



## CITY OF ATLANTA

SUITE 1900  
55 TRINITY AVENUE, SW  
ATLANTA, GA 30303

(404) 330-6204 Fax: (404) 658-7705  
Internet Home Page: [www.atlantaga.gov](http://www.atlantaga.gov)

DEPARTMENT OF PROCUREMENT  
Adam L. Smith, Esq., CPPO, CPPB, CPPM, CPP,  
CIPC, CISCC, CIGPM, CPPC  
Chief Procurement Officer  
[asmith@atlantaga.gov](mailto:asmith@atlantaga.gov)

Kasim Reed  
Mayor

May 23, 2016

Dear Potential Bidders:

**Re: FC-8807, Emergency On-Call Repairs and Maintenance For Atlanta  
Streetcar Overhead Contact System and Traction Power Substations**

Attached is one (1) copy of **Addendum No. 4**, which is hereby made a part of the above-referenced project.

For additional information, please contact Elvis G. Gibbs, Business and Federal Transit Administration (FTA) Procurement Manager, at (404) 865-8704, or by email at [eggibbs@atlantaga.gov](mailto:eggibbs@atlantaga.gov).

Sincerely,

A handwritten signature in blue ink that reads "Adam L. Smith".

Adam L. Smith

ALS/egg



**FC-8807, Emergency On-Call Repairs and Maintenance For Atlanta Streetcar  
Overhead Contact System and Traction Power Substations  
Addendum No. 4  
May 23, 2016  
Page 2 of 3**

**ADDENDUM NO. 4**

This Addendum No. 4 forms a part of the Invitation To Bid and modifies the original solicitation package and any prior Addenda as noted below and is issued to incorporate the following:

1. **Questions and Answers**  
Total of nineteen (19) questions dated 5/23/16 attached hereto as Attachment No. 1.
2. **Revision of Exhibit A, Scope of Services/Work**  
Exhibit A, Scope of Services/Work is hereby removed and replaced with a revised Exhibit A, Scope of Services/Work dated 5/23/16 attached hereto as Attachment No. 2.
3. **Revision of Exhibit A.1, Bid Form**  
Exhibit A.1, Bid Form is hereby removed and replaced with a revised Exhibit A.1, Bid Form dated 5/23/16 attached hereto as Attachment No. 3.
4. **Revision of Appendix D, Supplemental Conditions**  
Appendix D, Supplemental Conditions is hereby removed and replaced with a revised Appendix D, Supplemental Conditions dated 5/23/16 attached hereto as Attachment No. 4.

Addendum No. 4 for **FC-8807, Emergency On-Call Repairs and Maintenance For Atlanta Streetcar Overhead Contact System and Traction Power Substations** is available for pick-up in the Plan Room: City Hall, 55 Trinity Avenue, Suite 1900.

**The Bid due date HAS NOT been modified and Bids are due on Friday, May 27, 2016 and should be time stamped in no later than 2:00 P.M. EDT and delivered to the address listed below:**

Adam L. Smith, Esq., CPPO, CPPB, CPPM,  
CPP, CIPC, CISCC, CIGPM, CPPC  
Chief Procurement Officer  
Department of Procurement  
55 Trinity Avenue, S. W.  
City Hall South, Suite 1900  
Atlanta, Georgia 30303

**\*\* All other pertinent information is to remain unchanged\*\***

**FC-8807, Emergency On-Call Repairs and Maintenance For Atlanta Streetcar  
Overhead Contact System and Traction Power Substations**

**Addendum No. 4**

**May 23, 2016**

**Page 3 of 3**

**Acknowledgment of Addendum No. 4**

Bidders must sign below and return this form with their bids to the Department of Procurement, 55 Trinity Avenue, City Hall South, Suite 1900, Atlanta, Georgia 30303, as acknowledgment of receipt of this Addendum.

This is to acknowledge receipt of Addendum No. 4, FC-8807, Emergency On-Call Repairs and Maintenance For Atlanta Streetcar Overhead Contact System and Traction Power Substations on this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_.

\_\_\_\_\_  
Legal Company Name of Bidder

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

# **Attachment No. 1**

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QUESTIONS

&

ANSWERS

Question 1: The bid form does not include any Materials and Parts apart from line item 5, 13 and 21, which we read to be consumables and small parts. Are we correct to assume that larger parts will be out-of-scope and subject to a proposal/purchase order on an as-needed basis?

**Answer:** *Yes, the Contractor shall provide materials and supplies available for corrective repairs and must submit an invoice to be reimbursed for materials and supplies. Refer to Attachment No. 3, Bid Form. Lines 10, 21 & 31 provides for an allowance for miscellaneous materials and supplies for each term.*

Question 2: What kind of Equipment and special tools (if any) can be provided by the customer? (e.g. Earthing fixture, bucket truck, special measurement equipment,...)

**Answer:** *The City may provide tools, apparatus, equipment, materials, supplies and personnel only when they are available. The Contractor shall be responsible for accumulating and staging tools, apparatus, equipment, materials, and supplies necessary to properly complete emergency work activities should they occur.*

Question 3: We are a bit unsure about the onsite-response times for the TPSS part. They are a lot shorter than in the earlier tender and given the redundancies in the overall system we consider these response times very aggressive. Is it allowable to propose alternatives?

**Answer:** *It is not allowable to propose other alternatives to the solicitation or any of its addendums. Refer to Attachment 2, Scope of Services/Work.*

Question 4: The Overhead Cost of this solicitation is very expensive.

A. Will the City of Atlanta be willing to purchase all parts needed and have on hand, this include the (SIPROTEC 7SJ62 relay and the Lockout relay)?

**Answer:** *The City may provide tools, apparatus, equipment, materials, supplies and personnel only when they are available. The Contractor is responsible to have at all times as spare parts of its own the following:*

- 1. Siprotec Protective Relay – 1 each*
- 2. Ground Fault Relay – 1 each*
- 3. Sitras Pro Protective Unit - 1 each*
- 4. Qualitrol Transformer Over-temperature Protection Relay – 1 each*

- B. If the City of Atlanta stand on the requirements for the prospective bidder to have on hand the spare parts, will the City of Atlanta be willing to pay for all parts purchased once ordered and received by the prospective bidder?

*Answer: No, the City will to only pay for parts that are authorized for purchase and were ordered and received by the prospective bidder, on an as-needed basis.*

- i. If not, the prospective bidder is saddle with the cost of maintaining spare parts. These spare parts cannot be billed to the City of Atlanta until they are needed for installation. The cost of the SIPROTEC 7SJ62 relay and the Lockout relay could range from 10k – 40K. Is there any means of reimbursement if these parts are not used for the duration of the contract?

*Answer: Yes, Refer to Attachment 4, Supplemental Conditions. Supplemental Conditions has been revised to include “PARTS” provision, which states that:*

*“Upon expiration or termination of the Contract, the City will purchase the Contractor’s surplus inventory of new and unused parts specific to the repairs and maintenance subject hereto, at prices no greater than those paid by the Contractor, including shipping and handling from the Contractor’s facility, up to a total price of \$50,000.00.”*

- C. Will the prospective Bidder only be guaranteed to be paid for the Annual Preventive Maintenance of the OCS System, TPSS Preventive Maintenance and Mobilization/Equipment Staging?

*Answer: The contractor will be paid for each authorized and approved work that is completed, at the satisfaction of the City of Atlanta. This includes Annual Preventive Maintenance of the OCS System, TPSS Preventive Maintenance.*

*The Bidder’s price for mobilization and equipment staging shall be expressly for the purpose of reimbursing the Contractor for temporary or long-term expenses which he has incurred, and will incur, by accumulating and staging tools, apparatus, equipment, materials, and supplies.*

*For each Base and Option Year term, the City will reimburse for expenses incurred for accumulating and staging tools, apparatus, equipment, materials, and personnel, and manning the emergency work.*

*Payments will be made every month.*

- D. If no emergency on-call services is needed will the prospective bidder be compensated for the estimated hours associated with the OCS and TPSS 24 hours standby service?

**Answer:** *The contractor will be compensated for the estimated hours associated with the OCS and TPSS only when work has been completed at the satisfaction of the City of Atlanta.*

*The Bidder's price for mobilization and equipment staging shall be expressly for the purpose of reimbursing the Contractor for temporary or long-term expenses which he has incurred, and will incur, by accumulating and staging tools, apparatus, equipment, materials, and supplies.*

*For each Base and Option Year term, the City will reimburse for expenses incurred for accumulating and staging tools, apparatus, equipment, materials, and personnel, and manning the emergency work.*

- E. Does the City of Atlanta realize the overhead cost associated with this Solicitation to a Small Business?

**Answer:** *Yes.*

- F. Due to the cost of all the Bonding and Insurance (Performance Bond, Payment Bond, and Insurance Requirements) and not having any means of covering the cost of such if no emergency on call billable hours is used, will the City of Atlanta be willing to subordinate on any of these requirements?

**Answer:** *No, the City is not willing to subordinate on any bonding and insurance requirement. The selected Contractor will be required to satisfy all insurance and bonding requirements as detailed in Appendix B of the solicitation.*

Question 5: |The Atlanta Streetcar has a requirement to provide a Utility License.

- A. If a problem occurs on the AC 20k input power supply will this be contracted by the City of Atlanta to be repaired?

**Answer:** *Repairs to the AC 20K input power supply are not within the scope of this Contract.*

- B. Will a problem on the AC input be taken care of by Georgia Power and not be a part of this solicitation?

**Answer:** *Repairs to the AC 20K input power supply are not within the scope of this Contract.*

- C. Although the transformers and the cabling on the input to the VMF maybe own by the City of Atlanta, will it be maintained by Georgia Power?

**Answer:** *Maintenance of the transformers and cabling on the input to the VMF is not within the scope of this Contract.*

- D. The AC input for TPSS unit 3 at Peachtree Center is owned by MARTA will it continue to be maintained by Georgia Power?

**Answer:** *The Peachtree Center Station TPSS unit 3 is owned by MARTA and will not be maintained within the scope of this Contract.*

- E. Does the DC output from TPSS Unit #1 and Unit #2 within the confines of the VMF have a construction requirement to be over six feet deep?

**Answer:** *No.*

- F. Does this underground cable run represent more than approximately 100ft of cable and conduit?

**Answer:** *No.*

- G. Is the length of the underground cable section from the Peachtree Center TPSS unit less than 100 ft.?

**Answer:** *The Peachtree Center Station TPSS unit 3 is owned by MARTA and will not be maintained within the scope of this Contract.*

- H. Does the Peachtree DC output run underneath the side walk on the corner of Peachtree and Ellis Street?

**Answer:** *Yes.*

- I. At what point does this solicitation requirements start to require a Utility License?

**Answer:** *The City has removed the requirement for the contractor to possess a Georgia Utility Contractor's License. Refer to Addendum No. 2.*

- J. Does the requirement for a Utility License apply to the underground utility on the AC supply 20KV side that feed the two TPSS unit on the VMF; is this considered a part of this solicitation?

**Answer:** *The City has removed the requirement for the contractor to possess a Georgia Utility Contractor's License. Refer to Addendum No. 2.*

- i. Does this solicitation Utility requirements start at the DC output that feed the OSC system?

**Answer:** *The City has removed the requirement for the contractor to possess a Georgia Utility Contractor's License. Refer to Addendum No. 2.*

- ii. Does the Utility License requirement only pertain to the underground cable sections that runs from TPSS unit to the first service pole?

**Answer:** *The City has removed the requirement for the contractor to possess a Georgia Utility Contractor's License. Refer to Addendum No. 2.*

- iii. Does the Utility License requirement apply to the cabling from the output of the TPSS equipment to the first service pole as it convert to the OCS system?

**Answer:** *The City has removed the requirement for the contractor to possess a Georgia Utility Contractor's License. Refer to Addendum No. 2.*

- iv. Will the City of Atlanta be willing to subordinate on the Utility License Requirement?

**Answer:** *The City has removed the requirement for the contractor to possess a Georgia Utility Contractor's License. Refer to Addendum No. 2.*

- v. Could the City of Atlanta clarify the entire system that dictate the requirement of a Utility License? From the start point to the ending.

**Answer:** *The City has removed the requirement for the contractor to possess a Georgia Utility Contractor's License. Refer to Addendum No. 2.*

6. Is it possible to get the Model number off the SIPROTEC 7SJ62 relay? One would have to open the control cubicle. A picture of the name plate is preferred.

**Answer:** *Yes, the model number of the SIPROTEC 7SJ62 Relay is attached hereto in Attachment No. 5, dated 5/23/16.*

7. Who (The City of Atlanta or The Contractor) will be responsible for traffic control on this contract?

**Answer:** *The City may assist with traffic control when time permits and resources are available. However, the Contractor will be responsible for traffic control under this Contract.*

8. Will The City of Atlanta always provide a Bucket Truck for this Contract.

**Answer:** *The City may provide a Bucket Truck only when it is available. The Contractor shall be responsible for having, apparatus, equipment, materials, and supplies necessary to properly complete emergency work activities should they occur.*

9. Scope of Work, Section 1. On-Call Emergency Repair states: "The Contractor shall respond by phone within one (1) hour of being notified. The Contractor shall be onsite within (4) hours of being notified and shall be ready to perform emergency repairs on the OCS." Whereas the Traction Power Substation Emergency On-Call Repair indicates a response time of (2) hours of being notified. To perform the requested services, it is necessary to establish a twenty-four (24) on-site response time, and a matching time of (2) hours response time, to match both OCS and TPSS services. Please confirm acceptability of the 2 and 24 hour response and onsite response time, respectively.

**Answer:** *Refer to Attachment 2, Scope of Services/Work. The Scope of Services/Work has been revised to confirm acceptability of the Contractor response times to perform repairs on the OCS and TPSS.*

10. Please confirm the intention of Price Bid Form Lines 1, 9, and 17 (Mobilization and Equipment Staging) to be a yearly mobilization cost, not a mobilization cost per site visit.

**Answer:** *Refer to Attachment No. 3, Bid Form. The Bid Form has been revised to include Lines 1, 12 and 22 to provide that for each Base Year and Option Term, the City will reimburse for expenses incurred for accumulating and staging tools, apparatus, equipment, materials, and personnel, and manning the emergency work. Payment will be made every month.*

11. I talked to Georgia Power on yesterday the network people didn't know anything about a Utility License. When looking on the internet they talk about a Utility Manager. When looking at the requirement for a utility manager they state a person should have underground duct bank experience.

A. In the solicitation the City is requiring a Utility License and an Electrical Contractor License. Will it be better for the City to ask for some Transit Traction Power Experience.

**Answers:** *No, the City will not require Transit Traction Power Experience and has removed the requirement for the contractor to possess a Utility Contractor's License. Refer to Addendum No. 2.*

B. If a company brings onboard a consultant that has OCS experience will that satisfy the requirement of the Utility License?

**Answers:** *The City has removed the requirement for the contractor to possess a Utility Contractor's License. Refer to Addendum No. 2.*

12. Our company has not been directly invited to bid. Are we allowed to bid nevertheless?

**Answer:** *Yes.*

13. Is it possible to bid for the OCS and TPSS scope alone, or will it be necessary to bid for both scopes together?

**Answer:** *Yes.*

14. Is it possible to extend the bid deadline by 3 weeks?

**Answer:** *Refer to Addendum No. 3. The Bid Due Date has been extended to Friday, May 27, 2016, at 2:00 P.M. EDT.*

15. Section 1 Instruction to Bidders, 4. Georgia Utility Contractors License  
"This section states that the bidder shall provide a Bidder's Georgia Utility Contractor License Number at the time of the bid. Based on previous experience in this type of work this license is not required and only an Unrestricted Electrical License is required." Will the City of Atlanta consider removing this requirement?

**Answer:** *The City has removed the requirement for the contractor to possess a Utility Contractor's License. Refer to Addendum No. 2.*

16. There is no bid line item for On-Call Service Repair rate. Please specify.

**Answer:** *Refer to Attachment No. 3, Bid Form. The Bid Form has been revised to include Lines 7, 18, and 28 to provide for On-Call Repairs.*

17. There is no On-Call Service Repair specified for OCS. Is the intention to provide On-Call Service repairs to TPSS only?

**Answer:** *Yes, the City only requires On-Call Service Repairs for TPSS.*

18. Please specify if On-Call Service Repairs are subject to a 24 hour response time, as previously requested in question 1 for emergency repairs?

***Answer:*** ***Refer to Attachment No. 2, Exhibit A, Scope of Services/Work. The Scope of Service/Work has been revised, which requires that Contractor shall be onsite within twenty-four (24) hours of being notified, seven days per week, 24 hours per day, and be ready to perform repairs on the City's traction power substations.***

19. Please clarify the inclusions of Price Bid Form Lines 1, 9, and 17. It is unclear what should be included in this cost and whether mobilization will be paid yearly, or per site visit.

***Answer:*** ***Refer to Attachment No. 3, Bid Form. The Bid Form has been revised to clarify Lines 1, 12 and 22 to provide that for each Base Year and Option Term, the City will reimburse for expenses incurred for accumulating and staging tools, apparatus, equipment, materials, and supplies necessary to promote imminent prosecution and completion of emergency work activities should they occur. Payment will be made equally every month.***

# **Attachment No. 2**

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## **EXHIBIT A, SCOPE OF SERVICES/WORK**

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

### A. Atlanta Streetcar Overhead Contact System and Traction Power Substations

#### 1. System Overview

The power required to operate electric rail vehicles over Atlanta Streetcar (ASC) system is delivered through a network of electrical distribution lines and facilities. ASC's traction power distribution system uses various protective devices to ensure high level of reliability, and includes many safeguards and controls to ensure that operations and maintenance employees can work safely and confidently in its vicinity. The ASC running vehicle power is provided by a network of overhead contact system poles and wires.

##### 1.1 Rail System Stations and Services

The Atlanta Streetcar System consists of four (4) Siemens S-70 light rail vehicles, twelve (12) stops, and 2.7 miles of embedded track comprised solely of at-grade rail sections. The Streetcar's alignment is located in the roadway Right-of-Way and shares travel space with automotive, bicycle and pedestrian traffic. Powered by an overhead contact system (OCS), Streetcars will operate at speeds of up to 35 miles per hour on standard fifteen-minute headways. Additional service may also be provided where chartered or in response to special events.

Each of the twelve streetcar stops consists of a raised platform located in the sidewalk area and one in the median of Edgewood Avenue. Streetcar stops are low, concrete platforms that allow for level boarding of the rail vehicles. Streetcar stops are configured with a simple railing and modern amenities, including a shelter, bench, fare collection equipment, lighting and signage.

The City of Atlanta is the sole owner of all streetcar stops and right-of way on which the ASC operates, and does not share track with any other passenger or freight rail system.

##### 1.2 Vehicle Maintenance Facility

The ASC's Vehicle Maintenance Facility (VMF) is located on Auburn Avenue under the I-75/85 overpass. From this location, the ASC stores all four rail vehicles. The VMF supports rail vehicles with periodic safety inspection, routine and heavy maintenance, and repair services.

##### 1.3 Traction Power System Elements

The Traction Power System is comprised of two functional subsystems; the Traction Power Substations (TPSS) and the Overhead Contact System (OCS). The TPSS contains all of the necessary equipment to receive electric power from utilities and deliver it in usable form to the OCS. The major elements of the TPSS include high-voltage AC switchgear, transformers, rectifiers, DC switchgear, and DC feeders and auxiliary equipment.

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

The OCS contains all of the elements required for the delivery of power from the TPSS to the rail vehicles along the alignment. These major elements include the trolley wires, hangers, and jumpers, all in span-components, supporting structures, poles, and grounding system. Two (2) TPSS units are located at the Vehicle Maintenance Facility (VMF). One (1) TPSS unit is located at the MARTA Peachtree Center Rail Station and access is controlled by MARTA.

### 2. Training

Persons assigned to manage, supervise, inspect, maintain, calibrate and/or test ASC electrical power distribution equipment must be qualified personnel trained on the equipment they will be required to maintain as defined under the guidelines of American Public Transportation Association RT-FS-S-006-03 rev-1 as shown in **Appendix F**, and OSHA 1910.269 as provided in

[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=9868](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9868).

### 3. Responsibilities

#### 3.1 Contractor's Responsibilities

Managers, Supervisors and System Maintainers will be responsible for knowing and implementing applicable industry safety rules and regulations and taking action to provide for the safety of the personnel and operations they supervise. This includes taking positive action to identify and reduce hazards; instructing all employees in safe work methods and associated safety requirements; and allowing only qualified employees to perform work. They will be responsible for the safety of all employees under their supervision and shall enforce all rules designed to mitigate hazards or hazardous conditions.

Managers and Supervisors will be responsible to ensure employees receive instruction in emergency response techniques, such as CPR, first aid, pole top rescue, and confined space rescue.

#### 3.2 Atlanta Streetcar Responsibilities

ASC will ensure the implementation of applicable industry safety rules and regulations and take action to provide for the safety of the personnel and operations. The City shall ensure that all employees and contractors work in safe environment allowing only those employees that are qualified to perform work. The City will enforce all rules designed to mitigate hazards or hazardous conditions.

## **SCOPE OF WORK**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

Atlanta Streetcar shall provide maintenance personnel to advise the Contractor at all time to assist at a minimum with:

- Lock-Out Tag-Out
- Manufacturer specifications
- Operating and Maintenance Manuals
- As-Built Construction Drawings, and/or
- Record Drawings

#### **3.3 Mobilization and Equipment Staging**

The proposed price for mobilization and equipment staging shall be expressly for the purpose of reimbursing the Contractor for temporary or long-term expenses which he has incurred, and will incur, by accumulating and staging tools, apparatus, equipment, materials, and supplies, manning the work, and exercising expeditious and extraordinary effort to promote imminent prosecution and completion of emergency work activities should they occur.

For each Base and Option Year term, the City will reimburse for expenses incurred for accumulating and staging tools, apparatus, equipment, materials, and personnel, and manning the emergency work. Payment will be made equally every month. Payment may be subject to the City's opinion that quantities of accumulated tools, apparatus, equipment, materials, and supplies are insufficient to prosecute the emergency work should they occur.

#### **4. Electric Traction System**

Electrical power for the Atlanta Streetcar traction power system is provided by Georgia Power. Power is distributed to three ASC substations, where it is transformed and rectified to 750 VDC output. Cables from the substations feed a system of overhead contact wires to supply power to the streetcar. A negative return system utilizes the running rail and negative return cables to bring current back to the substation, thus completing the circuit.

The strategy of maintaining the electric traction power distribution system is focused on conducting preventive maintenance to avoid failures that could interrupt ASC service. Reaching this goal requires an effective program of inspection, the anticipation of failures caused by age and wear, and preemptive corrective action.

All ASC maintenance practices for traction power distribution equipment are in accordance with APTA and OSHA standards, original equipment manufacturers recommendations, and City of Atlanta electrical code provisions.

## **SCOPE OF WORK**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

#### **5. Documentation Control**

All traction power substations and overhead contact system preventive maintenance, inspection, repair, testing calibration, adjustment and corrective action will be documented in hard copy and electronic digital format. All records will be made available to ASC at any time for maintenance and inspection verification and transmitted to ASC system managers on a monthly basis.

## SCOPE OF WORK

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

#### B. Scope of Services To Be Provided

##### 1. Overhead Contact Systems

The Contractor shall supply the City of Atlanta Contract Administrator or his designee telephone numbers where emergency personnel can be contacted after normal hours, nights, holidays and week-ends.

The operating hours of the Atlanta Streetcar Overhead Contact System (OCS) will be as illustrated below:

REFERENCE CHART FOR NIGHTLY ALLOWABLE RANGE OF ATLANTA STREETCAR OCS OUTAGE

| DAY OF OPERATION                 | RECOMMENDED STREETCAR HOURS      | PRE-OP & POST OP BUFFER                     | RANGE ALLOWED FOR OCS OUTAGE       |
|----------------------------------|----------------------------------|---|------------------------------------|
| MONDAY                           | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Tue – 4:30 AM Tue         |
| TUESDAY                          | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Wed – 4:30 AM Wed         |
| WEDNESDAY                        | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Thu – 4:30 AM Thu         |
| THURSDAY                         | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Fri – 4:30 AM Fri         |
| FRIDAY                           | 6:00 AM <u>until</u><br>1:00 AM  | 4:30 AM to 6:00 AM and 1:00 AM to 2:30 AM   | 2:30 AM Sat – 7:00 AM Sat          |
| SATURDAY                         | 8:30 AM <u>until</u><br>1:00 AM  | 7:00 AM to 8:30 AM and 1:00 AM to 2:30 AM   | 2:30 AM Sun – 7:30 AM Sun          |
| SUNDAY                           | 9:00 AM <u>until</u><br>11:00 PM | 7:30 AM to 9:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Mon – 4:30 AM Mon         |
| HOLIDAY SCHED* PRECEDING MON-FRI | 9:00 AM <u>until</u><br>11:00 PM | 7:30 AM to 9:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Holiday – 4:30 AM Mon-Fri |

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

### 1.1 On-Call Emergency Repair

An emergency repair is considered as any repair of a known condition that is necessary to restore the system to a normal operation. The Contractor shall return the OCS to within 10% of the As-Built Construction Drawings and/or Record Drawings. If As-Built specification cannot be met due to time constraints etc., the build requirements will be met. (for example, 9 inches plus or minus 2" on the straight and up to 18 inches in the curve plus or minus 2" for the stagger).

The Contractor shall respond by phone within one (1) hour of being notified. The Contractor shall be onsite within four (4) hours of being notified and shall be ready to perform emergency repairs on the OCS. In accordance with manufacturer specifications, operation and maintenance manuals, As-Built Drawings, Record Drawings and Construction Drawings as listed in Exhibit A; the Contractor shall perform emergency repairs of all authorized work on the entire OCS to address corrective actions for any deviations from manufacturer specification, damages, irregularities, mal-adjustments.

The Contractor shall furnish labor, equipment and specialty tools at its sole expense, required in performing the emergency repair services under this Contract. All of the services required hereunder shall be performed by Contractor and under the Contractor's supervision and all personnel engaged in the emergency repair services shall be fully qualified to perform the work.

### 1.2 Seasonal Adjustment

Twice annually, in anticipation of winter and summer seasonal temperature extremes, the Contractor shall inspect fixed-tension segments and support systems of the OCS and adjust as needed.

### 1.3 Preventive Maintenance Annual Inspection

The Contractor shall coordinate the preventive maintenance annual inspection with the Contract Administrator or designee to prevent any service delays from occurring as a result of the inspection.

In accordance with ASC OCS Inspection Procedure, the Contractor shall complete preventive maintenance, which includes annual inspections, repairs and calibration to the trolley wire infrastructure that includes poles, hangers, surge suppressors, grounds, jumpers switches, section insulators and the trolley wire tension system. The OCS trolley wire span shall be also measured for height and stagger alignment on every pole.

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

The Contractor shall be required to perform annual OCS preventive maintenance according to the frequencies described below. The completion of scheduled maintenance will be within 90% of the set date.

The required maintenance practices for traction power distribution equipment will be in accordance with American Public Transportation Association (APTA) and OSHA standards, original equipment manufacturers recommendations and the City of Atlanta Electrical code.

Any defect and/or deficiencies noted by the Contractor that is considered hazardous shall be corrected. Upon the completion of the inspections of OCS, the Contractor shall provide the Contract Administrator or designee with a list of all items that require repair. The Contract Administrator or designee and the Contractor shall jointly deliberate and decide corrective actions to be taken for each item that need repair. As part of the inspection, the Contractor shall submit the following:

- A. Recommendation and Deficiency Reports;
- B. Recommended Repair List;
- C. Summary of work for the recommended repairs; and
- D. Itemized repairs cost estimate

Inspection Schedule, Contractor shall follow this task list per periodic inspection:

### **ANNUAL**

The Contractor shall inspect at minimum the following:

#### **Jumper Inspection**

##### **INSPECTION ITEM**

- Inspect wire jumpers for leaning movement.
- Torque all nuts and bolts and mark each bolt and/or jamb nut with a torque mark.
- If cable requires replacement, provide recommendation to replace cable and clamps.

#### **Balance Weight Inspection**

##### **INSPECTION ITEM**

- Inspect bolts, wires, brackets, and wire grips.
- Inspect weight for freedom of movement.
- Inspect wheels and pulleys for freedom of movement and signs of binding. Lubricate as needed.
- Verify balance weight position with regards to corresponding temperature and adjust if incorrect.
- Verify the termination spans are proper and all fasteners in place. Provide recommendation to replace all missing components.

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

### Section Insulators

#### INSPECTION ITEM

- Inspect for excessive wear, burns, fatigue, loose hardware, and proper pantograph transition.
- Inspect and gauge trolley wire at the entering and leaving end of the section insulators for damages. Monitor for excessive wear.
- Once the inspection is completed, clean section insulators.
- Provide recommendation to place damaged runners as needed.
- Clean, check and adjust all section isolators to the manufacturer's specifications. and as built drawings; check the torques and apply torque stripe.

### DC Power Switch Inspection

#### INSPECTION ITEM

- Inspect switches for signs of high resistance, proper movement, and hardware torque. Check the torques and apply torque stripe.
- Clean insulators with denatured alcohol.
- Ensure feeder wire is secured to the Cantilever.

### Wire Gauge Inspection

#### INSPECTION ITEM

- Using a micrometer, measure the gauge of the contact/trolley wire at pre-determined locations of high-wear – including transitions in wire elevation and in curves – along the alignment. If wire gauge is found to be less than 20% of original size (350 MCM or 50.748 mm), provide recommendation to replace and inspect other high-wear area points.
- Inspect Contact wire for damage and measure any damaged location, if below 20% of the As-Built Drawings, provide recommendation for repairs.
- Locate all areas along the alignment that cause arcing of the Pantograph and recommend to pair the locations.
- Check the torque of the Feeder clamps and Jumper clamps. Check for overheating and provide recommendation to replace if damaged. Torque-stripe the bolts for ease of inspection.
- Check the torque of all fixed terminations and apply torque stripe repair if damaged.

### Pole, Grounds and Surge Arrestors

#### INSPECTION ITEM

- Inspect poles, grounds, and surge arrestors for loose hardware, severe bending movement, and general condition.
- Inspect all surge arrestors for arcing and wire connections.

## **SCOPE OF WORK**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

#### **VFM Door Break Assemblies and Shop Inspection**

##### **INSPECTION ITEM**

- Inspect door break assemblies for loose bolts, nuts, and burnt or damaged insulation.

#### **Tension Spring Inspection**

##### **INSPECTION ITEM**

- Inspect dead-end sleeves, mounting hardware, nuts, bolts, pins, and cotter pins for security.
- Inspect tension springs for proper function and clean with a dry cloth.
- Lubricate extension rod protruding from the spring with silicon spray.

#### **Aerial OCS Inspection**

##### **INSPECTION ITEM**

- Inspect for any unusual occurrences or conditions, such as broken bolts, wires, or excessively worn items.
- Inspect each hanger for tightness and vertical alignment.
- Inspect all cantilever hardware for proper torque, check the torques and apply torque stripe.
- Inspect registration arms for pantograph clearance.
- Inspect equalizer taps for tightness and signs of wire fatigue. Overlaps shall be checked for proper transition of the pantograph, ensuring a parallel area of approximately 10 feet.
- Inspect feeder connections for tightness and signs of fatigue.
- Inspect trolley wire for “pitting” or signs of arcing.
- Inspect insulators for signs of fatigue or cracking.
- Inspect trolley wire bridges for tightness, signs of fatigue, and proper location.
- Utilizing approved measuring device, check height and stagger of the OCS and compare and adjust to As-Built Drawings or better. Document findings.
- Check bridle tension and configuration and adjust to manufacturer’s specification.
- Inspect steady arms for proper configuration and adjust to manufacturer’s specifications.
- Inspect Drop Brackets.
- Verify and adjust the tension on fixed terminations equipment.
- All fixed tension applications shall be checked and verified to be within original manufacturer’s specification, or in accordance with As-Built drawings.

## SCOPE OF WORK

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

#### 2. Traction Power Substations

The Contractor shall supply the City of Atlanta Contract Administrator or his designee telephone numbers where emergency personnel can be contacted after normal hours, nights, holidays and week-ends.

The operating hours of the Atlanta Streetcar Traction Power Substation (TPSS) will be as illustrated below:

REFERENCE CHART FOR NIGHTLY ALLOWABLE RANGE OF ATLANTA STREETCAR TPSS OUTAGE:

| DAY OF OPERATION                 | RECOMMENDED STREETCAR HOURS      | PRE-OP & POST OP BUFFER                     | RANGE ALLOWED FOR TPSS OUTAGE      |
|----------------------------------|----------------------------------|---|------------------------------------|
| MONDAY                           | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Tue – 4:30 AM Tue         |
| TUESDAY                          | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Wed – 4:30 AM Wed         |
| WEDNESDAY                        | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Thu – 4:30 AM Thu         |
| THURSDAY                         | 6:00 AM <u>until</u><br>11:00 PM | 4:30 AM to 6:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Fri – 4:30 AM Fri         |
| FRIDAY                           | 6:00 AM <u>until</u><br>1:00 AM  | 4:30 AM to 6:00 AM and 1:00 AM to 2:30 AM   | 2:30 AM Sat – 7:00 AM Sat          |
| SATURDAY                         | 8:30 AM <u>until</u><br>1:00 AM  | 7:00 AM to 8:30 AM and 1:00 AM to 2:30 AM   | 2:30 AM Sun – 7:30 AM Sun          |
| SUNDAY                           | 9:00 AM <u>until</u><br>11:00 PM | 7:30 AM to 9:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Mon – 4:30 AM Mon         |
| HOLIDAY SCHED* PRECEDING MON-FRI | 9:00 AM <u>until</u><br>11:00 PM | 7:30 AM to 9:00 AM and 11:00 PM to 12:30 AM | 12:30 AM Holiday – 4:30 AM Mon-Fri |

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

### 2.1 On-Call Emergency Repair

The Contractor shall respond by phone within two (2) hours of being notified. The Contractor will be onsite within twelve (12) hours of being notified and will be ready to perform emergency repairs on the City's traction power substations. The Contractor shall furnish labor, tools and equipment, at its sole expense, required in performing the services under this Contract. All of the services required hereunder shall be performed by Contractor and under the Contractor's supervision and all personnel engaged in the services shall be fully qualified. The Contractor shall supply the Contract Administrator telephone numbers where emergency personnel can be contacted after normal hours, nights, holidays and weekends.

Maintenance practices for traction power distribution equipment will be within accordance with APTA and OSHA standards, original equipment manufacturers recommendations and the City of Atlanta Electrical code. The Contractor shall be required to perform Annual TPSS maintenance according to Annual frequencies as described in paragraph 1.2.

### 2.2 On-Call Service Repair

The Contractor shall be onsite within twenty-four (24) hours of being notified, seven days per week, 24 hours per day, and be ready to perform repairs on the City's traction power substations. The Contractor shall furnish labor, tools and equipment, at its sole expense, required in performing the services under this Contract. All of the services required hereunder shall be performed by Contractor and under the Contractor's supervision and all personnel engaged in the services shall be fully qualified. The Contractor shall supply the Contract Administrator telephone numbers where emergency personnel can be contacted after normal hours, nights, holidays and weekends.

Maintenance practices for traction power distribution equipment will be within accordance with APTA and OSHA standards, original equipment manufacturers recommendations and the City of Atlanta Electrical code. The Contractor shall be required to perform Annual TPSS maintenance according to Annual frequencies as describe in paragraph 1.2.

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

### 2.3 Preventive Maintenance Annual Inspection

The Contractor shall be required to perform an annual Traction Power Substation (TPSS) maintenance inspection according to frequencies as described below. Scheduled maintenance will be completed within a variance of + / - 10% of the set date. The required maintenance practices for traction power distribution equipment will be in accordance with APTA and OSHA standards, original equipment manufacturers recommendations and the City of Atlanta Electrical code.

Upon the completion of the annual TPSS maintenance inspections, the Contractor shall provide the Contract Administrator or designee with a list of all items that need repair. The Contract Administrator or designee and the Contractor shall jointly deliberate and decide corrective actions to be taken for each item that need repair.

As part of the inspection, the Contractor shall submit the following:

- A. Recommendation and Deficiency Reports;
- B. Recommended Repair List;
- C. Summary of work for the recommended repairs; and
- D. Itemized repairs cost estimate

Once per year, each TPSS will undergo a comprehensive program of tests and procedures to thoroughly check the condition of all major equipment. During the annual TPSS maintenance inspection, the substation will be thoroughly cleaned throughout. Prior to any test being performed, all insulators shall be cleaned and inspected. Check all buss bar insulators for cracks, overheating, corrosion, voltage tracking and other abnormal conditions, and replace as needed.

Any component found to have discoloration due to overheating or arc marks, shall be Hi-Pot tested. Complete function tests of all alarms must be performed, including the fire alarm system. An analysis of the fault logs shall be performed annually. A comprehensive parts list will be provided by the Contractor. Recertification must be issued on all substations after inspection and testing is completed. The Annual Inspection will focus on the following components:

- Transformers
- High Voltage Switchgear
- Power Rectifier
- DC Switchgear

The transformer testing will consist of the following:

- Hi-Pot testing of the primary windings according to manufacturer's specification and industry standard first year test, every subsequent five (5) years.
- Meg all the secondary windings.
- Vacuum the transformer coils and blow the coils out with nitrogen gas.

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

The high voltage switchgear annual testing:

- Inspect all control devices such as control switches, meters, lights, and relays for any damage.
- Inspect all terminal strips for secure wiring.
- Inspect all protective devices for proper current ratings.
- Re-torque the power buss; inspect the buss insulators, hardware, and bushings for damage.
- Inspect breaker for any damage or malfunction.
- Mechanically operate the breaker.
- Check for proper racking operation.
- Check for correct operation of kirk keying.
- Check the insulation properties of the AC breaker (Meg, hi-pot), first year test, and every subsequent five (5) years.
- Check the insulation properties of the buss insulators, bushings, and cables from the transformer secondary to the rectifier (Meg, hi-pot), first year test, every subsequent five (5) years.
- Meg/hi-pot the auxiliary transformer primary and secondary circuits according to the manufacturer's specifications and industry standards, first year test, every subsequent five (5) years.
- Verify the remote control of the AC breaker (only on TPSS-3).
- Check and clean breaker fingers as necessary.
- Insure that the heating system is operational.

The Power Rectifier annual testing:

- Inspect and clean buss insulators.
- Verify and torque all heat sinks in the rectifier enclosure.
- Inspect and torque all power connections and buss splices.
- Inspect all internal, external, and site installed wiring.
- Test the thermal switches associated protective devices.
- Meg the AC buss, DC buss, and rectifier enclosure.
- Check the operation of the negative disconnect switch, clean and lubricate.

The DC Switchgear annual testing will:

- Inspect the DC breaker.
- Inspect all buss insulators for condition.
- Inspect and torque all buss splices, connections, and insulators.
- Inspect internal, external, and site connections.
- Meg the main DC buss, first year test, every subsequent five (5) years.
- Meg the DC feeder buss, first year test, every subsequent five (5) years.
- Meg the DC feeder breakers, first year test, every subsequent five (5) years.
- Meg the DC switchgear enclosure, first year test, every subsequent five (5) years.
- Test the associated protective devices: DC ammeters, load measuring relays etc.

# SCOPE OF WORK

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

- Verify the control sequence of the DC feeder breakers and the related cell controls.
- Verify remote control of all DC breakers.
- Inspect arc chutes.
- Measure contact width.
- Meg the insulated floor (first year test, subsequent test every 5 years).
- Check integrity of the K0 K1 and K2 relay.
- Check main contacts for damage, and repair or replace if necessary.

Upon completion of the annual TPSS maintenance inspection, the substation will be brought back on-line to regular service.

### 2.4 Substation Locations and Characteristics

There are three substations in the ASC system:

| <b>Traction Substation</b> | <b>Power</b> | <b>Location</b>              | <b>Support</b>     |
|----------------------------|--------------|------------------------------|--------------------|
| TPSS No. 1 - VMF           |              | Vehicle Maintenance Facility | Main Shop and Yard |
| TPSS No. 2 - EDG           |              | Vehicle Maintenance Facility | East Alignment     |
| TPSS No. 3 - PCH           |              | Peachtree Center             | West Alignment     |

All interior substation equipment shall be cleaned, lubricated, inspected, repaired, and adjusted to original equipment manufacturers.

There are three line breakers and main transformer breakers inside the AC switchgear. These devices protect ASC equipment and cables from any surges or overloads originating from Georgia Power or from internal substation equipment failures. Every two (2) years, these breakers shall be inspected, cleaned, calibrated and repaired as needed. All arc chutes shall be cleaned, the main and secondary contacts shall be checked for wear or deterioration, and necessary breaker adjustments shall be performed.

The breaker cubicles and controls shall be inspected, cleaned and repaired on the same timeframes described above, including any secondary disconnects, shutters, truck interlocks, wiring, and control relays. Also, every two years overcurrent relays shall be calibrated.

# **Attachment No. 3**

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**EXHIBIT A.1**

**BID FORM**

**PRICE BID FORM**  
**EMERGENCY ON-CALL REPAIRS AND MAINTENANCE FOR ATLANTA STREETCAR**  
**OVERHEAD CONTACT SYSTEM AND TRACTION POWER SUBSTATIONS**

**ONE (1) YEAR BASE TERM**

| Line Item  | Description   | Unit      | Estimated Quantity (see note 2) | Estimated Unit Price |       | Estimated Extended Price |
|--|---|-----------|---------------------------------|----------------------|-------|--------------------------|
|  |   |           |                                 |                      |       |                          |
| 1  | Mobilization and Equipment Staging  | Month     | 12                              | X                    | =     | \$                       |
| 2  | Labor Rate per Hour for OCS On-Call Emergency Repairs                         | Hour      | 200                             | X                    | =     | \$                       |
| 3  | OCS Seasonal Adjustment   | Each      | 2                               | X                    | =     | \$                       |
| 4  | OCS Preventive Maintenance Annual Inspection                                  | Each      | 1                               | X                    | =     | \$                       |
| 5  | Labor Rate per Hour for OCS Preventive Maintenance Annual Inspection Repairs  | Hour      | 130                             | X                    | =     | \$                       |
| 6  | Labor Rate per Hour for TPSS On-Call Emergency Repairs                        | Hour      | 48                              | X                    | =     | \$                       |
| 7  | Labor Rate per Hour for TPSS On-Call Service Repairs                          | Hour      | 40                              | X                    | =     | \$                       |
| 8  | TPSS Preventive Maintenance Annual Inspection                                 | Each      | 1                               | X                    | =     | \$                       |
| 9  | Labor Rate per Hour for TPSS Preventive Maintenance Annual Inspection Repairs | Hour      | 48                              | X                    | =     | \$                       |
| 10   | Miscellaneous Materials and Supplies Allowance for OCS and TPSS               | Allowance | Lump Sum                        | X                    | ***** | \$10,000.00              |
| 11   | Surplus Inventory Parts Purchase ( <i>Supplemental Conditions, "PARTS"</i> )  | Allowance | Lump Sum                        | X                    | ***** | \$50,000.00              |
| <b>TOTAL PRICE, ONE (1) YEAR BASE TERM</b><br>Sum of Line Item Nos. 1 through 11 |   |           |                                 |                      |       | <b>\$</b>                |

**PRICE BID FORM**  
**EMERGENCY ON-CALL REPAIRS AND MAINTENANCE FOR ATLANTA STREETCAR**  
**OVERHEAD CONTACT SYSTEM AND TRACTION POWER SUBSTATIONS**

**OPTION 1, ONE (1) YEAR**

| Line Item   | Description   | Unit      | Estimated Quantity (see note 2) | Estimated Unit Price |       | Estimated Extended Price |
|---|---|-----------|---------------------------------|----------------------|-------|--------------------------|
| 12  | Mobilization and Equipment Staging  | Month     | 12                              | X                    | =     | \$                       |
| 13  | Labor Rate per Hour for OCS On-Call Emergency Repairs                         | Hour      | 200                             | X                    | =     | \$                       |
| 14  | OCS Seasonal Adjustment   | Each      | 2                               | X                    | =     | \$                       |
| 15  | OCS Preventive Maintenance Annual Inspection                                  | Each      | 1                               | X                    | =     | \$                       |
| 16  | Labor Rate per Hour for OCS Preventive Maintenance Annual Inspection Repairs  | Hour      | 130                             | X                    | =     | \$                       |
| 17  | Labor Rate per Hour for TPSS On-Call Emergency Repairs                        | Hour      | 48                              | X                    | =     | \$                       |
| 18  | Labor Rate per Hour for TPSS On-Call Service Repairs                          | Hour      | 40                              | X                    | =     | \$                       |
| 19  | TPSS Preventive Maintenance Annual Inspection                                 | Each      | 1                               | X                    | =     | \$                       |
| 20  | Labor Rate per Hour for TPSS Preventive Maintenance Annual Inspection Repairs | Hour      | 48                              | X                    | =     | \$                       |
| 21  | Miscellaneous Materials and Supplies Allowance for OCS and TPSS               | Allowance | Lump Sum                        | X                    | ***** | = \$10,000.00            |
| <b>TOTAL PRICE, OPTION 1, ONE (1) YEAR</b><br>Sum of Line Item Nos. 12 through 21 |   |           |                                 |                      |       | \$                       |

**PRICE BID FORM**  
**EMERGENCY ON-CALL REPAIRS AND MAINTENANCE FOR ATLANTA STREETCAR**  
**OVERHEAD CONTACT SYSTEM AND TRACTION POWER SUBSTATIONS**

**OPTION 2, ONE (1) YEAR**

| Line Item   | Description   | Unit      | Estimated Quantity (see note 2) | Estimated Unit Price |       | Estimated Extended Price |
|---|---|-----------|---------------------------------|----------------------|-------|--------------------------|
| 22  | Mobilization and Equipment Staging  | Month     | 12                              | X                    | =     | \$                       |
| 23  | Labor Rate per Hour for OCS On-Call Emergency Repairs                         | Hour      | 200                             | X                    | =     | \$                       |
| 24  | OCS Seasonal Adjustment   | Each      | 2                               | X                    | =     | \$                       |
| 25  | OCS Preventive Maintenance Annual Inspection                                  | Each      | 1                               | X                    | =     | \$                       |
| 26  | Labor Rate per Hour for OCS Preventive Maintenance Annual Inspection Repairs  | Hour      | 130                             | X                    | =     | \$                       |
| 27  | Labor Rate per Hour for TPSS On-Call Emergency Repairs                        | Hour      | 48                              | X                    | =     | \$                       |
| 28  | Labor Rate per Hour for TPSS On-Call Service Repairs                          | Hour      | 40                              | X                    | =     | \$                       |
| 29  | TPSS Preventive Maintenance Annual Inspection                                 | Each      | 1                               | X                    | =     | \$                       |
| 30  | Labor Rate per Hour for TPSS Preventive Maintenance Annual Inspection Repairs | Hour      | 48                              | X                    | =     | \$                       |
| 31  | Miscellaneous Materials and Supplies Allowance for OCS and TPSS               | Allowance | Lump Sum                        | X                    | ***** | \$10,000.00              |
| <b>TOTAL PRICE, OPTION 2, ONE (1) YEAR</b><br>Sum of Line Item Nos. 22 through 31 |   |           |                                 |                      |       | \$                       |

|  |  |  |  |  |  |    |
|--|--|--|--|--|--|----|
| <b>TOTAL PRICE, BASE TERM + OPTION 1 + OPTON 2</b><br>Sum of Line Item Nos. 1 through 31 |  |  |  |  |  | \$ |
|--|--|--|--|--|--|----|

**Note:**

1. Bids must be on ALL Line Items.
2. Estimated Quantities are not fixed and serves only for purposes of comparing Bids.

# **Attachment No. 4**

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## **APPENDIX D SUPPLEMENTAL CONDITIONS**

# **CONTRACT SUPPLEMENTAL CONDITIONS**

## **Emergency On-Call Repair and Maintenance Services for the Atlanta Streetcar Overhead Contact System and Traction Power Substations**

### **CONTRACT TERM**

The Base Term of this Contract shall begin on the Effective Date for one (1) year and expires thereafter. In addition to the Base Term, the City shall have the option to extend the Contract for up to two (2) additional one (1) Year Options, by giving the Contractor a written notice of its election to do so at least thirty (30) days prior to the expiration of the base term. The City shall also have the right to terminate this contract prior to the end of the Base Terms or the Option Term, if exercised, when all Contract funds reserved for this Contract have been expended.

### **NOTICE TO PROCEED**

A Notice to Proceed will be issued by the Contract Administrator, after receipt and approval of the following information:

- Certificates of Insurance
- A list of certifications/licenses and accreditations for all personnel performing inspections and repairs under this Contract.
- Contractor's Site Specific Safety and Health Program
- Comprehensive Quality Plan

### **SAFETY AND HEALTH REQUIREMENT**

All work shall comply with all applicable state and federal safety and health regulations and industry standards, and in accordance with the City of Atlanta Streetcar System Safety Program Plan (SSPP) (**see Appendix F**).

### **TRACK ACCESS PERMIT SYSTEM**

All work shall be performed in accordance with the City of Atlanta Streetcar emergency shutdown process. The Contractor shall comply with standard operating procedures (SOPs) pertaining to the work to be done under this contract. At minimum, SOPs shall be applicable for work related to power distribution, removal and restoration, track access & lock-out-tag-out (LOTO). Further, the Contractor shall comply with the SSPP and the Security and Emergency Preparedness Plan, which can be reviewed at the City of Atlanta Streetcar Office of Safety.

### **ATLANTA STREETCAR ROADWAY WORKER PROTECTION TRAINING**

All work will be performed in accordance with the Atlanta Streetcar Roadway Worker Protection Procedure, made part of the Supplementary Conditions. All personnel working on track roadway must receive the mandatory Atlanta Streetcar Roadway Worker Protection training before beginning work. Training shall be coordinated with the Contract Administrator or designee and conducted after the award of the Contract.

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

#### **WORKMANSHIP**

All work under the contract shall be performed in a skillful and workmanlike manner. The City shall have the right to direct the Contractor to remove from the work any employee the City considers incompetent or careless or to whom it has other reasonable objection.

#### **PARTS**

All parts and materials the Contractor installs shall be new, unless otherwise specified in the Technical Provisions.

The City shall have available spare parts for emergency repairs. The Contractor shall provide parts available for corrective repairs. The Contractor must submit an invoice to the Contract Administrator to be reimbursed for spare parts and materials.

The Contractor shall maintain at all times a sufficient supply to ensure timely completion of work in accordance with the requirements of the Contract. Upon expiration or termination of the Contract, the City will purchase the Contractor's surplus inventory of new and unused parts specific to the repairs and maintenance subject hereto, at prices no greater than those paid by the Contractor, including shipping and handling from the Contractor's facility, up to a total price of **\$50,000.00.**

- a. Within thirty (30) days after contract award, the Contractor shall submit to the City for approval the parts that are to be used in each of the types of component to be repaired, and shall provide the name, address, and part number of the manufacturer of each such part. The City shall have the right to disapprove the use of any parts it considers unsuitable. The contractor shall provide the foregoing information for the parts actually used in each replacement.
- b. In the case of parts or materials other than the parts listed in paragraph a above, whenever brand, manufacturer, or product names are used in the Technical Specifications, they are included only to suggest, for the Contractor's convenience, products believed to possess the characteristics required. The Contractor may use others of the required design, function, performance, and quality subject to prior written approval by the Authority.
- c. The Contractor shall label all parts and materials he removes or replaces with the relevant Task/Work Order Number, part type, and serial number, and shall keep them for at least thirty (30) days after the part is returned to the Authority. Thereafter, he shall give the Authority at least fifteen (15) days written notice before disposing of such parts and materials, during which time the Authority may reclaim any it determines still to be of use.

## **CONTRACT SUPPLEMENTAL CONDITIONS**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

After such fifteen (15) days have expired the Contractor may dispose of parts and materials the Authority has not reclaimed, provided he does so at no cost to the Authority and in accordance with all applicable laws, regulations and ordinances at no cost to the Authority. The Contractor shall indemnify and save harmless the Authority from any and all liability that may arise out of the disposal of such parts and materials.

Below is the current list of OCS poles in inventory. There is currently one (1) of each OCS pole available for use by the contractor. In the case where an OCS pole is damaged beyond repair, the contractor may use one of the spare poles listed to replace the damaged pole. In the case where pole is not available from inventory, the contractor will furnish and install a new pole of the type suitable for the specific location.

Current list of OCS poles in inventory

|            |                         |
|------------|-------------------------|
| TP-1A/28   | TP-1B/24                |
| TP-1A/28/H | TP-1A/28                |
| TP-1B/24/H | TP-3/24                 |
| TP-4/24    | OCS Pole (Unidentified) |

Below is the current list of Overhead Contact System (OCS) components in inventory available for use by the Contractor. In the case where an OCS component is damaged beyond repair, the Contractor may use one of the spare components listed to replace the damaged component. In the case where component is not available from inventory, the Contractor will furnish and install a new component of the type suitable for the specific location.

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

Current list of OCS components in inventory including quantities

| Component Part Number | Component Description              | Quantity |
|-----------------------|------------------------------------|----------|
| PBA-C-A01             | POLE BAND BRACKET                  | 107      |
| shp213-8115           | 5/8" SHACKLE                       | 0        |
| SV5-202A              | STRANDVISE, 3/8" WIRE SIZE TYPE A  | 59       |
| CSNP-38PL             | COMPRESSION SLEEVE                 | 0        |
| G408-38               | THIMBLE, 3/8", OPEN, HDG           | 91       |
| BR300-63              | BULL RING, 5/8" X 3" ID            | 53       |
| SAU-A01               | SURGE ARRESTOR                     | 0        |
| JBCV21F-21T-200       | TROLLEY CONTACT CLAMP              | 0        |
| PFI-CC-00-AA          | STRAIN INSULATOR, C/C              | 4        |
| SHHP213-8099          | SHACKLE, ANCHOR 1/2"               | 7        |
| SHHP213-8099          | SHACKLE, ANCHOR 1/2"               | 37       |
| SINB14-1500           | SECTION INSULATOR, NB OUTLINE      | 0        |
| INS-ST2-A01           | STRUT INSULATOR, 2" IPS            | 2        |
| ESC200                | CAP, 2" IPS SEAL, EXTERNAL PLASTIC | 0        |
| TCDS34T-K             | CLAMP, SWIVEL CONTACT WIRE KIT     | 0        |
| DECLA63-90            | LINK, TONGUE-CLEVIS                | 0        |
| PUL50-A01             | PULLEY, SINGLE 3/8" CABLE          | 4        |
| ISSS-CLP-001          |                                    | 18       |

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

|                 |  |     |
|-----------------|--|-----|
| EVR56-6         | STITCH CLAMP ASSEMBLY                        | 0   |
| JBCV35F-34T-200 | STITCH CLAMP ASSEMBLY<br>ROD, SILICON BRONZE | 115 |
| TBJE-32091      | CLAMP, CUPLEX, 350HMCM-350MCM CW             | 1   |
| TBJE-32091      | TURNBUCKLE, JAW/EYE, 3/4 X 12 26KSI          | 1   |
| SAU-BKT-A02     | TURNBUCKLE, JAW/EYE, 3/4 X 12 26KSI          | 2   |
| UD50-21         | BRACKET, SURGE ARRESTOR                      | 0   |
| INS18-ES-STD    | PARALLEL CLAMP, 1/28 TO 1/2 SIZE APPLICATION | 0   |
| CSNP-19PL       | INSULATOR, 3/16 EYE/SLEEVE                   | 0   |
| PBA-HCB-A01     | SLEEVE, COMPRESSION 3/16", PLAIN             | 31  |
| BWA-IN-RNDP01   | BRACKET, POLE BAND, HINGE TYPE               | 0   |
| BWT-CW-A01      | BWA-TENSIONING KIT, ROUND POLE MNT, INTERNAL | 0   |
| BWS-IN-1100-01  | BWA-TERMINATION KIT, 350MCM CW               | 0   |
| FTDEW-35T       | BWA-WEIGHT KIT, INTERNAL POLE MIN ID 12.5"   | 11  |
| G408-50         | TROLLEY WIRE DEAD END CLAMP                  | 6   |
| G408-50         | THIMBLE, 1/2", OPEN, HDG                     | 4   |
| TBJE-32199      | THIMBLE, 1/2", OPEN, HDG                     | 0   |
| SV5-204A        | THIMBLE, 1/2", OPEN, HDG                     | 2   |

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

|                           |   |        |
|---------------------------|---|--------|
| CSNP-25PL                 | TURNBUCKLE, 1X12<br>JAW/EYE 50KMUS                                  | 0      |
| SHS34T                    | STRANDWISE, 1/2"<br>WIRE SIZE, TYPE A                               | 2      |
| FCT31-27SS                | SLEEVE,<br>COMPRESSION 1/4"<br>PLAIN                                | 0      |
| TS-ARM-A01                | SPLICE PIN TYPE,<br>300, 336, 350MCM<br>CONTACT WIRE                | 0      |
| WFC38-G450-<br>0097       | TY-RAP, .31X27" LG<br>STAINLESS STEEL                               | 0      |
| ESC75                     | TUNNEL SUPPORT<br>ARM, ELASTIC,<br>INSULATED                        | 400    |
| INS-SPOOL<br>CSA75-0-A02  | WIRE CLIP, 3/8<br>FORGED BODY, HDG                                  | 0<br>5 |
| INS63H-CC-STD             | CAP, 3/4" IPS SEAL,<br>BLACK COLOR,<br>EXTERNAL<br>INSULATOR, SPOOL | 5      |
| INS63H-CC-STD             | STEADY ARM, 3/4<br>IPS, STRAIGHT,<br>SCH40, GR-B                    | 19     |
| INS63H-CE-STD             | INSULATOR, 5/8"<br>CLEVIS/CLEVIS                                    | 2      |
| INS63H-CE-STD             | INSULATOR, 5/8"<br>CLEVIS/CLEVIS                                    | 15     |
| INS75H-CT-STD             | INSULATOR, 5/8"<br>CLEVIS/EYE                                       | 6      |
| INS75H-CT-STD             | INSULATOR, 5/8"<br>CLEVIS/EYE                                       | 1      |
| ISNS63H-EE-STD            | INSULATOR, 3/4"<br>THIMBLE/EYE                                      | 4      |
| INS63H-EE-STD             | INSULATOR, 3/4"<br>THIMBLE/EYE                                      | 1      |
| TCBM-X-ARM-01<br>GF50-T50 | INSULATOR, 5/8"<br>EYE/EYE  | 0<br>1 |
| DBWS-A01-AA               | INSULATOR, 5/8"<br>EYE/EYE  | 0      |
| DBWS-TRP-K01              | INSULATOR, 5/8"<br>EYE/EYE  | 0      |

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

|                |   |    |
|----------------|---|----|
| DBWS-STK200-G  | BRACKET CROSS<br>ARM KIT<br>GROUND CLAMP              | 0  |
| DEFS34T-3      | DOOR BRIDGE<br>ASSEMBLY                               | 4  |
| TBJE-32055     | TRIP PLATE KIT  | 0  |
| G408-25        | STUD MTG KIT, 5/8-<br>11UNCX2"LG,<br>W/NUTS & LW, HDG | 0  |
| KNC-DW35T-1800 | DEAD END CLAMP  | 3  |
| KNC-SW35T-6000 | TURNBUCKLE,<br>3/4X6, J/E, SML=26K                    | 1  |
| CAA75-15-1BSR  | THIMBLE, 1/4" OPEN,<br>HDG                            | 31 |
| ISC-75         | CONTACT WIRE<br>KNUCKLE                               | 0  |
| BR-400-63      | ASSEMBLY, 6"-18"                                      | 0  |
| TBJE-32171     | CONTACT WIRE<br>ASSEMBLY                              | 2  |
| WFC50-G450-131 | STEADY ARM, 3/4<br>IPS, 1 BEND, SCH 60,<br>GR-B, HVY  | 12 |
| TBJJ-33714     | PLUG, 3/4" IPS  | 4  |
| UP50-21-RR     | PLASTIC, SCH 40,<br>RED COLOR,<br>INTERNAL            | 0  |
| OBA-A-A02      | BULL RING, 5/8"X4"<br>ID                              | 0  |
| SIBGL-A05      | TURNBUCKLE,<br>JAW/EYE, 1X6 50KSI                     | 0  |
| TBC-LP-A02     | WIRE CLIP 1/2"<br>FORGED BODY, HDG                    | 4  |
| EYE-BK50X6SS   | TURNBUCKLE, J/J                                       | 0  |
| G411-25        | UNIVERSAL<br>PARALLEL CLAMP                           | 0  |
| TCDS34T-63     | POLE BRACKET<br>ASM, 3/4" SSX 48"<br>BAND W/BUCKLES   | 3  |
| DDEL90-FR-AA   | SECTION<br>INSULATOR,<br>BRIDGING TYPE                | 1  |
| DDEL90-FR-AA   | TURNBUCKLE, LOOP<br>TYPE, BRZ                         | 3  |
| DELA90-FR-AA   | EYE BOLT KIT, 1/2X6<br>SS                             | 5  |

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

|                       |  |    |
|-----------------------|--|----|
| DELA90-FR-AA          | THIMBLE, 1/4"<br>STANDARD<br>(CLOSED)                              | 11 |
| SIBGL-A05             | CONTACT WIRE<br>CLAMP  | 0  |
| JBCV13F-13T-200       | DOUBLE RING-EYE<br>90 DEG LINK                                     | 0  |
| DDCL90-FR-AA          | DOUBLE RING-EYE<br>90 DEG LINK                                     | 1  |
| DDCL90-FR-AA          | LINK RING-<br>TOUNGUE 90 DEG                                       | 6  |
| YPLT-MPA50-KIT        | LINK RING-<br>TOUNGUE 90 DEG                                       | 4  |
| UB-BKT-01             | SECTION<br>INSULATOR,<br>BRIDGING TYPE<br>TROLLEY CONTACT<br>CLAMP | 0  |
| SWT7X26-<br>MB4200    | DOUBLE RING-<br>CLEVIS FOR<br>STEADY ARMS, FR<br>TYPE AL           | 6  |
| FPI-CS-AA             | DOUBLE RING-<br>CLEVIS FOR<br>STEADY ARMS, FR<br>TYPE AL           | 0  |
| CSA100-6-5AA          | DOUBLE RING-<br>CLEVIS FOR<br>STEADY ARMS, FR<br>TYPE AL           | 14 |
| TPSC200-63-A02-<br>AA | DOUBLE RING-<br>CLEVIS FOR<br>STEADY ARMS, FR<br>TYPE AL           | 4  |
| BSC200-63-AA          | YOKE PLATE, MPA<br>ANCHOR FOR CW<br>KIT W/FASTENERS                | 25 |
| MSSC200-8U63-<br>AA   | UNDERBRIDGE<br>BRACKET SUPPORT                                     | 5  |
| ADB200-L-AA           | PIER BRACKET, FITS<br>42" SQ COLUMN<br>W/FASTENERS                 | 1  |
| DWAS44-63-AA          | STRAIN INSULATOR,<br>C/S   | 6  |
| UP30-30               | CLAMP, INSULATOR<br>CONTACT SWIVERL,<br>ALUM                       | 36 |
| PB1916-E              | PIPE TO PIPE END<br>CLAMP  | 0  |
| DEL88X6GS             | CLAMP, PIPE<br>CLEVIS, 2" IPS, AL                                  | 0  |

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

|               |   |    |
|---------------|---|----|
| SIBGL-A05     | INSULATOR, BRIDLE<br>SUPPORT, AL                                  | 0  |
| BWA-IBRKT-A01 | DROP BRACKET,<br>CLEVIS TYPE, 2" IPS                              | 0  |
| ISC75E        | DROP BRACKET, 3/8-<br>1/2 SPAN WIRE TYPE                          | 0  |
| DECLA63-90-AA | PARALLEL CLAMP,<br>3/8 TO 3/8 SIZE<br>APPLICATION,<br>300MCM MAX. | 12 |
| BWA-LTS-01    | POLE BAND,<br>ADJUSTABLE 9-16"<br>DIA., 4 SEMENT,<br>20KMUS       | 0  |
| DCLA63-90-AA  | STRAP, 5/8X6"<br>CENTERS, STEEL<br>TYPE                           | 0  |
| DBWS-ADP-W01  | SECTION<br>INSULATOR,<br>BRIDGING TYPE                            | 0  |
| BSC200-2-A2   | BWA MTG BRACKET,<br>INTERNAL, RND<br>POLE                         | 0  |
| BLTSS0022     | PLUG, 3/4" IPS<br>PLASTIC, SCH 90,<br>RED COLOR,<br>INTERNAL      | 3  |
| SSLW62        | LINK, DOUBLE<br>CLEVIS, 90 DEG<br>ALUM BODY                       | 1  |
| ADB200-S-AA   | STOP, LOW<br>TEMPERATURE,<br>THRU POLE MTG,<br>RND POLE           | 0  |
| ADB200-S-AA   | LINK, DOUBLE<br>CLEVIS, 90 DEG<br>ALUM BODY                       | 0  |
| ECMB-02-AA    | ADAPTER PLATE   | 0  |
| DPL35-1       | DOUBLE CLEVIS<br>CLAMP  | 0  |
| BSC200-FR-2AA | BOLT, 5/8-11 UNCX1<br>1/4LG-SS304/18-8                            | 0  |
| FC3105-50-AA  | WASHER, SPLIT<br>TYPE, LOCK 5/8<br>SS304/18-8                     | 30 |
| TBJJ-32670    | DROP BRACKET,   | 1  |
| DPL13-1       |   | 4  |
| WSG-44AA-A01  |   |    |
| FC5105-50-AA  |   |    |
| BSC200-63-4AA |   |    |

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

|                       |   |                       |
|-----------------------|---|-----------------------|
| UP-BKT-A03            | CLEVIS TYPE, 2" IPS                             | 0                     |
| SEC13A-2U             | DROP BRACKET,<br>CLEVIS TYPE, 2" IPS            | 0                     |
| EYE62X7-G             | BRACKET, TWIN<br>CETILEVER, RDP                 | 0                     |
| INS-SPOOL-125         | MUDULAR-AL                                      | 7                     |
| INS-ST2-A10           | COMPRESSION<br>TERMINAL LUG                     | 225                   |
| CSSC200-2INS-<br>CW   | PIPE CLAMP, LINK<br>TYPE, BACK TO<br>BACK       | 0                     |
| CSSC200-2INS-<br>CW02 | FEEDER CABLE<br>CLAMP                           | 0                     |
| CKA125-N1-01          | TURNBUCKLE, J/J<br>3/4X8                        | 0                     |
|                       | COMPRESSION<br>TERMINAL LUG<br>CORD CONNECTOR   | 700 FEET              |
|                       | FEEDER CLAMP, 5<br>CABLES                       |                       |
|                       | CLAMP, CLEVIS<br>TYPE, 2" IPS                   | 2 SPOOLS=<br>150 FEET |
|                       | UNDERBRIDGE TIE<br>BACK SUPPORT                 | 1                     |
|                       | DEAD ENDING<br>CLAMP                            |                       |
|                       | EYE BOLT, 5/8 X 7"<br>LG                        | 300 FEET              |
|                       | INSULATOR, 1 1/4<br>STUD                        | 1                     |
|                       | STRUT INSULATOR,<br>2" IPS PIPE                 |                       |
|                       | SUPPORT CLAMP<br>FOR CONTACT<br>WIRE, OOR       | 3                     |
|                       | INVERSER<br>SUPPORT FOR<br>CONTACT WIRE,<br>OOR |                       |
|                       | CANTILEVER, PULL<br>OFF, HVY LD                 |                       |
|                       | 1 1/4" X .044<br>STAINLESS<br>BANDING           |                       |

# CONTRACT SUPPLEMENTAL CONDITIONS

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

|  |   |  |
|--|---|--|
|  | PROTECTIVE STRIP<br>PANDUIT                     |  |
|  | POLE BAND                                       |  |
|  | 1/4" X .020<br>STAINLESS<br>BANDING             |  |
|  | INSULATOR<br>THIMBLE EYE TO<br>THIMBLE EYE 3/4" |  |
|  | INSULATOR<br>THIMBLE EYE TO<br>THIMBLE EYE 3/4" |  |

After award of the Contract, the City may provide the Contractor with a list of spare parts currently stored at the Vehicle Maintenance Facility (VMF) for the Traction Power Substations (TPSS). At the City's discretion, the Contractor will be able to utilize the parts to make repairs on Atlanta Street Car TPSS equipment. The Contractor is expected to have spare parts available for emergency repairs and regularly scheduled maintenance. At a minimum, the Contractor shall have at all times as spare parts of its own the following:

1. Siprotec Protective Relay – 1 each
2. Ground Fault Relay – 1 each
3. Sitras Pro Protective Unit - 1 each
4. Qualitrol Transformer Over-temperature Protection Relay – 1 each

### **WARRANTY**

The Contractor warrants each component and piece of equipment repaired under this contract, and all new parts and components furnished by the contractor, against failure or malfunction for every cause or reason mutually determined to be the fault of the Contractor. Repairs under warranty shall be warranted for six months or the unexpired balance of the original warranty period, whichever is longer. These periods of warranty shall begin when the component or piece of equipment is redelivered to the City or put back into service.

### **QUALITY ASSURANCE PROVISIONS**

The Contractor shall establish and implement a Quality Assurance Program, which shall be maintained throughout the execution of the contract to ensure the delivery of service.

# **CONTRACT SUPPLEMENTAL CONDITIONS**

## **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

### **PROJECT PLAN**

The Contractor shall develop and implement a Project Management Plan (Within thirty (30) days after award of the contract. Work cannot commence until an approved plan is in place), which shall be maintained throughout the execution of the contract to ensure the delivery of service. Project management plan provides the structure needed to efficiently manage key project elements:

1. Quality;
2. Budget;
3. Schedule;
4. Organizational Chart
5. Safety & Security

The Contractor shall establish and maintain written procedures defining the Quality Assurance Program. The procedures shall encompass all phases of the system and shall include, but not be limited to, control of the subcontractor's techniques, process control, including hold points, functional testing, discrepancy control, quality records, measuring and test equipment calibration/certification, drawing/document control, final inspection, shipping inspection, and other quality provisions to meet the requirements of this contract.

Within thirty (30) days after award of the contract, the Contractor shall submit its Quality Assurance Program Manual for City review. The Contractor's Quality Assurance Program shall be subject to City verification and approval at any time.

Verification and approval will include surveillance of operation to determine that practices, methods, and procedures of the program are being properly implemented. Gages and test equipment must be calibrated within the required calibration date.

After Contract Award, the Contractor shall submit, for City approval, a comprehensive Quality Plan that details the quality control requirements that shall be established, implemented and executed throughout this contract, assuring that all aspects of the product are in conformance with the designs, materials, testing and workmanship requirements. This submittal shall include details of all qualifications, tests, procedures, and process controls.

Contractor personnel performing inspections and tests shall be qualified by evidence of prior experience, training, and/or certification. Records of personnel qualifications shall be maintained and available to the City for review.

The City reserves the right to inspect and reject at the source, any supplies furnished or services rendered under this contract.

## **CONTRACT SUPPLEMENTAL CONDITIONS**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

The City may make unannounced inspections. The Contractor's own Final Acceptance documentation shall be available for review at the source inspection. All drawings, tools, and work area needed for the inspection shall be provided by the Contractor.

When the City elects to source inspect at a subcontractor's facility, such inspection shall not be used by the Contractor as evidence of effective quality control by such subcontractor. City inspection of a subcontractor's facility will be coordinated first with the Contractor.

The City also reserves the right to take photographs of the work performed.

#### **DRUG AND ALCOHOL POLICY**

The Federal Transit Administration (FTA) of the U.S. Department of Transportation has published 49 CFR Parts 655 and 40. The contractor must comply with the requirements of this program, including the ASC Drug and Alcohol. (Attach the statutes and ASC D&A policy.

#### **NO FEDERAL GOVERNMENT OBLIGATION TO THIRD PARTIES**

(1) The Contractor acknowledges and agrees that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the City, the Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

#### **FALSE STATEMENTS OR CLAIMS – CIVIL AND CRIMINAL FRAUD**

(1) Civil Fraud. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §§ 3801 et seq., and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Contract. Upon execution of the underlying Contract, the Contractor certifies or affirms the truthfulness and accuracy of each statement it has made, it makes, or it may make, or causes to be made, pertaining the underlying Contract or the FTA assigned project for which this Contract work is being performed.

## **CONTRACT SUPPLEMENTAL CONDITIONS**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

In addition to other penalties that may apply, the Contractor furthers acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose penalties of the Program Fraud Civil Remedies Act of 1986, as amended, on the Contractor to the extent the Federal Government deems appropriate.

(2) Criminal Fraud. The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the City under 49 U.S.C. Chapter 53 or any other Federal law, the Federal Government reserves the right to impose the penalties of 49 U.S.C. § 5323(l), 18 U.S.C. § 1001, or other applicable Federal law on the Contractor to the extent the Federal Government deems appropriate.

(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

#### **SUSPENSION AND DEBARMENT**

(1) This Contract is a covered transaction for purposes of Executive Orders Nos. 12549 and 12689, "Debarment and Suspension," 31 U.S.C. § 6101 note, and U.S. DOT regulations, "Non-procurement Suspension and Debarment," 2 C.F.R. Part 1200, which adopts and supplements the provisions of U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Government-wide Debarment and Suspension (Non-procurement)," 2 C.F.R. Part 180. As such, the Contractor agrees to provide a debarment and suspension certification containing information about the debarment and suspension status of itself and its principals.

The Contractor agrees that it shall refrain from entering into any contract of any amount to a debarred or suspended subcontractor, and to obtain a similar certification from any subcontractors, seeking a contract exceeding \$25,000. Contractor agrees to and assures its subcontractors, and other participant at any tier of the underlying Contract will review the "Excluded Parties Listing System" at <http://epls.gov/> before entering into any agreement or other arrangement in connection with the underlying Contract.

(2) The certification is a material representation of fact upon which reliance will be placed when this transaction is entered into. If it is later determined that the Contractor knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the City may pursue available remedies, including suspension and/or debarment.

## **CONTRACT SUPPLEMENTAL CONDITIONS**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

The Contractor shall provide immediate written notice to the City if at any time the Contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(3) The Contractor also agrees to include these requirements in each subcontract exceeding \$25,000 financed in whole or in part with Federal assistance provided by FTA.

#### **ENERGY CONSERVATION**

The Contractor agrees to comply with applicable mandatory energy efficiency standards and policies of applicable state energy conservation plans issued in accordance with the Energy Policy and Conservation Act, as amended, 42 U.S.C. §§ 6321 et seq., except to the extent that the Federal Government determines otherwise in writing.

To the extent applicable, the Contractor agrees to perform an energy assessment for any maintenance facility constructed, reconstructed, or modified with FTA assistance, as provided in FTA regulations, "Requirements for Energy Assessments," 49 C.F.R. Part 622, Subpart C.

#### **LOBBYING**

The Contractor agrees to comply with the requirements of 31 U.S.C. § 1352(a), the Byrd Anti Lobbying Amendment, which prohibits the use of Federal assistance to pay the costs of influencing any officer or employee of a Federal agency, Member of Congress, officer of Congress or employee of a member of Congress, in connection with making or extending the Grant Agreement or Cooperative Agreement. The Contractor shall file the certification required by U.S. DOT regulations, "New Restrictions on Lobbying," 49 C.F.R. Part 20, modified as necessary by 31 U.S.C. 8 1352. Each tier certifies to the tier above that it will not and has not used Federally appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any public agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U. S. C. 1352.

Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contracts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U. S. C. 1352. Such disclosures are forwarded from tier to tier up to the CITY OF ATLANTA.

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

#### **SUSPENSION OF WORK DURING ALERTS ISSUED BY HOMELAND SECURITY ADVISORY SYSTEM**

- A. When the Secretary of Homeland Security announces an alert under the National Terrorism Advisory Service (NTAS), whether such alert is issued publically or otherwise, the CITY OF ATLANTA shall have the right to suspend or delay completion of work under this Contract and take additional action as the CITY OF ATLANTA deems necessary to secure the CITY OF ATLANTA's facilities as follows:
- B.
1. Elevated Threat Alert:  
the CITY OF ATLANTA shall have the right to delay or suspend work, as determined in its sole discretion, monitor all work areas and Supplier's personnel and equipment entering work areas until such alert expires.
  2. Imminent Threat Alert:  
the CITY OF ATLANTA shall have the right to suspend all work, as determined in its sole discretion, and to restrict or deny access to work areas until such alert expires.
- C. The CITY OF ATLANTA shall provide notice to the Supplier, as soon as is practicable, of the receipt of a NTAS Alert and the effect such alert will have upon the work of the Supplier.

To facilitate the provision of such notice, the Supplier is required to provide the Program Manager with emergency contact information in the form of cell phone numbers, facsimile numbers and e-mail addresses to which such notices may be forwarded, and to keep said numbers current. Notice or attempted notice given to the most recent points of contact shall be deemed to be sufficient notice to the Supplier that work shall be delayed or suspended in accordance with this paragraph.

Any delay or suspension of work required under this paragraph shall not entitle the Supplier to any claims for additional compensation under this contract.

- D. Should the Federal Transit Administration (FTA) or the Secretary of Homeland Security adopt a different method of identifying threats to homeland security, or if the FTA or the Secretary of Homeland Security adopt rules binding upon the CITY OF ATLANTA for the suspension of work which differ from those set forth herein, this Contract shall be modified by written agreement of the parties to reflect such changes.

## **CONTRACT SUPPLEMENTAL CONDITIONS**

### **Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations**

#### **TERMINATION FOR CONVENIENCE**

In the event that the CITY OF ATLANTA determines that this Contract is no longer in its best interest for any reason, including but not limited to the withdrawal or otherwise unavailability of financial assistance expected to be provided by the FTA (U.S. DOT), The CITY OF ATLANTA may terminate this Contract, in whole or in part, without any liability whatsoever upon the CITY OF ATLANTA, by giving thirty (30) days written notice of its election to do so. If the Contract is terminated by the CITY OF ATLANTA, Contractor will only be paid for the Contract price for goods, equipment and supplies delivered and accepted on or before the effective date of the termination.

#### **ACCESS TO THIRD PARTY CONTRACT RECORDS**

(1) The Contractor agrees to maintain all book, records, accounts and reports required under this Contract for a period of not less than three (3) years after the date of termination or expiration of this Contract.

In the event of litigation or settlement of claims arising from the performance of this Contract, the Contractor agrees to maintain such records until the City, the FTA Administrator, the Comptroller General, or any of the duly authorized representatives have disposed of all such litigation, appeals, claims or exceptions related thereto. During the course of this Contract and for three (3) years thereafter from the date of transmission of the final expenditure report, the Contractor agrees to maintain intact and readily accessible all data, documents, reports, records, subagreements, leases, third party contracts, and supporting materials related to the this Contract as the Federal Government may require, and;

(2) the Contractor agrees to permit the U.S. Secretary of Transportation, the Comptroller General of the United States, and, to the extent appropriate, the State, or their authorized representatives, upon their request to inspect all work, materials, payrolls, and other data, and to audit the books, records, and accounts of the Contractor pertaining to this Contract, as required by 49 U.S.C. § 5325(g).

#### **CHANGES TO FEDERAL REQUIREMENTS**

The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between the City and FTA, as they may be amended or promulgated from time to time during the term of this Contract.

The Contractor's failure to so comply shall constitute a material breach of this Contract.

# CONTRACT SUPPLEMENTAL CONDITIONS

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

### **INCORPORATION OF FTA TERMS**

All contractual provisions required by U. S. DOT or FTA, as set forth in FTA Circular 4220.1F, "Third Party Contracting Guidance," November 1, 2008, and any later revision thereto, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Contract. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any the City's requests, which would cause the City to be in violation of the FTA terms and conditions.

### **CIVIL RIGHTS**

The following requirements apply to the underlying Contract:

(1) Nondiscrimination - In accordance with Title **V1** of the Civil Rights Act of 1964, as amended, 42 U.S.C. §§ 2000d et seq., U.S. DOT regulations, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act," 49 C.F.R. Part 21, Section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. §6102, Section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant because of race, color, creed, national origin, sex, age, or disability.

In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing regulations FTA may issue.

(2) Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying Contract:

(a) Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. §2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL.) regulations "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41C.F.R. Parts 60 et seq., (which implement Executive Order- No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect activities undertaken in the course of the Contract.

The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees treated during employment, without regard to their race, color, creed, national origin, sex, or age.

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(b) Age - In accordance with Section 1 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. §§ 621 through 634 and with implementing U.S. Equal Employment Opportunity Commission (US. EEOC) regulations, "Age Discrimination in Employment Act," 29 C.F.R. Part 1625 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may Issue.

(c) Disabilities - In accordance with Section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. §12112, the Contractor agrees that it will comply with the requirements U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(3) The Contractor also agrees to include the requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

#### **FLY AMERICA**

To the extent applicable, the Contractor agrees to comply with Section 5 of the international Air Transportation Fair- Competitive Practices Act of 1974, as amended, 49 U.S.C. § 40118, and U.S. GSA regulations, "Use of United States Flag Air Carriers," 41 C.F.R. §§ 301-10.131 through 301-10.143, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S-Government-financed international air travel and transportation of their personal effects and, to the extent such service is available, unless travel by Foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a **U.S.** flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements.

Further, the Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

#### **DISPUTES, BREACHES, DEFAULTS, OR OTHER LITIGATION**

The City of Atlanta agrees that FTA has a vested interest in the settlement of any dispute, breach, default, or litigation involving the Project. Accordingly, it agrees that:

a. Notification to FTA. City of Atlanta will notify the FTA Chief Counsel or Regional Counsel immediately of any current or prospective legal matter:

(1) Such as:

- (a) A major dispute,
- (b) A breach,
- (c) A default,
- (d) Litigation, or
- (e) Naming the Federal Government as a party to litigation or a legal disagreement in any forum for any reason,

(2) That may affect the Federal Government's:

- (a) Interests in the Project, or
- (b) Administration or enforcement of Federal laws or regulations.

b. Federal Interest in Recovery.

(1) General. The Federal Government retains the right to a proportionate share of any proceeds recovered from any third party, based on the percentage of the Federal share for the Project.

(2) Liquidated Damages. However, the City of Atlanta may return all liquidated damages it receives to **its** Project Account rather than return the Federal share of those liquidated damages to the Federal Government.

c. Enforcement. The City of Atlanta will pursue its legal rights and remedies available under any third party agreement or available under Federal, State, or local laws or regulations.

d. FTA Concurrence. FTA reserves the right to concur in any compromise or settlement of any claim involving the Project and the City of Atlanta.

e. Alternative Dispute Resolution. FTA encourages the City of Atlanta to use alternative dispute resolution procedures, as may be appropriate.

## CONTRACT SUPPLEMENTAL CONDITIONS

### Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

#### AIR QUALITY

The Contractor will, comply with the Clean Air Act, as amended, 42 U.S.C. §§ 7401 - 7671q, and implementing Federal regulations, as provided in Federal directives, except as the Federal Government determines otherwise in writing. Among its responsibilities, the Contractor agrees that:

(1) Public Transportation Operators. It will comply with:

(a) U.S. EPA regulations, "Control of Air Pollution from Mobile Sources," 40 C.F.R. Part 85,

(b) U.S. EPA regulations, "Control of Air Pollution from New and In-Use Motor Vehicles and New and In-Use Motor Vehicle Engines," 40 C.F.R. Part 86, and

(c) U.S. EPA regulations "Fuel Economy OF Motor Vehicles," 40 C.F.R. Part 600, and any revisions to these regulations.

(2) State Implementation Plans. It will support State Implementation Plans (SIP) by:

(a) Implementing each air quality mitigation or control measure incorporated in the documents accompanying the approval of the Project,

(b) Assuring that any Project identified as a Transportation Control Measure in its State's SIP will be wholly consistent with the design concept and scope of the Project described in the SIP,

(c) Complying with:

1 Subsection 176(c) of the Clean Air Act, 42 U.S.C. § 7506(c), 2 U.S. EPA regulations, "Determining Conformity of Federal Actions to State or Federal Implementation Plans" 40 C.F.R. Part 93, Subpart A, and 3 Other Federal conformity regulations that may be promulgated at a later date.

(3) Violating Facilities. It will:

(a) Comply with the notice of violating facility provisions of section 306 in the Clean Air Act, as amended, 42 U.S.C. 4 7414, and

(b) Facilitate compliance with Executive Order No. 1 1738, "Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans," 42 U.S.C. § 7606 note.

# CONTRACT SUPPLEMENTAL CONDITIONS

## Emergency On-Call Repairs and Maintenance for Atlanta Streetcar Overhead Contact System and Traction Power Substations

### SITE-SPECIFIC SAFETY AND HEALTH PROGRAM

Work at the site shall not begin until the City has accepted the Contractor's Safety and Health Program. Implementation and enforcement of the Safety and Health Program for the forces of the Contractor and subcontractors shall be the responsibility of the Contractor. The following shall be described in detail:

1. Contractor's Management's Commitment and Leadership Policy Statement: This policy statement shall include:
  - a. Safety goals for the project.
  - b. Commitment of personnel and resources to adequately address safety.
  - c. Management's cooperation in working with the Authority to ensure a safe Worksite(s).
2. Safety Responsibilities of Personnel: For each of the responsibilities named below, the Contractor shall list the name and title of the responsible individual, scope of their authority, name of their immediate supervisor, and other duties assigned to them.
3. Safety program promulgation and execution responsibility.
4. Worksite(s) inspections responsibility. (if applicable)
5. Project's first-aid medical treatment responsibility.
6. Employee protective devices:
  - a. Personal devices required.
  - b. Protective devices available.
7. Accident procedures.
  - a) Worksite(s) medical facilities.
  - b) Doctor/hospital arrangements:
    - i) Emergency.
    - ii) Non-emergency.
  - c) Worksite(s) accident devices:
    - i) First-aid supplies.
    - ii) Emergency transport.
    - d) Accident investigation.
8. Other safety and health features of the program:
  - a) Project substance abuse policy
  - b) Site-Specific Safety and Health Program shall not be modified without the approval from a representative of the office of Safety.

# **Attachment No. 5**

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**SIPROTEC 7SJ62**

# SIPROTEC 7SJ62

**SIEMENS**

MADE IN  
GERMANY

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Overcurrent Protection  
and Control

$I_N = 5 \text{ A, 50, 60 Hz}$

$U_N = 100 \dots 125 \text{ V AC}$

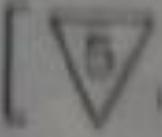
$I_L = 5 \text{ A / 240 V AC}$

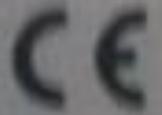
$U_H = 110 \dots 250 \text{ V DC}$   
 $115 \dots 230 \text{ V AC}$

Diagr.: CB3000-B1150-C188.2  
Operation only with fixed cover

  III  
 $U_H$

 A.B.C.

[  , III ]

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**7SJ6225-5EC90-1FG0/GG**

F.-Nr.: BF1207044493 L0A

