

STATEMENT OF WORK (SOW)
FOR
HOUSTON INFORMATION TECHNOLOGY
SERVICES

**Project Name: Data Center
Consolidation/Migration**

**Technology Category: Power
Distribution Unit (PDU)/Computer
Room Air Handling Unit (CRAHU)
Maintenance Contract**

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Prepared by: *George A Allen*
HITS Data Center Manager

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Houston Information Technology Services
PDU/CRAHU Maintenance**

1. INTRODUCTION

The City of Houston IT department requests maintenance services for the Power Distribution Units (PDU) and Computer Room Air Handling Units (CRAHU) located at 1301 Fannin, suite 1255. The objective is to provide a scheduled routine maintenance and break/fix, as required, service for new data center core infrastructure purchased December 2013, as part of the new downtown city data center. These systems provide cooling and power to approximately 5,000 square feet for critical systems supporting the city to include; Email (Exchange), CSMART, GIS, 311, Voice (a \$13,000,000 project) Health and Human services systems, Parks and other ancillary systems/services. The data center houses 5 STULZ CRAHU units, 6 floor model APC PDUs and 6 floor model APC Remote Power Panels (RPP). This cooling and power provides us the assurance that our data center's infrastructure is operating at maximum efficiency and actively managing server supply with demand. In a sense, it is similar to an insurance policy, assuring that critical business infrastructure will not be interrupted by unforeseen server hot spots or power outages as operations change.

The risk of not having redundant, well maintained power and cooling in the data center means the potential to incur outages extending beyond city employees but severely impacting the city as a whole where critical systems such as 311, GIS or CSMART would not be available for use, due to over-heating or single-threaded power outages. This PM contract and work eliminates and mitigates the majority of risk associated with outages caused by heat or power outages by ensuring the systems are monitored, managed and repaired as necessary keeping them up to date.

The city invested a lot of money standing up a new data center supporting some of its most critical systems, which the PDUs and CRAHUs provide the backbone power and cooling to. If a system gets too hot, the lifespan and likelihood of it breaking increase significantly; causing more delays and often times money.

2. BACKGROUND

As part of the city's initiative to consolidate its data centers, the 1301 Fannin data center was built during FY14 to house and support various departments across the city providing vital services and technology.

3. SCOPE OF SERVICES

- a. Provide routine maintenance, inspections and break/fix of 5 STULZ CRAHUs and 6 APC PDUs and 6 APC RPPs, to include but not limited to:

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Equipment to service:

1. 5 STULZ CRAHU systems:

Compact SWE Series; Model CC D-300-CW-E-UF
10-100 Tons Chilled Water Computer Room Air Handling Units

2. 6 x APC Row PDU 150kW 480/208V (including)

(2) 42 pole panels
(1) 400a subfeed breaker
L6-30 whips
SNMP communications Card

3. 6 x APC Row RPP 60kW/208V (including)

(2) 42 pole panels
L6-30 whips
SNMP communications Card

- a. Quarterly inspections and maintenance updates
- b. Emergency service
 - 1. 2-4 hour response, upon receiving a phone call from the City of Houston, to provide troubleshooting and break/fix onsite if required
- c. Provide parts and materials, as needed
Travel costs, as needed (example; outside skill required)
- d. Trained technicians
 - 1. Each technician must be certified to perform maintenance on each piece of equipment, APC PDUs and STULZ CRAHUs
- e. PM Service Monday-Friday 8am-5pm
 - 1. If weekend work or afterhours is required it will be scheduled by City of Houston for emergency purpose only
- f. Completed PM checklist – provided upon completion of inspection and repair

Quotes for any repair shall be approved by City of Houston prior to purchase or repair

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4. REQUIREMENTS: IMPLEMENTATION, INSTALLATION AND OR SERVICES

- a. Coordinate effort for work will be coordinated through the City of Houston prior to repair or service
- b. The city requires a maintenance contract for its PDUs/RPPs and CRAHUs located at the 1301 Fannin, suite 1255 data center on a year over year basis
 1. Coordination of effort for work will be managed through the City of Houston prior to repair
 2. Firm selected must be certified by the manufacturer, STULZ Air Technology Systems and APC Floor Model Power Distribution Systems and Remote Power Panels to service the equipment. All service must be performed by the trained technicians.

5. PROJECT EVENTS AND TASKS

- Initial meeting with the City of Houston infrastructure team
- Tour of the 1301 Fannin data center, suite 1255
- Vendor to provide the city with a copy of the maintenance checklist
- Vendor to notify the city prior to a schedule window, ensuring access is in place and all parties are aware of person(s) in the facility

6. PERIOD OF PERFORMANCE

Maintenance windows will be coordinated and approved through the City of Houston

7. INVOICES

Net 30 days

8. DELIVERABLES

- PM Checklist by vendor, prior to inspection and upon completion
- Provide methodology to perform maintenance
- If the deliverable cannot be provided within the scheduled time frame, the Vendor is required to contact the Infrastructure team in writing with a reason for the delay and the proposed revised schedule. The request for a revised schedule must include the impact on related tasks
- A request for a revised schedule must be reviewed and approved by the Infrastructure Deputy Director or designee before placed in effect. Contract Terms and Conditions may dictate penalties, costs, and other actions based on the facts related to the request for a revised schedule.
- The Infrastructure team will complete a review of each submitted deliverable within specified working days for the date of receipt.
- A kickoff meeting will be held at a location and time selected by the City of Houston Infrastructure team where the Vendor and its staff will be introduced to the Customer

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9. ACCEPTANCE CRITERIA

Acceptance Criteria for this Solution will be based on the City of Houston PO acceptance language. Each deliverable created under this Statement of Work will be delivered to the Infrastructure team with a Deliverable Acceptance Receipt. This receipt will describe the deliverable and provide the Infrastructure Deputy Director with space to indicate if the deliverable is accepted, rejected, or conditionally accepted. Conditionally Accepted deliverables will contain a list of deficiencies that need to be corrected in order for the deliverable to be accepted by the City.

10. ASSUMPTIONS, PROJECT ROLES AND RESPONSIBILITIES

This section contains assumptions specific to this engagement.

Assumptions

- Vendor costs are based on quarterly inspections over a period of one year
- Vendor has recommended PM checklist
- Vendor will have enough personnel to perform scheduled maintenance
- The city will provide vendor with access to the site
- Vendor will not make repairs unless approved by the city
- Vendor will provide names of all individuals working onsite to ensure proper access is submitted and approved

REPORTS AND MEETINGS The Vendor is required to provide the Infrastructure team a report reflecting names of vendor employees and outcome of maintenance completed.

- The progress reports shall cover all work performed and completed during the inspection for which any subsequent work required will reflect additional actions and coordination
- The progress report shall identify any problems encountered or still outstanding with an explanation of the cause and resolution of the problem or how the problem will be resolved.
- The Vendor will be responsible for conducting the maintenance and contacting the city prior to and day of any inspection or work to be completed

11. FURNISHED EQUIPMENT AND WORK SPACE

The work environment will consist of data center space, removing and installing equipment from PDUs and CRAHUs as repairs are required and approved. Trucks will utilize existing loading docks, under the direction of City employees and the facility loading dock procedures.

12. TRAVEL

Travel expenses and costs are not covered separately.

14. LOCAL MINORITY/WOMEN BUSINESS ENTERPRISE PARTICIPATION:

Not Applicable if quote is below the City of Houston Office of Business Opportunity dollar threshold requiring MWBE participation.