Energy Fiji Ltd



TENDER SPECIFICATIONS

TENDER

TENDER NO: MR 242/2018

Inspection, Servicing, Testing and Calibration of Heavy Fuel Oil Transfer Pump at EFL's Navutu Depot

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Section A - Invitation for Tenders

Energy Fiji Ltd is inviting bids for Servicing of Stand by HFO Fuel Pump at Navutu Depot. Interested bidders may obtain Tender Document at the:

Supply Chain Office Energy Fiji Ltd Head Office 2 Marlow Street, Suva Contact: 322 4360 / 999 1587

All tenders shall submit all documents required including spares pricing as per price template.

During evaluation of tenders, the Authority will invite a tenderer or tenderers for discussions, presentations and necessary clarification before awarding of the contract

Section B - Instruction to Bidders

1. Eligible Bidders

This invitation is open to all Bidders who have sound Financial Background, and have previous experience in servicing of Pumps.

Bidders shall provide such evidence of their continued eligibility satisfactory to EFL as EFL shall reasonably request. Bidders who are not manufacturer of such jointing and outdoor termination kits shall provide evidence of agency.

Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent practice.

2. Eligible Materials, Equipment and Services

The materials, equipment, and services utilized under the Contract shall have their origin from reputable companies as specified by EFL and from various countries and all expenditures made under the Contract will be limited to such materials, equipment, and services. Upon request, bidders may be required to provide evidence of the origin of materials, equipment, and services.

For purposes of this Contract, "services" means the works and all project-related services including design services.

For purposes of this Contract, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing or substantial or major assembling of components, a commercial recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

The materials, equipment and services to be supplied under the Contract shall not infringe or violate any industrial property or intellectual property rights or claim of any third party.

3. One bid per Bidder

Each bidder shall submit only one bid. A bidder who submits or participates in more than one bid will cause all those bids to be rejected.

4. Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of its bid and EFL will in no case be responsible or liable for those costs.

5. Site Visits

Thursday 28th June, 2018 at 10.30am at EFL's Navutu Depot, Lautoka

Contact Person: Semesa Qalo (Team Leader Thermal West), Ph: 9908645

6. Contents of the Bidding Documents

The bidder is expected to examine carefully the contents of this Bidding document. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Bids which are not substantially responsive to the requirements of the bidding documents will be rejected.

The following are the mandatory submission of a successful tender bid;

- Pricing Schedule
- Program of Works
- Company Profile (Max 2 pages in standard A4)
 - \circ $\;$ Work History Project/ Work done with referee, FEA work history.
 - Company background
 - o Bidder available resources e.g. Manpower, Machines & Equipment.
 - o OHS Policies or Plan
- Fiji Revenue & Customs Service (FRCA) compliance
- Fiji National Provident Fund (FNPF) compliance
- Signed checklist declaration (Appendix 5.1)

Failure to submit required documents may affect bid compliance even make it non-compliance.

7. Clarification of Bidding Documents

A prospective bidder requiring any clarification of the bidding documents may notify EFL in writing by fax (hereinafter the term "fax" is deemed to include electronic transmission such as facsimile, cable and telex), or email addressed to:

Tuvitu Delairewa General Manager Commercial 2 Marlow Street, Suva, Fiji Phone: +679 3224 185

EFL will respond to any request for clarification which it receives earlier than 10 days prior to the deadline for submission of bids.

8. Amendment of Bidding Document

At any time prior to the deadline for submission of bids, EFL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing addenda.

9. Language of Bid

The bid, and all correspondence and documents related to the bid, exchanged between the bidder and the EFL shall be written in the English language.

10. Bid Currencies

Prices shall be quoted in a single currency only.

11. Bid Validity

Bids shall remain valid for a period of 60 days from the date of Deadline for Submission of Bids specified in Sub-Clause 2.14.

12. Format and Signing of Bids

The bidder shall prepare one original and two (2) copies of the technical and financial proposals, clearly marking each one as: "ORIGINAL-TECHNICAL & PRICE PROPOSAL", "COPY NO. I - TECHNICAL & PRICE PROPOSAL", etc. as appropriate. In the event of discrepancy between the original and any copy, the original shall prevail.

The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.

The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by EFL, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

13. Sealing and Marking of Bids

The bidder shall seal the original copy of the technical proposal and the original copy of the price proposal and each copy of the technical proposal and each copy of the price proposal in separate envelopes clearly marking each one as: "ORIGINAL-TECHNICAL & PRICE PROPOSAL", "COPY NO. I - TECHNICAL & PRICE PROPOSAL", etc. as appropriate.

The bidder shall seal the original bids and each copy of the bids in an inner and an outer envelope, duly marking the envelopes as "ORIGINAL", "COPY No. 1", etc.

The inner and outer envelopes shall

a) be addressed to EFL at the following address:

Tuvitu Delairewa General Manager Commercial 2 Marlow Street, Suva, Fiji Phone: +679 3224 185

In addition to the identification required, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Deadline for Submission of Bids. If the outer envelope is not sealed and marked as above, EFL will assume no responsibility for the misplacement or premature opening of the bid.

14. Deadline for Submission of Bids

EFL may, at its discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of EFL and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.

15. Late Bids

Any bid received by EFL after the deadline for submission of bids prescribed above will be rejected and returned unopened to the bidder.

16. Modification and Withdrawal of Bids

The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by EFL prior to the deadline for submission of bids.

The bidder's modification or withdrawal notice shall be prepared, sealed, marked and delivered in accordance with Sealing and Marking of Bids, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate. A withdrawal notice may also be sent by fax but must be followed by a signed confirmation copy.

No bid may be modified by the bidder after the deadline for submission of bids.

17. Rejection of one or all Bids

EFL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the rejection.

18. Process to be Confidential

Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process. Any effort by a bidder to influence EFL processing of bids or award decisions may result in the rejection of the bidder's bid. Lowest bid will not necessarily be accepted as successful bid.

19. Clarification of Bids

To assist in the examination, evaluation and comparison of bids, EFL may, at its discretion, ask any bidder for clarification of its bid. The request for clarification and the response shall be in writing or by fax, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by EFL in the evaluation of the bids in.

20. CLEARING AWAY

The contractor shall remove all existing rubbish and debris and surplus materials from the site as they accumulate and at completion; and clean all surfaces, including those of the affected portions of the existing premises, internally and externally, and leave the works clean and to the satisfaction of the Officer in charge or Team Leader at completion.

21. ENVIRONMENTAL CONTROL

Comply with all environmental protection provisions in the Contract and the requirements of any statute, by-law, standard and the like related to environmental protection.

22. STORAGE ON SITE

Store materials and equipment on site to prevent damage to site and minimize hazards to persons, materials and equipment. Keep storage area neat and tidy.

Take proper precautions to keep poisonous and other injurious substance in place secured against access by unauthorized persons.

Section D - Scope of Work

A general servicing of the Heavy Fuel Oil transfer pump and electrical controls l is required with provision of mechanical and electrical works.

1. Servicing of the Pump (Viking Pump Model R335, SER# 11893704)

I. Inspection

Inspection of the pump via dismantling and identifying the works to be undertaken and parts to be changed. An Inspection report is required before commencing with the servicing works.

The contractor shall provide a report upon full inspection. The report will be subject to a review process by the Principal. Two (2) weeks are to be allowed for the Principal to review the report/s and return comments. The Contractor shall make allowances for the review process to be followed.

The report shall further include:

- Part list of the parts that needs replacement
- The manual that will be utilized for the Viking Pump and the Induction Motor

Inspection of the Parts Shall Include:

| Item | Electrical Part | OK/ NOT OK | Mechanical Part | OK/ NOT OK |
|------|------------------------------------|------------------|--------------------------------------|------------------|
| 1. | Stator Core | | Lock Nut and Washers | |
| 2. | Fastening Bolts for Bracket | | Bearing Spacer Collar | |
| 3. | Inner Bearing Cap | | Caps Screw for Adjusting Lock Nut | |
| 4. | Greasing Pipe | | End Cap Lock | |
| 5. | Outer Bearing Cap | | Lip Seal | |
| 6. | Bearing | | End Cap | |
| 7. | Key at End Shaft | | Roller Bearing | |
| 8. | Shaft | | Grease Fitting | |
| 9. | Fasteners for inner Bearing Cap | | Thrust Bearing Housing | |
| 10. | Grease Outlet | | Packing Gland | |

| 11. | Fasteners for outlet Cover | Rotor Bearing Sleeve & Bushing |
|-----|-------------------------------|-----------------------------------|
| 12. | | Packing |
| 13. | Inner Bearing Cap | Bushing, Rotor Sleeve Bearing |
| 14. | Lock Nut | Casing |
| 15. | Fastener for Fan | Rotor and Shaft |
| 16. | Lock Washers | Idler and Bushing |
| 17. | Fan Hood | Idler Bushing |
| 18. | Outer Bearing Bracket | Idler Pin |
| 19. | Fastener for Fan hood | Head and Idler Pin |
| 20. | Inner Fan | Nut for Head |
| 21. | Stator Winding | Stud for Head |
| 22. | Terminal Plate | Cap screw valve |
| 23. | Terminal Cover | Idler Pin Nut |
| 24. | Terminal Fastening Bolts | Internal Relief valve |
| 25. | Terminal Box | Pipe Plug |
| 26. | | Bearing Housing Stand |
| 27. | | Packing Gland Stud |
| 28. | | Packing Gland Nut |
| 29. | | Bearing Housing Stud |
| 30. | | Bearing Housing Nut |
| 31. | | Bearing Housing Cap Screw |
| 32. | | Stud for Rotor Bearing Sleeve |
| 33. | | Rotor Bearing Sleeve Gasket |
| 34. | | Nut for Rotor Bearing Sleeve |
| 35. | | Pipe Plug |
| 36. | | Head Gasket |
| 37. | | Relief Valve Gasket |

II. Servicing

A general electrical and mechanical servicing work to be carried out of the HFO pump.

a. Electrical Works shall include

- i. Check/service electrical condition of insulation on power cable(s) and on all phases of the motor (in Meg Ohms).
- ii. Check for any loose or faulty electrical connections within the control panel.
- iii. Measure resistance between stator windings (in Ohms).
- iv. Check voltage supply between all phases of the electrical control panel.
- v. Check voltage balance between all phases on the load side of the pump / mixer control panel with pump / mixer running (VAC).
- vi. Check amperage draw on all phases of the motor (in Amps).
- vii. Check condition and operation of the motor thermal protection control system (if equipped)
- viii. Check for physical damage of power, control cables and switches. Replace where necessary

b. Mechanical Works shall include:

- i. Removal of pump from the lift station for physical inspection. (Corrosion, oil seepage, etc.)
- ii. Clean the pump inside out
- iii. Check condition of upper and lower shaft seals and replace with new ones
- iv. Replace all the bearings
- v. Check and repair key and keyway wallow
- vi. Check condition and operation of leakage. Fix all leakages if any
- vii. Check and replace all filters
- viii. Drain oil from oil housing and replace with new oil.
- ix. Pipe flushing
- x. Check for worn or loose impeller or gears. Correct measure to be taken to bring it back to the state of full/proper operation
- xi. Check impeller/gear wear rings (rotating & stationary), replace if required
- xii. Adjust clearances as needed for optimal operation.
- xiii. Check for any unusual noise in the upper and lower bearings.
- xiv. Clean, reset and check operation of the level control system
- xv. Check for correct shaft rotation and alignment.
- xvi. Test the pump, under load (if liquid level in the station permits).
- xvii. Perform shut off head test on pumps to establish pressure being produced
- xviii. Check operation of valves and associated equipment.
- xix. Clean and flush the truck transfer inlet to the pump and the connecting pipes

- xx. General flushing of the pump after serviced
- xxi. Cleaning of the outer surface and paint where necessary with respect to current color.

NB: Flushing to be carried out by diesel.

Other necessary checks/replacements apart from specified works above where necessary is to be carried out by the contractor in order to make the pump functional, and these replacements are to be recorded and handed to EFL personnel in charge.

2. Testing and Calibration

An operational test to be carried out in the Presence of EFL Generation Personnel. After the approval of the pump normalizing from the generation staff, further calibration with respect to the fluid density to be conducted along with balancing of the pump. A final report on the servicing and the parts changed with respect to electrical and mechanical functions to be submitted once the pump is fully operational.

Note:

- 1. Contractor to be responsible for providing all parts to be changed either electrical or mechanical with evidence of the new parts that requires replacement upon the inspection result.
- 2. Report on the progress of work to be provided daily to the officer in charge.
- 3. A detailed work plan to be provided with expected **date of completion**.
- 4. Flushing to be carried out in Environmentally controlled manner
- 5. EFL financial terms are applicable for these works.
- 6. Site visit is mandatory
- **7.** Refer to the appendix for the name plates

Section E - Price Schedule

Energy Fiji Ltd

Inspection, Servicing, Testing and Calibration of Heavy Fuel Oil Transfer Pump at EFL's Navutu Depot

| Item | ITEM DESCRIPTION | UNIT PRICE Currency \$ | TOTAL PRICE Currency \$ |
|------|-------------------------|---------------------------|----------------------------|
| 1 | Inspection and Report | | |
| 2 | Servicing of Pump | | |
| 3 | Testing and Calibration | | |
| | TOTAL (VEP) | | |
| | VAT 9% | | |
| | TOTAL (VIP) | | |

Section F – Appendix

Nameplates

i. Motor

| CIAG TYP | FLAMEPROOF INDUCTION E | |
|---------------|------------------------------|---|
| IOLTS . Hz 50 | RPM 975 | PF. 0.81 |
| AMPS CONIL, | DESIGN IP 6 | 11.6 |
| CERIAL NO | RISE 75 °C INSUL | Contraction of the second s |
| BRG DE 6110/ | C3 NDE 5310/0 | 3 MASS 207 kg |
| | IS EX37687 MDA EXA | |

ii. Pump



Tender Submission

<u>Two (2) hard copies</u> of the tender bids in sealed envelope shall be deposited in the tender box located at the Supply Chain Office at the EFL Head Office, 2 Marlow Street, Suva, Fiji.

Courier charges for delivery of Tender Document must be paid by the bidders.

This tender closes at 4:00 p.m. (16.00hrs Fiji time) on Wednesday 4th July, 2018.

Each tender shall be sealed in an envelope with the envelope bearing only the following marking:

MR 242/2018

Inspection, Servicing, Testing and Calibration of Heavy Fuel Oil Standby Transfer Pump at EFL's Navutu Depot

The Secretary,

Tender Committee

Energy Fiji Limited

Supply Chain Office

Private Mail Bag,

Suva

It must also indicate the name and address of the tenderer on the reverse of the envelope.

All late tenders, unmarked Envelopes and envelopes without bidder's name and address on the reverse on the envelope will be returned to the Tenderers unopened. (Bids via e-mail or fax will not be considered).

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act and must have the most current Tax Compliance Certificate.

For further information or clarification please contact our Supply Chain Office on phone (+679) 3224360 or (+679) 9991587.

Bidders are requested to submit a:

- Valid Tax Compliance Certificate
- FNPF Compliance Certificate

20.