 and MP104 #4, need clarification on 'zero clearance wrap' on the stainless steel ductwork.	Mech.	Keynote 11 MP103 and keynote 4 on MP104 is for grease rated zero clearance duct wrap insulation on the exterior welded stainless steel ductwork.	3
054	MP703		MP703 Boiler controls drawings shows NOx, CO2 and Opacity monitors in each boiler stack but there is no reference except for Opacity monitors in the Spec. Are these analyzers required? These would typically not be found on a firetube boiler. These would typically be part of a Continuous Emissions Monitoring System (CEMS). They would add a large cost to the project and require regular (weekly) maintenance to keep operational.	Mech.	VA requested NOx, CO2 and Opacity Monitors be provided. Provide all three sensors. NOx and CO2 sensors to be similar to Siemens Control, Mine Safety, and Emerson Process.	3
055	Drawings	General	Please provide schedule and locations for CO and Combustible Gas detectors.	Mech.	Location is schematically shown on drawing MP703. Schedule is not required as considered part of controls. Sensors to be similar to Siemens Control, Mine Safety, and Emerson Process.	N/C
056	MP703		In reference to drawing MP703, Would multiple computer monitors be acceptable instead of one 42" touchscreen? More data	Mech.	Bid in accordance with design drawings.	3

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			could be displayed utilizing multiple smaller monitors arranged in a dual or quad configuration.			
057	23 09 11	p. 52	In reference to 230911-52 Natural Gas Flowmeters, Would Vortex Meters or Thermal Mass meters be acceptable?	Plumbing	Use the turbine meter as specified.	3
058			What type of meter is to be used for the Atomizing Air Flowmeter and what is the purpose of this meter?	Plumbing	The Atomizing Air Flowmeter is not required.	3
059	Bid Schedule, MP708	Item No. 3	In reference to Bid item #3, drawing MP708, SCADA workstation is deleted. Please clarify intention of bid item #3.	Mech.	Computer and Monitor for SCADA to be deleted in bid alternate #3. Drawing MP708 shows items to remain if Alt #2 is accepted.	3
060	MP703	N/A	Is a separate Fuel Oil Pump Control panel required as shown on MP703 or can these functions be included in the Master Boiler Control Panel?	Mech.	A separate control panel is required as shown on MP703.	N/C
061	Schedule	Bid Inquiries	Request extension for time to review plans to ask questions.	VA	Extension granted to 8-Apr-15.	2
062	SS001	Note 2.4	Note 2.4 on drawing No. SS001 states that the fabricator must participate in the AISC. Can this be waived?	Struct.	No. Bid as specified.	3
063	23 09 11	2.1.A.2 and 2.4	Section 23 09 11, 2.1.A.2 and 2.4: Controllers and burner management systems must be separate assemblies but 2.4 states the controllers should be installed in the same panel. Can separate panels be provided?	Mech.	Specification section 2.4A also says Individual panels. Provide separate panels.	
064	23 09 11	2.1.A.3, 2.1.A.4	Section 23 09 11, 2.1.A.3 states the control loops but does not include draft control. However 2.1.A.4 states that controllers for	Mech.	Boiler outlet draft control is not required unless it is required by the boiler manufacture. There is no common flue gas	

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			draft must be provided. Is draft control a requirement and what are the components?		breeching. Each boiler is provided with a stack.	
065	23 09 11	2.1.B	Section 23 09 11, 2.1.B describes several control types, multiple loop controllers, and controllers with touch screens. What system shall be provided, touch screen or multiple loop controllers? All recent projects use control systems with touch screens.	Mech.	Use touch screen system.	
066	23 09 11	2.3.G	Section 23 09 11, 2.3.G, Pressure gauges are specified requiring tubing runs for steam, feed water and fuel header pressures. This could lead to leakage and damage to the internal components of the panel. Shall pressure transmitters be supplied in place of the gauges?	Mech.	Bid as specified	
067	23 09 11	2.5.C.j	Section 23 09 11, 2.5.C.j: Multiple pen chart link with unlimited number of pens. Is this required? SCADA systems today do not include chart recorders.	Mech.	Bid as specified.	
068	23 09 11, MP704, MP709	2.5.D	Section 23 09 11, 2.5.D: Drawings identify the instrumentation and sensors needed for this project. But this section states that if Section 2.5 identifies other display or report sensors and instrumentation then they need to be provided. Shall the drawings point listing MP704 & MP709 be the basis of design or shall the point listings in the drawings plus extra instruments not listed on the drawings be supplied?	Mech.	Provide instrumentation and sensors for both.	

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069	23 09 11	2.6	Section 23 09 11, 2.6: Since the monitoring of NOX and CO has a high investment cost what model and manufacturer is the basis of design? If manufacturer and basis of design cannot be supplied then what are detailed specifications for this instrument?	Mech.	VA requested NOx, CO2 and Opacity Monitors be provided. Provide all three sensors. NOx and CO2 sensors to be similar to Siemens Control, Mine Safety, and Emerson Process.	
070	23 09 11	2.7.A	Section 23 09 11, 2.7.A, vortex flow meters. What vortex flow meters are required and what are the line sizes and flow rates?	Mech.	Vortex flow meters are for the steam. Disk or turbine type are for water, positive displacement screw type for fuel oil, turbine –type for natural gas. Pipe sizes are shown on the design drawing	
071	23 09 11	2.7.B	Section 23 09 11, 2.7.B, water flow meters. What water flow meters are required and what are the line sizes and flow rates?	Mech.	4" turbine for soft water 207gpm. 6" compound for CW - 260 gpm.	
072	23 09 11	2.7.C	Section 23 09 1,1 2.7.C, oil flow rates. What oil flow meters are required and what are the line sizes and flow rates?	Mech.	Positive displacement screw type meter for ¾" FOS at each boiler. 3.4 gpm at (3) 700 BHP boilers. 1 gpm at 200 BHP boiler.	
073	23 09 11	Sec. 3	Section 23 09 11, Section 3, Execution and Services: When companies are bidding these jobs it is important that the VA provide a minimum number of person days for startup and commissioning of the controls in this section. What is the VA's requirement for this project? How much time should be included with the quotation to do this task?	Mech.	Time will be dependent upon the level of completion of systems when commissioning starts. HDG will require a min. of 5 days. Any time required by the VA (i.e. Washington inspections) would need to be added.	
074	23 09 11	2.9.E and 2.9.F	Section 23 09 11, 2.9.E and 2.9.F: Are spare transmitters and a new laptop with the transmitter and controller software required	Mech.	Per section 2.9 one transmitter of each type utilized is required. If a computer is required for calibrating one must be	



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			to be provided?		furnished.	
075	23 09 11	2.11	Section 23 09 11, 2.11: Temperature sensors and transmitters. What temperature sensors and transmitters are required and how many?	Mech.	Location is schematically shown on drawings MP501, 504, 505, 701, 702, 703, 704, 705, and 706. Schedule is not required as considered part of controls.	
076	AF601, AE203	Rm. 105A	AF601-105A-Mens Locker Room shows Walls A,B,C,D paint. Elevation 105A-AE203 shows tile and paint.	Arch.	AE203 is correct with the two type of tile and paint.	
077	AF601, AE203	Rm. 109A	AF601-109A-Womens Locker Room same as above.	Arch.	AE203 is correct with the two type of tile and paint.	
078	25 10 10	General	This specification section is missing.	Arch.	Specification 25 10 10 is included in this amendment.	
079	General	N/A	Is there an existing controls contractor for the Mechanical portion for this project that the VA is looking to use on this project?	VA	The existing Building Automation System is a Siemens product. They are the sole source controls contractor in this regard at the Salem VAMC.	
080	General	N/A	Does the VA have a preference between Johnson Controls and Siemens.	VA	The existing Building Automation System is a Siemens product. They are the sole source controls contractor in this regard at the Salem VAMC.	
081	General	N/A	For the SCADA system, is there a recommended manufacturer or are there existing? If not, who is recommended by the Veterans Affairs.	VA	The product would need to be compatible with Siemens. They are the sole source controls contractor in this regard at the Salem VAMC.	
082	General	N/A	The normal brick at the hospital has always been Old Virginia #24 Colonial Full Range". w/10% black. Is this going to be the same brick for this project?	Arch.	As shown on AE202, there are two types of brick veneer with two types of colored mortar. The brick number 1 and mortar shall match the standard campus brick and mortar and the Contractor shall submit a	

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			What is brick type 2?		standard red wire cut brick sample boards for brick #2 and with a colored red mortar for review by the A/E and VA's COR.	
083	General	N/A	Is there a source for the stick on stone. Are we to match a special area of the existing building?	Arch.	The stone veneer shall match the existing campus standard	
084	General	N/A	Stick on Stone: on sheet C2/202, E2/303 B5/306 all show the stone sticking to the concrete. All other details show it sticking to CMU block. What detail are correct?	Arch.	There are areas for the stone veneer to attach directly to the concrete and areas for the stone veneer to attach to the CMU. Use appropriate details as shown on the documents.	
085	ES102	General, Note 7	Sheet ES102 is unclear. Are we to pull two (2) sets of 15KV cable, one through the tunnel and one through the manholes as shown? If Bid Item 2 is accepted, is the 15KV run in the tunnel eliminated or is a second run pulled in Ductbank A-A? Why would 15KV cable be in the tunnel anyway if it's just going halfway through and then out to the manhole? Note 7 on this sheet is misleading-please clarify.	Elec.	<ol style="list-style-type: none"> <li>1. Base bid is to run medium voltage conductors and raceway in service tunnel with breakout to new manhole and continue to new medium voltage switch.</li> <li>2. Under alternate proposal, eliminate medium voltage conductors and raceway in service tunnel and breakout to new manhole. Provide feed from the existing manhole to the new manhole and continue with medium voltage conductors and raceway to the new medium voltage switch.</li> <li>3. Omit Keynote 7 on ES102.</li> </ol>	
086	Specs.	General	There is nothing in the specs addressing above ground raceway for the 15KV cable.	Elec.	New 15 KV cable to be installed in rigid metal conduit.	

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			Since it's shown to be run in the tunnel, which is not a dedicated high voltage area, I'm thinking it has to be installed in heavy wall rigid conduit. Please clarify.			
087	Bid Schedule, SS100D	Item No. 2	Bid Item 2: Sheet SS100D shows the footprint of the trench to be done in lieu of the tunnel. Given the four (4) changes of direction shown, are we to install underground junction boxes for all the electrical circuits coming through there? Can't this trench be straight?	Elec.	In service trench and service tunnel, shown on EL106, pull boxes are to be installed per NEC considering length of run and number of elbows. Trench cannot be straight. Loop is required for expansion on mechanical piping.	
088	Bid Schedule	Item No. 8	Please clarify Bid Item #8. Are we to deduct only the disconnection of the existing boilers? Deduct the unit heater and exhaust fan disconnect and reconnect also? How about the new condensing pump 13-CP1? Should we deduct the work associated with the fire alarm system?	Arch.	The work shown on MD101 is included in the bid deduct. All other work listed shall remain in base bid.	
089	Drawings	General	Will REVIT drawings be issued for bidding purposes on this project? This will greatly benefit the trades for Building Information Modeling on the project.	Arch.	This Project was not completed with REVIT. If acceptable to the VA, the CADD files will be made available to the accepted Contractor after award.	
090	E802	Panels LB3, LB4	Panel LB3 schedule is incorrect. Circuits 1, 3, 5 and 7 need to be 15A 2-pole to feed Fuel Oil Tank Pumps 1-4. The receptacles shown to be fed from these circuits are actually fed from Panel LB4.	Elec.	Circuits LB3-27, 31, 35, and 39 are to be 15 amp, 2 pole circuit breakers to serve fuel oil tank pumps 1-4. Pumps to be served with 2 #12, #12G - ¾" c. Circuits 19, 21, 23, and 25 are to be spares.	
091	Specs.	01 45 00.10	Due to the size and scope of the project, insert a Quality Control Specification tailored to the job.	VA	A Quality Control Specification is included in this amendment based upon UFGS 01 45 00.00 10.	

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092	Specs.	01 35 26	Specify use of the EM385-1-1.	VA	In addition to OSHA regulations, the Contractor shall also use and adhere to the 2008 EM385-1-1 including all published changes and errata through the date of this amendment. For a given activity, the more stringent of the two safety regulations shall apply.	
093	Specs.	01 33 23	<del>Specify use of video documentation for daily QA/QC.</del>	VA	<del>The Contractor shall provide real time and time lapse video documentation through the use of a limited access webcam showing both the exterior and interior progress of the construction throughout the project duration. The webcam shall indicate at a minimum the date and time, and may also provide such general site conditions as the temperature, humidity, and wind speed. This will primarily be used for quality assurance purposes and daily report documentation. (Disregard this requirement. 21-Apr-15)</del>	N/A
094	Specs.	General	Specify use of video documentation for training.	VA	The Contractor shall video record each O&M training session and submit those videos as part of the closeout documents. The purpose of these videos is simply to provide a record of proper O&M for future maintenance personnel.	
095	Bid Schedule	Alternate No. 4	Recommend replacing this alternate with a reduction in the 800 pair copper count.	VA	Bid Alternate No. 4 shall be replaced in its entirety with the following: Delete 600 pair of the 800 pair copper specified in this contract. Include in that deletion all	

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					associated labor, material, equipment, termination, and testing costs. The remaining 200 pair of copper, and all of its associated labor, material, equipment, termination, and testing costs are to remain. For clarification, the stack economizer is to remain in its entirety and shall no longer be considered a bid deduct.	
096	Bid Schedule	Alternate No. 2, Alternate No. 7	Recommend swapping these two alternates on the hierarchy of deducts.	VA	All verbiage in Bid Alternate No. 7 shall be replaced with that for Bid Alternate No. 2, and vice versa. The intent of this change is to treat demolition of the existing boilers as a lower priority (i.e. an earlier deduct alternate) than deleting a portion of the SCADA system.	
097	Specs.	01 33 23	Recommend requesting most submittals be provided electronically.	VA	All submittals and daily reports, with the exception of items such as shop drawings, record drawings, material samples, sample boards, O&Ms, Warranty Manuals, etc. shall only be provided electronically. The Contractor shall utilize an electronic version of Form 4025 for transmittal logs for all submittals, stamped with the CQC System Manager's verification that he/she reviewed the submittal and verified its conformance to the specifications. The Contractor shall use the provided Spec. Sec. 01 33 23 Master Submittal List for packaging related submittals together.	
098	Drawings		There appears to be discrepancies between	Elec.	1. Keynote 7 to become General	

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			<p>ES101, ES102 &amp; EL106 for routing of data, telephone, CATV, fire alarm, medgas and MV.</p> <ol style="list-style-type: none"> <li>1. Keynote 7/ES101 is not depicted on the drawings, however it references you to FA001 and states "from existing building 13 run new conduit in existing and <u>new tunnel</u> to new FACP in control room of new boiler building." On ES102 the FA is shown in a duct bank (keynote 7)</li> <li>2. ES101 states "new service tunnel see EL106 for additional information".</li> <li>3. Keynote 7/ES102 states "run 4" conduit with telephone fiber and CATV to I.T. closet, 4" conduit with fire alarm, medgas and energy management to control room". Keynote 7 is pointing to a duct bank labeled A-A, which per F7/E503 is a MV duct bank with 6" conduits. This duct bank ties into a new electrical manhole, which also shows a new MV primary being tied into.</li> <li>4. ES102 and EL106 conflict, EL106 note 6 shows two conduits, but both of these conduits are the</li> </ol>		<p>Sheet Note C.</p> <ol style="list-style-type: none"> <li>2. Item 2 does not appear to be clear on what the question is. All tunnel requirements for special systems and telecommunications are indicated on EL106.</li> <li>3. Keynote 7 was omitted. See response 3 for item 085. Keynote symbol 7 on plan to be omitted.</li> <li>4. EL106 depicts requirements for special systems and telecommunications. See response 1 and 2 for item 085. The MV primary information is indicated on ES102.</li> <li>5. The telephone, fiber, and CATV come from plan north. The fire alarm tie-in comes from plan south. See sheet ES101.</li> <li>6. Keynote 7 was omitted. See response 3 for item 085.</li> <li>7. See Clarification Keynote 14 and Sheet ES101 for information.</li> </ol>	
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			<p>conduits as noted to be located in the duct bank. EL106 does not depict any MV conductors, however ES102 shows medium voltage conducts in the tunnel.</p> <p>5. EL106 also shows both conduits turning plan north. We understand that the telephone fiber and CATV would come from plan north, but the FA would come from plan south.</p> <p>6. We assume that the keynote 7 duct bank is a typo, we assume all of this conduit is running either in the new tunnel or new trench. The keynote 7 duct bank is significant LF, which has excavation, conduit and concrete costs associated with it.</p> <p>7. PP104 states that the medgas comes from Building 13, but this is not depicted on the ES101 sheet, we assume the FA and medgas have a similar route. ES101 does not state to provide conduits with required medgas cables.</p>			
099	Specs.	26 32 13	The generator specification (263213) makes note of a day tank. The electrical drawings do not depict a day tank, and we assume a day tank is not needed. The generator will	Elec.	The design shows a sub-base tank, therefore a day tank shall be omitted.	

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			have a 96 hour fuel tank per E601 & 263213 2.5-C.2.			
100	Drawings & Specs.	Elec. (General)	The ATS is indicated to be closed-transition on the drawings, but open-transition in the specifications, which is correct?	Elec.	See Clarification Keynote 15 for the response.	
101	Specs.	General	Your initial RFP indicated that we must comply with the Buy American Act; however, we need to know which FAR or FARs we need to meet. Please advise.	VA	FAR clauses cited in the solicitation are 52.225-11, 52.225-12, 52.225-13 and 52.225-25.	
102	Drawings & Specs.	Elec. (General)	Enclosure sound level seems to be unclear...please provide a dBA value measured at 23 feet (the industry standard for generator noise levels) that the enclosure must meet.	Arch. & Elec.	Refer to specification section 26 32 13 (2.15C) for enclosure sound level noise requirements.	
103	Drawings & Specs.	Elec. (General)	A 96-hour runtime sub-base tank is called for, but it seems to be indicated as a DAY tank in the specifications, with references to other main tanks...is there a main storage tank on this campus? If so, please provide specifications for the return pumps on the 96-hour day tank. Note, 96 hours is very high for a typical DAY tank...typically this value is about 4 to 8 hours.	Civil & Elec.	The generator is not connected to other fuel tanks on campus. The generator has a separate fuel sub-base tank. The 96-hour fuel capacity is to be provided per VA requirements. The sub-base tank is not a day-tank.	
104	Drawings & Specs.	Elec. (General)	Would UL142 be acceptable for the sub-base tank, or is UL2085 necessary here?	Civil & Elec.	The sub-base tank to be double wall type UL142.	
105	Drawings & Specs.	Elec. (General)	The ATS is indicated to be closed-transition on the drawings, but open-transition in the specifications...which is correct?	Elec.	See response to item 100.	
106	Drawings & Specs.	Civil / Struc. (General)	The site is indicated as seismic zone C, and the referenced URL indicates this zone	Civil & Struc.	If seismic category C is correct, then all seismic requirements to comply with	



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			would require Seismic Certification for the generator and ATS...is this really necessary?		seismic category C certification.	
107	MP705, 23 09 11	Controls (General)	<p>VAMC Salem, VA Solicitation VA246-15-B-0371 is for a new boiler plant with a large amount of instrumentation. Among the published plans for this project is attached drawing MP705 which specifies automatic boiler sequencing, including that backup boilers be started by the sequencer when needed.</p> <p>Previously you [Dough Ryan] had identified VHA Directive 2008-062 (attached) which states on Attachment A that "Ensurance that no boiler of any pressure can be restarted remotely".</p> <p>Has this directive been replaced by a new one, as it apparently self-expired in 2013?</p> <p>Should we include automatic boiler start-stop (lead-lag) control systems for this and other projects if specified?</p> <p>Note that Section 230911 for the project doesn't specify anything other than a standard boiler master pressure control with firing rate wired to each boiler. The lead-lag requirement is only listed on Drawing MP705.</p>	Mech.	As stated on MP705 drawing, Boilers must be started manually.	

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			Please advise if lead-lag systems are now permitted within the VA.			
108	Drawings & Specs.	Plumbing (General)	Can you please clarify if fuel oil supply & return piping will require insulation in any of the following locations: 1. Direct Buried 2. Inside Tunnel/Trench 3. Inside the Boiler Plant	Plumbing	Fuel oil supply and return piping does not require insulation for any of those locations and will not require insulation anywhere on this project.	
109	PP102, 23 31 11	2.1.A	Specification Section 23 31 11 2.1.A states "A. Pre-packaged, pre-piped, vertical, down flow, pressure type with automatic controls to operate on sodium cycle. Automatic-alternating triplex units" and specification section 23 31 11 2.1.D.1 states "D. Softener Tanks – Support on a molded structural base. Tanks shall have flanged openings for mineral filling and removal. Provide vacuum breaker as indicated in the drawings. 1. Each system shall include three (3) tank(s). Each softener tank shall be 30.0 in. in diameter. The overall tank height (less base) shall be 60.0 in., sufficient to allow for a proper freeboard space above the resin bed for adequate expansion of the resin during backwashing." Drawings PP102 and PP401 show a water softener with four vessels. Should the water softener have three or four 30" vessels? <b>Response:</b> 4 softeners is the correct number.	Plumbing	There are four (4) softeners shown on PP102.  One (1) has a Note 4 designation which clarifies it is Contractor Furnished Contractor Installed (CFCI). The brine tank also has a Note 4 designation which clarifies it is CFCI.  The other three (3) softeners have a Note 3 designation which clarifies they are Government Furnished Contractor Installed (GFCI). Note 2 states that the Government will only be providing that subset (3) of the total softener count (4) and goes on to clarify the Contractor's role in relocating that subset.	

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			However drawing number PP102 state the following in keynote four provide one new softener tank and all new softener accessories including brine tanks as required for a complete and functional system in new building. Which is correct? Provide triplex new softener or only one softener?			
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