



**FIJI ELECTRICITY AUTHORITY**

**TENDER NO MR 114/2015**

**July 2015**

**SPECIFICATIONS FOR THE SUPPLY OF:**

- **INDUSTRIAL DIESEL OIL (IDO)**
  - *Max 500ppm (0.05%) Sulphur Content*

## 1.0 **INTRODUCTION**

The Fiji Electricity Authority (hereinafter referred to as the “FEA or Authority”) invites tenders for the supply of the following product:

- a. Diesel or Gas Oil (Max 0.05% Sulphur Content) as per Product Specifications for FEA use. The bids should indicate clearly costs for Bundled and unbundled on **a regional basis (Viti Levu and Vanua Levu/Ovalau)**. Tender Pricing templates will be also provided. The contract term will be for a **two (2) year period** from **the date of award of the contract**.

### 1.1 **FEA DELIVERY POINTS**

Currently the Authority has Power Stations and or Depots at the following locations which shall be the point of delivery of the products as and when required. Deliveries shall always be made during normal working hours or after hours as may be required. Delivery of IDO shall be into the storage tank located at the power Stations. Some of the tanks are owned by TOTAL (Fiji) Ltd. Capacity of tanks and Ownership are shown in Clause 2.1

#### 1.1.1 **Viti Levu**

1. Vuda Power Station
2. Nadi Airport Power Station
3. Sigatoka Power Station
4. Kinoya Power Station
5. Deuba Power Station
6. Rokobili Power Station
7. Vatuwaqa Power Station
8. Monasavu Depot
9. Rakiraki Power Station
10. Korovou Power Station
11. Qeleloa Power Station
12. Wailoa Power Station
13. Nadarivatu Power Station

### 1.1.2 Vanua Levu

- 14. Labasa Power Station
- 15. Savusavu Power Station

### 1.1.3 Ovalau

- 16. Levuka Power Station – (via pipeline through FEA on site meter)

All plants/generating sets at each site are detailed in Appendix B.

## 2.0 INDUSTRIAL DIESEL OIL (IDO)

The successful tenderer shall sell and deliver or procure to be delivered to the Power Station sites belonging to or which will belong to the Authority as aforementioned or any other site in Fiji nominated by FEA.

Tank capacities and ownership of tanks at Power Stations at various locations are presented as follows:

### 2.1 STORAGE TANK DETAILS

<u>LOCATION</u>	<u>QTY.</u>	<u>TOTAL CAPACITY</u> <u>IN LITRES</u>	<u>TANK OWNERSHIP</u>
Vuda	1	711,900	FEA
Nadi Airport	2	104,500	FEA
Sigatoka	2	109,000	TOTAL
Deuba	1	54,600	TOTAL
Kinoya	2	1,852,000	FEA
Rokobili	2	80,000	FEA
Monasavu	1	10,000	FEA
Rakiraki	1	54,200	TOTAL
Labasa	4	212,000	FEA
Savusavu	2	106,000	TOTAL
Korovou	1	54,500	TOTAL
Wailoa	1	10,000	FEA
Qeleloa	1	50,000	FEA
Levuka	1	25,000	TOTAL

### 2.2 Estimated Consumptions

The Authority's consumptions from the year 2010, up to date is shown in Appendix C. It must be borne in mind however, that in the

event of the breakdown at any Hydro Power Stations supplying to FEA Power Grid or dry weather conditions that may dramatically reduce Hydro plant power generation, tenderers should state how they would intend to accommodate this increase should the circumstances extend for an extend time.

In 2014, Annual Consumption of Diesel fuel for the Power Stations of the Authority was about **59,000 Metric Tons**.

Please note this quantity may vary according to change in demand, plant outage or circumstances beyond FEA control. Refer Appendix C for details on fuel usage at each station.

**Bidders are required to detail current tank storage capacity and how they will be able cater for FEA max fuel requirements per month should it exceed available storage capacity. This will include any arrangements with other fuel suppliers.**

**Conversely, bidders are to clearly explain how they will cater for fuel storage in the event FEA does not accept deliveries due to increased hydro power generation when dam levels are healthy.**

## 2.3 Tendered Pricing Format

Pricing Format: Single Price; Variable Monthly **in line with International Spot posted prices with Fixed Constant for all onshore costs.**

The pricing shall follow the format shown below with a transparent pricing template that determines the price according to latest **International Plats daily Spot Prices**. The template is constructed as follows :

<b>BULK DIESEL(IDO 500ppm Sulphur content) PRICING TEMPLATE FOR FEA - FEBRUARY 2015 DIESEL PRICE FOR VITI LEVU,VANUA LEVU &amp; OVALAU</b>		
1	<b>FOB Singapore</b>	US\$/MT
2	<b>Product Premium</b>	US\$/MT
3	Offshore Freight	US\$/MT
4	Insurance	US\$/MT
5	<b>Total delivered price(CIF) to Suva/Vuda excl Fiji's Government Charges(Duty, Wharfage &amp; VAT)</b>	US\$/MT
6	Exchange Rate	FJ\$1 = US\$
7	<b>Total delivered price to Suva excluding Fiji's Government Charges (Duty, Wharfage &amp; VAT)</b>	FJ\$/MT
8	Fiscal Duty	FJ\$/MT
9	Wharfage	FJ\$/MT
10	Constant Factor (including delivery/storage costs)	FJ\$/MT
11	<b>Total delivered price Excluding VAT to FEA in Viti levu for the month of February 201x</b>	FJ\$/MT
12	<b>Total delivered price Excluding VAT to FEA in Labasa and Savusavu for the month February 201x</b>	FJ\$/MT
13	<b>Total delivered price Excluding VAT to FEA in Ovalau for the month of February 201x</b>	FJ\$/MT

Where:

**Item 1 varies** in line with the Singapore market as the average for the month concerned of Platt's Singapore Sport Mid-Point Quotes for 500ppm Gas Oil. i.e world pricing for the fuel components of 500ppm Gas Oil in line with world prices posted by independent organization Platts. The supplier will quote FOB rates (US\$/Barrel) for each coming month from the 25<sup>th</sup> of the preceding month to the 24<sup>th</sup> of the current month. {For example, pricing for February 2015 is set from daily spot prices from 25 December 2014 to 24 January 2015}. The supplier then average the spot prices in US\$/Barrel and converts it to US\$/MT using the conversion factors below.

**Fixed Conversion Factors**

LITRES/USG	=	3.7854
LITRES/METRIC TONNE	=	1175
USG/BBL	=	42
LITRES/BBL	=	159

**Item 2** is the Product Premium associated with quality of the product in US Dollar per MT (Metric Tonne) **must remain constant** during the period of the contract.

**Item 3** is freight and associated costs from refinery to Fiji terminals, and **will alter on a monthly basis and in line with movement in world freight prices** (also independently monitored and published). It is quoted as Freight Worldscales 100 for Singapore to Vuda/Suva voyage x Worldscale level for MR AFRA for month of bill-of-lading, plus 50 Worldscale points clean premium :

**Item 4** is the cost of Insurance associated with shipping and handling of products from refinery to Fiji.

**Item 5** is the landed cost (CIF) in Fiji in US Dollar per MT (metric tonne) excluding any government or local costs.

**Item 6** the Exchange Rate from US Dollar to Fijian Dollar, is quoted as the average of the Fiji ANZ Bank selling rate for the month concerned: i.e, exchange rates for each coming month from the 25<sup>th</sup> of the preceding month to the 24<sup>th</sup> of the current month. {For example, pricing for February 2015 is set from daily spot rates from 25 December 2014 to 24 -January 2015}.

**Item 7** is the landed cost at in Suva in Fijian Dollar per MT.

**Item 8** is the Duty, is quoted at concession rate subject to approval by Fiji Customs for IDO (500ppm Diesel) and **may vary** according to the Fiji Government legislation applicable to FEA.

**Item 9** is the Wharfage costs in Fiji and **may vary** according to the Fiji Government legislation.

**Item 10** is the **constant factor** consisting of onshore operating costs, margin, and cartage costs from the supplier Terminal to FEA power stations in Viti Levu areas and remains fixed during the period of the contract.

**Item 11** is Total Delivered Price excluding VAT to FEA power stations VITI LEVU

**Item 12** is the total delivered price to the FEA power stations in Labasa/Savusavu and is including freight & cartage. Please note the local freight and cartage for Labasa/Savusavu shall remain fixed and can only be reviewed on an annual basis. Any changes can only take place under mutual agreement. Any onshore operating costs and margins (excluding local freight and cartage) should be included in item 10.

**Item 13** is the total delivered price to the FEA power stations in Ovalau and is including freight & cartage. Please note the local freight and cartage for Ovalau **shall remain fixed and can only be reviewed on an annual basis**. Any changes can only take place under mutual agreement. Any onshore operating costs and margins (excluding local freight and cartage) should be included in item 10.

## 2.5 GENERAL NOTES TO CONVERSION FORMULAE

### Fixed Conversion Factors

LITRES/USG	=	3.7854
LITRES/METRIC TONNE	=	1175
USG/BBL	=	42
LITRES/BBL	=	159

## 2.6 ENERGY CONTENT AND LIQUIDATED DAMAGES

**2.6.1** The tenderer shall ensure that the energy content of IDO it proposes to supply meets the limits specified on the IDO Product Specification for FEA use (refer Appendix A1).

**2.6.2** During the period of the contract, FEA will take random samples of IDO from either the supplier's storage tanks

(from which FEA fuel are supplied from) or from the output of the supplier's delivery tankers and send them away to an independent laboratory for testing against the product specification. The costs for these tests are expected to be shared equally by FEA and the supplier.

- 2.6.3** If the Energy content of the fuel from the tested sample falls below the minimum specified value of the FEA IDO Product Specification, a liquidated damage amount will be levied on the supplier on the following basis;

For each Tonnage supplied per month, FEA will ensure that it recovers from the supplier the full cost of the "lost or foregone Energy" quantity based on the full IDO Quantum delivered to FEA (particular to the batch from which the sample was taken) and on the applicable monthly price.

### **3.0 MOTOR SPIRITS (ULP) & AUTOMOTIVE DIESEL (ADO)**

Not required.

### **4.0 Fuel Card Services**

Not required.

## **5.0 GENERAL CONDITIONS**

### **5.1 Submission of Tenders**

Tenders in properly sealed envelopes clearly marked "TENDER No. MR114 /2015 – Supply of DIESEL FUEL for FEA," must be lodged with The Secretary, Tender Committee, Suva, Fiji no later than date specified in tender advertisement.

In the above regard tenderers are to submit their tender in triplicate with the original clearly marked "ORIGINAL" and the others marked "COPY".

### **5.2 Other Conditions**

- 5.2.1** The Authority does not bind itself to accept the lowest for any tender and retains the right to let the contract in full or in part (split tenders).

- 5.2.2** The Authority will in no way be obliged to give reasons for



its acceptances or rejection of any tender.

**5.2.3** The successful tenderer will be required to guarantee regularity in delivery to the locations aforesaid.

**5.2.4** The Authority retains the right to use up stocks of product, brought in by the previous contractor for their exclusive use and which are on hand at the commencement date of the award of this contract, before placing orders with the successful tenderer.

**5.2.5** All products offered must be compatible with those being presently used. Where blending is necessary the successful tenderer must provide assurances that the machines and or equipment are safeguarded during the transition period (this implies that condition-monitoring services will be maintained and guaranteed during that period

**5.2.6** Should the successful tenderer fail to effect delivery of any product within time or offer a product of an inferior quality to that tendered or at any time fail to replace a product reasonably rejected by the Authority shall be at liberty and have right to :

- (i) either cancel the contract, or
- (ii) purchase such product from alternate source and in the later event, should the price be higher than the Tendered price, the Authority shall retain the right of deducting the difference from payment of any future deliveries or of payments due.

**5.2.7** Quantities given in this tender are only intended to be indicative of future consumption and as such the Authority accepts no liability should these figures prove incorrect for future usage patterns.

**5.2.8** Prices quoted should take into account the supply of storage facilities and equipment owned by the successful tenderer.

**5.2.9** The successful tenderer shall guarantee constant supply and storage of fuels over the entire duration of the contract.

**5.2.10** Tenderers must advise on Diesel condition monitoring and precautions necessary where fuel/oil is stored on a long-term basis. This is to counter gum and sludge formation, microbiological growth and tank corrosion brought about by low pH solutions. Tenderers should include costs associated with this device in their overall tendered price for Diesel.

**5.2.11** The successful tenderer shall be required to submit quality certificates for each batch of fuel delivered to Authority from an independent testing organisation, for each batch of fuel, which may be used by the Authority. (Refer to example on Appendix E) The successful tenderer should ensure that they conform to the specification laid out. Tenderers shall have provision for the Authority nominated staff to witness any tests that are performed locally under circumstances when a batch certificate of quality assurance from an independent testing organisation is not provided.

**5.2.12** Where the storage tanks are the property of the supplier or leased from the Authority, the supplier shall be responsible for regular inspection and proper maintenance and calibration of such tanks. In this regard should any spillage and or leakage occur and it is firmly established such was the result of the supplier's storage equipment failure, the supplier shall:

- i. Make good any loss of the product to the Authority.
- ii. Clean up such spillage and or leakage, and
- iii. Meet all claims of damages etc arising from such spillage and or leakage.

### **5.3 TENDERER TO ACQUAINT ITSELF BEFORE SUBMITTING TENDER**

No claims will be entertained by the Principal for any omission in the tender submitted. It is the tenderer's responsibility to ensure that he has a thorough understanding of the Authority's requirements.

### **5.4 VERBAL ADVICE**

Verbal advice given or obtained in respect of their specifications shall not constitute a warranty or a representation to the tenderer and shall not be binding on either or the Authority's. The Authority shall be bound only by written advice or information furnished by the Principals to the tenderer.

### **5.5 VALIDITY OF TENDER**

All tenders submitted will remain valid for acceptance for a period of **thirty days (30) from the date of closure** of this tender.

### **5.6 ACCEPTANCE OF TENDER**

The successful tender will be notified in writing of the Authority's acceptance of his tender, and any agreed variations and/or additions which may pertain. The letter of acceptance will form the basis of the contract in conjunction with the terms and conditions contained in the tender documents.

### **5.7 REJECTION OF TENDER**

FEA reserves the right to accept or reject any non-conforming tender. However tenderers may submit an alternate tender provided it is duly marked as such.

## **5.8 CONSTRUCTION OF CONTRACT**

The Contract established by the issue of the Principals' letter of acceptance shall operate in all aspects and be governed and construed with respect to the law for the time being in force in the country of Fiji.

## **5.9 CANCELLATION**

This tender will be construed as when formed into a contract being available for cancellation by either party giving three (3) months notice in writing to the other. Cancellation shall not be able to be performed when the contract is under force majeure nor within one month of the lifting of a force majeure invitation.

## **5.10 PAYMENT & DISCOUNT**

Credit terms shall be **30 days**, that is, purchase made in the current month will be paid for by the end of the following month. However tenderers must specify any additional discounts offered for the early settlement/payment of accounts or for volume discounts.

## **5.11 ASSIGNMENT OF CONTRACT**

This Contract is made between the Authority and the successful tenderer and during the life of the contract as determined shall not be assigned to subcontractors or other persons without the prior approval in writing of the Authority.

## **5.12 ESTIMATED USAGE**

The Authority envisages that the total requirements will be as tabulated in the Appendix C and Appendix D. The Authority does not bind themselves to these estimates and reserve the right to exceed or reduce the forecasted usage. The Contractor must agree that he will make no claim of the Authority's estimated usage during the contracted periods.

### **5.13 TECHNICAL SERVICES**

The level of technical and support services available to the Authority will be a factor in the award of the contract. It is the Authority's requirements to be provided with and kept updated with the most up to date technological support. Tenderers shall include in their proposal details of their technical and support services. The Authority's minimum requirements are as follows :

- a. The Contractor in conjunction with each of the Authority's operating and engineering sections is to constantly review practices and conditions with the aim of increasing performance to reduce the operating costs. Details of the proposed method of establishing realistic targets and the format for reporting of results are required to be submitted with the tender proposal.
- b. Schedules of monthly visits from technical representatives.
- c. Emergency call-out facilities
- d. Regular surveys to ensure that the material being consumed is appropriate to the end use and continued recommendations for improvement in application.
- e. Technical training of staff including updates on technological change.
- f. Give assurance to the Authority that all dispensing equipments used for trading do comply with Local regulation. i.e. Meters, Storage Tanks, Product trucks, etc.

### **5.14 GUARANTEES**

The Contractor shall guarantee the quality of all products to the specification accepted by the Authority. The Contractor shall guarantee further; all on-site services to the level agreed between the tenderer and the Authority's prior to the award of the contract. The type of guarantee for performance of product and service that the Authority is seeking from the Contractor is as

follows:

“In the event of non-performance of product or service for any reason other than negligence on the part of the Authority, the contractor shall reimburse to the Authority a business interruption payment without prejudice based on its position immediately prior to the failure for any similar or proven resulting damages whatsoever”.

For this type of guarantee the Authority envisages that the Contractor would maintain a suitable business interruption policy

## **5.15 WEIGHBRIDGE CERTIFICATE OR TONNAGE CALCULATIONS**

For all bulk products a weighbridge certificate shall be presented with each delivery as and when requested or via tonnage calculation and invoiced as per procedure below:

### **Invoices**

The Supplier must ensure that all invoices issued by it to the Authority in relation to products delivered by it to the Authority are accurate and provide all necessary details relating to the delivered products including:

- a. Density of delivered products at 15 degrees centigrade;  
***(Please note the density at 15 degree centigrade should be related to the refinery certificate).***
- b. Temperature of delivered product at time of delivery.
- c. Volume of delivered product in litres and equivalent metric tons based on the pricing template and applicable to the date of delivery
- d. The base price for the delivered product.
- e. The volume correction factor applicable to the date of delivery.

## **5.16 PRODUCT SPECIFICATION**

The Product Specification will be those accepted by the Authority prior to the award of the contract. The specification shall include a guaranteed shelf/storage life where applicable.

## **5.17 TESTING AND QUALITY CONTROL (Bulk Products Sampling)**

The Contractor shall perform acceptance tests on a sample of each deliver of bulk product prior to discharge into the Authority holding areas.

Alternatively the Contractor shall perform tests at the time of pumping into the Authority's varying tankage. Secondary testing will be carried out after settling and ownership will pass only after acceptance of the results of the secondary testing.

### **Acceptance**

All bulk products shall be accepted following the successful completion of testing carried out as in the preceding paragraph and which demonstrates that the products meet specification. The acceptance test methods used shall be those agreed prior to award of the contract between the Authority and the tenderer.

### **Rejection**

Where rejection may occur all rejected product shall, subject to any lien thereof which the Authority may have in circumstances, be removed by the Contractor at its own expense from the Authority's premises and if the Authority has not exercised its right to cancellation shall be replaced by product which is in accordance with the specification at no additional expense to the Authority. Any rejected product not removed by the Contractor from the Authority's premises within 30 days of the date of notification of the rejection, may be returned to the Contractor by the Authority at the Contractors cost.

## **5.18 SUPPLY DEFINITIONS**

Due to the unique nature of the Petroleum Industry the tenderer is requested to detail the definition of the supply term which will be used in this tender such as the definitions of FOB, FREIGHT and how it is calculated, INSURANCE and the way it will be calculated, OCEAN LOSS and calculations, DUTY, the definition of an M R TANKER and its capacity, the definition of an LCT TANKER and its capacity, the definition of MARGIN applicable to tender.

The tenderer will also be required to detail the mode of delivery and discharge procedure required at the Authority's terminal. This shall include the requirements for the Authority's personnel being attendant and the duties required by those personnel.

## **5.19 DOCUMENTATION**

For the purpose of the tender each tenderer will be required to detail the documentation which will support their delivery of both local and international products. This documentation will include but not be limited to refinery certificate, a full acceptance test report, a report of cargo discharge, an original invoice, price calculation basis, a copy of the Singapore Spot verification, if this is being used as the standard, or similar validation. These documents must be in the hands of the Authority within three days of the delivery occurring or as agreed.

## **5.20 ESCALATION PROVISIONS**

Any product pricing escalations or changes shall be as detailed in each individual product clauses mentioned above and will need to be mutually agreed between the supplier and the Authority.



## **5.21 FORCE MAJUERE**

- a. All orders from the Principals are to be filled within the designated delivery time provided that those delivery times are within the agreed framework of the terms of the contractor but not withstanding anything contained herein to the contrary no failure or omission by the company to carry out or observe any of the terms or provisions, stipulations or conditions shall give rise to any claim against it or be deemed to be a breach if the same shall arise directly or indirectly form force majeure .
- b. For the purpose of this cause Force Majeure shall include Act of God; invasion, riot, civil commotion, revolution; conspiracy; civil war; mutiny; military; naval war-like operations whether before or after declaration of war and whether war in fact shall be or have been declared or not; fire or epidemic.

Lockouts, labour disturbances or strike shall be considered as Force Majeure only if they are beyond the Contractors ability to have any effect on their outcome.

Inability of the Contractor to procure stocks or to procure sufficient stocks or sufficient transport facilities to enable its normal stocks in Fiji to be maintained, if this inability is beyond the control of the Contractor.

In the event of any of the above mentioned, the Purchaser shall be free to purchase from any other supplier any deficiency or deliveries caused by operation of this clause. If the operation of this clause causes a change to the pricing of the goods, Purchaser shall be free to purchase from other suppliers and the seller shall be obliged to examined his liability to subsidise the difference in purchase price between the contracted price and the actual price by the purchaser.

## **5.22 TESTING REQUIREMENT AND TECHNOLOGY ADVANCEMENT**

The Principals have a responsibility to stay abreast of technology advancement. To achieve this end the Principals reserve the right to purchase similar and alternative products from other sources throughout the period of the contract for the purpose of testing and evaluating alternative product.

## **5.23 ENVIRONMENT**

In view of environmental legislation, tenderers are required to provide provisions in their tender documents for ways and means for disposal of used fuels and/ or used oils. Cost for purchase of waste oil and fuel from various depots and power stations to be stated for 205 litre drum. (Empty drums could be also returned with the waste oil or fuel)

## **5.24 STORAGE FACILITIES**

Location where contractors storage facilities are installed in Authority's premises, the contractor shall ensure the storage facilities comply with : Pacific Island Protection Storage and Handling – Standard PI 1 of 1994; the Authority's fire control regulations and the Fiji Occupational Health and Safety Act, 1996; AS1940 - The storage and Handling of Flammable and combustible liquids; and relevant international technical standards that are applicable for facilities that store and use fuel.

## **5.25 EXIT PLAN**

The successful tenderer (s) will need to work out an exit plan with the current supplier on purchasing/leasing of current storage infrastructure and equipment before full operation.

They will also need to include in the offer the proposed exit plan if another supplier takes over the contract at the end of this proposed contract period.

## APPENDIX A1

### DIESEL FUEL TECHNICAL SPECS

Specifications of Industrial Diesel Fuel (IDO) for FEA use are as follows:

**Application** : Fuel for diesel engines and furnaces.

TEST	UNIT	LIMIT	METHOD
Appearance		1 Max	ASTM D4176
Colour		3 max	ASTM D1500
Density @ 15°C	kg/L	0.82 - 0.86	ASTM D4052
Cetane Index		45 min	ASTM D4737
Flash Point	°C	61.5 min	ASTM D93
Viscosity-kinematic @ 40°C	cSt	1.9 - 5.5	ASTM D445
Cloud Point	°C	15 max	ASTM D2500
Cold Filter Plugging Point	°C	13 max	IP 309
Carbon content on 10% bottoms	% mass	0.10 max	ASTM D189
Ash	% mass	0.01 max	ASTM D482
Water	% vol	0.05 max	ASTM D95
Sediment	% mass	0.01 max	ASTM D473
Acid number - total	mg KOH/g	0.5 max	ASTM D974
-strong	mg KOH/g	Nil	ASTM D974
Sulphur-total	% mass	0.05 max	ASTM D4294
Copper Corrosion 3h @ 100°C		1 max	ASTM D130
Distillation 90% recovered	°C	357 max	ASTM D86
Oxidation Stability	mg/L	25 max	ASTM D2274
Conductivity	pS/m	50 min	ASTM D2624
Energy Content (Thermal Energy)	Mj/kg	45.3 min	BS 2869 PART II
	kcal/kg	10,820 min	

## **APPENDIX A2**

### **MOTOR SPIRIT TECHNICAL SPECS**

Specifications of Unleaded Motor Spirit (ULP) for FEA

# APPENDIX B

Details of Generating Sets						
Station	Set	Make	Model	Year	Capacity	Capacity
					Available (MW)	Installed (MW)
Wailoa	1	TIBB (Milano)-Pelton Wheel	Hydro	1983	19.00	20.80
	2	TIBB (Milano)-Pelton Wheel	Hydro	1983	19.00	20.80
	3	TIBB (Milano)-Pelton Wheel	Hydro	1983	19.00	20.80
	4	TIBB (Milano)-Pelton Wheel	Hydro	1983	19.00	20.80
Vuda IDO	1	Mirlees Blackstone	KV16	1976	4.00	5.00
	2	Mirlees Blackstone	KV16	1976	4.00	5.00
Vuda - HFO	3	Wartsila	18V32LN	2001	6.00	6.30
	4	Wartsila	18V32LN	2001	6.00	6.30
Nadi	1	Caterpillar	CAT3516	2002	1.00	1.00
	2	Caterpillar	CAT3516	2002	1.00	1.00
	3	Cummins	QSK60	2001	0.80	1.00
	5	Cummins	KTA50-G3	2014	0.80	1.00
	6	Cummins	KTA50-G3	2012	0.80	1.00
	7	Cummins	KTA50-G3	2012	0.80	1.00
	8	Cummins	KTA50-G3	2012	0.80	1.00
	9	Cummins	KTA50-G3	2012	0.80	1.00
	10	Cummins	KTA50-G3	2012	0.80	1.00
	11	Cummins	KTA50-G3	2014	0.80	1.00
	12	Cummins	KTA50-G3	2012	0.80	1.00
Qeleloa	1	Caterpillar	CAT3516	2002	1.00	1.00
	2	Caterpillar	CAT3516	2002	1.00	1.00
	3	Cummins	KTA50-G3	2014	0.80	1.00
	4	Cummins	KTA50-G3	2014	0.80	1.00
	5	Cummins	KTA50-G3	2014	0.80	1.00
	6	Cummins	KTA50-G3	2014	0.80	1.00
	7	Cummins	KTA50-G3	2014	0.80	1.00
Rakiraki	1	Caterpillar	CAT3516	2002	0.80	1.00
	2	Caterpillar	CAT3516	2002	0.80	1.00
Sigatoka	1	Cummins	KTA 50-G3	2014	0.80	1.00
	2	Caterpillar	CAT3516B	2000	1.00	1.00
	3	Caterpillar	CAT3516B	2000	1.00	1.00
	4	Cummins	KTA 50-G3	2014	0.80	1.00
	5	Cummins	QSK60-G4	2011	1.40	1.60
	6	Cummins	QSK60-G4	2011	1.40	1.60
	7	Cummins	QSK60-G4	2011	1.40	1.60
	8	Cummins	QSK60-G4	2011	1.40	1.60
Deuba	4	Cummins	QSK60	2012	1.40	1.60
	5	Cummins	QSK60	2012	1.40	1.60
	6	Cummins	QSK60	2012	1.40	1.60
Rokobili	1	Caterpillar	CAT 3516	2001	1.00	1.20
	2	Caterpillar	CAT 3516	2001	1.00	1.20
	3	Caterpillar	CAT 3516	2001	1.00	1.20
	4	Caterpillar	CAT 3516	2001	1.00	1.20
	5	Caterpillar	CAT 3516	2001	1.00	1.20
	6	Caterpillar	CAT 3516	2001	1.00	1.20
	8	Cummins	KTA50-G3	2014	0.80	1.00
	9	Cummins	KTA50-G3	2014	0.80	1.00
	10	Cummins	KTA50-G3	2014	0.80	1.00
	11	Cummins	KTA50-G3	2014	0.80	1.00
	12	Cummins	QSK38	2014	1.00	1.00
	13	Cummins	QSK38	2014	1.00	1.00
	14	Cummins	QSK38	2014	1.00	1.00
	15	Cummins	QSK38	2014	1.00	1.00
	16	Cummins	QSK38	2014	1.00	1.00
Kinoya-IDO	1	Mak Cat 1	16CM32	2005	7.00	7.45
	2	Mak Cat 2	16CM32	2005	7.00	7.45
	3	Mak Cat 3	16CM32	2005	7.00	7.45
	4	Mak Cat 4	16CM32	2005	7.00	7.45
Kinoya-HFO	8	Wartsila	18W38	2001	10.00	10.33
	9	Wartsila	18W38	2001	10.00	10.33
Labasa	1	Ruston	12RK270	1998	2.50	2.72
	2	Caterpillar	CAT3516	2009	1.30	1.60
	3	Caterpillar	CAT3516	2009	1.30	1.60
	4	Caterpillar	CAT3516	2009	1.30	1.60
	5	Cummins	QSK60	2012	1.20	1.60
	6	Ruston	16RK270	2000	2.20	2.40
	7	Caterpillar	CAT3516	2002	1.00	1.00
	8	Caterpillar	CAT3516	2002	1.00	1.00
	10	Caterpillar	CAT3516	2002	1.00	1.00
Savusavu	1	Caterpillar	CAT3516	2002	1.00	1.00
	3	Caterpillar	CAT3412	2002	0.30	0.50
	2	Cummins	KTA50-G3	2014	0.80	1.00
	4	Cummins	KTA50-G3	2014	0.80	1.00
	5	Cummins	KTA50-G3	2014	0.80	1.00
Wainiqueu	1	Chinese	Hydro	1992	0.40	0.40
	2	Chinese	Hydro	1992	0.40	0.40
Korovou						
	2	Caterpillar	C18	2006	0.40	0.50
Levuka	1	Cummins	QSK23-G3	2006	0.50	0.60
	2	Cummins	QSK23-G3	2006	0.50	0.60
	3	Cummins	QSK23-G3	2006	0.50	0.60
	4	Caterpillar	CAT 3412 C STA	2008	0.40	0.50
	5	Caterpillar	CAT 3412 C STA	2008	0.40	0.50
Wainikasou	1	Frances Turbine	Voith Esac	2003	3.20	3.30
	2	Frances Turbine	Voith Esac	2003	3.20	3.30
Nagado	1	Pelton Wheel	Voith Esac	2004	1.90	2.80
Butoni Wind Farm	37	GEV MP Vergnet SA	Wind ( 37 x 275)	2007	9.90	10.18
Nadarivatu	1	Pelton Wheel	Hydro	2012	20.00	22.00
	2	Pelton Wheel	Hydro	2012	20.00	22.00
					Available	Installed
			National Total Thermal (MW)		132	147
			National Total Hydro (MW)		125	137
			Butoni Wind Farm (MW)		10	10
			National Total (MW)		267	294

## APPENDIX C

### Fuel Usage (Metric Tons) 2010 - 2014

Stations	2010	2011	2012	2013	2014
Vuda	16,841	14,277	3,980	1,765	416
Nadi	1,137	774	538	679	3,801
Sigatoka	3,268	2,201	1,817	2,716	5,100
Rakiraki	886	938	1,278	987	1,488
Kinoya	25,946	24,465	11,564	12,404	29,921
Debua	782	754	494	860	2,508
Rokobili	-	-	-	-	1,689
Labasa	7,140	6,289	6,377	6,093	6,601
Savusavu	2,151	1,912	2,451	2,256	2,664
Korovou	3	6	12	12	15
Levuka	2,563	1,753	2,174	2,375	2,173
Qeleloa	-	42	-	35	2,799
<b>Total</b>	<b>60,718</b>	<b>53,410</b>	<b>30,684</b>	<b>30,181</b>	<b>59,175</b>

## **APPENDIX D**

### **Estimated Annual Volume**

**Estimated Annual Volume:** 30,000 metric tons of IDO per year.

The above is the estimate that FEA will purchase during a 12month period. FEA reserves the right to exceed or reduce the above estimated Annual Volume.

The estimated volume will be subject to variation of up to + / - 50% during the contract period. A 3 month advance usage forecast will be provided by FEA.

**APPENDIX E**  
**CERTIFICATE OF QUALITY (EXAMPLE ONLY)**

Product: Gas Oil

Cert Id : COQ03001766

Spec Id : GOP1618VI

Cert. Date : 18 Mar 03

N o.	Test Description	Test-Method	Units	Min.	Max.	Result	Result
	Sample Point					F3422	IVER EXPLORER
	Batch No.						ST0303078
	Sample Name					03034239	030354OS
	Sample Date					15 Mar 03	18 Mar 03
1	Appear @ 20 Degc, Haze Level	ASTM O4176			4	1	1
2	Calculated Cetane Index	ASTM 04737		40		54	
3	Density @ 15 Deg.C kg/l	ASTM D4052	KG/L		0.876	0.8431	0.8481
4	Apl. Gravity @ 15.6 Deg. C	ASTM D4052	API			35.3	35.3
5	Dist. 10% Recovered	ASTM D88	DEGC		266	242	
6	Dist. 40% Recovered	ASTM D88	DEGC		299	280	
7	Dist. 50% Recovered	ASTM D86	DEGC			290.8	
8	Dist 90% Recovered	ASTM 086	DEGC		357	354	
9	Dist. FBP	ASTM 086	DEGC		399	382	
10	Flash Point – PMCC	ASTM D93	DEGC	65		84	85
11	Viscosity @ 40 Deg.C	ASTM D445	CST	1.5	5.8	3.8	
12	Cloud Point by D2500	ASTM D2500	DEGC		6	+4	
13	Pour Point	ASTM D97	DEGC		3	-3	
14	Micro Carbon Residue (10% Bt)	ASTM D4530MOD	MASSPCT		0.35	0.01#	
15	ASH	ASTM D482	MASSPCT		0.01	<0.01#	
16	Water & Sediment in Distillate	ASTM D22709	VOLPCT		0.01	<0.01	
17	Sulphur	ASTM D4294	MASSPCT		0.05	0.1	
18	Strong Acid No. (Mineral Acid)	ASTM D974	MGKOH/G		Nil	Nil#	
19	Total Acid No.	ASTM D974	MGKOGH/G		0.25	0.01#	
20	Copper Corrosion (# hrs At 100 Deg. C)	ASTM D130			2	1A	
21	ASTM Color	ASTM D1500			3.0	L1.0	L1.0
22	Oxidation Stability–16 hrs	ASTM D2274	MG/100ML		2.5	0.4#	
23	Conductivity	ASTM D2624	Ps/M		50min		



## **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 FEA Head Office, 2 Marlow Street, Suva, Fiji.

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

**This tender closes at 4:00pm, on Wednesday 12<sup>th</sup> of August, 2015.**

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

**Tender- MR 114/2015 – Supply of Industrial Diesel Oil**

The Secretary, Tender Committee  
Fiji Electricity Authority

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 will be returned to the Tenderers.**

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

**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 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: \_\_\_\_\_