

Bid CMC-14377  
Addendum #1 dated 5 May 2019

### **Request for information (RFI)**

For the services I understand you are looking to preform 2 services, to confirm you are only looking to do one oil change but 2 filter changes along with the inspection? I would like to confirm that changing out the filters twice a year is not recommended by any manufacturer unless you are running these units 500 hours a year. Changing these filters that many times can get costly. **RESPONSE: Specification modified see below.**

What kind of sampling are you looking for? Diesel? Coolant? Oil? **RESPONSE: All fluids**

Are you looking for a coolant change every year since this might be a 5 year contract? **RESPONSE: Specification modified see below.**

When is the major work (oil changes, filter changes) going to be done? **RESPONSE: Spring April/May**

When will the minor inspection be done? In the bid it's indicating both are inspections **RESPONSE: Fall, six months after major PMI**

Can you confirm there no ATS above 480v **RESPONSE: There are no ATS above 480 VAC**

Is this bid a Prevailing wage Bid?. **RESPONSE: Yes see spec section IIE. LAWS AND REGULATIONS 13. (b)**

How many of the Gens/ATS are "emergency room" gens (i.e. Sunday's only)? **RESPONSE: 2 – generators OR3 and ACP. Other critical generators are in n+1 configuration.**

Is the fuel sample testing the new, DFAO2 test, or is it our standard fuel test? **RESPONSE: standard fuel test.**

Changes to Section III: Specifications: change entire section with following pages. Note differences are **highlighted in bold type.**

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SECTION III: SPECIFICATIONS

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**MAINTENANCE AND REPAIR SERVICES SPECIFICATIONS**

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SCOPE OF SERVICES

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1. GENERAL

Contractor shall provide two semi-annual inspection tests (one Preventative maintenance tune-up, fluid analysis and oil change ~~July/August~~ **April/May**, and one general test inspection ~~January/February~~ **October/November** and all minor and emergency repair service to the emergency generator systems listed in Section III in accordance with manufacturer's guidelines. The Corporation reserves the right to add or delete equipment covered under the Award of Agreement at anytime. Appropriate adjustments will be made to the Base Contract Price for any changes.

2. GENERATOR SYSTEM INSPECTION- ~~PMI-PROCEDURE (July/August)~~ **April/May**

a. Diesel Fuel System

(1) Provide fuel sampling and analysis by an independent professional testing laboratory for each of the generator systems listed in Section III(7). For systems that utilize a day tank, the fuel samples shall be collected from the day tank. A fuel analysis report shall be submitted within twenty (20) business days of the collection date.

Each report shall include: API gravity, distillations, flash point, calculated cetane, water %, sulphur content and micro fiber test.

- (2) Change oil filters.
- (3) Clean or replace air filter element
- (4) Inspect for and repair fuel leaks
- (5) Drain all water from fuel system, check for contamination.
- (6) Check operation of transfer pumps and day tanks.

b. Engine Cooling System

(1) Secure coolant sample from each generator system and provide coolant analysis by an independent professional testing lab. Coolant analysis report shall be submitted within twenty (20) business days of the collection date. Each report shall include: % antifreeze and flash point, nitrite/molybdate levels, pH level, corrosion products, silicate level, hardness, chlorides and sulfates.

(2) Change coolant on closed systems **if required by analysis. Cost of coolant change is NOT included in base price.**

- (3) Check engine water pumps, circulating pumps and remote fan motors.
- (4) Check condition of hoses and connections (repair or replace as necessary)
- (5) Inspect and adjust fan belts (repair or replace as necessary)
- (6) Check operation of automatic coolers
- (7) Inspect and lubricate pulley hub bearing
- (8) Inspect and repair related intake and or exhaust ductwork
- (9) Check and Clean all louvers and automatic dampers.
- (10) Check and adjust operation of remote thermostatic or solenoid valves.
- (11) Repair ALL coolant leaks
- (12) Check operation of jacket water heater.
- (13) Check operation of transfer pumps and float switches.
- (14) Inspect all valves; check for correct position for proper operating controls.

c. Engine Lubricating System

(1) Secure an oil sample from used oil from each generator system and provide an analysis performed by a professional testing laboratory. A detailed report of oil analysis shall be submitted within twenty (20) business days with recommendations for each generator system. Fuel analysis shall include elemental analysis (spectroscopy, infrared spectroscopy, gas chromatography, viscosity, total base number (TBN), particle count, direct reading ferrography, and microscopic analytical ferrography.

- (2) Change oil and lube oil filters
- (3) Remove used oil from premises
- (4) Service and clean crankcase breather
- (5) Operation of lubricating oil heater
- (6) Repair any lube oil leaks

d. Engine Electrical Starting System

- (1) Check battery electrolyte level and add distilled water where required.
- (2) Check battery terminals for corrosion and tightness
- (3) Check alternator or charger operation, including trickle charging unit
- (4) Check battery charging rate

e. Governor.

- (1) Check and lubricate all linkages, ball joints, and throttle controls, and adjust as required.
- (2) Check oil level
- (3) Inspect for oil leaks

f. Exhaust system.

- (1) Inspect all manifolds, brackets, mountings and flex connectors and tighten where necessary
- (2) Repair any exhaust leaks
- (3) Check for restricted exhaust, repair as needed
- (4) Tighten all connections
- (5) Visually check the exhaust system for wet stacking conditions. Include findings and recommended corrective measures on report

g. Generator

- (1) Check brush length and pressure and adjust as required.
- (2) Check appearance of and clean slip rings.
- (3) Blowout with clean compressed air
- (4) Clean windings
- (5) Check generator bearings
- (6) Operate electric set, check for correct voltage and frequency. Note any unusual noise or conditions, record and report immediately.
- (7) Test and adjust generator voltage regulator under single unit configuration without load and while under load
- (8) Simulate and check operation of each safety shutdown device
- (9) Check operation of automatic start-stop control and switches
- (10) Check operation of generator control instrument
- (11) Replace all faulty lamp bulbs

3. GENERATOR GENERAL INSPECTION PROCEDURE (~~January/February~~ **October/November**)

The general inspection shall include all of the above with the exception of changing fluids. Price quoted shall include all parts, labor, tools, equipment and travel as described, as well as all mileage and toll charges.

4. TRANSFER SWITCH ANNUAL INSPECTION PROCEDURE

Use Infra-Red Scanner To Detect Loose/Overheated Connections

Test & Calibrate The Following Components As Required:

Torque All Bus/Lug Connections Per Specifications

Lubricate As Required & Check Function Of Interlocks

Clean & Adjust Finger Relays and Contacts As Required

Calibrate All Phase & Voltage Sensitive Relays As Required

Test & Calibrate The Drop Out Voltage Of Sensors

Electrical Tests: (If Required - Refer To MFG'S Specs)

Insulation Resistance Test - Measure Resistance Of Each Bus Section Phase To Phase & Phase To Ground For 1 Min.

Contact Resistance Test - Measure For Each Bus

Overpotential Test - Perform On Each Section Of Bus Phase To Phase & Phase To Ground On Assemblies Rated Over 600 V.

Calibrate, Tighten, Repair, Clean, & Replace as Required.

4. MINOR REPAIR SERVICE

- a. Minor repairs are defined as those jobs requiring less than 10 man-hours to accomplish. Labor for minor repairs shall be included in the base bid.

5. EMERGENCY SERVICE

a. Emergency service shall be provided on an on-call basis, 24 hours a day, seven days a week.

b. All emergency service calls shall be responded to within a maximum of two (4) hours of the call for service. For the purpose of this contract, responded to shall mean arrival on site prepared to resolve emergency. All labor for such emergency calls shall be included in the Base Contract Price.

c. The Contractor shall be assessed damages in the dollar amount equal to the overtime hourly rate payable for services rendered hereunder for each hour, or part of an hour, beyond the maximum response time set forth herein that the contractor fails to respond to an emergency service call. In the event the Contractor fails to respond within the maximum response time, the Corporation in its sole discretion may elect to arrange for provision of emergency repair service from a source other than the Contractor. In such event, the Corporation shall immediately notify the Contractor verbally of such election, and the Contractor shall be liable for the cost to the Corporation for providing coverage. Said damages shall be assessed as a deduction from payments otherwise due and payable to the contractor for providing services rendered pursuant to the Agreement.

d. The number of emergency calls to which the Contractor must respond is unlimited.

## 6. REQUIRED REPORTS

a. A service report and data sheet, on forms approved by the Corporation, shall be required after each visit and shall be left with the Facilities Management Office, Macy Pavilion Room E004. Service reports for work completed when the Facilities office is closed shall be put in the mail slot in the door of the Facilities Department.

b. Service reports shall accurately describe the work performed and include the date, building, location, equipment item# and mechanics signature. A representative of the Facilities Management Department shall sign all service reports.

c. Fuel sample, oil sample and coolant sample reports shall be submitted within twenty business days of the date of sample.

## 7. COORDINATION OF WORK

a. All preventive maintenance and inspection test work shall be coordinated through the Facilities Management Office #(914) 493-7320 forty eight (48) hours prior to work to be performed.

b. Except for emergency repairs all work on the generators that are labeled as "critical" shall be scheduled so as not to interfere with rooms that may be in use. Work is usually scheduled for a Sunday two (2) weeks in advance or weekdays with work completed by six (6) A.M.

c. All scheduled work for generators that do not serve rooms listed above shall be performed weekdays between 8:00 A.M. and 4:00 P.M.

d. When requested by the Facilities Management Department the Contractor must perform the Preventive maintenance for a generator on other than regular hours. Under this condition the Contractor may invoice the Corporation for the difference between the daytime and the overtime hourly labor rate for the hours used to complete the requested work. This does not apply to work on generators listed in 7.b. above.

e. It is understood the need for the Operating rooms cannot be scheduled and that area's may be in use when the Contractor arrives. In each contract year the Contractor shall be expected to make at least two separate visits to complete the work as part of the base contract bid. If the Contractor has arrived prepared to work and through no fault of his own has no other work that can be done at that time, the Contractor shall be paid the applicable rate for the mechanic's round trip travel time to a maximum of two (2) hours.

f. For each maintenance or service visit where system deactivation is necessary, Contractor shall notify the Facilities Management Department (914)493-7320. Work on the system must be continuous without interruption until system is returned to service.

g. Contractor may, at his discretion, utilize other experienced specialist sub-contractors to perform such work as may be required to fully complete the Contractors preventative maintenance and / or emergency repairs. The Contractor shall be fully responsible for any and all work by subcontractors.

8. PARTS

a. The Contractor shall maintain the most frequently used replacement parts, materials and supplies necessary for the Services to the Equipment for the term of the Agreement on inventory.

b. Replacement parts not in the Contractor's inventory stock must be obtained within three (3) business days. These are defined as non-standard parts.

9. COVERED EQUIPMENT (GENERATOR LIST – includes associated ancillary equipment)

| Name                        | Description   | Building                                  |
|-----------------------------|---|---|
| OR2<br>(aka<br>"Bloodbank") | Massaro Detroit Mod # 70837305<br>Ser. # 8VA-419299<br>KVA312.5 KW 250  | Macy Pavilion (Mechanical next to Biomed) |
| OR3                         | Caterpillar C18 ATAAC<br>Ser. #<br>KVA750 KW600<br>480V 721A 1800 RPM (new 9/2013)<br>w/external load bank<br><b>CRITICAL</b> | Macy Pavilion (outside west façade)       |
| BHC                         | Mod # D3408<br>Caterpillar D Ser # 67U0861676<br>KVA376 KW300<br>480Volt 451 Amp  | Behavioral Health Center (outside)        |

|        |   |  |
|--------|---|--|
| TCC    | Consolidated Mod #290D1<br>Detroit Ser # 12VA034665<br>Institute Outside D KVA 375 KW 300<br>wing   | Taylor Care Center (outside)                               |
| Main 1 | Caterpillar Mod # D398<br>Ser # 66B4236<br>KVA 844.4 KW 660<br>480 Volt 1059 Amp w/external load bank<br><b>CRITICAL HOWEVER ONE GENERATOR FROM<br/>THE GROUP MAIN 1 -&gt; MAIN 4 MAY BE OUT<br/>OF SERVICE AT A GIVEN TIME</b>           | Main Hospital (Plant)                                      |
| Main 2 | Caterpillar Mod # D398<br>Ser # 66B4563<br>KVA 875 KW 700<br>480 Volt 1059 Amp w/external load bank<br><b>CRITICAL SEE MAIN 1</b>   | Main Hospital (Plant)                                      |
| Main 3 | Caterpillar Mod # 512S1 D<br>Ser # 67Z00724<br>KVA 875 KW 700<br>480 Volts 1052 AMP w/external load bank<br><b>CRITICAL SEE MAIN 1</b>  | Main Hospital (Plant)                                      |
| Main 4 | Caterpillar Mod # 3412<br>Ser # 7AJ01779<br>KVA875 KW 700<br>480 Volt 1052 w/external load bank<br><b>CRITICAL SEE MAIN 1</b>   | Main Hospital (Plant)                                      |
| CED    | Detroit Mod # 500D54<br>Ser # 0727080<br>N/E corner) KVA 638 KW 500<br>280 Volt 1770 Amp  | Cedarwood Hall (outside)                                   |
| ELM    | Cumins Mod # 3300<br>Ser # 5CA04516<br>KVA 156 KW 125<br>208 Volt 434 Amp   | Elmwood Hall (outside)                                     |
| n/a    | Light Tower (see Specialty Lighting Mod #<br>BTK64MH<br>Facility Mgt Office) Ser # 010030435<br>L9971148  | Mobile unit  |
| MFCH 1 | Caterpillar CAT00000JCMJ000369 1250 KW;<br>1562 KVA, 1878A@480V<br>Model CAT 3512 s/n 1KZ00721<br>w/external load bank<br><b>CRITICAL HOWEVER ONE GENERATOR FROM<br/>THE GROUP MFCH 1 AND 2 MAY BE OUT OF<br/>SERVICE AT A GIVEN TIME</b> | Maria Fareri Children's Hospital<br>(roof mechanical room) |

|        |  |  |
|--------|--|--|
| MFCH 2 | Caterpillar CAT00000JCMJ000368 1250 KW;<br>1562 KVA, 1878A@480V<br>Model CAT 3512 s/n 1KZ00720<br>w/external load bank<br><b>CRITICAL SEE MFCH 1</b> | Maria Fareri Children's Hospital<br>(roof mechanical room) |
| ACP    | Caterpillar <b>CAT3512C</b> 1500 KW 1875 KVA s/n<br><b>LYH00253</b><br>w/external load bank (NEW 2019)<br><b>CRITICAL</b>                            | Outside (west façade)                                      |

10. COVERED EQUIPMENT (TRANSFER SWITCHES)

| Switched/<br>Date?       | Description               | On<br>Generato<br>r |            | Equip. Ind.<br>Ex. | Building   | Room   | SubLocation             |
|--------------------------|---------------------------|---------------------|------------|--------------------|------------|--------|-------------------------|
| <input type="checkbox"/> | ATS BHC                   | BHC                 |            | 50240              | BHC        | B-035  | Elect. Dist. Rm.        |
| <input type="checkbox"/> | ATS Cedarwood             |                     | Cedarwood  | 46181              | WIHD       | AG-01  | Elect. Rm.              |
| <input type="checkbox"/> | ATS Elmwood SW-1          | Elmwood             |            | 51178              | Elmwood    |        | Elect. Dist. Rm.        |
| <input type="checkbox"/> | ATS Elmwood SW-2          |                     |            | 51179              | Elmwood    |        | Elect. Dist. Rm.        |
| <input type="checkbox"/> | ATS Elmwood SW-3          |                     |            | 70546              | Elmwood    |        | Elect. Dist. Rm.        |
| <input type="checkbox"/> | ATS-2 Macy                |                     | OR 3       | 48938              | Macy       | 0311   | NW Dist.Rm              |
| <input type="checkbox"/> | ATS STAT Flight           |                     |            | 48400              | Macy       | 0409   | Surg. Suite Substa SE-3 |
| <input type="checkbox"/> | ATS ES-SSXS-3             |                     |            | 51232              | Macy       | 0409   | Surg. Suite Substa SE-3 |
| <input type="checkbox"/> | ATS SE                    |                     |            | 51235              | Macy       | 0409   | Surg. Suite Substa SE-3 |
| <input type="checkbox"/> | ATS ES-SSXS-1             |                     |            | 51236              | Macy       | 0409   | Surg. Suite Substa SE-3 |
| <input type="checkbox"/> | ATS CS-SSXS-2             |                     |            | 51237              | Macy       | 0409   | Surg. Suite Substa SE-3 |
| <input type="checkbox"/> | ATS-PP-7                  |                     |            | 71472              | Macy       | 0409   | Surg. Suite Substa SE-3 |
| <input type="checkbox"/> | ATS-GEN                   |                     |            | 71473              | Macy       | 0409   | Surg. Suite Substa SE-3 |
| <input type="checkbox"/> | ATS-1 Macy NWXS-1         |                     |            | 46006              | Macy       | 0313   | SE-4                    |
| <input type="checkbox"/> | ATS-3 Bloodbank Generator | OR-2                |            | 45965              | Macy       | W0067  | S/W Mechanical Rm       |
| <input type="checkbox"/> | ATS-XB                    |                     | Main 1, 2, | 49096              | Main Hosp. | 2E-11A | Control Rm Cath 4       |
| <input type="checkbox"/> | ATS-Cardiac Cath          |                     | 3 and 4    | 49095              | Main Hosp. | 2E-22  | Cath Lab nt Room2       |
| <input type="checkbox"/> | ATS-XA                    |                     |            | 49097              | Main Hosp. | 2E-11A | Control Rm Cath 4       |
| <input type="checkbox"/> | ATS ER-2                  |                     |            | 71599              | Main Hosp. | LLL-03 | SE-26 Emergency 2       |
| <input type="checkbox"/> | ATS LS-2                  |                     |            | 71591              | Main Hosp. | LLL-03 | SE-26 Emergency 2       |
| <input type="checkbox"/> | ATS ES-2                  |                     |            | 71592              | Main Hosp. | LLL-03 | SE-26 Emergency 2       |



|   |  |     |              |       |             |                 |                                 |
|---|--|-----|--------------|-------|-------------|-----------------|---------------------------------|
| □ | ATS CS-2   |     |              | 71593 | Main Hosp.  | LLL-03          | SE-26 Emergency 2               |
| □ | ATS CS-3   |     |              | 71595 | Main Hosp.  | LLL-03          | SE-26 Emergency 2               |
| □ | ATS ES-3   |     |              | 71594 | Main Hosp.  | LLL-03          | SE-26 Emergency 2               |
| □ | ATS CAT-1TS  |     |              | 46253 | Main Hosp.  | LLK-04A         | Mech Rm 2                       |
| □ | ATS ELEV-Pt  |     |              | 71138 | Main Hosp.  | LLF-04          | Emerg Switchgear Rm 1           |
| □ | ATS-PUBLIC-ELEV                                    |     |              | 71605 | Main Hosp.  | Elev mach<br>rm | Mech Rm 4                       |
| □ | ATS ES-1   |     |              | 71136 | Main Hosp.  | LLF-04          | Emerg Switchgear Rm 1           |
| □ | ATS CAT-2TS  |     |              | 46264 | Main Hosp.  | LLK-04A         | Mech Rm 2                       |
| □ | ATS LS-1   |     |              | 71137 | Main Hosp.  | LLF-04          | Emerg Switchgear Rm 1           |
| □ | ATS CONTROLLER FIRE PUMP                           |     |              | 70481 | Main Hosp.  | LLF-03          | LLF-03 Chiller Rm               |
| □ | ATS MCC-1A-EM (formerly ATS-ES-1A)                 |     |              | 70477 | Main Hosp.  | LLF-04          | Emerg Switchgear Rm 1           |
| □ | ATS-CS-1   |     |              | 70478 | Main Hosp.  | LLF-04          | Emerg Switchgear Rm 1           |
| □ | ATS-MCC-1-EM Emergency (formerly ATS-MCC)          |     |              | 71131 | Main Hosp.  | LLF-04          | Emerg Switchgear Rm 1           |
| □ | MTS Electric Chiller (manual transfer do not test) |     |              | 70074 | Main Hosp.  | LLF-03          | LLF-03 Boiler Rm<br>Upper level |
| □ | ATS-1H08   |     |              | 71340 | Main Hosp.  | 1H49            | Radiology                       |
| □ | ATS-1H39   |     |              | 71341 | Main Hosp.  | 1H49            | Radiology                       |
| □ |  | TCC |              |       |             |                 |                                 |
| □ | ATS-LS   | TCC |              | 70485 | Taylor Care | GK-18           | Fire panel room                 |
| □ | ATS-ES   |     |              | 70486 | Taylor Care | GK-18           | Fire panel room                 |
| □ | ATC-CS   |     |              | 70487 | Taylor Care | GK-18           | Fire panel room                 |
| □ | ATS-CTEL   |     |              | 71589 | Taylor Care | GK-18           | Fire panel room                 |
| □ | MTS-1 (manual transfer do not test)                |     |              | 71950 | Taylor Care | GK-18           | Electrical distribution         |
| □ | ATS -EHR1  |     | MFCH 1,<br>2 | 60499 | MFCH        | 4119            | S PENTHOUSE                     |
| □ | ATS CONTROLLER FIRE PUMP                           |     |              | 60419 | MFCH        | B007            | Fire pump room                  |
| □ | ATS -EHR2  |     |              | 60390 | MFCH        | 4103            | N PENTHOUSE                     |
| □ | ATS -EHR3  |     |              | 60345 | MFCH        | 4103            | N PENTHOUSE                     |
| □ | ATS MCC-B-EQ-EM2                                   |     |              | 60268 | MFCH        | B011            | Absorber room                   |
| □ | ATS MCC-B-EQ-EM1                                   |     |              | 60254 | MFCH        | B011            | Absorber room                   |
| □ | ATS B-CR1  |     |              | 60252 | MFCH        | B011            | Absorber room                   |
| □ | ATS B-CR2  |     |              | 60249 | MFCH        | B011            | Absorber room                   |
| □ | ATS CR-EQ-RB                                       |     |              | 60182 | MFCH        | 4105            | SWITCHGEAR                      |
| □ | ATS LS-R2  |     |              | 60177 | MFCH        | 4105            | SWITCHGEAR                      |

|   |              |     |  |       |      |       |                      |
|---|--------------|-----|--|-------|------|-------|----------------------|
| □ | ATS LS-R1    |     |  | 60175 | MFCH | 4105  | SWITCHGEAR           |
| □ | ATS CR-RB    |     |  | 60173 | MFCH | 4105  | SWITCHGEAR           |
| □ | ATS CR-RA    |     |  | 60172 | MFCH | 4105  | SWITCHGEAR           |
| □ | ATS CR-RC    |     |  | 60170 | MFCH | 4105  | SWITCHGEAR           |
| □ | ATS -ELEV 2  |     |  | 60116 | MFCH | B041  | ELEV MER             |
| □ | ATS -ELEV 1  |     |  | 60111 | MFCH | B041  | ELEV MER             |
| □ | ATS ACP-LS   | ACP |  | 71604 | ACP  | AB110 | Emergency Electrical |
| □ | ATS ACP-CR1  |     |  | 71603 | ACP  | AB110 | Emergency Electrical |
| □ | ATS ACP-CR2  |     |  | 71598 | ACP  | AB110 | Emergency Electrical |
| □ | ATS ACP-EQ1  |     |  | 71601 | ACP  | AB110 | Emergency Electrical |
| □ | ATS ACP-EQ2  |     |  | 71600 | ACP  | AB110 | Emergency Electrical |
| □ | ATS ACP-EQ3  |     |  | 71598 | ACP  | AB110 | Emergency Electrical |
| □ | ATS ACP-XRAY |     |  | 71602 | ACP  | AB110 | Emergency Electrical |
| □ | ATS ACP-ELEV |     |  | 71597 | ACP  | AB110 | Emergency Electrical |

#### 11. REPLACEMENT OR OTHER RENTALS

12. A. In the event a generator cannot be placed back into service within 4 hours, or the Medical Center requires an additional generator for construction or other purposes, the contractor shall be capable of providing suitable rental equipment.

#### 13. CONTRACTOR QUALIFICATIONS

a. The Contractors shall list the names of four (4) employees certified and/or authorized with at least five (5) years experience to service Equipment.

b. The Contractor shall list the name, telephone number, and business person of four clients for whom they currently supply the same or similar service in accounts of equal size and complexity to the Corporation

c. The Contractor shall maintain a principal Service Office within fifteen (25) miles of the Corporation for the term of the Agreement.

d. The Contractor has provided the Equipment Services for the last five years