

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES
			J	1 9
2. AMENDMENT/MODIFICATION NO. 0005	3. EFFECTIVE DATE 20-Feb-2004	4. REQUISITION/PURCHASE REQ. NO. W33SJG-3212-7917		5. PROJECT NO.(If applicable)
6. ISSUED BY US ARMY ENGINEER DISTRICT SAVANNAH 100 W OGLETHORPE AVENUE SAVANNAH GA 31401-3640	CODE W912HN	7. ADMINISTERED BY (If other than item 6) See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		X	9A. AMENDMENT OF SOLICITATION NO. DACW21-03-B-0011	
		X	9B. DATED (SEE ITEM 11) 25-Nov-2003	
			10A. MOD. OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA (If required)				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.				
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).				
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Subject: Richard B. Russell Powerplant Static Start Frequency Installation.				
1. This amendment is issued to answer the Technical questions that were submitted. See the attached pages with the Technical questions and answers.				
2. This amendment also includes revised drawings for the Conduit and Cable Schedule.				
3. All other aspects of the solicitation remain unchanged.				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
		TEL: _____ EMAIL: _____		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)		20-Feb-2004

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

Questions and Answers

Question: We are concerned about the amount of painting that will need to be done on new Government Furnished equipment. For example, is all of the new equipment the proper color to match the painting scheme at the power plant? Also, all of the iso-phase bus was in crates and could not be seen during the visit. Will all of this have to be painted, or just touched up to cover marks caused during handling and assembly. Please elaborate on how much painting the new equipment will be expected to need, besides touchup due to construction damage.

Answer: This should be touch-up painting only for damage incurred during construction.

Question: Similarly, concerning the waterproof topping in the transformer area. Is the contractor just to repair areas disturbed by his construction or does he need to figure on resurfacing the entire deck? It was noted during the walk through that there is already some damage, which is schedule to be patched before this project starts.

Answer: This was intended to be touch-up repairs for where the existing oil containment curbs and equipment pads are being removed, as well as any damage incurred during construction.

Question: Due to the holidays, we are having problems scheduling subcontractors such as painters and riggers for site visits. It would be helpful if the Government could push the bid date back a couple of weeks so that we can have some subcontractors visit the site after the holidays.

Answer: The bid opening was rescheduled to 10 March 2004.

Question: Since the terrorism threat level has been raised during the holidays, do you have any idea when we could schedule site visits?

Answer: Contractors and subs can still visit the powerhouse, but must contact Ms. Gayle Barnes, Power Project Manager at 706-213-3462 in advance to schedule a site visit.

Question: In our previous letters we had asked for details on the floor construction in order for a rigging subcontractor to look at the project and see what needs to be done in order to move the transformers in the generator and switchgear galley. We really need to have this information in hand before they visit the site before the bid.

Answer: A structural analysis has already completed and determined that the portion of the switchgear floor (about 30 feet) that the contractor needs to pass over will take the 49,000 lb. weight of each of the transformers. In the specifications the Government has advised the contractor not to temporary store or stop for a prolonged time while he is moving these across the span to their permanent location. Their permanent location will be on or over mass concrete at the toe of the dam. The floor will take the 30 ft. (+/-) passage load and the permanent position is on mass concrete that has zero potential of failure.

Question: We are concerned about the amount of welding and such that may have to be done for the iso-phase bus. Some of the existing bus appeared to be welded and some appeared to be bolted together. Can you provide assembly instructions and / or submittal data from the manufacturer on this Owner Furnished Iso-Phase bus?

Answer: Details of the new Government-furnished ABB iso-phase bus for the unit circuit breakers are shown on Reference Drawings R-125 thru R-135. Details of the new Government-furnished iso-phase bus for the current-limiting reactors will be provided after award.

Question: With respect to the weight of the input and output transformers, are these oil filled and if so, do they have oil in them now? If they do, how much weight would be saved by draining them before moving them?

Answer: These are DRY type transformers. The approved final Virginia Transformer drawings show the weight of each unit to be 49,000 Lbs.

Question: DWG E-114 contains a note concerning the cable tray system and refers to DWG E-63. According to the index of drawings, however, drawing E-63 is not a part of the drawings, which we have been provided. Can the Government supply us with this detail? If not, what is the width and depth of the tray and what type of material is it made out of?

Answer: The Partial Plan Unit 1 Breaker Control Cable Tray detail on Plate E-114 refers to Plate E-63. This is an error that should be corrected to refer to Plate E-113, Unit 1 Cable Tray and Terminal Cabinet Details.

Question: Specification section 1270, paragraph 1.2.2 speaks of unit price payment for extra welding to be done on site. We do not see a unit on the bid form to enter our price for this unit.

Answer: "Miscellaneous Welding (Optional)" is added as a separate bid item to the Bid Schedule and to Section 01270. The amount is 100 Est. Lbs., and the description in 01270 is "Payment for Bid Item 00___ will be made on a per pound basis. Pounds (Lbs.) shall be as described in paragraph 1.2.2 of this Section. Work shall be Contracting Officer Representative (COR) directed for tasks not directly involving the assembly of the Government-furnished isolated-phase bus." Our intent is for welding that is directly involved with assembling the iso-phase bus be included in the bid items concerning the installation of the iso-phase bus (Items 0007 and 0008).

Question: Our analysis of the 365-day time frame allowed for completion of the project is very tight. We believe a more appropriate period would be 425 days. Can the period of performance be changed by amendment?

Answer: Period of performance has been changed from 365 days to 450 days.

Question: The bid specifications do not publish data on the existing circuit breakers regarding, weight, height, width and length. The breakers will have to be moved on Low-boy trailers and this data is critical to quoting disposal.

Answer: Existing oil circuit breakers for Units 1-4 each contain 357 gallons of oil. Each of these circuit breakers weighs 10,950 lbs with oil. Overall maximum outer dimensions of each of these circuit breaker assemblies are 123 inches high by 69 inches wide by 157 inches deep. Existing air-blast circuit breakers for Units 5-8 weigh 13,000 lbs. each, including outer housing. Overall maximum outer dimensions of each of these circuit breaker assemblies are 195 inches high by 132 inches wide by 96 inches deep.

Question: Likewise, the bid specifications do not publish data on the new breakers regarding weight and handling restrictions. These breakers are presently in the generator bay and must be moved into the switchgear bay for installation. Bidders should have this data for planning movement of new breakers into place.

Answer: The breakers will have to be uncrated and flipped on side to get through door using special procedure and tools provided by ABB. Weights and lifting instructions for the new Government-furnished ABB unit breakers are also shown on Reference Drawings R-125 thru R-135.

Question: We noted that there are three (3) doors from the generator bay into the switchgear bay, all of which appear to be too small for passage of breakers and static start system transformers. Will the wall have to be modified?

Answer: No, there is adequate space to move the equipment through the doors with the doorframes removed.

Question: We should also know the size and weight as well as handling restrictions for the Static Start System transformers that must be moved into the switchgear bay.

Answer: The approved final Virginia Transformer drawings show the weight of each unit 49,000 Lbs. There are not any special handling requirements for the transformers.

Question: It will be very difficult to estimate the amount of welding on iso-phase bus without an erection plan. Do you plan to issue a bus erection diagram by amendment prior to the bid? We assume ABB has published a bubble diagram with part numbers and welding procedures.

Answer: This is shown in Reference Drawings R-125 thru R-135, for the ABB iso-phase bus and breakers.

Question: SECTION 013050 at paragraph 3.1.4 states that circuit breaker shall be removed and disposed of in accordance with hazardous waste removal and disposal requirements. The existing oil circuit breakers do not have PCB signs posted on them. Have they been tested for PCB's?

Answer: Yes, they have been tested.

Question: Section 16050 at paragraph 3.2.3 requires replacement of current transformers in circuit breakers for units 5-8. It is not clear who furnishes these CT's. Are they to be provided by the breaker manufacturer?

Answer: These current transformers are to be furnished and installed by the Contractor for the Installation Contract. The Contractor will need to coordinate with ABB for selection of the proper current transformer.

Question: Bid specifications indicate that erection engineers will be provided for circuit breaker installation and static start system installation but does not indicate erection oversight from iso-phase bus manufacturer. Will the Government provide an erection engineer for iso-phase bus?

Answer: The Circuit Breaker Supply Contract (Section I) provided for an erection engineer for the iso-phase bus that was furnished under that contract. The Static Start Supply Contract (Part 1, Paragraph 19) provides for an erection engineer for the iso-phase bus being furnished under that contract.

Question: DWG E-111, Section A indicates supports for the floor mounted cable cabinet & the floor mounted circuit breaker to be as shown on the reference DWG. The reference DWGs only show the existing/old equipment, which is different than the new.

The only indication we could find were anchor bolts set in the (4) legs.

Please clarify what supports are required.

Answer: Reference Drawings R-125 thru R-135 show the new Government-furnished equipment to be installed, and should cover the installation requirements.

Question: The scale of the DWGs indicates that the circuit breakers will not fit thru the door into the switchgear room from the generator bays.

Answer: The breakers will fit through the doors but have to be put on their sides using a special procedure from ABB. The procedures will be provided to the awardee of the contract.

Question: Do you have a list of the ABB GFE equipment that you will be supplying, i.e.: total footage of bus, quantities of fittings, C.B.'S & ACC'S etc.

Answer: See attached list

Question: Drawing E116 shows a side view of the new SF6 breakers, which seems to indicate that the control cabinets will mount separately as opposed to being mounted on and being a part of the breaker. IS this correct? If so, we need wiring diagrams to indicate how much wiring will have to be supplied between these two units.

Answer: The reference drawings and the contract drawings show that the control panels are a separate unit, and all interconnecting wiring is addressed.

Question: There are a number of cables in the cable schedule for which the data is incomplete. For example, cable 6G75 and 6G76 and several others through the schedule. For each cable on the project we need to know the type of cable, the size and number of conductors, where it goes from and where it goes to, and what routing it needs to take (which cable tray or conduit, etc).

Answer: For estimating purposes, suggest that all bidders assume that cable data for each unidentified cable in the Cable Schedules (where "X/c" or "XXXXXXX" is shown) be considered as a 12/c #12 cable running 500 feet average.

Question: The specifications presently call for the contractor to identify the conduits with cables of over 600 volts by means of painting the conduit at every coupling with two red bands, separated by a band painted white, on white is to be stenciled the voltage of the cables in the conduit. It is presently estimated that this may entail painting the conduit at some 200 locations. This will be a fairly involved, time consuming and expensive endeavor, due to the time involved in painting the conduits in several steps as each band has to have time to dry and the stenciling has to be done after the bands are painted and dried. Will the Government allow the contractor to use a system such as commercially available pipe identification labels instead of painting this identification at each pipe coupling?

Answer: Section 16050 paragraph 3.4.2 by adding this sentence to the end of the paragraph: "A commercially available method of labeling these conduits instead of painting may be substituted for approval if the method approximates the banding described above."

Question: Can we re-use existing control cables if they are long enough?

Answer: Most control cables will not be long enough and should all be considered as new for bidding purposes.

Question: Starter bus MOD's - Do these switches have to be cut with torch or can they be removed from top portion of bus by bolted connections?

Answer: Assume that cutting the switches out from below will be required.

Question: Can the shell of the 4 existing air blast circuit breakers be removed on site before the actual breakdown switches are removed?

Answer: The four existing air blast breakers are rated for indoor use only, so the outer enclosure, or "shell", must remain in place over each air blast breaker as long as the air blast breaker remains in service.

Question: Propane or electric lifts?

Answer: EM 385-1-1 does allow the use of either propane or electric hoists, but prohibits the use of gasoline hoists (in case that question arises).

Question: At the pre-bid although, as we walked through the switchgear gallery, we walked past a set of double doors, one of which was opened, and one of the new transformers was visible as being located immediately outside of the door. None of the contractors, however, were taken through the door to look at the crated units in the generator gallery. In reviewing the drawings, it is noted that there are two doors such as this, with the size indicated after removal of the doorframe. Which one of the two sets of doors is the one at which the transformers are stored?

Answer: The door in question is located between units 4 and 5.

Question: Are all 4 transformers stored at the same location, or are they disbursed at different locations in the generator gallery?

Answer: One of the transformers is located on the Generator floor between units 4 and 5 and the other three transformers are stored on the erection bay of the powerhouse.

Question: The specifications state that the transformers must be kept in motion when in the generator gallery, however, they appeared to be currently stored stationary in the generator gallery. Is this an error in the specifications? If not, is the floor in the switchgear gallery thinner or less reinforced than the floor in the generator gallery where the transformers are now stored?

Answer: The floors in these locations are constructed differently, hence the requirement to avoid static loads in that specified portion of the powerhouse.

Question: During the walkthrough, we did not see any of the new breakers. Where are they stored?

Answer: The new breakers are all stored on the generator floor between all the units. They are in the shipping crates in which they arrived in and have not been uncrated.

Question: The opening width is given for the doors through which the new transformers must be moved, however, the height is not. How tall is the opening in these doors?

Answer: The transformers were manufactured to fit through an opening 9 foot 0 inches high by 7 foot 6 inches wide, as specified in the Static Start Supply Contract. The door opening in question is 9 foot 11 inches high by 8 foot 0 inches wide with doors and frame removed.

Question: We cannot find any specification on the cable tray. Can the Government supply this?

Answer: Cable tray is specified in SECTION 16050 paragraph 2.6.

The following be listed as Government-furnished equipment for the Installation Contract:

<u>Line Item</u>	<u>Quantity</u>	<u>Total Line Item Value</u>
SF6 Circuit Breaker, 15kV, 6300A	8 EA	\$ 2,173,672.00
Isophase Bus, 15kV, 4000A	430 LF	320,436.00
Isophase Bus Elbows, 15kV, 4000A	103 EA	90,640.00
Isophase Bus T-Taps, 15kV, 4000A	6 EA	5,418.00
Isophase Bus, 15kV, 5000A	440 LF	327,888.00
Isophase Bus Elbows, 15kV, 5000A	72 EA	63,396.00
Isophase Bus T-Taps, 15kV, 5000A	3 EA	2,709.00
Isophase Bus, 15kV, 1200A	10 LF	7,453.00
Isophase Bus Elbows, 15kV, 1200A	6 EA	5,283.00
Floor Penetrations, 3-Phase Bus Elbows	16 EA	13,660.00
Seal-Off Bushings, 3-Phase	8 EA	26,136.00
Disconnect Links, 3-Phase	8 EA	16,248.00
Deck Cover Plates & Hardware, 3-Phase	1 LS	6,959.00
Static Frequency Control System	1 LS	626,776.00
Input/Output Transformers, 15kV	4 EA	427,644.00
Input/Output Circuit Breakers, 15kV	3 EA	137,610.00
Current-Limiting Reactors, 3-Phase, 15kV	2 EA	47,927.00
Isophase Bus, 15kV, 1200A, 240LF w/6 T-Taps, 12 Elbows1 Lot		61,059.00

TOTAL VALUE of GOVERNMENT-FURNISHED EQUIPMENT:		\$ 4,360,914.00

