

FQ15237 Six (6) Tie Breaker Stations Upgrade Orange and Blue Lines VA, DC and MD

IFB Questions and Responses

STATUS DATE: November 25, 2015

Q#	Questions	WMATA Responses or Clarifications
1	We may be interested in bidding on the referenced project if it is big enough for us to be competitive. Is there a published dollar value range for this project?	WMATA will not issue the dollar range for this project.
2	We are looking to bid the subject project, but there is some confusion on where and when the Pre-bid conference is being held. The Letter to Contractors indicate the Hyattsville location at 10 AM while the solicitation instructions instruct us to meet at JGB at 8:30 AM. Can you clarify which time/location is correct?	IFB Letter information is correct: Pre-Bid Conference: will be held on October 20, 2015 starting at 10:00 AM at 8100 Professional Place, Hyattsville, MD 20785-2225, Conference Room #1, 1st Floor. Item 4 of Solicitation Instructions (pdf page 20 of 421 in Volume 1) will be corrected in future Amendment.
3	In the TBS drawings, it shows the HMI being a separate unit from the RTU, with the RTU being combined with the network cabinet. In the SCADA drawings, it shows the HMI and RTU being combined with a separate network cabinet due to space constraints. Please clarify which would be correct, and where in the TBS they would be situated.	Drawings K06TB2-TB-200, K07TB1-TB-200, K07TB2-TB-200, G01TB-TB-200, G02TB1-TB-200, G02TB2-TB-200 show HMI and RTU as separate entities. SCADA Drawings ST-SC-G-SSI-004 and ST-SC-G-SSI-011 show HMI and RTU as separate entites. Provide SCADA drawing numbers showing the HMI and RTU being combined.
4	The TBS drawing package cable schedules are inconsistent with the SCADA drawing package cable schedule. For example, various components are connected to the network switch via fiber and Ethernet cable to the network switch for indication in the SCADA drawings, while the TBS cable schedule shows them being connected via regular multiconductor copper cable to the HMI (which we are assuming is also the RTU at this moment). Please clarify what wires we should run, or if we are installing both schemes for compatibility and future development. Is it possible to get a consolidated cable schedule if the latter is the case?	Drawing K06TB2-TB-300 (pg 17), Drawing K07TB1-TB-300 (pg 25), Drawing K07TB2-TB-300 (pg 33), Drawing G01TBS-TB,-300 (pg 41), Drawing G02TB1-TB-300 (pg 49) , and Drawing G02-TB2-TB-300 (pg 57) will be corrected in the future Amendment. Please refer to the attached file "Response to RFI No.4" which shows what will be amended in each of the above listed drawings.
5	In order to prepare the most competitive solution, we request an extension to the bid date of three weeks. Please consider this request.	Amendment 1 will extend the Bid due date to November 25, 2015. The last date for submission of RFIs will be COB November 16, 2015.
6	Enclosed, please find our written request for an extension of the Washington Metropolitan Area Transit Authority, Six-(6) Tie Breaker Station Upgrade; Orange and Blue Line, Va., DC. and MD., project bid due date. 1. We would like to request an extension to the bid due date. Please extend the bid due date forty-four (44) days, to December 18, 2015?	Refer to response to RFI No. 5 in this document.

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7	There was no Systems Integration Specification included within the documents. Please provide if required?	Refer to Section 16606 SCADA Systems Integration For Tie Breaker Station - Site Acceptance Test Plan of VOLUME 2, TECHNICAL PROVISIONS
8	Is a Temporary DC Power Supply required during testing of the new DC Switchgear and who is responsible for this equipment?	Refer to Section 2.12 (C) TEMPORARY UTILITY AND ELECTRICAL SERVICES of Construction Special Provisions which requires to " <i>bring its own 125 DC power supply</i> ".
9	16051D-1.01-E references several specifications not provided. Please clarify?	The following revisions will be made in the future Amendment: 1. Delete Reference to Section 16051C - Scope of Work For Tie Breaker Stations -Replace with Section 01110 Scope Of Work 2. Delete Reference to Section 16053 - Operations and Maintenance Training 3. Delete Reference to Section 16260 - Uninterruptible Power System and Switchgear Control Power Batteries, Replace with Sections 16265 Battery and Battery Monitoring Systems and 16266 Battery Charger
10	Volume 1, Page 5 notes for Railroad Protective Insurance; "For bidding purposes, an allowance will be provided on the Unit Price Schedule." The bid form does not currently have an allowance for Railroad Protective Insurance. Please clarify?	Line Item 008 RAILROAD PROTECTIVE LIABILITY WAIVER FEE for a lums sum allowance of \$30,000 will be added to Amendment 1.
11	Volume 1, page 208, section 2.58.7 notes the contractor shall provide a full time Quality Manager, while page 218 and 219, section 2.68 notes the Quality manager as half time. Please clarify?	Please refer to Section 2.58 as the Section that conforms to Quality with the exception that the 2.58.7 will be changed in Amendment 1 to require a half-time Quality Manager.

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12	Specification 128 requires custom manufactured wire with large minimums exceeding the quantities required for this contract. Please confirm bidder is required to comply with this specification?	WMATA confirms that the Contractor shall comply with Section 16128 WIRE AND CABLE FOR TRACTION POWER of Volume 2, Technical Provisions.
13	Volume 1, Section 2.68 Contractors Qualifications are not indicated to be submitted as part of the pre-award data for purposes of being considered before award. We suggest these qualifications be submitted as part of the pre-award data and reviewed by WMATA prior to award.	Section 2.68 (b) (1) Contractors Qualifications shall remain unchanged.
14	Requirement is for a VA Class A license. It does not specify a specific trade. Are we to assume any VA Class A license would be applicable?	The Bidder must comply with federal, state and local laws and regulations including Virginia State licensing requirements. Refer to Virginia State licensing requirements.
15	To the above question-If a specific trade is required, are we in compliance as long as the application has been submitted and we are awaiting to take the test?	The Bidder must comply with federal, state and local laws and regulations including Virginia State licensing requirements. Virginia State licensing requirements.
16	What will the possibility of an extension to the bid date?	Refer to response to RFI No. 5 in this document.
17	could you please confirm our understanding that a WMATA badge is not required for the Pre-Bid and Site Visit.	Refer to Pre-Bid Conference Clause of IFB Letter in Volume 1 BIDDING AND CONTRACTING REQUIREMENTS, p.6 of 421.
18	In cable schedules K07TB1-TB-300, K07TB2-TB-300, G01TBS-TB-300, G02TB1-TB-300, the cable schedule shows that we will have to run power feeds to lighting beyond the Tie Breaker Stations. We request for more information regarding this scope regarding distance and the number of devices powered off of the circuit.	<p>Cable schedule references: K07TB1-TB300, K07TB2-TB-300</p> <ul style="list-style-type: none"> - Station Indoor Lights refers to Tie-Breaker-Station indoor lights. - Outdoor Lighting refers to outside the TBS above the door light. - All lights to be replaced are shown on the drawings. <p>Cable schedule reference: G01TBS-TB-300:</p> <ul style="list-style-type: none"> - Station Lights refers to the Lights inside the TBS <p>Cable schedule reference: G02TB1-TB-300:</p> <ul style="list-style-type: none"> - The Contractor shall connect existing Vent Shaft Light circuit to new Panelboard LC-5. The Contractor shall adjust breakers so that no new splices are required in this existing circuit.

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19	Please provide the location of the negative polarity junction boxes as indicated in cable schedules K06TB2-TB-300, K07TB1-TB-300, K07TB2-TB-300, G01TBS-TB-300, G02TB1-TB-300, and G02TB2-TB-300.	Provided in AM1, TBS-G-003.
20	I'm also hearing this project may not happen. We have a team flying in. Is there still a prebid Tues?	Refer to response to RFI No. 2 in this document.
21	It appears that the performance and payment bond forms are mixed up; the language reads The obligee's performance bond covers "payment to all claimant as hereinafter defined" but claimant is not defined in the bond form. The obligee's payment bond states "the principal shall performance and fulfill all the undertakings, covenants, term, conditions and agreements of the said contract...". It appears that the obligee has the NOW THEREFORE paragraphs in the performance and payments crisscrossed. Please confirm that the language in the paragraphs beginning with "now therefore" in the payment and performance bond forms are correct or not.	Yes, NOW THEREFORE paragraphs in the performance and payments bonds are crisscrossed. WMATA will issue revised forms for Performance Bond and Payment Bond in the Amendment 1.
22	General Insurance Requirements: Please delete item #3 under the General Insurance Requirements, We can only supply copies of certificates of insurance to evidence coverage.	Item No. 3 in General Insurance Requirements shall remain unchanged. As an additional insured WMATA is entitled to have a copy of the policies.
23	Commercial General Liability, Required Minimum Coverage(s)- Item #7- Please consider removing this requirement, leaving this in would result in an additional premium charge.	Item No. 7 under Commercial General Liability, Required Minimum Coverage(s) shall remain unchanged.
24	Commercial General Liability, Required Minimum Coverage(s)- Item #8-We are only able to provide item #7 or item #8, asking for both items does not make sense. Please consider removing one of these items.	WMATA will delete Item No. 8 under Commercial General Liability, Required Minimum Coverage(s) in the future Amendment.
25	Railroad Protective Liability Insurance (RRP)-We would have to procure this coverage at an additional cost. We would need to know the proposed project duration and anticipated contract value to obtain a quote for this coverage. Please consider removing this requirement.	This requirement remains unchanged. Refer to Note 10 in Notes to Bidders in the Unit Price Schedule: "If the contractor chooses to not utilize the WMATA RRPL, then WMATA will reimburse the contractor for the actual cost with no markups up to the amount (not allowance) that would have been paid for the WMATA waiver fee." Line Item 008 RAILROAD PROTECTIVE LIABILITY WAIVER FEE for a lump sum allowance of \$30,000 will be added to Amendment 1.

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26	Certificate of Insurance (COI)- under the word additionally, Item #2. Please remove the words "or policies" from the sentence.	Certificate of Insurance (COI)- under the word additionally, Item #2 shall remain unchanged
27	Contract language does not appear to have a clear cure period for a material breach of contract. Please consider adding a period of 14 days for Contractor to cure a material breach.	WMATA will not consider this suggestion for this Contract.
28	<p>Contract language does not appear to have an overall limitation of liability, or contain a disclaimer for indirect and consequential damages. Please consider adding the following language; "Contractor shall not be liable, under any theory of liability whether in contract, warranty, tort (including negligence or strict liability), indemnity, or any other legal or equitable theory for damage to or loss of other property or equipment, business interruption or lost revenue, loss of profits or sales, costs of capital, for any loss of use, for any loss or corruption of data or for any special, incidental, punitive, indirect or consequential damages or for any other loss, costs or expenses of a similar type; even if it has been advised of the possibility of such damages or even if the remedy fails of its essential purpose. In no event shall Suppliers' total liability under this contract exceed 100% of the final Sub-subcontract amount, provided however, such limitation liability shall not apply in the case of liability incurred due to Suppliers' fraud, gross negligence, abandonment, and/or willful misconduct".</p> <p>Contractor's indemnity obligation shall be limited to its fault and/or negligence. The indemnification obligations are conditioned upon the following: (i) Contractor gives prompt written notice to Supplier of the claim(s), and (ii) Owner provides all reasonable assistance in defense of the claim(s)".</p>	Indemnity language cannot be changed and will not agree to limiting the indemnity in this manner.
29	Section 2.2 Liquidated Damages- Please consider adding that Liquidated Damages shall be the sole and exclusive remedy for delay, and that the total amount of liquidated damages that Authority may assess for any and all non-excusable delays shall not exceed 15 percent of the total contract price.	The language shall remain as is.

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30	<p>Section 23 "Licenses" of the Solicitation Instructions asks for Virginia Contractor License #, while section 2.54.1 "Contractor's License" of the construction special provisions states that contractor's must show evidence of a certificate of registration as required by the following; (1) District of Columbia, (2) Maryland, (3) Virginia and including any local jurisdictions therein. Please clarify which Contractor's licenses the Contractor will need to have to work on the project.</p>	<p>The Contractor shall comply with Federal, State, Local laws and regulations. Refer to Clauses 1.12 PERMITS AND RESPONSIBILITIES, 2.54 LICENSES of Construction General Provisions. In addition refer to Paragraph 1.02 REFERENCES in Section 01110 SCOPE OF WORK of Technical Provisions which lists codes, regulation, reference standards and specifications. Note Paragraph (2) PAST EXPERIENCE AND QUALIFICATIONS of Clause 14. PRE-AWARD INFORMATION which requests (b) Copies of all necessary certifications, licenses and other documentation, including any specialized licenses required to meet health and safety rules and regulations, required by the plans and specifications demonstrating that the bidder has the necessary capabilities to perform the work. Per Paragraph b of Clause 14. PRE-AWARD INFORMATION "...the apparent lowest responsive bidder is required to furnish, within five calendar days after bid opening, pre award data as required by the "Bidder's Qualifications" article...".</p>
31	<p>I/We missed the prepaid today, I would like to be included on the registration list for DBE. Please advise how to proceed.</p>	<p>Per Appendix B "DBE" "All DBE firms must be pre-certified". Participation by a firm that is not currently certified as a DBE by the Authority at the time of the due date for bids or offers on a contract, does not count towards the DBE goal." WMATA cannot include your company in the list of companies which attended the Pre-Bid Conference because your company was not physically present there.</p>

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32	G01TBS-TB-200. Please provide location of the receptacles to be powered or replaced inside the TBS station	A note was provided on G01TBS-TB-200 in Amendment No. 1.
33	G01TBS-TB-300. Provide location of Supervisory cont terminal box inside the TBS station.	Refer to Drawing G01-TBS-TB-201 which labels the subject question as EX. DTS Cabinet.
34	G01TBS-TB-300. Please clarify scope of work for 1000 MCM cable from DC switchgear to contact rail and length of cable if it's a part of contractor's scope of work	All indications of Track feeder Cables extending from the TBS to the 3rd Rail will be removed from the drawings as a part of the future Amendment. Track feeder cable work is not in the Contract SOW.
35	K07TB2-TB-200/-300. Provide location of Unit Heaters inside the TBS station	Provided in AM1, TBS-G-003.

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36	K07TB2-TB-200/-300. Provide location of exhaust fans inside TBS station	Provided in AM1, TBS-G-003.
37	Please clarify scope of work for ETS jumpers on the rail-side, length and size of jumpers if it's a part of contractor's scope of work	ETS jumper cable work is not part of the Contractor's the Scope of Work. WMATA will refer to the section in the IFB in the future response.
38	Please confirm exterior lighting on all TBS locations versus drawings	Exterior lighting is only applicable to the outside building locations. Refer to Drawings No. K07TB2-TB-001; K07TB1-TB-001; K06TB2-TB-001 for picture locations. WMATA will revise the drawings in the future Amendment.
39	Please confirm scale on all drawings	Plans and Elevations are approximately (not exact) 1/4"=1 ft due to half size printing and to fit 11x17 paper size. Also, dimensions provided on the plans and elevations are approximate.
40	Please provide confirmation that scope of work for hauling of all tools and equipment will be provided by the authority	Refer to Volume 2, Section 01110, Scope of Work, 1.01 Summary, F.
41	SP 2.13.A Indemnity: 1. Please confirm Indemnity is limited to third party claims only?	No, it is not. Refer to Clause 2.13 (b) INDEMNIFICATION AND INSURANCE of Construction Special Provisions.

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42	SP 2.13.A Indemnity. 2. Please confirm Indemnity is limited to Contractor's Negligence in performing the work?	No, it is activity-based indemnity. Refer to Clause 2.13 (b) INDEMNIFICATION AND INSURANCE of Construction Special Provisions.
43	SP 2.13.A Indemnity. 3. Please confirm Contractor is only responsible for claims to the extent caused by Contractor?	No. Refer to Clauses 2.13 (a), 2.13 (b) INDEMNIFICATION AND INSURANCE of Construction Special Provisions.
44	SP 2.13.A Indemnity: 4. Please confirm Claims must be limited to bodily injury and property damage?	No. Refer to Clauses 2.13 (a), 2.13 (b) INDEMNIFICATION AND INSURANCE of Construction Special Provisions.
45	Drawing TBS-G-010, Note 7 states "All External Control, Indication and Power Cables are N.I.C". This conflicts with the cable schedules K06-TB2-TB-300, K07TB1-TB-300, and G01TBS-TB-300 which all show replacing feeder(s) to the contact rail. Please clarify which is correct?	Refer to RFI response No. 34
46	Drawing(s) K06-TB2-TB-300, K07TB1-TB-300, K07-TB2-TB-200, G01TBS-TB-300, G02-TB1-TB-200, and G02-TB2-TB-200 SCADA Note 3 all indicated the Network Switch Enclosure is to be provided by the contractor. Drawing ST-SC-TB-SSI-203 shows zero's for the quantities of Network Switch Enclosures to be provided. Please clarify?	Drawing ST-SC-TB-SSI-203 is correct. The TBS Drawings referenced will be corrected to remove Note 3 in Amendment 2.
47	Drawing ST-SC-TB-SSI-200 has a Note 15 on one of the Cable Shield Monitor Sensor's. Note 15 is not provided. Please provide?	Reference to Note 15 will be deleted in Amendment 2.
48	In cable schedule G02TB2-TB-300, we see a circuit AC-3 that goes from the existing 480V AC Panel. However, in the equipment layout in G02TB2-TB-200, the panel does not seem to be depicted. Please clarify the location of this panel.	This issue has been resolved under Amendment No. 2. Refer to the G02TB2 drawings.
49	On G02TB2-300, circuit MA-7 points to a DC SWGR Unit No. 5. This switchgear unit does not seem to exist.	Amendment 2 will revise Drawing G02TB2-300 to Unit No. 4
50	Special Provisions page 132 does not address ETS testing for 'cutover activities.' Page 18 technical provisions requires ETS testing. Who will perform this test to provide results? This testing requirement calls for 3 separate tests.	Volume 2, Section 16343B 3.01 will be amended to remove all ETS testing and modification responsibility from the Contractor. All ETS reconfiguration and testing will be conducted by WMATA.
51	Please identify any salvaged equipment that the authority wishes to keep. If any, provide qty's of each type, and address of delivery.	Refer to Volume 1, p. 166, clause 2.20 "Salvage of Materials and Equipment"
52	Please provide rail gap measurements so bidders can quantify temporary 2KV 1000 MCM jumpers. Please provide us with the number of jumpers required per gap.	The Contact Rail Schematics will be provided in Amendment 2.
53	Specification 16525-2.02-A.3.I.5 and 6 calls for both Cell and System Level monitoring. In the past, only system level monitoring has been required. Please confirm both are required for this project.	Refer to page 149 of Specification 16265-2.02-A.3.I.5 and 6.

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54	<p>WMATA's response to question #14 is misleading. WMATA is it's own Authority Having Jurisdiction, which means in the majority of cases, federal, state, and local permits are not required. This means an unlicensed contractor can perform work for WMATA as they don't need to pull permits which is really the only time a contractor has to provide proof of license. This project is an extremely complex electrical project. Please confirm WMATA would expect that all electrical work shall be performed by licensed electrical contractor's in the jurisdiction the work is in, meaning the work in Maryland shall be performed by electrical contractor's licensed in Maryland, and similarly for Virginia and DC? This will insure the work is performed under the licensing of a Master Electrician. Further as DBE's are required to be certified at the time of bid, bidders should be required to be licensed at the time of bid as otherwise WMATA could award to a contractor that later is unable to get licensed.</p>	<p>Response to Question No. 14 shall remain as is. WMATA is not an Authority Having Jurisdiction. The Contractor shall comply with Federal, State, Local laws and regulations. Refer to Clauses 1.12 PERMITS AND RESPONSIBILITES, 2.54 LICENSES of Construction General Provisions. In addition refer to Paragraph 1.02 REFERENCES in Section 01110 SCOPE OF WORK of Technical Provisions which lists codes, regulation, reference standards and specifications. Note Paragraph (2) PAST EXPERIENCE AND QUALIFICATIONS of Clause 14. PRE-AWARD INFORMATION which requests <i>(b) Copies of all necessary certifications, licenses and other documentation, including any specialized licenses required to meet health and safety rules and regulations, required by the plans and specifications demonstrating that the bidder has the necessary capabilities to perform the work.</i> Per Paragraph b of Clause 14. PRE-AWARD INFORMATION "...the apparent lowest responsive bidder is required to furnish, within five calendar days after bid opening, pre award data as required by the "Bidder's Qualifications" article...". DBE: Refer to Paragraph F of Clause 5. HOW DBE PARTICIPATION IS COUNTED TOWARDS THE CONTRACT GOAL in Appendix B DBE.</p>
55	<p>SECTION 16051D p. 24, para 1.03.F.4 Q Since certifications do not exist for all of the three protocols referred, can we assume that references or industry experience will be sufficient as evidence to the RTU and vendor's capability</p>	<p>Refer to Amendment 1, Volume 2, p.256</p>
56	<p>SECTION 16051D p. 25, para 1.03.F.5.f Q "All RTU programming including database shall be... " would seem to suggest the master station database is the responsibility of the contractor, can you please clarify.</p>	<p>Refer to Volume 2, Specification 16051D .3.02, pg 35, POINT ASSIGNMENT CHART FORMAT.</p>

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57	SECTION 16051D. p. 25, para 1.03.G Q Can you please clarify the sequence of events in the execution of this project from a RTU vendor perspective. We understand there to be a design approval process, FAT, then is there a SAT at the WMATA LAB before equipment deployment? Or, is this after. Can you clarify where this step fits in the sequence of design, acceptance and deployment of equipment, and how much time and resources will be expected to support this effort.	Refer to Volume 2, Specification 16602, paragraph 2.04 "RTU Configuration" the sequence of events in the execution of this project for the RTU.
58	SECTION 16051D. p. 28, para 1.06.E Q Can we confirm that the OWNER needs are what is specified in Section 16602, para. 1.06. If otherwise, can you please specify what other training requirements will be required of the OWNER.	Volume 2, Section 16602, para. 1.06 specifies the technical requirements of the training.
59	SECTION 16051D. p. 31, para 1.08.F Q Please clarify "coordination", will WMATA be supplying the switches configured. If not, will this be the RTU vendor's responsibility to configure based on information supplied by WMATA IT. Can it be assumed power for the switch will need to be taken into consideration as part of the RTU design. Please confirm all warranties, licenses will be WMATA's responsibility.	Refer to Amendment 2, Volume 2 of Technical Provisions, page 300, section 16604 paragraph 1.04.B "Coordination"
60	SECTION 16051D. p. 34, para 3.01.F Q Please confirm that WMATA IT will install the switches, will this be done in the factory, or field, and is this a part of the FAT and SAT.	WMATA IT will furnish, configure and install network switches in the field per requirements in section 16604 "Network switch for TBS SCADA and automation" paragraphs: 1.01.B, and 3.01.A. In addition, refer to Amendment 2, Volume 2 page 300 1.04.B
61	SECTION 16051D. p. 36, para 3.03.A Q Please confirm who had responsibility to insure OCC is fully compatible with the point mapping and integration, and how will this be done. Please also confirm that all Master Station database development and configuration is WMATA's responsibility.	RTU will not be connected to Control Center at the time of completion of each site. Other servers and simulation methods will be used to ensure compatibility. The contractor is responsible for proper configuration of the RTUs not master stations. This will be clarified in Amendment No. 2, pg 36.
63	SECTION 16602. p. 246, para 1.01.E Q RTU interface with Emergency Trip Stations is required. Please clarify how WMATA intends to perform this interface, if a separate ETS data concentrator configured and programmed to interface with ETS system is required in the RTU cabinet.	Refer to Volume 3B drawings ST-SC-G-SSI-006 and ST-SC-G-SSI-013 for RTU interface with ETS. No ETS Data concentrator is included in this Contract.
64	SECTION 16602. p. 249, para 1.04.D Q Please confirm that WMATA is responsible for Ethernet switches (provided and installed by WMATA) warranty.	Volume 2, Section 16602, page 249, para 1.04.D is the defects warranty period for RTU not for the network switches. Refer to Volume 3B, ST-SC-TB-SS1-203, pg 18.

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65	SECTION 16602. p. 249, para. 1.04.E.3 Q Is it required that the FAT be held in the USA.	Refer to Clause 1.55 Buy America, Volume 1, Bidding and Contracting Requirements
66	SECTION 16602. p. 249, para 1.04.E.4 Q Please clarify if the Ethernet switches will be available and installed prior RTU fully assembled FAT.	Refer to RFI No. 60.
67	SECTION 16602. p. 250, para 1.04.F.2 Q To demonstrate or verify communication with the master station will require database development, is WMATA taking responsibility to create the master station database.	Refer to Specification 16602 para 2.04 "RTU Configuration".
68	SECTION 16602. p.251, para 1.05.A.1 Q Please clarify the intent of this paragraph. Is it additional of what is requested in paragraph 1.05.A.4? As per our interpretation WMATA wants an independent testing company to test the RTU software communication with the systems in substation and to show that it is conforming to IEC 61850. In this case these tests can only be possible to perform during FAT and/or Field Testing and never at time of bid. Please confirm if we have to carry the costs of this independent testing company on the bid price and when do you what to perform the tests. Also in order to estimate the cost of this test, please provide the list of equipment using IEC61850 in the Tie Breaker Station.	Refer to Amendment No. 1, Volume 2, Section 16602, pg. 251.
69	SECTION 16602. p. 255, para 1.06 Q Please confirm the required RTU training requirements will be; Operation & Maintenance - 3 days, 1 session RTU Maintenance - 1 day, 1 session Engineer's Course - 3 days, 1 session	Refer to Amendment No. 1, Volume 2, Section 16602, pg 255.
70	SECTION 16602. p. 258, para. 2.02.B.9 Q Technical onsite support and integration, is it required to come from the OEM, or will a local integrator be an acceptable resource. It is also requested a minimum of 1 week of on-site technical support for each RTU locations for systems integration. Specification section 16606 p.315, para 3.01 defines three (3) days to perform the field testing. Please clarify the required on-site time to perform the system integration testing.	Correction has been made and is included in Amendment No. 1, Volume 2, 16051D, pg. 28.
71	SECTION 16602. p. 263, para 2.02.G.5 Q Please confirm this paragraph is related to Analog Input Modules and is not required analog output signals on the RTU.	Refer to Volume 2, Section 16602, 2.01 D Table 1, pg 256. This paragraph provides characteristics of Analog Control Output Modules to be provided with each RTU. Paragraph 2.01.D Table 1 provides the quantity of modules installed in the TBS RTU.

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72	SECTION 16602. p. 264, para. 2.02.G.8.a Q Please clarify “The Master user shall be able to perform a virtual...” is there master station responsibility by the RTU vendor, and if so, please clarify what that shall be.	It is the RTU manufacturer's responsibility to demonstrate that the proposed RTU has the IED pass thru functions. This can be demonstrated locally without a Master station.
73	SECTION 16602. p. 266, para. 2.02.G.14 Q Per this paragraph it is required terminal strips within the RTU cabinet for all connections for instrumentation and control signal. However, on page 271, paragraph 3.02.D. seems to indicate that there will be required a wall mounted interface cabinet which contains the terminal blocks for all external connections between substation and RTU cabinet. Please clarify if ALL status, analog and control points require terminal blocks and where it would be located: within RTU cabinet or in a wall mounted interface cabinet.	Volume 2, Section 16602, Paragraph 3.02 is RTU installation. 1. Paragraph 2.02.G.14 provides the design requirements, it specifies terminal strips. Contract drawings specify quantity, layout. Paragraph 3.02.B requires all wire to be terminated on the terminal strips inside the RTU. 2. Paragraph 3.02.D is not applicable and was deleted in Amendment No. 1.
74	SECTION 16602. p. 268, para. 2.04.B Q Please clarify that in addition to the RTU manufacturer supplying configured RTUs, in addition the RTU manufacturer will supply two (2) weeks onsite working with WMATA developing a configuration template.	Amendment No. 1 clarifies Volume 2, Section 16602, 2.04, pg. 268.
75	SECTION 16602. p. 268, para. 2.04.E Q Can WMATA please specify what equipment, how much, and how it should be packaged to be delivered to the WMATA LAB.	Amendment No. 1 clarifies Volume 2, Section 16602, 2.04, pg. 268.
76	SECTION 16602. p. 270, para 2.06.B.16 Q Network switches are required to be installed in the RTU equipment rack. However, contract drawings shown the opposite, indicating the network switches installed in a separate cabinet and in some cases RTU cabinets with 90”H, higher than maximum dimensions required per spec. Please clarify where the network switches will be installed and the required design.	Refer to the FQ15237 Volume 3B Technical Drawings • Drawing ST-SC-SSI-003 note 1, says that the network switches and patch panels are mounted in the RTU cabinet. • Drawing ST-SC-SSI-011 show the RTU cabinet drawing with the equipment rack and the following note: “SPACE FOR NETWORK SWITCHES AND FIBER PATCH PANEL AS REQUIRED”
77	SECTION 16602. p. 271, para 3.02.E.2 Q Spec mentions a wall mount interface cabinet as necessary. Contract drawings do not show any of these cabinets so there is no way to figure where these cabinets are required. Are these cabinets required at each TBS location? If so, will terminal blocks be required for all the status, analogs and controls considered in the RTU?	Volume 2, Section 16602, pg. 271, Paragraph 3.02.E.2 is deleted in Amendment No. 1.
78	SECTION 16602. p. 273, par. 3.03.B Q Does the manufacturing representative need to be the OEM, or is a third party representative acceptable.	Refer to Volume 2, Section 16602, 3.03 B. RTU Manufacturer or an authorized representative (the SCADA System Integrator).

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79	SECTION 16603. p. 285, para 2.06 Q The requested software application for streaming data requires to be web based compatible with IE and Chrome browsers. Please advise if this is a mandatory request or if other type of configuration applications can be accepted.	Correction was made to Volume 2, Section 16+603, pg. 285, para 2.06 in Amendment No. 1.
80	SECTION 16604. p. 300, para 1.04.B.1 Q Please confirm when the Ethernet switches will be installed and tested by WMATA.	Refer to Volume 2, Section 16604, 1.01 B.
81	SECTION 16604. p.300, para 1.04.B.2 Q Please confirm Ethernet switches configuration, licenses and warranties are WMATA's responsibility.	Refer to RFI Response No. 59, 60, and 80.
82	There are several references in the specifications to spare parts. In regards to Spare Parts for the DC Switchgear, The Technical Provisions section 2.03 O states that Spare Circuit Breaker Elements are to be provided as indicated in the contract documents. Where in the contract documents is this requirements detailed?	Refer to Volume 1, Section 2.64, pg 210 and the Unit Price Schedue, Notes to Bidders, pg. 49, Item 10
83	I understand from earlier IFB responses that an addendum to this contract documents is to be issued. When will the addendum be issued?	Amendment 1 was publicized on November 6, 2015 on www.wmata.com . WMATA is working on Amendment 2.
84	On drawing number ST-SC-TB-SSI-203, the matrix shows the contractor to provide an RTU for each location. The network switch enclosure shows a quantity of zero. On the floor plans it shows the RTU as an RTU/NWS. Please clarify if this is a combination unit RTU/NWS.	Refer to RFI Response No 46.
85	Please provide the DC loading (Load profile per IEEE 485) info for each of the five sites to size the batteries for the project per the requirement of WMATA specification sections 2.02.A.2.a.1 and 2.02.A.2.b.1&2. There appear to be a total of seven individual DC loads per the single line diagrams which are to be fed from the new DC panels. DC load details need to be provided for each of these load such that a sizing Per IEEE 485 can be performed as specified.	Refer to the specified battery type in Volume 2, Specification 16265. Battery sizing is not required.
86	Specification Section 16291A - Human Machine Interface Panel (HMI) For Tie Breaker Stations 2.01.D.2 pg. 184 states " An optional price shall be given to configure the HMI using WMATA established templates." - Where on the UNIT PRICE SCHEDULE should this optional price be included? 2.01.D.4 pg 185 states "in addition to the lump sum price for configuration, an hourly rate should be quoted for assistance with configuration and commissioning...." - Where on the UNIT PRICE SCHEDULE should this hourly rate be included?	Volume 2, Section 16291A, 2.01.D will be revised in Amendment No. 2.

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87	<p>Specification Section 16602 - Remote Terminal Unit (RTU) for Tie Breaker Stations 1.01.F pg. 246 states " Provide at time of bid a certificate from an independent testing company that the RTU software has not shown to be non-conforming to IEC 61850 communications networks and systems in substations." - Where on the UNIT PRICE SCHEDULE should this certification be included? Please confirm this certificate shall be submitted after award at the time of submittal of the product and not with the bid?</p>	<p>Provide a certificate from an independent testing company that the RTU software is in compliance with IEC 61850 protocol" will be added to Section 14. Pre-Award Information (b) (1), p. 24 in Amendment 2 and will be deleted from Specification Section 16602 - Remote Terminal Unit (RTU) for Tie Breaker Stations 1.01.F pg. 246 in the future Amendment. This certification will not be included in the Unit Price Schedule.</p>
88	<p>The contract language does contain a contractor's overall limitation of liability, please add language that states the contractor's overall liability under this contract shall not exceed 100% of the final contract amount.</p>	<p>The suggested language will not be added.</p>
89	<p>The contract language does not contain a disclaimer for indirect and consequential damages. Please add language that states contractor shall not be liable for indirect or consequential damages under the contract.</p>	<p>The suggested language will not be added. Refer to existing Clause 2.13 INDEMNIFICATION AND INSURANCE of Construction Special Provisions.</p>
90	<p>Please add language that states Liquidated Damages are the sole and exclusive remedy for delay under this contract. <input type="checkbox"/></p>	<p>The suggested language will not be added. Refer to existing Clause 2.2 LIQUIDATED DAMAGES of Construction Special Provisions.</p>
91	<p>Request owner provide access / egress dimensions for all doors and walkways</p>	<p>The heights and widths of the access doors are indicated on each of the drawings: K06TB2-TB-200, K07TB1-TB-200, K07TB2-TB-200, G01TB-TB-200, G02TB1-TB-200, G02TB2-TB-200.</p>
92	<p>General, spec page, section 3 1.01-D . Please define Salvage / disposal methods</p>	<p>Refer to Volume 1, pg 166, 2.20, Salvage of Materials and Equipment.</p>
93	<p>Section 1.01-F.1.b. Please clarify / explain the "requirement for protection from damage and security during movement into and inside the facility and installation."</p>	<p>This section is self-explanatory, no clarification required.</p>
94	<p>Section 1.01-F.1.d. Please state " whether the Contractor will or will not be required to provide temporary power for the switchgear internal space heaters."</p>	<p>Refer to Volume 2, Section 01110, 1.01-F.1.d: "<i>If permanent power for the space heaters is not available, the Contractor shall provide the necessary temporary power.</i>"</p>
95	<p>Question type System Description. Specification page 7. Section 1.03-A.1.j. Please state / clarify " Room Temperature Monitor as indicated."</p>	<p>Refer to Section 01110, 1.10 J., pg. 32. Specific part number is provided "Rotronic Hygroflex3 HF320-WT6XXXXX", no system description is required.</p>
96	<p>Question type System Description. Specification page 7. Section 1.03-A.1.k. - Please state / clarify " Any other auxiliary equipment as indicated."</p>	<p>The language will remain. Please refer to the Contract drawings and specifications.</p>

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97	Question type Technical Provisions. Specification page 132. Section Vol. 2 - Section 3.06, paragraph A- . "Paragraph states that an extended product warranty shall be provided which warrants functionality or all components used in the system for 25 years from the date of registration" Question: Please clarify, is this really addressing speaking to provisions for a "25 year warranty period"? If that is the case please define / list which "system and what components are being referred to.	Section 16149. 3.06.A second sentence explains what is in the extended warranty. <i>"The Extended Product Warranty shall warrant the installed horizontal and/or backbone copper, and both the horizontal and the backbone optical fiber portions of the cabling system."</i>
98	Per response to Question 5, Amendment 1 was to be issued extending the bid due date to November 25 and submission of RFI's will be November 16, 2015. The WMATA solicitation site does not have an amendment 1 posted. Please indicate if an amendment is being posted.	Amendment 1 was posted on November 6, 2015 on www.wmata.com
99	Please advise how quickly you plan to award? It seems very impractical to meet an end of June '16 completion.	Refer to solicitation instructions, Clause 22 (c) Bid Guarantee which states in part "period specified .. for acceptance (90 days ...)". This means WMATA has calendar days to award the Contract after receipt of Bids.
100	What is the new delivery date for the first site Tie-Breaker Upgrade? June/July delivery of the first location is not possible by any supplier including NTP issuance date, Design, Submittal, Order product and construct, install, test and commission. Please advise.	Amendment No. 2 will update Volume 1, Clause 14, p. 25; 2.1.7 INTERIM WORK COMPLETION MILESTONE,p.138; Clause 2.23.1 (b),p.167 in reference to K06TB2 and K07TB2 to September 30, 2016.
101	Question type: Performance Requirements. Spec page 192. Section 2.02-D. Please define the DC signals, number, and data stream parameters, that the new DTR will need to communicate to the HMI.	Refer to the revised section 16603 by Amendment 1.
102	Special Provision 2.1.7 notes the requirement to complete K06TB2 and K07TB2 by June 30, 2016. The ability to comply is truly dependent upon the award date of the contract and the Authorities cooperation. We believe we can kick the contract off, submit the equipment for approval, receive approval, release for fabrication, factory testing, and delivery and complete the work of those two locations in approximately 255 Calendar days. We're assuming we will be allowed to work more than one location concurrently and that the Authority will process approvals timely as well as provide all required support efficiently to meet this. We request the hard June 30, 2016 date be changed to NTP + 255 Calendar Days?	Refer to RFI Response No. 100.
103	Please confirm, contractor is responsible for costs associated with providing a low-flat rail car for transporting equipment to underground locations where it is know that a standard flat-car and equipment will not fit within the dynamic envelope of the tunnels?	Volume 1, Special Provisions, Section 2.1.5 (a) Work Trains will be revised in Amendment 2 to state: "A work train will be provided by the Authority for transporting equipment, materials and tools to/from the work areas"

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104	Please confirm for K07-TB1 Ogden St., that WMATA will coordinate with the Virginia Department of Transportation for nightly lane closures required for personnel and equipment access to the station and that the Contractor should not carry associated costs?	Under no circumstances will WMATA be responsible for any coordination with outside jurisdictions concerning access. As referenced in Volume 1, Section 2.1.4 Access to Site, p.134 "Contractor shall be responsible to confirm allowable ERD work hours with Local Jurisdictions and". "Contractor shall be responsible to confirm allowable IC work hours with the Local Jurisdiction. Contractor shall coordinate specific work hours with the Authority." In addition, refer to Clause 1.12 PERMITS AND RESPONSIBILITIES, Volume 1, p.80. K07-TB1 Ogden Street specifically calls for equipment to be accessed by rail. A future amendment will add the "train drop" option for personell access to this location.
105	Amendment #1 notes revisions to clause 2.1.4 (c) Access to Site and Hours of Work, p.128, but a revised p.128 was not provided?	Clause 2.1.4 (c) Access to Site and Hours of Work, p.128 will be added in Amendment 2.
106	The connections to the DC Switchgear from the DTR for the Breaker Current, MPR Trigger, and Bus Voltage contacts are not shown on the cable schedules. Please provide needed cables for this equipment on the cable schedules?	Refer to Section 16603, 1.03, C., 1. (AM1) and 16341, 2.02, C. DTR is factory installed by the manufacturer of the DC switchgear. Refer to SCADA drawing ST-SC-G-SSI-008, showing the termination on the DTR. All other wiring is internal to the switchgear and not Cable Schedule item.
107	On drawing ST-SC-TB-SSI-206, cables SCS-8 and SCS-9 show going from an Inverter to the RTU and Network Switch. There are no inverters shown on the floorplans. Please clarify if these cables are needed or where the inverter is located?	SCADA drawings are typical, not site specific. If an equipment is not installed, the cable is not to be provided.
108	In Amendment 1 Changes list, it states that there is a revised Clause 2.1.4 (c) Access to Site and Hours of Work, p. 128. This page cannot be found in the Amendment documents. Please provide.	Correct, the page was provided in Amendment 2.
109	After applying Amendment 1 to the Technical Provisions, Page 296 seems to be incorrect. Please provide a revised page 296 of Volume 2 Technical Provisions.	Page 296 as issued in Amendment 1 is correct.
110	At the pre-bid meeting WMATA indicated that the craft could access K07TB1 from a vehicle drop-off on the shoulder of Interstate 66. VDOT has informed us that a Virginia state permit and an MOT lane closure will be required for each such event. Additionally, lane closures could only be done during non-rush hours. Does WMATA have an existing permit from the state to allow access from I-66 and would it be transferable to the Contractor?	Refer to RFI Response No. 104

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<p>111</p>	<p>DIO: In section 16605: 2.01: The responsibility of the DIO's are described as follows: A. Remote control of the breakers by the Operations Control Center (OCC) and Human Machine Interface (HMI) shall use a Distributed I/O (DIO) technology where required. OCC control commands shall be received by the SCADA RTU through the Wide Area Network (WAN)/Local Area Network (LAN). The RTU shall execute the control through the Distributed I/O Modules using a DNP3 protocol. The RTU shall receive breaker status from the Distributed I/O Modules and transmit the data back to OCC through the WAN/LAN B. Distributed I/O Modules shall be provided for each DC breaker. The modules shall receive digital control signals from the RTU or switchgear PLC and provide relay contact control outputs to the breakers through interposing relays. The module shall also receive dry contact signals from the breakers for status indications and send the corresponding digital signals to the RTU or switchgear PLC. The Control I/O Modules shall be power using 125VDC supply at the switchgear.</p> <p>One of the Switchgear manufacturers we are working with can provide the breaker status by the Controller installed inside the Switchgear. Similarly, we can send control commands to the Switchgear Controller to operate the breakers. We are able to communicate to the Switchgear Controller via DNP protocol. However, the spec calls for a hardwired connection between the breaker signals and DIO's as RTU communicates with the DIO per spec. Our question is if DIO can be eliminated so that the Switchgear signals and controls are communicated directly to through Controller installed in the Switchgear.</p>	<p>DIO is required as described in Section 16605 in Volume 2 TECHNICAL PROVISIONS.</p>
<p>112</p>	<p>HMI: The HMI spec in section 16291A implies for two separate locations for installing RTU cabinet and HMI hardware. Our RTU enclosure will have room for installing the specified HMI. Our question is if it is acceptable to install the HMI hardware in the RTU enclosure</p>	<p>HMI is to be installed in separate enclosures. Refer to RFI No. 3.</p>

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113	Amendment #1, page 24, Item 14.b(2)(a) added the requirement that the bidder have been in business for a minimum of three (3) years by the time the bid is due. While our firm does not meet this requirement, we have completed approximately ten (10) similar Tie Breaker Upgrades for WMATA over the last year plus. We are a wholly owned subsidiary of a construction firm whom also perform work for WMATA and whom has been in business for more than three (3) years. Please confirm that as a bidder, we would meet the qualification of being in business at least three (3) years at the time of bid through the fact that our parent company exceeds the requirement?	The requirement shall remain as is. Refer to Volume 1, Clause 14 (2) (a) PRE-AWARD INFORMATION and Clause 13. AWARD OF CONTRACT. WMATA intends to award a Contract to the Bidder, not to a parent company.
114	After reviewing the Drawings provided we have the following questions: Sheet No. 14 of 60: a. Item #10 Panel EAC-IGS is not present in the drawing or in the panel board schedules page 20 b. Item #11 Annunciator Panel is not present in the drawing c. Item #20 DC to AC Inverter is not present in the drawing d. Item #15 Length of feeder to breaker E-K06-63 s not present in the drawing or in the panel board schedules page 20	Refer to Drawing Sheet 14 of 60. The panelboard, annunciator panel, and inverter are existing and to be removed only. The removal is covered in the notes as indicated on the Drawings. Their size does not exceed 18"x18". Item 15 was removed in Amendment No 2.
115	After reviewing the Drawings provided we have the following questions: Sheet No. 22 of 60: a. Item #10 Panel EAC-105 (Emergency) is not present in the drawing or in the panel board schedules page 28 b. Item #11 DC to AC inverter is not present in the drawing or in the panel board schedules page 28 c. Item #16 Annunciator Panel is not present in the drawing	Refer to Drawing Sheet 22 of 60. The panelboard, annunciator panel, and inverter are existing and to be removed only. The removal is covered in the notes as indicated on the Drawings. Their size does not exceed 18"x18".
116	After reviewing the Drawings provided we have the following questions. Sheet No. 30 of 60 a. Items #10 EAC-IPA, #11 DC to AC Inverter and #12 Annunciator Panel is not present in the drawing or in the panel board schedules page 36	Refer to Drawing Sheet 30 of 60. The panelboard, annunciator panel, and inverter are existing and to be removed only. The removal is covered in the notes as indicated on the Drawings. Their size does not exceed 18"x18".
117	After reviewing the Drawings provided we have the following questions. Sheet No. 38 of 60 a. Items #6 DC to AC Inverter & #8 Annunciator Panel is not present in the drawing or in the panel board schedules page 36	Refer to Drawing Sheet 38 of 60. The annunciator panel and inverter are existing and to be removed only. The removal is covered in the notes as indicated on the Drawings. Their size does not exceed 18"x18".
118	After reviewing the Drawings provided we have the following questions. Sheet No. 46 of 60 a. Items #9 Annunciator Panel & #10 DC to AC Inverter is not present in the drawing or in the panel board schedules page 36	Refer to Drawing Sheet 46 of 60. The annunciator panel and inverter are existing and to be removed only. The removal is covered in the notes as indicated on the Drawings. Their size does not exceed 18"x18".

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119	After reviewing the Drawings provided we have the following questions. Sheet No. 54 of 60 a. Items #9 Annunciator Panel & #10 DC to AC Inverter is not present in the drawing or in the panel board schedules page 36	Refer to Drawing Sheet 46 of 60. The annunciator panel and inverter are existing and to be removed only. The removal is covered in the notes as indicated on the Drawings. Their size does not exceed 18"x18".
120	Please provide Battery DC loading profile per IEEE 485	Refer to RFI Response No. 85, Clarification was included in Amendment No. 2., Section 16265.
121	Please check Battery specifications – listed batteries have been discontinued	Refer to RFI Response No. 85, Clarification was included in Amendment No. 2. , Section 16265
122	Please provide and verify scale on all drawings	Refer to RFI Response No. 39.
123	Please clarify bid form breakdown. Unit Price form calls on pricing components that are out of scope of project per latest issued RFI's response. Items (b)&(c).	Refer to Drawing TBS-G-012 and RFI Response No. 52. Power jumper cables are within the Scope of Work. Refer to RFI REsponse No. 37. ETS jumper cables are not a part of the Scope of Work.
124	Please confirm an electronic copy of the Pre-Award Data will be all that is required for submission and that no hard copies will be required?	Incorrect. Bid documents are listed in Volume 1, p.18 under "Bidding Material". In addition, refer to Volume 1, p. 6 which states in part: " Pre-Award Information: Shall not be submitted with the bid. After the bid opening, only the Apparent Low Bidder will be requested to submit Pre-Award Information." "Bidders are cautioned to not take exceptions or qualify their bid! Any questions regarding the solicitation should be made in writing to the Contracting Officer no later than close of business (COB) November 23, 2015. Please carefully review the Notice to Bidders of the IFB. The Notice to Bidders addresses common problems found in previous bids that may cause bid rejection."
125	In the response to RFI #3, it was requested we provide where it was stated that the HMI was integrated with the RTU. This combination was mentioned in Note #2 of drawing ST-SC-G-SSI-005. We will consider this note to be an exception in the case where there is not enough room in the TBS, and typically the RTU and HMI will be separate from each other.	Note #2 of drawing ST-SC-G-SSI-005 will be deleted in Amendment 3.
126	Please provide the interrupting rating of the 208Y120 and 480Y277V AC Molded case Circuit Breaker Panelboards. Only the interruption rating of the DC Panelboards is provided in specification 16052 Section 2.02 B.4.e as 10 kAIC.	The following revisions will be made in Amendment No. 3: 480V Panelboards AIC shall be minimum 14 KA. 208V Panelboards shall have minimum AIC of 10 KA.
127	Specification 16265 section 2.02 A.a.1) lists the Amp Hour capacities of the Battery Systems as being List 1S, 1,600 Ah; List 2S, 864 Ah; List 3S 488 Ah and List 4S 296 Ah. Where is it shown in the specifications the requirements for the individual Tie Stations?	Refer to RFI Response No. 85, Clarification was included in Amendment No. 2. , Section 16265 .

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128	<p>During the pre-bid conference on 10/20/15, there was discussion regarding the feasibility of the 6/30/15 milestone completion date for K06TB2 and K07TB2. Further discussion with manufacturers indicate that the expedited lead time for the switchgear lineups for the two locations will be four (4) months at best after approval of shop drawings and product data. If we take into account that the bid date is December 3rd, and the Contract Award being finalized 90 days after the bid date, the duration to develop the shop drawings for submittal after NTP and a reasonable time for review and approval by WMATA, it is not possible to achieve the milestone date. We request WMATA provide any information regarding liquidated damages tied to the milestone date, or whether this date will be changed in a future addendum.</p>	<p>Refer to RFI Response No. 100.</p>
129	<p>Following the previous question regarding MOT and permitting considerations for K07TB1, is it possible for personnel under WMATA escort to enter the job site by crossing the right of way via the access gate on the other side of the structure during revenue service?</p>	<p>Refer to RFI Response No. 104</p>
130	<p>There is a requirement to supply a RTU test setup. Can we include the RTU test setup on an open rack ? Or is WMATA expecting all the equipment in a typical RTU panel on this test setup? Could we include the RTU Controller and modules along with the local/remote selector switch? . Please clarify.</p>	<p>Section 16602 paragraph 2.04.D requires the contractor to provide the RTU components necessary for the development and testing in a LAB environment, not the cabinet. The contractor may provide the components mounted on an open rack.</p>
131	<p>Please clarify if the contact rail Temporary jumper cables showing on drawing TBS-G-012 are part of contract scope of work. Note that previous RFI # 37 dated October 28th mentions that ETS jumpers are not part of the scope of work. If it's not a part of the scope please revise the bid form items b & c.</p>	<p>Drawing TBS-G-012 is correct. Power jumper cables are within the Scope of Work. Refer to RFI Response No. 52 for additional information. RFI response No. 37 is correct. ETS jumper cables are not a part of the Scope of Work.</p>

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<p>132</p>	<p>Please see enclosed request for changes to the RFP language. We are requesting these changes in order make the contract more balanced so that we can bid the project. Without these changes or something similar that limits the authority from arbitrarily putting the contractor in default, we may not be able to bid the project.</p> <p>The proposed changes are listed in bold font.</p> <p>-Construction General Provisions Section 1.5 "Termination for Default, Damages for Delay and Time Extensions"</p> <p>1.5 a. If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will ensure its completion within the time specified in this Contract, or any extension thereof, and the cap on liquidated damages has been reached, or fails to complete said work within such time and the cap on liquidated damages has been reached, the Contracting Officer may, by written notice to the Contractor, terminate his right to proceed with the work or such part of the work as to which there has been delay. In such event, the Contracting Officer may take over the work and prosecute the same to completion, by contract or otherwise, and may take possession of and utilize in completing the work such materials, appliances and plant as may be on the site of the work and necessary therefor. Whether or not the Contractor's right to proceed with the work is terminated, he and his sureties shall be liable for any damage to the Authority resulting from his refusal or failure to complete the work in the specified time.</p> <p>1.5 b. If fixed and agreed liquidated damages are provided in the Contract and if the Contracting Officer so terminates the Contractor's right to proceed, the resulting damage will consist of such liquidated damages until such reasonable time as may be required for final completion of the work or until the cap on liquidated damages has been reached whichever is less together with any increased costs occasioned the Authority in completing the work.</p> <p>1.5 c. If fixed and agreed liquidated damages are provided in the Contract and if the Contracting Officer does not so terminate the Contractor's right to proceed, the resulting damage will consist of such liquidated damages until the work is completed or accepted, or until the cap on liquidated damages has been reached whichever is less.</p>	<p>WMATA will be consistent with other sealed bidding procurements on the subject Section and the language shall remain as is.</p>
<p>133</p>	<p>In Amendment 1, a scope of work was added to the Technical Provisions spec section 16051D, para 3.01.D: "Contractor shall furnish, install and terminate two six pair single-mode fiber optic cables, between the Communication room Data Switch and the Network Switch provided at Greenwich ST and Benning RD TBS". There does not seem to be any information regarding the location of these communication rooms in either of those locations, and the routing these cables will need to take. Please provide us with more detailed information regarding this work.</p>	<p>The requirement has been removed. Refer to Amendment No. 3, Volume 2, pg. 34, 3.01 D and Volume 3, Pg. 18 of 29.</p>

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134	<p>On Technical Provisions, Page 11, it states that a full-time factory expert shall be provided on-site for a period of 30 calendar days during installation at each location. Please clarify this requirement. Are these experts to be available on an as-needed or a continuous basis?</p> <p>If there are multiple installations occurring at once, would a factory expert be required for each location, or can one expert be available to cover all of these locations?</p>	<p>Refer to Amendment No. 3, Volume 2, pg. 10, D.2.</p>
135	<p>Amendment 1 Volume 1 Bidding and Contracting Requirements AM1--Insurance.</p> <p>-Please confirm that that \$30,000 allowance item for RRPL coverage is for bidding purposes only, and will not be an allowance item in the contract.</p> <p>-What is the estimated amount that the RPPL waiver fee will be?</p> <p>-What is the estimated premium for the RRPL policy under WMATA?</p> <p>-Is the RRPL waiver fee and the premium paid to WMATA one in the same or are they two separate costs? If they are two separate costs please confirm that both costs are reimbursable to the contractor.</p>	<p>* Amendment 3 will revise line item 008 Railroad Protective Liability Waiver Fee in the Unit Price Schedule to \$40,000. Refer to Volume 1, Letter to Bidders, p.5 which states in part : "For bidding purposes, an allowance will be provided on the Unit Price Schedule" and Volume 1, Notes to Bidders (10), p.50 states in part "If the Contractor chooses to not utilize the WMATA RRPL, then WMATA will reimburse the Contractor for the actual cost with no markups up to the amount (not allowance) that would have been paid for the WMATA waiver fee."</p> <p>* Amendment 3 will revise line item 008 Railroad Protective Liability Waiver Fee in the Unit Price Schedule to \$40,000. Refer to Volume 1, Letter to Bidders, p.5 which states in part : "For bidding purposes, an allowance will be provided on the Unit Price Schedule" and Volume 1, Notes to Bidders (10), p.50 states in part "If the Contractor chooses to not utilize the WMATA RRPL, then WMATA will reimburse the Contractor for the actual cost with no markups up to the amount (not allowance) that would have been paid for the WMATA waiver fee."</p> <p>* They are one and the same. Refer to Volume 1, Notes to Bidders (10), p.50 which states in part 2) The Contractor prepays the waiver fee which shall be determined by the rate schedule promulgated by the insurer in effect as of the effective date of this Contract and Volume 1, Letter to Bidders, p.5 which states in part : The contractor is entitled to 100% reimbursement of the actual premium paid to WMATA with no markups. ... The contractor shall be reimbursed 100% of the actual waiver fee paid to WMATA".</p>
136	<p>There is not enough information provided in the bid package to determine what size batteries and chargers we need to quote.</p> <p>Requesting WMATA clarification ASAP. Thank You.</p>	<p>Refer to RFI Response No. 85, Clarification was included in Amendment No. 2. , Section 16265.</p>

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137	WMATA responded to Question #103 indicated that Volume 1, Special Provisions, Section 2.1.5 (a) Work Trains will be revised in Amendment 2 to state: "A work train will be provided by the Authority for transporting equipment, materials and tools to/from the work areas". Upon review of Amendment #2, Volume 1, Special Provisions, Section 2.1.5 (a) has been revised, but the fourth sentence still indicates if a low boy flat car is required, it's the contractor's responsibility. As indicated in question 103, it is known that a standard flat car will not work for the underground locations. Please clarify if Contractor is responsible for providing a low boy flat car to accomplish the work?	The language in Volume 1, Special Provisions, Section 2.1.5 a. is clear. Refer to Appendix I "Dynamic Outline Diagram".
138	Please clarify battery requirements for each tie breaker station requiring batteries. Per Volume 2 Specification 16265 various battery capacities are listed, but IEEE 485 sizing is called for.	Refer to RFI Response No. 85, Clarification was included in Amendment No. 2. , Section 16265.
139	Per RFI No. 64 response, it's our understanding that WMATA didn't clearly answer who is responsible for the warranty of Cisco Network switches provided, installed, configured and tested by WMATA. Please confirm WMATA will be responsible for the warranty of Ethernet switches.	WMATA is providing and Installing the Network switches. WMATA will be responsible for the warranty of Ethernet switches.
140	RFI No. 70 response doesn't clarify the required on-site time to perform the system integration testing, one (1) week of three (3) days. Please clarify the required on-site time to perform system integration testing.	Refer to Section 16606 SCADA Systems Integration For Tie Breaker Station.
141	Per RFI No. 71 response we believe there is some confusion between Analog Input Modules and Analog Control Output modules. Paragraph 2.02.G.5 refers "Each input shall have suitable protection..."; "The ability of the RTU to accommodate dc inputs shall include...". It's our understanding that required modules on table 1 are Analog Input Modules. Please confirm.	Volume 2, Section 16602, Paragraph 2.02.G.5 is corrected by Amendment 3 to "Analog Input Modules".
142	AMENDMENT 1 – SECTION 16602. p. 268, para. 2.04-Per Amendment 1 Contractor shall provide a full functional RTU on an open rack for the tests at WMATA. Please confirm network switches are required to be installed on RTU open rack, and also confirm that WMATA will provide, install, configure and test the Cisco network switches for this open rack, as for the standard RTUs.	Refer to Volume 2, Section 16602. Cisco network switches are not required to be installed on the Rack for the Lab tests. SCADA Lab network switches will be used for the Tests.
143	AMENDMENT 1 – SECTION 16602. p. 368, para. 2.04-Please advise if a HMI panel is required for the RTU open rack and who will perform HMI configuration/programming.	Refer to Volume 2, Section 16602, 2.04 E. Add HMI and any other ancillary equipment required to demonstrate full functional RTU. HMI is required and provided by the contractor for the LAB test, the contractor is also responsible for all configuration files including the HMI files.

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144	AMENDMENT 1 – SECTION 16603. The description of DTR system seems to indicate a standalone, local data acquisition and storage system to record voltage and current channels from voltage and current transducers. Based on some features required for this system, this seems to be a completely different system from that one is being provided for the last years to WMATA. Based on some of that features, such as storage capability, sample rates, software features like power analyzer, FFT Harmonic analyzer, etc., it seems to us this will result in a very expensive equipment. Please confirm this is WMATA intent for DTR system.	Refer to Volume 2, Section 16603 for DTR specifications.
145	AMENDMENT 1 – SECTION 16603. Please confirm if it is requested a touchscreen visual display in the DTR cabinet.	Refer to Volume 2, Section 16603. The DTR shall not include visual display.
146	AMENDMENT 1 – SECTION 16603.p. 283, para. 2.02.A.10 - This paragraph requests that DTR interfaces with the substation RTU for alarm monitoring. Based on the requirements specified for the DTR, the available standard products in the market today don't have the capability to be interfaced/integrated with a SCADA/Automation system. This means that product customization and development is required to achieve this requirement. Please confirm this is intended by WMATA and advise what kind and type of alarms shall be monitored by the RTU.	Refer to Amendment 1, page 295 Paragraph 2.06D for alarms monitored by SCADA. "DTR shall be monitored by the TBS SCADA system for communication failure as well as DTR failures."
147	AMENDMENT 1 – SECTION 16603. p. 282, para 2.02.A.1 - Per amendment 1, the DTR shall capture individual samples with a minimum of 10k/s rate. Being this request so restrictive and also increasing considerably the price for this solution, please advise if a device with 2k/s sample rate is accepted by WMATA.	Refer to Volume 2, Section 16603 specifications.
148	AMENDMENT 1 – SECTION 16603. p. 2852, para 2.06.A.1 - The specification requires a portable laptop computer. Please advise if this laptop is the same laptop mentioned in the Spec Section 16602 or a different laptop required only for this type of application.	Volume 2, Section 16603, Paragraph 2.06 A., does not require Laptop to be provided with the DTR, only software to be provided with each DTR. Laptop specified in section 16602 is to be furnished to WMATA for use by WMATA. Contractor must have their own laptop with the DTR software for the DTR configuration.
149	AMENDMENT 1 – SECTION 16603. p. 282, para 2.02.A.4 - Based on the size of local storage capability and software capabilities required on the Amendment 1 for the Digital Trace Recorder section 16603, we need to provide to each individual TBS an external and expensive computer based system to fully comply with the specifications. Please confirm that is WMATA intention to have installed in the DTR cabinet a panel PC/computer running the DTR application software. If so, please advise further information and spec requirements for this panel PC, such as System memory, Operating System, etc.	Refer to Amendment 2 in Volume 2, 1.03, A.1., pg. 275 for the list of Digital trace recorder manufacturers that provide computer based Data Acquisition systems. All DTR must meet the environmental requirements and performance.

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150	AMENDMENT 1 – SECTION 16603. The amendment 1 changed entirely the specifications section 16603 involving the Digital Trace Recorder. Also the specifications are very restrictive and limitative to one brand. We would like to have the confirmation that this new specifications need to be fully compliant or are an example of the type of features WMATA wants in the DTR.	Pending WMATA response.Refer to Amendment 2 in Volume 2, 1.03, A.1., pg. 275 for the list of Digital trace recorder manufacturers.
151	AMENDMENT 1 – SECTION 16603. The amendment 1 changed entirely the specifications section 16603 involving the Digital Trace Recorder bringing a new system design very different from the original specifications with additional clarifications needed. In order to properly prepare a proposal for this solution based on these specifications, the manufacturer/system integrator needs at least 2 more weeks. Considering also the holidays season we kindly request an extension of 3 weeks of bid due date.	The due date shall remain as is.
152	SECTION 16605. Please confirm that DIOs feature to include a real-time clock with power-failure backup circuitry synchronized by an IRIG-B receiver through BNC, RS485 or fiber optic port or through its DNP3 communications port from a Data Concentrator is required.	Refer to 16605 para 2.05.A: "The I/O modules shall be equipped to receive NTP time synchronization over the multimode fiber port"
153	SECTION 16605. Please confirm that the following indications by LEDs are required: <ul style="list-style-type: none"> • Communications port activity; • Status point keying; • CPU heartbeat; • System 3V power; • Local/remote switch position. 	Refer to Volume 2, Section 16605, 1.03 A. for the list of specified manufacturers having different LED lists and arrangement of LED that are acceptable.
154	SECTION 16605. Please confirm that a Local/Remote switch shall be installed in the DIO unit, in order to disable relay operation when in Local mode, for safety reasons.	Volume 2, Section 16605 does not call for a mandatory Local/Remote switch requirement.
155	AMENDMENT 2 SECTION 16051D. p. 36, para. 3.03 - Answer to RFI No. 61 says that "Other servers and simulation methods will be used to ensure compatibility. The contractor is responsible for proper configuration of the RTUs not master stations." Per Amendment 2, RTU will be tested with WMATA system servers for compatibility tests at WMATA LAB. Please indicate how WMATA is planning these simulation methods and how many days of support on WMATA LAB needs from manufacturer. Please confirm that WMATA will be responsible for configuration of WMATA servers.	Refer to Volume 2, Section 16606. RTU will be connected to DIO, Relays and Simulators to mimic a typical TBS and the RTU will be simulated for the complete ultimate size point counts. All requirements for exchanging data with AIM servers and SCADA servers will be simulated by connecting the RTU to the SCADA and AIM servers to continuously poll the RTU every second for 48 hours. WMATA is responsible for the configuration of the servers, it is however the contractor responsibility to configure the RTU using WMATA point assignment chart.

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156	SECTION 16291A. p. 184, para 2.01.D - Per Amendment 2, is contractor responsibility to provide all HMI configuration. The specification section 16291A does not address the custom scripts that are not template driven that provide the coordination between the TBS and ETS RTUs in order to provide the fully integrated HMI control scenario. Please provide further information/clarification on the HMI configuration requirements in order to quote the properly effort for this work.	There is no ETS RTU in the TBS contract. Amendment No. 3 deletes any reference on pages 45 and 46.
157	The Tax language in Section 25 of the Solicitation Instructions, "WMATA's Tax Exempt Status" and Section 1.24 "Federal, State and Local Taxes" is unclear. Please confirm whether or not the Materials purchased for work in DC,MD, and VA is subject to sales and use tax.	It is the responsibility of the Contractor to determine its liability for any and all taxes applicable to this Project.
158	Please provide liquidated damage language tied to the completion of the milestone for the first 2 TBS by 9/30/15. In lieu of a defined liquidated damage amount, the Contractor is liable for actual damages related to failure to meet this requirement.	The language shall remain as is.
160	<p>Question type. General regarding 45kVa voltage regulator required for the Ogden Street TBS. Spec Pg# TBS-G011. Section KO7 TB1-TB-200. What sort of voltage regulation is needed +/-? Typically, this would be +/- 5% or less.</p> <p>What under and over voltage do they want to correct? Typically, a voltage regulator can operate from +10 to -20% input voltage with a set output voltage.</p> <p>Do they want any electrical noise and spike protection or just voltage regulation?</p> <p>Does it need overload capability?</p> <p>Does it need any ride through capability on loss of power?</p> <p>Does it need the capability to be bypassed?</p>	Refer to Volume 2, Section 16270, pg. 175 and 176.

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161	<p>On page 24A of Volume I, the requirements of a Quality Manager is "...be trained as a Lead Auditor in a Registrar Accreditation Board of the American Society for Quality (ASQ) approved course on the requirements of ISO 9001 and with a minimum of 5 years of related experience including a minimum of 2 years of management positions in a production, manufacturing, or construction environment...". On page 208, spec section 2.58.7 states "The Quality Manager shall be trained as a Lead Auditor through an approved certification agency (RAB, ASQ, etc...) and shall have 10 years of related experience including 5 years of management positions in a production, manufacturing, or construction environment and experience in QA/QC auditing." Please clarify which requirement to follow.</p>	<p>Volume 1, page 24A under requirements of a Quality Manager and Volume 1, Section 2.58.7 will be revised in Amendment 3 to: "<i>Quality Manager (part time). Shall possess ASQ Certification and be trained as a Lead Auditor in a Registrar Accreditation Board of the American Society for Quality (ASQ) approved course on the requirements of ISO 9001 and with a minimum of 10 years of related experience including a minimum of 5 years of management positions in a production, manufacturing, or construction environment performing QA/QC auditing. Transit industry experience is preferred.</i>"</p>
162	<p>Does the Safety Superintendent have to be full time or part time? The specs do not clarify.</p>	<p>Refer to Volume 1, Clause 2.15 (b) SAFETY REQUIREMENTS, p. 155 "<i>Category II. - The Safety Superintendent may be the project foreman or an employee who is on- site at all times while work is being performed, and who has the added duty of supervising the safety of persons, equipment, and property affected by contract work. The need for separate First Aid Attendant coverage will be determined by WMATA's Representative.</i>" The Bidder shall decide whether full time or part time Safety Superintendent is required based on the IFB requirements to the Safety Superintendent. Amendment 3 deletes paragraph 5 (iii) in Volume 1, Clause 2.68 CONTRACTOR'S QUALIFICATIONS, P.219.</p>
163	<p>If the license is in process at time of bid, would this be sufficient to bid?</p>	<p>No. Refer to: Volume 1, p.16, question 3 Clause 14 (b) (2) (b) PRE-AWARD INFORMATION Volume 1, Clause 23. LICENSES.</p>

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164	<p>General regarding. Battery Type: Industrial Flooded Lead Acid Cell. Spec Pg.# 144. 2.02 PRODUCTS AND MATERIALS: A. Storage Battery: 2. Battery: 60 Cells Battery: Industrial Flooded Lead Acid Cell capable of full service life in either an industrial UPS duty cycle application or for standby DC power backup in a switchgear or communications application. Question: . Are Industrial Flooded Lead Acid Cell the only type storage battery allowed for the WMATAT Six(6) Tie Breaker Station upgrades</p>	This substitution request is not acceptable.
165	<p>General regarding. Battery Type: Industrial Flooded Lead Acid Cell. Spec Pg.# 144. 2.02 PRODUCTS AND MATERIALS: A. Storage Battery: 2. Battery: 60 Cells Battery: Industrial Flooded Lead Acid Cell capable of full service life in either an industrial UPS duty cycle application or for standby DC power backup in a switchgear or communications application. Question: May we utilize Valve Regulated Lead Acid batteries (VRLA type)? This type battery also has a 20 year design life. VRLA design footprint typically offers a 40% to 60% footprint reduction and a 50% reduction in installation time/man-hours.</p>	Refer RFIs No 163 and 164.
166	<p>There is a conflict between the warranty terms in the general and special provisions. General provisions state that the warranty period is two years from SCI (Section 1.48). Special provisions say warranty period is one year from SCI (Section 2.66.J.1). Please clarify exactly when the warranty period ends.</p>	Refer to Amendment 3. It deletes Section 2.66. (j) (1).