



CITY OF HOUSTON

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December 18, 2013

Subject: *Letter of Clarification No. 4-1* to Invitation to Bid No. S50-C24730 for the Generator Readiness Improvement Project Citywide for the Public Works and Engineering Department

To: All Prospective Bidders:

This letter of Clarification is being issued for the following reasons:

- **To extend the bid opening date, revise SECTION “A” of the bid document to schedule site visits and extend the date to receive final questions and revise SECTION “B” Scope of Work:**

NOTICE TO BIDDER:

- 1.) **The bid opening date has changed from 10:30 A.M. December 19, 2013 to 10:30 A.M., January 23, 2014.**
- 2.) Remove Page Nos. 3, 17, 18, 19, 20 & 25 of 43 and replace with the revised Page Nos. 3, 17, 18, 19, 20 & 25 of 43 marked, **REVISED 12/18/2013.**

When issued, Letter(s) of Clarification shall automatically become a part of the solicitation 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 bidder/respondent to ensure that it has obtained all such letter(s). By submitting a bid on this project, bidders/respondents shall be deemed to have received all Letter(s) of Clarification and to have incorporated them into this solicitation and resulting bid.

Furthermore, it is the responsibility of each Contractor to obtain any previous Letter of Clarification associated with this solicitation.

Arturo Lopez

Arturo Lopez
Senior Procurement Specialist
832-393-8731

Attachments: Revised Page Nos. 3, 17, 18, 19, 20 & 25 of 43

S50-C24730 / Letter of Clarification No. 4-1

for the Generator Readiness Improvement Project Citywide
for the Public Works and Engineering Department

SECTION A

REVISED 12/18/2013

Documents/forms must be downloaded from the City's Website
<http://www.houstontx.gov/purchasing/index.html>

Additional Required Forms to be Included with this bid:

In addition to the electronic Bid Form and the Official Signature Page, the Forms listed in Table 1 **must be completed and submitted to the Office of the City Secretary on or before the date and time the bid is due:**

Table 1
Affidavit of Ownership
Fair Campaign Ordinance
Statement of Residence
Conflict of Interest Questionnaire
M/WSBE Documentation
Pay or Play Contract Compliance Acknowledgement Form 1a
Contractor References
10% Bid Bond

Table 2 lists other documents and forms that should be viewed/downloaded from the City's website, but are not required to be submitted with the bid. The City will request these forms, as applicable, to be completed and submitted to the City by the recommended/successful bidder:

Table 2
Formal Instructions for Bid Terms
Drug Forms
Insurance Certificates Over \$50,000.00 / Insurance Endorsements
OCP Insurance Certificate Over \$100,000.00
Pay or Play Form 2 / Certification of Agreement to Comply
Pay or Play Form 3 / List of Subcontractors
Performance, Maintenance and Statutory Payment Bonds
2013 Engineering Construction Wage Decision
2013 Building Construction Wage Decision

Note:

- The City has scheduled the following dates to provide site visits at all generator locations; December 16, 17, 18, 20, 23 & 30, 2013.***
A PDF version of the Generators (Types & Locations & Schedule of Site Visits) can be viewed on the following web link
<https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24730>
- Questions concerning the Bid should be submitted in writing to: City of Houston, Strategic Purchasing Division, 901 Bagby, Room B506, Houston, TX 77002, Attn: Arturo Lopez or via fax: 832-393-8759 or via email (preferred method) to arturo.lopez@cityofhouston.net no later than **4:00 PM, Monday, January 6, 2014.**
- Bidders are required to bid on all Bid Groups.

S50-C24730 / Letter of Clarification No. 4-1

for the Generator Readiness Improvement Project Citywide
for the Public Works and Engineering Department

REVISED 12/18/2013

All repair and services shall be performed in a manner to comply with the applicable sections of the above standards and codes.

5.0 SECURITY PROTOCOL:

- 5.1 The Contractor shall be required to comply with the Public Works and Engineering Policy and Procedure guide on background checks of Employment Applicants, Employees, Contractors, Suppliers and follow the Department Standard Operating Procedures (SOP) for Contractor Badge Issuance and Access to Critical Infrastructure Sites. (See the link below)

A PDF version of the Department Standard Operating Procedures

<https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24730>

5.2 *Security Badge Procedures for Site Visits:*

- 5.2.1 *Forms must be submitted 48 hour in advance before name is added to the front gate list.***
- 5.2.2 *Background Consent Form – (Only) Good for name on front gate list for 90 days.***
- 5.2.3 *Background Consent Form is needed to obtain badge (Good for 1 year). Must call and make an appointment with Tammy Spriggs (Office (832) 395-5175, Fax (832) 395-5187) to get picture taken and pick up badge.***
- 5.2.4 *Background Consent Form submitted Must have a front and back copy of a current driver's license.***
- 5.2.5 *The Contractor applying for security badge must complete the subject Background Consent forms and a copy of their driver's license to Mr. Fred Stroud at fred.stroud@houstontx.gov. The City will forward the completed information (along with a list of facilities) to the appropriate security personnel who will in turn process the background check and return the results back. The City will distribute the results back to the appropriate Contractor, compile the list of security approved personnel, and reschedule the site visits. All site visits for the purposes of bid information, be it a plant with on-site security or un-manned sites, will be escorted by Drinking Water Operations personnel.***

A PDF version of the Security Badge Request Form

<https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24730>

6.0 PERFORMANCE TIME:

- 6.1 The Contractor shall have **540 calendar days** to rehabilitate the listed City's Drinking Water Operations Emergency Power Supply Systems (EPSS) and associated auxiliary/ancillary equipment listed in SECTION BB entitled "Generators" (Types &

REVISED 12/18/2013

Locations) in strict accordance with the scope of work/specifications after receipt of the City of Houston Purchase Order.

7.0 WARRANTY:

7.1 The Contractor shall warranty all parts, labor, materials and workmanship for one year subsequent to certification, testing and acceptance of the equipment by the City of Houston.

8.0 SPECIFIED EQUIPMENT OR EQUIVALENT:

8.1 Wherever in the specifications any materials or processes are indicated or specified by patent or proprietary name and/or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating descriptions of the performance, materials and/or processes desired and shall be deemed to be followed by the words, "or equivalent", if not so stated in the specifications herein.

8.2 The burden of proof shall rest with the bidder, in the course of a technical evaluation, to prove that the proposed item(s) are equivalent to the performance, materials, processes, or articles specified. DETERMINATION AS TO WHETHER THE ITEM (S) BID IS (ARE) EQUIVALENT TO THOSE SPECIFIED SHALL REST SOLELY WITH THE CITY PURCHASING AGENT AND THE RECEIVING DEPARTMENT.

9.0 BRAND NAME OR TRADE NAME:

9.1 Any manufacturer's names, trade names, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing the general quality level, design and performance desired. Such references are not intended to limit or restrict bidding by other Contractors/Suppliers, but are intended to approximate the quality design or performance that is desired. Any bid that proposes like quality, design or performance, will be considered. Equivalent products will be considered, provided a complete description and product literature is provided. Unless a specific exception is made, the assumption will be that the item bid is exactly as specified on the Invitation to Bid.

END OF SECTION

S50-C24730 / Letter of Clarification No. 4-1

for the Generator Readiness Improvement Project Citywide
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TECHNICAL SPECIFICATIONS

REVISED 12/18/2013

PART II

1.0 SECTION 1 – FUEL POLISHING:

1.1 Fuel polishing and/or replacement of fuel is essential to extending the useful service life of the fuel storage vessels and the diesel engines. Neglected and untreated diesel fuels can damage storage vessels and clog fuel injectors, thereby shortening the lifespan of these units. Prior to the commencement of any engine rehabilitation service; all on-site fuel stored in the bulk diesel storage tanks and local day tanks shall be reconditioned as follows:

1.1.1 Test fuel for suitability of polishing/filtration.

1.1.1.1 If found unsuitable present evidence to the City's Contract Technical Representative (CTR) for review.

1.1.1.2 After approval from the City's CTR, dispose of fuel per EPA requirements, provide manifest of disposal to City.

1.1.1.3 Filter/polish fuel to remove entrained water, sediments and bio-organisms.

1.1.1.4 Clean bio-organisms and other foreign matter from storage tank(s).

1.1.1.5 Treat fuel with biocides and fuel stabilizer.

2.0 SECTION 2 – DIESEL ENGINE REHABILITATION:

2.1 The rehabilitation of diesel engines neglected over a several year period is essential to extending the useful life of said engines and minimizing the potential for catastrophic failure of the engines.

2.2 Diesel Engine Rehabilitation Services: The following services are to be performed at all locations. All replacement fluids shall be as per the engine manufacturer specifications. All parts shall be factory O.E.M.

2.2.1 *Parts – All engine parts shall be O.E.M. replacement or O.E.M. remanufactured. No aftermarket parts are acceptable. Any requests for parts found to be not available from the O.E.M. (obsolete), shall be submitted to the City Project Manager for sourcing approval.*

2.3 Manuals:

2.3.1 Obtain engine specific operations and maintenance manual for each engine, at conclusion of project, include manual with project deliverables.

2.4 Cooling System:

2.4.1 Drain and replace coolant with extended life coolant.

2.4.2 Replace/re-core radiator (replace blower motor on remote mounted radiators).

2.4.3 Replace V-belts.

S50-C24730 / Letter of Clarification No. 4-1

for the Generator Readiness Improvement Project Citywide
for the Public Works and Engineering Department

REVISED 12/18/2013

- 2.4.4 Replace all coolant hoses and install isolation valves for coolant heater.
- 2.4.5 Replace radiator cap.
- 2.4.6 Replace water pump and inspect cooling system gaskets for leaks.
- 2.4.7 Replace jacket water heater(s) and adjust thermostat setting to manufacturer recommendation. Heater output shall conform to engine manufacturer specification.
- 2.4.8 Inspect pulleys for excessive wear.
- 2.4.9 Replace hose clamps w/ constant tension hose clamps.
- 2.4.10 Lubricate fan drive with bearing lubricant.
- 2.4.11 Collect coolant sample for analysis, submit results in project report.
- 2.4.12 Radiator – Replacement/Re-core of the existing radiator – The radiator unit shall be replaced /re-cored, the determination of which method is at the discretion of the contractor. Replacement/re-cored radiator shall be of the same size and cooling capacity as the existing radiator.**

2.5 Lubrication System:

- 2.5.1 Collect oil sample for scheduled oil sampling program, submit results in project report.
- 2.5.2 Change engine oil using manufacturer recommended diesel engine oil.
- 8
- 2.5.3 **Change oil filter(s). All filters shall be OEM parts.**
- 2.5.4 Check for excessive crankcase blow-by with engine running.
- 2.5.5 Inspect front and rear crankshaft seals and lubrication system gaskets for leaks. Replace/repair any leaking seal/gasket.
- 2.5.6 Replace crankcase breather, inspect hose and connections.

2.6 Valve Train:

- 2.6.1 Remove all valve covers visually inspect valve train.
- 2.6.2 Adjust valve clearance to engine specification.

2.7 Fuel System:

- 2.7.1 Replace fuel transfer pump.
- 2.7.2 Replace fuel priming pump.
- 2.7.3 Test day tank pump for proper operation and level (as applicable).

S50-C24730 / Letter of Clarification No. 4-1
for the Generator Readiness Improvement Project Citywide
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REVISED 12/18/2014

- 3.4.2.7.1 Utility source voltage phase to phase, phase to ground, and phase to neutral.
- 3.4.2.7.2 Engine start time (from crank start to source available light or relay pickup).
- 3.4.2.7.3 Emergency source voltage phase to phase, phase to ground, and phase to neutral.
- 3.4.2.7.4 Load current each phase.
- 3.4.2.7.5 Momentary override normal deviation where provided.
- 3.4.2.7.6 Transfer time delay where provided.
- 3.4.2.7.7 Return to normal source time delay where provided.
- 3.4.2.7.8 Engine cool-down where provided.
- 3.4.2.8 Verify proper operation of all indicator lights, meters and controls.
- 3.4.2.9 Return ATS to normal service.
- 3.5 Alternator Motor Control Center:
 - 3.5.1 Inspect and calibrate all protection devices
 - 3.5.2 Inspect and calibrate all meters, replace any meter(s) which are inoperable or exhibit impaired visibility due to clouding or discoloration of the lens.
 - 3.5.3 Replace all indicator lights.

4.0 SECTION 4 – CONTROL SYSTEM UPGRADES:

- 4.1 The installation of upgraded control systems will extend the useful lifespan of the electrical components associated with the generators, increase fuel efficiency, and provide compatibility with the SCADA system operated by DWO.
 - 4.1.1 *Since there is not a replacement control system available from Detroit Diesel, the control system replacement for Detroit Diesel Engines ONLY (Locations: HIA, Park Ten Central and EWPP Plant 1 – Admin) shall be from:***
 - 4.1.1.1 *Engineering Concepts Unlimited, Inc.***
PO Box 250 – 8950 Technology Drive
Fishers, IN 46038
Phone: 317-849-8470
 - 4.1.1.2 *Model ECU-800C***
- 4.2 The following upgrades will occur only at locations indicated in the Purchase Order Fee Schedule: Install an Engine Manufacturer's Specific Digital Generator Set Controller. The controller shall be equipped with a resistance temperature detector (RTD) module for monitoring of generator temperatures. All engine sensors interfaced with Controller shall be replaced.
- 4.3 Unit shall monitor the following parameters:
 - 4.3.1 Generator Monitoring;
 - 4.3.1.1 Voltage (L-L, L-N)
 - 4.3.1.2 Current (Phase)