

VA project 613-12-111
BIDDER RFI'S COMBINED
5/21/14 - REVISED

QUESTIONS & ANSWERS:

1. Description of Bid Alternates included in the solicitation does not match the description on the drawings. Could you please clarify? The description included in the solicitation seems incorrect.

ANSWER:

Revise Deduct Alternates in Specification Section 01 00 00 – 1.3 and Project Description on GI001 as follows:

ITEM #2 - DEDUCT ALTERNATE #1: All work in base bid to remain except:

1. Delete concrete curbing between poles.
2. Delete replacement of Existing lighting at 75,000 gallon fuel storage tanks.
3. Delete one (1) K01 fixture.
4. Delete Walk-in enclosure for automatic transfer switches and Replace with NEMA 4 rated (non-walk-in enclosure)
5. Provide single-head light poles in lieu of dual-head light poles.
6. Delete 25 foot lighting poles and replace with 18 foot lighting poles
7. Delete 36" lighting pole bases and Provide 16" lighting pole bases
8. Provide two new 25,000 gallon fuel tanks, associated fuel piping, and pumps to supply fuel to new generators, in lieu of the 30,000 gallon tanks.

ITEM #3 - DEDUCT ALTERNATE #2: All work in base bid to remain except Delete:

1. Factory witness testing from Specification Section 263213.
 2. Class 1 Division 2 wiring at Fuel tank and Replace with weatherproof wiring.
2. Under General Requirements 01 00 00, 1.31 and 1.32, it specifies that the contractor employ Commercial / Professional Photographer. For a project of this size could the GC self perform these duties as specified?

ANSWER:

Per the VA response: a Commercial/Professional Photographer that can meet the specification must be used on this project.

3. Under General Requirements 01 00 00, it specifies that the Contractor must have (SSHO) Site Safety and Health Officer on site at all times, and that same person could also perform QC duties. Would it also be acceptable for the Superintendent to perform the SSHO and QC duties for this project?

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ANSWER:

Per the VA response: This is acceptable, as long as the Superintendent meets the requirements for both positions and all Safety Guidelines are adhered to.

4. Under Testing Laboratory Services 01 45 29, 1.1, it is indicated that VA will retain the Testing Services for Construction. This section also specifies required testing for earthwork, concrete, steel, etc. Specification Section 03 30 00 Cast-in-place Concrete specifies testing agency retained by Contractor. Please clarify who will be responsible for hiring of testing agency.

ANSWER:

Per the VA response: The contractor is responsible for all testing services.

5. Please verify the feeder sizes between the generators. Dwg E601 shows #1/0 cable, Dwg E101 shows 250MCM cable.

ANSWER:

Feeder size noted on E601, keynote 3 are correct. Feeder conductor size in keynote 12, Sheet E101 to be #1/0 in lieu of 250kcmil.

6. Drawing SS102 references a new 14" thick concrete pad with a dimension of 45'6" x 34' and contains a note referencing a drain with further clarification on the plumbing drawings. Drawing PL501 references a concrete pad with approximate dimension of 32' x 15.' Is the existing concrete in the containment area to be demolished for the new piping? What is the size of the new concrete pad in the containment area?

ANSWER:

The existing concrete will need to be saw cut and patched with new pad going on top. Note 2 on Sheet SS102 calls for the tanks to be no closer than 24" from edge of pad.

7. On Drawing E101, Enlarged Generator & Switchgear Plan, Note 12 shows feeders to be 3 #250's in 5" PVC but the one line drawing on Drawing E601 - Note 3 shows 3 #1/0's in 5" PVC, please advise which is correct.

ANSWER:

Reference response to question #5

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8. Also, Keyed Note 3 on Drawing E601 from generators to the parallel gear shows duct bank sectional cut A-A, please confirm this is the correct section.

ANSWER:

Keynote 3 on Sheet E601 does not reference any Sectional cut. Keynote 2 on Sheet E601 remove "ductbank type A" from keynote.

9. Drawing E101 detail F1 shows the feeder from generators to paralleling gear enclosure as 3-#250 KCMIL 15 KV cables. Sheet E601 sheet keynotes #3 is calling out 3-1/0 15KV and 1-1/0 600V cable. Sheet ES101 has keynote #3 on this run. Key note #3 on this page refers back to E501, detail C8, type A-A. This changes the cable and conduit runs a third time. Which is correct?

ANSWER:

Sheet E101, keynote 12 to be changed to – Electrical ductbank with 3 #1/0-1C-15Kv 105°C and 1 #1/0 – 600v THHN in 5" PVC conduit, 5" PVC spare conduit and two 1-1/4" PVC conduits for controls. Sheet ES101 symbol for keynote 3 from generators to paralleling gear to be removed.

10. Drawing E601 sheet keynotes #2 is calling for 3-4/0 15KV cables and 1-4/0 600V cable. Reference is made to E501, detail C8, type A-A. Is the intent to have parallel runs for each circuit or is the detail requiring a single run for both circuits be placed in the same duct bank?

ANSWER:

The intent is to have a single run for both circuits placed in the same ductbank. Keynote 2 on Sheet E601 to delete "ductbank type A" from keynote.

11. Reference ES101 Sheet Keynotes #13

- Will it be acceptable to turn up the 2" conduit in generator #3 base and then daisy chain to generator #2 & then #1 or is another method required?

ANSWER:

It is acceptable to daisy chain.

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12. 26 32 13-22 3.2.F.5 - Confirm that a REACTIVE load bank is required on site. Typically if the factory test is performed with a reactive load bank, normally at 0.8 PF, the on site test is allowed to be a resistive test only.

ANSWER:

A reactive load bank is required.

13. 26 32 13-22 3.2.K.2.b - Confirm that this line item is requiring a total of 6 mW of reactive load banks to satisfy the testing requirement or if a different maximum loading on load banks is acceptable, please advise that kW.

ANSWER:

6mW of reactive load banks is required for the testing procedure.

14. Is differential protection required to protect the generator feeder cables between the generator output terminals and the generator paralleling circuit breaker located in the Paralleling Switchgear located in a separate enclosure.

ANSWER:

Provide protective relays required for generator feed to paralleling switchgear.

15. On drawing E-401, the switchgear elevation (F5) shows a "Resistance Ground" compartment in the switchgear (section 2 from left). I need clarification as to what is being referred to here since if it referred to NGRs, there would need to be three (or 4 for future).

ANSWER:

The resistance ground is to be installed in the exterior of the paralleling switchgear structure. See Revised Sheet E401.

16. In the first section, the Battery & Charger is shown. They will NOT be in switchgear section(s), but will be mounted in the outdoor enclosure's aisle or storage space.

ANSWER:

The battery and charger are to be installed within the paralleling control/switchgear line-up. See Revised Sheet E401.

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17. In the last section (far right), likewise the panel, transformer and enclosed circuit breaker will NOT be mounted in the switchgear itself, rather mounted on a wall in the enclosure.

ANSWER:

No, the panel and transformer to be mounted in the equipment line-up. See Revised Sheet E401.

18. The ATS (as shown on E-101) shows as inside an enclosure, with detail B3 showing a "deduct Alternate". Footnote 14 calls that "Deduct Alternate #1: Automatic Transfer Switches to be NEMA 4 enclosures without walk-in enclosure (the "deduct" implying that the base is a NEMA 4 walk-in enclosure). However, Spec section 263623-2.1.A calls for a "Type 1 indoor with walk-in enclosure or by deductive alternate. Type 3R Non-Walk-In enclosures....." In short I need clarification on what the base and alternate construction of the ATS are to be.

ANSWER:

Specifications Section 263623-2.1.A to be corrected to Type 4 Outdoor Non-Walk-in enclosure.

19. Finally, the outdoor enclosures refer to NEMA 4 enclosures (which could imply stainless steel or plastic). Note that these will all be built per as NEMA 3R construction.

ANSWER:

Outdoor enclosures to be NEMA 4 Stainless Steel type.

20. Can you clarify the following:

- On site placement of excavation spoils or off site
- Rebar size in dead-man slab under the oil/water separator
- Will there be saw-cutting of existing slab for new SD lines inside tank corral
- Is the thickness of the tank corral slab known
- Is there a housekeeping pad under the oil tanks on top of the new slab in the tank corral (see SS102, PL501)
- Is filter cloth required for stone base < 3" thick

ANSWER:

- Off-site placement of excavations spoils.
- Rebar size in dead-man slab under the oil/water separator shall be No. 6 rebar.
- Yes, there will be saw-cutting of existing slab for new SD lines inside tank corral.
- The existing slab thickness of the tank corral slab is unknown.
- No, there is no housekeeping pad under the oil tanks on top of the new slab in the tank corral.
- Yes, filter cloth is required for stone base <3" thick.

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21. Bid Alternate #2 calls out to delete 25 foot fence posts & provide 18 foot fence posts & delete 36" pole bases & provide 16" bases. I believe this is supposed to be light poles & light bases, please confirm.

ANSWER:

Correct for light poles and light bases.

22. Specification section 010000 General requirements, page 10 and 11. 1.6 Operations and storage areas K. On page 11 of this paragraph list specification section 280511, Requirements for Electronic Safety and Security Installations for additional requirements. This section is not in these specs. Please clarify?

ANSWER:

Omit Reference to 280511.

23. We are writing to request detailed clarification on the exact power requirements during the period which the tie-in work occurs. Half of the primary electric service to the entire campus will need to be shut down to accommodate the tie-in work. During this down time, the other half of the primary electric service will power the entire campus however there will be NO back-up power should the primary service fail. Does this contract require the General Contractor to furnish and install some type of back-up electrical power to avoid a total power loss? If so, please provide detailed information on the back-up power scope-of-work so all bidders have the same information from which to bid.

ANSWER:

The contract does not require the General Contractor to furnish and install back-up electrical power for the changeover. Coordinate with COR seven (7) days in advance for any shutdown requirements.

24. Drawing PL101 states the tanks are to be monitored by the existing fuel monitoring system. Do we know, or can we get, the make and model and if there is enough room with the existing hardware to add two more probes and all of the sump sensors.

ANSWER:

Plan to add new hardware in existing system to support the new probes.

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25. Spec section 231000 states the tanks are to match the existing tanks in color – what color are the existing tanks?

ANSWER:

Existing tanks are white and new paint shall match existing.

26. Spec section 231000 states the tanks have a steel dike exterior – none of the drawings show a steel dike, just concrete. Are the tanks required to have a steel dike as well?

ANSWER:

Delete “and steel dike exterior” from Specification Section 231000-2.2.C. Tanks have concrete exterior.

27. Drawing PL101 shows 1.5” underground piping – the specs call for FRP piping meeting UL-971. I do not know of any UL-971 FRP piping that comes in a diameter smaller than 2”. There are other options that meet UL-971 if they want to stick to the diameter or we would have to provide 2”.

ANSWER:

2” Double-wall FRP piping for the fuel oil supply and fuel oil return will be acceptable.

28. The drawings (PL501 & PL501) show the fill line (FF) and fill line connections at the bottom of the tanks however the spec section calls for an “overflow prevention valve...designed for aboveground tanks at the top of the tank”. These valves are designed to be installed at the top and that is the only way they will function properly. Should we assume the fill line will be run up to the top? If so, does the filtration supply line (FOF) also move to the top of the tank?

ANSWER:

The intent is for the fuel oil fill to be at the top of the tank. The fuel filtration supply line (KOF) does go to the top of the tank.

29. Drawing E601 Reference Keynote #7

ANSWER:

This is the VAMC’s existing M.V. switchgear.

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30. Note 7 Indicates that we are to control a separate medium voltage switchgear from the new Paralleling Gear. Please provide map location, gear type, model, serial #, and conduit path to reach this location.

ANSWER:

The map location and conduit path are shown on sheet ES101. The gear type, model and serial number to be field verified by contractor.

31. Is there a DBA rating for the generator enclosures?

ANSWER:

Maximum 85dBA at 5'.

32. If contractor supplied fuel piping is required to be double wall, how many leak sensors will be required?

ANSWER:

Sensors to be in both supply and return lines.

33. Are dry contacts on the day tanks for fuel level indication from an alarm panel acceptable.

ANSWER:

No, separate contacts are required.

34. Will there be lighting, / electrical package required for the enclosures?

ANSWER:

Yes, see Specification Section 263213-2.15 for Generator Enclosure.

35. Will Blanket Type Exhaust Wrap with Internal Insulation be acceptable?

ANSWER:

Blanket type exhaust wrap is acceptable.

36. Is there a basis of design supplied for the Bulk Fuel Tanks?

ANSWER:

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No basis of design. Manufacturer for tanks must meet Specifications, specifications are performance based.

37. Deduct Alternate #1 as described on the SF 1442 Form indicates to delete the installation of new Lighting at the Fuel Storage Area, which is consistent with Drawing E102 Detail B3 Enlarged Plan – Fuel Storage Area and associated Keynotes 13 & 14. Drawing E101 Detail D5 Typical Pole Lighting Deduct Alternate #1 indicates via Note 1 'Replace Pole Light in Generator and Automatic Switch Transfer Yards. Total of 6 Removed.' So it would appear that deduct Alternate #1 is also to include this proposed revision for these six locations to provide single-head poles in lieu of dual-head poles per Details B1 & F1 on Drawing E101. The description of changes to the work on the SF 1442 document does not address this lighting change, only the deletion of the new Lighting at the Fuel Storage Area.

ANSWER:

Reference response to Question #1

38. Please review and confirm the requirements under Deduct Alternate #1.

ANSWER:

Reference response to Question #1

39. Reference sheet E401 detail D1

- What are the requirements for J-box with LLS1 beside it?

ANSWER:

J-box and reference to LLS1 to be omitted.

40. Drawing PL 501 Detail B8 shows the Oil/Water Separator detail. We are requesting a detail of the concrete deadman anchor. We are looking for slab thickness, reinforcing location and size, etc.

ANSWER:

Slab thickness is 6" minimum, reinforcing per manufacturers and installation instructions.

41. Drawing E403 has Details B3 and B6 regarding the posts at the gate as they relate to the water table curb. Drawing E101 Details B1 and F1 contain the note "SEE STRUCTURAL DRAWINGS FOR FENCE BASE." Please provide details for the line post supports as neither structural drawing contains this detail.

ANSWER:

Omit reference to "See Structural Drawings for fence base: and refer to sheet E402 for fence details.

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42. Drawing SS102 shows one drain with the new concrete sloped to this drain. Drawing PL501 shows three drains and a cleanout and one of the drains and the cleanout appear to be outside of the footprint of the new concrete shown in Drawing SS102. Please clarify the extent of concrete removal and the new drain pipe installation required for this project. Also, since this concrete forms the secondary containment for the storage tanks, it is critical that all joints be made liquid tight. There are no drawings showing the locations of joints or joint details showing the installation of waterstops. Please provide the locations and construction details of all joints within the containment area.

ANSWER:

See sheet PL501 for piping, which will also require cutting of existing concrete. All water stops in existing concrete are existing. Any disturbance of these must be repaired/replaced to maintain full waterproofing.

43. We are unable to determine how the fuel lines currently connect the existing tanks with the boiler house. Is there a drawing available that will show this? If they are underground are there spare conduits?

ANSWER:

The piping from the existing tank to boiler are underground. There are no spare conduits. The Boiler Plant upgrade project was incomplete at the time of this project design. As-built drawings were not available at the time of project design.

44. In reference to contract duration of 240 days, we feel that this is not enough time. Generally the generators will take about 22-26 weeks from date of approval to get to site. I would assume at least 6 weeks from date of order to get written approval of the submittal and 6 weeks to install and start up after arrival. IF we took worst case that would put us at 38 weeks which is 266 days. 4 weeks past the completion date. Please advise.

ANSWER:

Change contract duration to 300 days.

45. Deduct Alternate #1 as described on the SF 1442 Form indicates to delete the installation of new Lighting at the Fuel Storage Area, which is consistent with Drawing E102 Detail B3 Enlarged Plan – Fuel Storage Area and associated Keynotes 13 & 14. Drawing E101 Detail D5 Typical Pole Lighting Deduct Alternate #1 indicates via Note 1 'Replace Pole Light in Generator and Automatic Switch Transfer Yards. Total of 6 Removed.' So it would appear that deduct Alternate #1 is also to include this proposed revision for these six locations to provide single-head poles in lieu of dual-head poles per Details B1 & F1 on Drawing E101. The description of changes to the work on the SF 1442

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document does not address this lighting change, only the deletion of the new Lighting at the Fuel Storage Area.

ANSWER:

Reference response to Question #1

46. Please review and confirm the requirements under Deduct Alternate #1.

ANSWER:

Reference response to Question #1

47. Do the paralleling switchgear and the automatic transfer switches really need to be manufactured by ASCO or will equipment that is manufactured by the generator manufacturer, that meets the intent of the specification, be accepted?

ANSWER:

ASCO is not a requirement, only a basis of design. Any equipment that meets the requirement of the contract documents will be accepted.

48. In regard to the automatic transfer switches that are specified, is it necessary for them to meet UL1008A or can they meet "UL for Medium Voltage", which is what Kohler and the other generator set manufacturers would supply?

ANSWER:

UL 1008A is not specified or required.

49. Do the ATS's need to be NEMA 4?

ANSWER:

Yes.

50. Do the ATS's need to be closed transition?

ANSWER:

Yes.

51. For generator load bank testing, your spec. calls for a "reactive" load bank test. Please confirm whether you want "reactive" or "resistive." "Reactive" is substantially more expensive than "resistive" and most projects require "resistive" only.

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ANSWER:

Reactive load bank is required.

52. Drawing E601 Note 4 reads "MODIFY EXISTING VACUUM CIRCUIT BREAKERS FOR PLC CONTROL BY PARALLELING SWITCHGEAR. PROVIDE ANY ADDITIONAL CONTACTS, OPERATORS, CONTROLS, ETC. AS REQUIRED." No information has been supplied elsewhere on the drawings regarding the specifics of this particular switchgear or the path necessary for the requested wiring. Also, please supply the manufacturer of the existing walk-in switchgear.

ANSWER:

The existing walk-in switchgear and circuit breakers are Cutler-Hammer. Cutler-Hammer has not provided information about existing switchgear, though requested many times.

The existing Cutler-Hammer circuit breaker Shall be used for "Load-add" and "Load-shed" in accordance with Sequence of Operations noted on E601. Additional contacts for breaker-open and breaker-close shall be provided, as required.

From existing manhole, designated with keynote symbol 19, provide a 2" conduit to the existing main 15kv Cutler-Hammer Switchgear located inside the noted existing substation enclosure. Provide required control wiring for open/close operation of each of the three (3) breakers in each of the two (2) sections of the switchgear. All under-ground conduit to be in concrete.

53. Concerning the note regarding unsuitable soils, sheet SS101, note 2.5, no sub-surface investigation or geotechnical report. Should there be an allowance for unsuitable soils in the absence of a quantifiable amount?

ANSWER:

Change note 2.5 on SS101 to read as follows: "Unacceptable Soils: Contractor shall remove and replace unacceptable soils at the direction of the COR. "

All soils excavated for equipment pads only shall be deemed 100% unsuitable and shall be replaced with acceptable soils as specified.

54. The VA needs to tell us if they want a Tier 4i or Tier 4f compliant solution. They do not want to do a certified solution. With a certified system, the generator(s) will shut down for any issues due to an emissions system failure, this is a Federal Law. This is a hospital and that will not be acceptable.

ANSWER:

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There is no Tier 4 requirement on this project. Generators are for stand-by use only.