

Atlanta VAMC CHP Project
Technical Questions #06 7-30-2014

1. 1.1 DESCRIPTION: This section specifies materials testing activities and inspection services required during project construction to be provided by a Testing Laboratory retained by Department of Veterans Affairs. Has the VA has already selected a testing firm, and if not, whether we can bid the project directly to the VA?

VA Response: The Department of Veterans Affairs has engaged the services of URS (and their sub-consultant) to provide the required Special Inspections and Construction Materials Testing services. Accordingly, such costs, other than 're-testing' costs which may be the responsibility of the Contractor, will be borne by the VA.

2. There is no indication of type of wire mesh used for composite deck (except roof 6x6 W1.4xW1.4). Can you, please, verify type of wire mesh (or other reinf)?

VA Response: Note B11 on sheet SS-001 will be revised in *Addendum #2 to the Issued for Bid Design Package* to state for all composite slabs provide 6x6 W1.4xW1.4.

3. Drawing ES-602 shows a 1000A circuit breaker being added to existing switchgear GHSB-AG-1. Currently the breaker provision for GHSB-AG-1-07 is configured for an 800A breaker. Is the intention to modify the bus work and breaker carriage to accommodate a 1000A breaker?

VA Response: Provide modification to bus work and breaker carriage as required.

4. It appears that the ventilation ductwork on the second floor will interfere with the transformers that are close coupled to the 5kV paralleling switchgear. What is the maximum allowable height of the transformers that are closed coupled to the 5kV switchgear?

VA Response: Sheets MH-102 and MP-102 do not show duct or piping above the switchgears. Sheet MH-301 key note 3 shows bottom of duct at a minimum of 14' above floor. If any part of the switchgears is located directly below duct or piping, then provide protective equipment that ensures occurrences such as leaks, condensation, and breaks do not damage the electrical equipment located below.

Specification 26 13 14 (20kV gear spec) (Questions 7-18)

5. Section 1.2.D – Specification 25 10 10 not found, not reviewed. Please provide this missing spec section if available.

VA Response: New electrical utility metering will be a primary metering cubical to be provided by Georgia Power. Specification 25 10 10 is not needed.

6. Reference section 2.1.A.2 and 2.4.C - These spec sections call for 750MVA rating interrupting rating. The industry is phasing out the MVA ratings on the breakers and moving to k=1 breakers with kA ratings. Spec section 2.4.D calls for 25kA rated breakers at k=1. Please confirm that the interrupting rating of the breakers can be 25kA and not 750MVA.

VA Response: 25kA is acceptable.

7. Reference section 2.1.A.4 and 2.8– Currently we do not have any revenue metering cabinets and they are not shown on the drawings. Are these required for the proposed switchgear?

VA Response: Revenue metering cabinets are not required for the switchgear.

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8. Reference section 2.1.A.5 and drawing ES-601 sheet keynote #20 – This proposal offers electrical interlocks for the two intertie breakers to maintain system automation. If kirk key interlocks are truly required for a manual throw over scheme, please clarify and we will adjust our quote accordingly.

VA Response: Provide automatic electrical interlocks. Manual kirk key interlocks are not required.

9. Reference section 2.3.A.8 and 2.3.D.1 – In other sections of the spec it calls for silver plated bus and breaker contacts. This section calls for tin plated bus. For consistency, should all the bus be silver plated?

VA Response: The Specifications will be modified in *Addendum #2 to the Issued for Bid Design Package to reflect that Silver plated should be provided.*

10. Reference section 2.4.B.2.a and 2.4.D – We are providing 125VDC control power only on breaker control power. Please confirm this is acceptable.

VA Response: Acceptable.

11. Reference section 2.5.C – Verify need for zero sequence CTs (ground sensor CTs) as they are not in the current design.

VA Response: Provide zero sequence CTs if they are required for ground fault protection.

12. Reference section 2.6.D – The PTs will have epoxy supports for the VT bushings which is the latest technology and industry standard. Porcelain is not available.

VA Response: The Specifications will be modified in Addendum #2 to the Issued for Bid Design Package to reflect that Epoxy PT supports are acceptable.

13. Reference section 2.7 – There are no CPTs in the current design. If required, please clarify the loads that they are feeding and the size of the CPTs required.

VA Response: Not all switchgear manufacturers require CPTs. Provide CPTs per switchgear manufacturers' requirements.

14. Reference section 2.11.C.2-3 – This proposal offers distribution class surge arresters on those breakers labeled with "SPD" on drawing ES-601. Please confirm no other surge arresters are required for the 20kV gear.

VA Response: Provide surge arresters for the 20KV switchgear as shown on drawing ES-601, which are the circuit breakers labeled with SPD. No other surge arresters are required.

15. Reference section 2.11.D – No panel boards are included in the current switchgear design. If required, need more detail on qty/size of breakers in the panel.

VA Response: No panelboards are required in the switchgear.

16. Reference section 2.11.E – Since roll-on-floor breakers were required for all breakers (2.2.A.1.n), is a lifting device truly required?

VA Response: Provide a lifting device if required for future maintenance.

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Specification 26 13 13 (5kV generator gear spec) (Questions 19-25)

17. Reference section 2.1.A.2 –The current design has provided 50kA rated breakers. We are interpreting the 50kV rating as a typographical error, but please confirm.

VA Response: Provide 50kA rated breakers.

18. Reference section 2.1.A.4-5 – Please confirm there are no utility metering cabinets or kirk key interlocks in the proposed design of the 5kV switchgear.

VA Response: There are no utility metering cabinets or kirk key interlocks in the 5kV switchgear.

19. Reference section 2.3.A.8 – In other sections of the spec it calls for silver plated bus and breaker contacts. This section calls for tin plated bus. For consistency, should all the bus be silver plated?

VA Response: The Specifications will be modified in *Addendum #2 to the Issued for Bid Design Package to reflect that Silver plated should be provided.*

20. Reference section 2.4.J – This proposal offers DC control power only for breaker charge/close/trip. Please confirm this is acceptable.

VA Response: DC control power only is acceptable.

21. Reference section 2.8 – The drawings do not show a utility metering cabinet. Please confirm that one is not required by the switchgear provider.

VA Response: Utility metering cabinet is not required by the switchgear provider.

22. Reference section 2.11.C.2 –Distribution class surge arresters will be provided on switchgear bus as shown on drawing ES-601. Surge arresters will be provided at the generators by the generator manufacturer as shown on drawing ES-601. Drawing ES-601 does not show any other surge arresters for the 5kV gear. Please confirm no other surge arresters are required for the 5kV gear.

VA Response: Provide surge arresters on the three generator input circuit breakers as shown on drawing ES-601. Add a surge arrester on the switchgear bus to the right of the tie breaker.

23. Reference section 2.11.D – No panel boards are included in the current switchgear design. If required, please provide more detail on quantity, size, and function of breakers in the panel.

VA Response: No panelboards are required in the switchgear.

26 23 13 (Generator Paralleling Controls) (Questions 26 and 27)

24. Reference section 1.5.A.5 – Will there be a pre-defined sequence of operations provided for this project? What requirements will there be that are in addition to section 2.3 of this specification? What is the scope of controls for the CHP generators, ATS, and other components in the system?

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VA Response: Pre-defined sequence of operations is listed under section 2.3 of this specification. Coordinate with Georgia Power, generator manufacturer, and switchgear manufacturer for additional requirements and submit for review as specified under section 1.5.A.5 of this specification. Provide all controls as required for the CHP generators. Controls for the existing diesel emergency generators and ATSs shall remain as is.

25. Reference section 2.2 – Does the annunciation at the switchgear qualify as the remote annunciator?

VA Response: No.

26. Detail 2 on Drawing SS-302 shows two (2) dowels connecting the caisson to the grade beam. Can you confirm that only two dowels are required at each caisson?

VA Response: 11 dowels are required per the note pointing to the two dowels stating “Dowels same no. as vert. & one bar size smaller than vert, reinf. (U.N.O.)”

27. Drawing LP-104 details include footings with notes that refer to the Structural Drawings, however there are no structural details provided. Please provide details for the planter/seat wall footings on the roof.

VA Response: A sketch showing the structural details will be provided in *Addendum #2 to the Issued for Bid Design Package*.

28. Please provide a layout drawing for the green roof walls including dimensions for wall lengths and curve radii?

VA Response: Layout drawing LP-102 was issued with *Addendum #1 to the Issued for Bid Design Package* providing the green roof walls including dimensions for wall lengths and curve radii.

29. Please provide details for the roof drains at the green roof.

VA Response: Details for roof drains at roof slab are shown on drawing PL-502. There are no overflow inlets at finished grade level of planter areas due to expected permeability of gaps and joints between staggered insulation layers to allow passage of water to drainage layer.

30. Drawing CD-100 specifies removal of pavement, a concrete slab and several container foundations. Can you provide as-built drawings for these items or provide us with the thickness of the concrete and asphalt so that we can quantify the material to be removed?

VA Response: Known and readily available information related to existing pavements planned for removal will be provided in *Addendum #2 to the Issued for Bid Design Package*.

31. Drawing AS-102 includes a callout for Detail 7/AS-411 located at Column B2. Should this callout refer to 7/AS-410 instead?

VA Response: Detail was incorrectly labeled and will be corrected to 7/AS-410 in the “Issued for Construction” package.

32. Drawing AS-411, Detail 7 for Column F2 includes a callout for Detail 8/AS-411, however Detail 8 is not included on this sheet. Please provide this detail.

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VA Response: The last detail on sheet AS-411, titled TYPICAL RATED BLOCK TO METAL PANEL CLOSURE DETAIL, was incorrectly labelled as #7. The detail number will be changed to #8 in the “Issued for Construction” package. The reference inside that detail was to indicate an UL rated closure similar to HW d 451, Typ. C.M.U. head detail 1/AS-611. The reference will be updated in the “Issued for Construction” package.

33. Please specify the wall types for walls located at Stair 1 on Drawing AS-101.

VA Response: Walls facing into the generator room are type C-2. The areaway walls are of insulated precast having a 2-hour rating.

34. Drawing AS-101, wall at Stair 1 located along Column Line D is noted as C9, however Wall C9 is not included with the details provided on Drawing AS-611. Please provide a detail for Wall C9.

VA Response: Disregard the C9 designation for this exterior wall. The areaway walls are of insulated precast having a 2-hour rating. Exterior walls do not have a wall type.

35. Drawing AS-104, Detail 1 includes a reference to Detail 5 on AS-506. Can you confirm that Detail 5/AS-501 should be used instead?

VA Response: Confirmed. 5/AS-501 is the correct detail.

36. Drawings SS-301 through SS-303 indicate “Engineered Fill” under the new ground floor slab.

- a. Please provide specifications for Engineered Fill.
- b. Is there a minimum thickness required for Engineered Fill?

VA Response: The requested information is defined in the Geotechnical Report.

37. Specification Section 14 21 00 – 2.0 lists Kone, Otis, and Schindler as acceptable manufacturers. Please indicate if alternate, comparable manufacturers may be substituted.

VA Response: The specification will be amended in *Addendum #2 to the Issued for Bid Design Package* to allow manufacturers meeting the specifications requirements as acceptable.

38. Specification Section 23 09 23 – Item 1.1 G – This campus has standardized on an existing standard ASHRAE Standard 135, BACnet/IP Control System supported by a preselected controls service company. This entity is referred to as the Control System Integrator in this Section of technical specifications. Please provide the contact and company information for preselected controls company?

VA Response: Response will be posted in another amendment.

39. A TPO roof membrane system is called out for on the plans with details shown on AS-414, but there is no corresponding specification section. Please provide specifications for TPO roof membrane.

VA Response: The specification section 075423 TPO MEMBRANE was omitted previously and will be issued in *Addendum #2 to the Issued for Bid Design Package*.

40. LP101: There are two fountains shown but they do not show up on plumbing and there aren't any specifications. Please provide specifications and any MEP requirements.

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VA Response: The fountains are to be donor items and are not part of the invitation to bid. They do not show up on plumbing as the donor items are to be self-contained, requiring no plumbing connections or drains.

41. EL102: Note 3 requires bollards to be mounted onto wall footing extension. Please provide a detail.

VA Response: See detail 6 on sheet LP-104 for wall footing detail.

42. Does the VA facilitate a specific location offsite for contractor parking? If so is there a cost involved for parking in this area?

VA Response: The Atlanta VAMC has a designated off-site parking location which the Contractor can use at no cost to them. However, the Contractor will be responsible for transportation of their employees to and from this Lot. The VA will not be responsible for providing such transportation.

43. Solicitation Article 4.8 (d) and (e) specifically state that “there shall be no exclusionary clauses for asbestos related work...” with respect to the General Liability Insurance. Our policy as with most contractors, excludes coverage for asbestos. Will the General Contractor be allowed to utilize the abatement subcontractor’s policy to meet this specification?

VA Response: Yes, the General Contractor will be allowed to utilize the Abatement Subcontractor’s Policy to meet the intent of this specification.

44. Drawing AD-101 Keynote 1 indicates removal of Warehouse C. Can you provide as-built drawings for this structure?

VA Response: No additional As-Built information is available. URS has provided within the Drawings the known available information.

45. Refer to Detail 1 on Drawing AS-514. Please clarify the type of stair treads and intermediate landings to be used. Are they concrete filled or smooth plate?

VA Response: The landings are concrete filled as shown on the detail. The stairs are smooth plate with rubber treads RF-1. All landings except the CFS roof level are to receive rubber flooring RRF-1.

46. Detail 12 on Drawing SS-601 calls for ¼” welded pour stop.

- a. Is this plate to be welded to the decking or should this be a bent plate welded to the top flange of beams?
- b. Please provide details for attachment.

VA Response: The weld symbol is indicating the requirement to weld the #5’s at 12” rebar to the pour stop. The pour stop is intended to be welded to the decking. Details are a shop drawing level requirement provided by the contractor.