

**ENERGY FIJI LIMITED**



**TENDER SPECIFICATIONS**

**TENDER**

**TENDER NO: MR 38/2019**

**SUPPLY & COMMISSIONING OF AN IDO UPLOADING  
PUMP UNIT FOR KINOYA POWER STATION.**

## **Submission of Tender**

**Two (2) hard copies** 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 pm on Wednesday 06<sup>th</sup> March, 2019**

**Site Visit at 11 am on Wednesday 13<sup>th</sup> February, 2019 at Kinoya Power Station**

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

**Tender- MR 38/2019 – SUPPLY & COMMISSIONING OF AN IDO UPLOADING PUMP UNIT FOR  
EFL KINOYA POWER STATION.**

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 of the envelope. (Bids via e-mail or fax will not be considered).**

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

## IDO Uploading Pump Unit Requirement

EFL is requesting tenders for the supply of reliable IDO uploading pump Units for Kinoya Power Station.

### Requirements:

1. Supply and Commissioning of 1 x IDO upholding pump units (The pump should be mounted on a base plate/ skid with an electric motor and gear box).

The pump should fit the existing pipework's with ease and include other accessories such as;

- a. all necessary electrical,
- b. individual flameproof switches for the pump,
- c. pump control system to automatically shut down in the case of back pressure
- d. Pressure and flow modulating valve (PFM)
- e. an emergency stops.

Current specs:

Motor size - 11KW, 4 Poles and 1488 rpm type.

Gearbox – 11KW @ 588 rpm.

Pump - V series model V40 pump set.

2. Pump Flow rate at 1200l/min @ 12m head. Horizontal distances of 6m and 15m from the pump to Tank 1 and Tank 2 respectively.
3. Inlet & Outlet Size – ANSI Class 150 4" Flange
4. Any modification to the pipe works will be done by EFL.
5. IDO Tank Capacity is  
Tank 1 - 1,236,648.42 Liters  
Tank 2 – 586,270.59 Liters
6. The System Design condition is as follows:

Liquid/Product	:	IDO- Industrial Diesel Oil (Specification attached)
Viscosity at 40 deg C, mm <sup>2</sup> /s	:	2.0-4.5
Density at 15 deg C – kg/m <sup>3</sup>	:	820-860

**Note:** Product is discharged at ambient temperature

**SITE INSPECTION IS OPTIONAL.**

# Typical IDO Test Sample Data



## CERTIFICATE OF QUALITY

SAMPLE ID : 952577(BUKOM) / 045140(ITS)

VESSEL : STI BLACK HAWK  
 TERMINAL : Shell Pulau Bukom  
 PRODUCT : GASOIL 0.05% S(ADF4)  
 PRODUCT CODE : FNGPDX0500A0  
 SOURCE : Shore Tank 131  
 TYPE OF SAMPLE : Before Loading  
 PORT : Singapore  
 DATE TESTED : 1st November, 2018

UPON WITNESSING IN TERMINALS LABORATORY, THE FOLLOWING RESULTS WERE OBTAINED:-

Property	Units	Limits		Test method	Results
		Min	Max		
Appearance @ 25°C	—	—	1	ASTM D4176(Proc 2)	1
Aromatics (Total) *	wt%	19.0	—	IP 391	28.7
Aromatics Polycyclic *	wt%	—	11.0	IP 391	3.6
Ash *	wt%	—	0.01	ASTM D482	<0.001
Water and Sediment *	% vol	—	0.05	ASTM D2709	<0.01
Carbon Residue (on 10% bottom) *	wt%	—	0.20	ASTM D4530	<0.1
Cetane Index	—	46.0	—	ASTM D4737	53.3
Cloud Point	°C	—	+10	ASTM D2500	+4
Color	—	—	2.0	ASTM D1500	<0.5
Electrical Conductivity @ 30°C	pS/m	150	600	ASTM D2624	243
Corrosion, Copper Strp (3hrs @ 100 °C)	Class	—	1	ASTM D130	No.1
Density @ 15°C	kg/m3	820.0	860.0	ASTM D4052	839.2
Distillation	—	—	—	ASTM D86	—
Initial Boiling Point	°C	—	Report	—	164.8
10% Recovered	°C	—	Report	—	209.0
50% Recovered	°C	—	Report	—	282.8
90% Recovered	°C	—	Report	—	348.7
95% Recovered	°C	—	371.0	—	364.9
Final Boiling Point	°C	—	Report	—	373.3
Fatty Acid Alkyl Ester (FAME) *	% vol	—	0.1	EN14078	<0.05
Flash Point	°C	64.0	—	ASTM D93(Proc A)	67.0
Filter Blocking Tendency	FBT	—	2.0	IP 387	1.00
Lubricity wear scar diameter @ 60°C	microns	—	460	IP 450	393
Total Acid Number *	mg KOH/g	—	0.25	ASTM D974	0.03
Strong Acid Number *	mg KOH/g	—	Nil	ASTM D974	NIL
Oxidation Stability (Insolubles) *	mg/100ml.	—	2.5	ASTM D2274	0.8
Sulfur, Total *	wt.ppm	—	500	ASTM D5453	69
Viscosity @ 40 °C	cSt	2.0	4.5	ASTM D445	3.161
Odour	—	Mechantable	—	INDIRECT	Marketable
Pour Point	°C	—	+9	ASTM D97	+3
FAME CONTENT AT MANUFACTURE	Vol %	Report		Declaration	NIL ADDITION
Additives	—	—	—	—	—
Stadis Dissipation Additive- Stadis 450	mg/L	Report		Declaration	1.00
Lubricity Additive- Infineum R655	mg/kg	Report		Declaration	120
Cetane Improver	Vol %	Report		Declaration	NIL
Flow Improver Additive R240	mg/kg	Report		Declaration	NIL

\*The product meets the given specifications\*

\*With respect to the USA and US Territories, this product is designated as high sulfur diesel fuel for use only in American Samoa or the Commonwealth of Northern Mariana Islands

Note : \* Tested in ITS Lab



### INTERTEK APPROVED SIGNATORY

This report shall not be reproduced except in full, without the written approval of the laboratory. Unless specified, the above results relate only to the items tested.

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All work is performed in accordance with Intertek Standard Test and Conditions of Service which is available on request and at <http://www.intertek.com/standard>

**SUPPLY & COMMISSIONING OF AN IDO UPLOADING PUMP UNIT FOR EFL KINOYA POWER STATION.**

<b>Item</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT PRICE</b>	<b>TOTAL PRICE</b>
1	Supply of 1 x IDO uploading pump Inclusive of motor/gearbox/ control system attached on a skid Plate. (attach pump set/motor/gearbox/control system specification).		
2	Commissioning* Include: Travel, Accommodation and Withholding tax of 15% etc.		
3	Freight/Transportation Cost CIF/DDU/Ex Stocks - Shipping		
	<b>TOTAL (VEP)</b>		

\*15% Withholding tax will apply for any local works carried out by an overseas company.

**NOTE:**

1. All hardware (wire, staples, screws, poles, connectors etc.) must be galvanized.
2. All vertical support poles must be set in concrete and poles to have caps on top.
4. All Sub-contractors to be used for any part of the works are to be declared.
5. A detailed work plan to be provided with expected date of completion. A work plan is a mandatory submission.
6. Warranty for the fencing works must be provided.
7. EFL financial terms are applicable for these works. Any advance payment will require a bank guarantee.
8. Site inspection is mandatory.

## **TENDER SUBMISSION CHECK LIST**

*The Bidders must ensure that the details and documentation mention below must submitted as part of their tender Bid*

Tender Number \_\_\_\_\_

Tender Name \_\_\_\_\_

1. Full Company Name: \_\_\_\_\_

**(Attach copy of Registration Certificate)**

2. Director/Owner(s): \_\_\_\_\_

3. Postal Address: \_\_\_\_\_

4. Phone Contact: \_\_\_\_\_

5. Fax Number: \_\_\_\_\_

6. Email address: \_\_\_\_\_

7. Office Location: \_\_\_\_\_

8. TIN Number: \_\_\_\_\_

**(Attach copy of the VAT/TIN Registration Certificate - Local Bidders Only)**

9. Company Registration Number: \_\_\_\_\_

**(Attach copy of the Business License)**

10. FNPF Employer Registration Number: \_\_\_\_\_

**(For Local Bidders only)**

11. Contact Person: \_\_\_\_\_

I declare that all the above information is

correct. Name: \_\_\_\_\_

Position: \_\_\_\_\_

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

## **Tender Submission - Instruction to bidders**

It is mandatory for Bidders to upload a copy of their bid in the TENDER LINK Electronic Tender Box no later than **1600hrs, Wednesday, 6<sup>th</sup> March, 2019**.

To register your interest and tender a response, view 'Current Tenders' at:

<https://www.tenderlink.com/efl>

For further information contact The Secretary Tender Committee, by e-mail

[TDelairewa@efl.com.fj](mailto:TDelairewa@efl.com.fj)

In addition, hard copies of the tender, one original and one copy must be deposited in the tender box located at the EFL Head Office, 2 Marlow Street, Suva, Fiji no later than new time and date to be inserted - Addressed as

### **Tender – MR 38/2019 – Supply, Installation & Commissioning of an IDO Uploading Pump Unit for the EFL's Kinoya Power Station**

**The Secretary Tender Committee  
Energy Fiji Limited  
Head Office  
Suva  
Fiji**

**Hard copies of the Tender bid will be accepted after the closing date and time provided a soft copy is uploaded in the e-Tender Box and it is dispatched before the closing date and time.**

Tenders received after **closing time 1600hrs, Wednesday 6<sup>th</sup> March, 2019**.

- Will not be considered.
- Lowest bid will not necessarily be accepted as successful bid.

**It is the responsibility of the bidder to pay courier chargers and all other cost associated with the delivery of the hard copy of the Tender submission.**

Appendix



Fig1. Existing pump unit at Kinoya Power Station



Fig2. Existing pump control system