



# CITY OF HOUSTON

Annise D. Parker

Mayor

P.O. Box 1562  
Houston, Texas 77251-1562

Telephone - Dial 311  
[www.houstontx.gov](http://www.houstontx.gov)  
<http://purchasing.houstontx.gov>

November 25, 2013

**SUBJECT:** Letter of Clarification No. 5 On-Call Preventive Maintenance and Repair Services of Electric 138KV Substations for the Public Works and Engineering Department

**REFERENCE:** Invitation to Bid No. S30-L24769

**TO:** All Prospective Proposers:

This Letter of Clarification is issued for the following reasons:

• **To revise the above referenced solicitation as follows:**

1. Scope of Services Changes
2. Questions and Answers

On page 7 of 52 change 1.1 to read:

- 1.1 The contractor shall perform Scheduling of Switching with Center Point RTO (Real Time Operator), Receive All Required Switching Instructions from RTO, Perform All Required Switching, and Make All Required Confirmation upon Switching Competition to RTO. The contractor will perform an Arc-Flash study on all equipment **covered by** this contract and install signage indicating the Cal-Rating, Approach Boundaries and Required PPE for each piece of equipment, according to NFPA 70E . The contractor will make changes to substation relays setting provided by the city as requested.

On page 13 of 52 change 7.0 to read:

- 7.0 Wastewater Operations Monthly Services  
**Delete "at 69<sup>th</sup> Substation"**

On page 13 of 52 change 7.1 B to read:

- 7.1 B. Check station battery cell voltage, specific gravity, and if necessary, clean with soda water.  
**Delete "(quarterly only)"**

On page 15 of 52 change 7.11 to read

- 7.11 Protective Relays  
7.11.1 Clean, test, and calibrate.  
**Delete "see Item BB. 9.0 for list".**

On page 16 of 52 change 8.0 to read:

- 8.0 Drinking Water Operations' Monthly Services  
**Delete "(Equipment located at 2500 Federal Road, 3100 Genoa Red Bluff Road and include the Northeast Purification Plant at 12121 North Sam Houston Pkwy East.)"**

On page 17 of 52 change 9.0 to read:

9.0 Drinking Water Operations' Quarterly Services

**Delete "9.0.1 (Batteries at 2500 Federal Road, 3100 Genoa Red Bluff Road, 4414 Westpark Road and 12121 North Sam Houston PWY East)"**

On page 17 of 52 change 9.1 to read:

9.1 Battery and Battery Banks

- 9.1.1 Perform thorough visual inspection of each cell.
- 9.1.2 Clean battery cases with rags and distilled water.
- 9.1.3 Clean old grease and corrosion from links and battery posts.
- 9.1.4 Apply new grease to links and posts.
- 9.1.5 Torque connections.
- 9.1.6 Perform cell voltage, bank voltage, positive-to-ground, negative-to-ground, and specific gravity tests.
- 9.1.7 Add distilled water to cells as required.
- 9.1.8 Tabulate all test data and provide overall analysis of the data obtained from tests.

**Delete "Battery Banks (Eight locations – Plant 1 & 2, & Plant 3 Distributions Bldg., two at the Southwest Plant, two at the Southeast Plant and two at the Northeast Plant.)"**

On page 17 of 52 change 9.2 to read:

9.2 Battery charger/Rectifier

- 9.2.1 Perform visual and mechanical inspection.
- 9.2.2 Inspect for damage and moisture contamination.
- 9.2.3 Clean, wipe dirt and dust, remove rust, apply anti rust and spot paint, interior and exterior of enclosure.
- 9.2.4 **Inspect all bolted electrical connections for high resistance using low resistance ohmmeter.**
- 9.2.5 Verify float voltage and equalized voltage settings.
- 9.2.6 Verify operation of ammeter and voltmeter.
- 9.2.7 Verify operation of alarms.
- 9.2.8 **Compare bolted connection resistance to values of similar connections.**
- 9.2.9 Float and equalize voltage settings shall be in accordance with manufacturer's published data.

On page 18 of 52 change 10.0 to read:

10.0 Drinking Water Operations' Bi-Annual Services

**Delete "These bi-annual Electrical Preventive Maintenance services shall be performed immediately after award of the contract and they shall be repeated every two years thereafter upon approval of the UDR and Operations."**

On page 19 of 52 change 10.5 to read:

10.5 SF6 Breakers

- 10.5.1 Clean bushing, compartment, remove rust, apply anti rust, and spot paint with the same color.
- 10.5.2 Double power factor test bushing.
- 10.5.3 Double power factor test insulation.
- 10.5.4 Main contact resistance test with DLRO.
- 10.5.5 Megger insulation test secondary control circuits.
- 10.5.6 Double test of operating coils and bushing CT's by AC voltage saturation.
- 10.5.7 Check operating mechanism per manufacturer's instruction.
- 10.5.8 Check control/alarm pressure switches.
- 10.5.9 Find minimum voltage to trip control coil.
- 10.5.10 Pull gas sample for moisture analysis.

## **Delete “ (Northeast Water Purification Plant)”**

On page 21 of 52 **delete 10.15 in entirety**

On page 22 of 52 **delete 11.1 in entirety.**

On page 22 of 52 change 11.2 to read:

11.2 The Contractor shall, upon written request from UDR, perform infrared inspection of the equipment at Drinking Water Production Operations and/or Wastewater Operations, using a radiometric infrared camera.

### **Delete “additional”**

On page 23 of 52 change 12.1 to read:

12.1 The Contractor shall, upon written request from UDR, perform Protection and Coordination and other studies of power system at a facility. The analysis and study shall be in accordance with the latest edition of the electrical codes applicable to the work performed. Upon request the Contractor will perform an Arc-Flash study on equipment **covered by** this contract and install signage indicating the Cal-Rating, Approach Boundaries and Required PPE for each piece of equipment, according to NFPA 70E.

On page 27B of 52 Exhibit BB: change “The City’s Drinking Water Operations equipment covered by this contract are listed below” to read:

The City’s Drinking Water Operations equipment **and accessories** covered by this contract are **located at the following facilities:**

### **Question and Answers:**

- **The following questions and City of Houston responses are hereby incorporated and made a part of the Invitation to Bid:**

**Question:** Is it IR and Semi Annual for the following Drinking Water Locations?

Acres Holmes Plant  
Jersey Villages Plant  
Bellaire Braes Plant  
Katy Repump Plant  
Sims Bayou plant  
Southwest Plant  
Spring Branch Plant  
Acres Holmes Off Site  
Jersey Village offsite  
Sims Bayou Offsite  
Southwest Offsite  
Spring Branch Offsite  
Bellaire Braes Offsite  
Katy-Addicks Surface Water Re-Pump  
Katy-Addicks Ground Water  
District-184 Generator and Equipment  
District-123  
Park 10 Central

**Answer:** Drinking Water will determine maintenance schedule for all locations after the contract is awarded and throughout the contract term. This also includes IR testing needs. Bidders can anticipate service schedules to be monthly, quarterly and semi-annually.

**Question:** 138 KV Substation Equipment for 69<sup>th</sup> Street WWTP. No equipment except relays listed are the semi-annual and IR to be performed?

**Answer: Wastewater Operations will determine the maintenance schedule for the equipment located at 69<sup>th</sup> Street. Bidders can anticipate service schedules to be monthly and annually. Wastewater Operations will also determine the schedule for IR.**

No relays listed for the following WWTP Plants:

- Northwest WWTP
- Southwest WWTP
- Keegans Bayou WWTP
- Beltway WWTP
- WCID #111 WWTP
- West District WWTP
- Upper Brays WWTP

**Question:** Are we testing Relays at these locations?

**Answer: Relays will be tested at these locations. Not all the Relays and Protective Equipment have been listed in the document. What is listed is a cross-section of the types to be found at the various locations. Wastewater Operations will determine the relay testing needs for these locations and schedule accordingly. See revised Bid Document.**

**Question:** Are we supposed to do IR at all the WWTP Locations?

**Answer: IR will be done at all WWTP Locations. However Wastewater Operations will determine the IR schedule for each location.**

**Question:** I am in the process of submitting the above and I have found that the bid site does not match the bid package. On the drinking water sites Section 2 Para 10.0 the following is stated:

10.0 **Drinking Water Operations' Bi-Annual Services**

These bi-annual Electrical Preventive Maintenance services shall be performed immediately after award of the contract and they shall be repeated every two years thereafter upon approval of the UDR and Operations.

The bid site refers to this as a semi annual inspection as can be seen here:

3	DWO Semi-Annual Services	Semi-Annual	2	No Charge: <input type="checkbox"/>	\$ 0.00	\$0.00
				No Bid: <input type="checkbox"/>		
				No Charge: <input type="checkbox"/>		

That seems to be an error which can attribute to pricing errors and confusion. This is also repeated annually as opposed to bi annually. Can you please clarify how this should be entered? Also, the site calls for a hard bid for both annual and monthly inspections in addition to hourly rates. can you describe how that is being used?

**Answer: See revised Bid Document. Paragraph 10 was an error and has been deleted. Drinking Water Operations' service schedules will be monthly, quarterly and semi-annually. We also want the base fee for carrying out inspections, whether monthly, quarterly, annually or semi-annually, and the hourly labor rate for technicians to carry out the various servicing and maintenance needs.**

When issued, Letter(s) of Clarification shall automatically become a part of the proposal documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Letter(s) of Clarification. All revisions, responses, and answers incorporated into the Letter(s) of Clarification are collaboratively from both the Strategic Purchasing Division and the applicable City Department(s). It is the responsibility of the proposers to ensure that it has obtained all such letter(s). By submitting a proposal on this project, proposers shall be deemed to have received all Letter(s) of Clarification and to have incorporated them into this proposal.

If you have any questions or if further clarification is needed regarding this Request for Proposal, please contact me.

*Richard Morris*

Richard Morris  
Senior Procurement Specialist  
Strategic Purchasing Division  
832-393-8736