

INFORMATION SHEET FOR PROCUREMENT OF 600kW GENERATOR SET

Reference No.: FNK-I/IUL/2020/021

Issued on: 26th January 2020

Issued by:

Fenaka Corporation Limited

Male', Republic of Maldives





Section I: Instruction to Bidders

A. General		
1. Scope of Bid	1.1	Fenaka Corporation Limited requests quotations for a
		600kW generator set in accordance to Section III,
		Technical Specifications
2. Eligible Participants	2.1	Local companies registered in Maldives are eligible to
		participate in the tender
	2.2	Foreign companies are eligible to participate in the
		tender only if the total bid value is above 2,500,000
		Maldivian Rufiyaa.
B. Preparation of the Bid		
3. Bid Prices	3.1	The unit price of each item and the total price shall be
		clearly indicated in the quotation
	3.2	All items shall be quoted in the bid (please refer to
		Section III, Technical Specifications for the details of
		required items)
	3.3	Quotation shall separately indicate the additional
		charges such as freight charges, insurance, etc.
	3.4	The bidder shall submit quotation on CIF basis to Male'
		port
4. Currency	4.1	The bidder shall quote entirely in Maldivian Rufiyaa or
		US Dollars
5. Alternative Bids	5.1	Bidders can submit a maximum of two (2) options
6. Validity of Bids	6.1	Quotation shall remain valid for minimum sixty (60)
		days from the date of bid opening

Page **2** of **10**

Fenaka Corporation Limited

Ports Complex Building 7th Floor, HilaaleeMagu

Male' 20307, Republic of Maldives

Tel: [960] 300 7555 : مُورُدُّةُ : Fax: [960] 332 7555 : مُورُدُّة



Email: info@fenaka.com.mv

Website: www.fenaka.com.mv





7 D 110	7.1	
7. Bid Security	7.1	All bids should be accompanied with a bid security of
		USD 3,000 (Three Thousand US Dollars) or its
		equivalent in Maldivian Rufiyaa
	7.2	The bid security should be:
		- Original bank guarantee letter (or)
		- Bank guaranteed and stamped check (or)
		- An insurance policy from Maldives Monetary
		Authority (MMA) registered insurance company
	7.3	Any bid not accompanied by a Bid Security shall be
		rejected during bid opening
	7.4	The bid security must be valid for a minimum of twenty
		(20) additional days beyond the validity of quotation
8. Technical Compliance	8.1	All relevant information including the brand shall be
		given to enable technical evaluation of quoted items
	8.2	The documents required for technical evaluation are:
		- Technical data sheets of engine and the alternator
		- Datasheets specifying cooling system rated at
		ambient temperature 50°C
		- Certificate of Authenticity specifying
		manufacturer/assembler is an OEM or a genuine
		reputed international engine brand
	8.3	If the manufacturer or assembler is not the same as the
		bidder, a document indicating that manufacturer or
		assembler is willing to sell the generator set to the
		bidder is required
	8.4	Technical compliance letter will be required to enable
		technical evaluation
		The state of the s

Page **3** of **10**

Fenaka Corporation Limited

Ports Complex Building 7th Floor, HilaaleeMagu

Male' 20307, Republic of Maldives

Tel: [960] 300 7555 : مُورُدُّةُ : Fax: [960] 332 7555 : مُورُدُّة



info@fenaka.com.mv

Website: www.fenaka.com.mv

Email:





	8.5	If the goods do not comply with the requirements
	0.5	mentioned in Section III, Technical Specifications, the
		bid will be rejected during evaluation.
	8.6	
	8.0	Generator set should comply with our requirements, if
	0.1	not the bid will be rejected
9. Documents	9.1	Quotation (inclusive of the delivery period and
Comprising the Bid		payment terms)
	9.2	Specifications of the offered product
	9.3	Certificate of Authenticity specifying that manufacturer
		/ assembler is an OEM of a genuine reputed
		international engine brand
	9.4	Details of the company
		- Company profile/background
		- Company registration certificate
		- GST registration certificate (for local bidders only)
		- TAX clearance report (6 months validity)
		- Contact details (name, designation, mobile number
		and e-mail address)
	9.5	Experience letters, if available
		- Letters within past five (5) years
		- Relevant experience letters
		- Letters with project name and value
	9.6	One (1) compact disc with original bid document
		scanned and written
	9.7	Bids lacking the documents above are subjected to be
		rejected during the bid opening
10. Format of Bid	10.1	The Bidder shall submit two (2) sets of the bid
		document (1 original and 1 copy), enclosed separately
		in two envelopes and sealed with company stamp

Page **4** of **10**

Fenaka Corporation Limited

Ports Complex Building 7th Floor, HilaaleeMagu

Male' 20307, Republic of Maldives

Tel: [960] 300 7555 : مُورُدُّةُ : Fax: [960] 332 7555 : مُورُدُّةُ



Email: info@fenaka.com.mv : برخورو Website: www.fenaka.com.mv : وُقْدَارِهُ :





1	٠	
	10.2	All pages of the bid document shall be stamped and
		bound properly (excluding the bid security)
C. Bid Submission		
11. Sealing and Marking	11.1	The bid document shall be sealed properly in an
Bid Document		envelope clearly marked 'ORIGINAL' or 'COPY',
		with the name of the company and the tender reference
		number (FNK-I/IUL/2020/021)
12. Bid Opening	12.1	The bids will be opened on 06 th February 2020,
		11:00am in the presence of bidders
	12.2	Bids will be opened at:
		Fenaka Corporation Limited
		Hilaalee Magu, K. Male', Republic of Maldives
	12.3	Bids received electronically will not be accepted
13. Bid Rejection	13.1	Bidders that arrive after bid submission deadline shall
		not be able to participate in the bid.
	13.2	Bidders that do not register for the tender are unable to
		participate in the bid opening
	13.3	Bids lacking the documents mentioned in 9. Documents
		Comprising the Bid (except 9.5 Experience letters) and
		that do not comply with 10. Format of Bid are subjected
		to be rejected
D. Awarding of Contra	act	
14. Payment Terms	14.1	An advance will not be released for this project
15. Factory Acceptance	15.1	All generators should be tested to run at 25%, 50%,
Testing		75%, 100%, and 110% of rated load and power factor
		until the engine temperature stabilized for 30 minutes,
		and should check the protections below:
		- Lub oil low level (alarm testing)
		- Lub oil low pressure (alarm testing)
I	l	

Page **5** of **10**

Fenaka Corporation Limited

Ports Complex Building 7th Floor, HilaaleeMagu

Male' 20307, Republic of Maldives

Tel: [960] 300 7555 : こうらを Fax: [960] 332 7555 : こっこう



ۇسْرَمَ كَامْدَيْدَسْمَشْ مِرْدِغَ ؟ كَرْمُوْكُ كَادْيْرُوْمْكُ عِنْدِيْدَ 7 وَسُرْ وَسُرْدِ رِوَّهُ رِوَّهِ دَدُّ دُوْرُ 20307 ، مِرْدُرِمَّدُهُ

Email: info@fenaka.com.mv : جُرُمُوْد Website: www.fenaka.com.mv : وُفْتَ مِنْ اللهِ





وسرا مربر برسوس بروع یا وسرا مربر برسوس در در برای

- Earth fault (alarm testing)
- Over current (alarm testing)
- High temperature (alarm testing)
- Cooling system (alarm testing)
- High voltage pressure (alarm testing)
- All the functioning tests and routine tests should be done
- 15.2 All the protections should work properly, it should be examined for oil and coolant leaks, and it should be visually tested and secured
- 15.3 The remote radiator should operate continuously 100% in a 50 degree ambient temperature
 - It should be designed with vertical air discharge remote radiator with motor and fan
 - It should include all the generator connection pipes, accessories, joints and diagrams
 - The radiator should be developed remotely from the engine providing an added flexibility cooling system, and to be installed at the desired location
 - It should be designed with lower power consumption, and high efficiency aero foil designed fans are used
 - It must be designed with lower noise levels
 - The radiator core should be formed using high efficiency fin profile
 - The thickness of connection pipes must be in a range of 2mm to 4mm

Page **6** of **10**

: 00 cc

ئۇرىم :

Email: info@fenaka.com.mv

Website: www.fenaka.com.mv





Section II: Evaluation Criteria

Proposal Cost: 70 points for the lowest price

- (Lowest price / proposed price) x 70

Delivery: 20 points for the lowest delivery period

- (Lowest delivery period / proposed delivery period) x 20
- If the delivery period indicates 'ex-stock', it shall be taken same as the party offering the longest delivery period.

Credit Period: 10 points for the maximum credit period

- (Proposed credit period / longest credit period) x 10
- No points will be given for payment terms if the supplier requests for Letter of Credit (LC)

Page **7** of **10**







Section III: Technical Specifications

*Please note that the below specifications are for one unit only.

S/N:	Description	Unit	Qty
1	600 kW prime rated diesel generator set with parameters 0.8 P.F, 415kV, 3 Phase, 4 wires, 50 Hz at 1500 r.p.m. Powered by Internationally reputed brand engine coupled with internationally reputed brand Alternator.	1	No
	The Generator set shall be powered by a Branded engine origin or		
	assembled/manufactured by an Original Company's Licenced OEM manufactured/assembler.		
	The engine must produce a mechanical power output (kW _m) which should meet the		
	required electric power (kW _e) of 600kW and must be coupled with a 600kW		
	Alternator with pre-installed Droop CT and a control connection box (termination		
	box to connect control cables and power cables)		
	Engine to be complete with following auxilliary items :		
	Heavy electrical flywheel		
	SAE flywheel housing		
	 Air filters, Lubricating Oil Filters, Fuel Filters and all other such filter required 		
	for operation of the engine		
	Low lubricating oil pressure switch		
	High engine temperature switch		
	• lub oil sender		
	Water Temperature Sender		
	All necessary items to run and to protect the engine Starting any import fitted to engine consisting of a		
	Starting equipment fitted to engine, consisting of : 24 Volt charging alternator (Brushless)		
	• 24 Volt starting motor		
	• Fuel Shut-off solenoid		
	Heavy duty lead acid batteries, supplied in a dry charged condition		
	Governing System		
	The engine to be fitted with a close tolerance Electronic Governing system,		
	which should include efc, actuators, magnetic pickups, etc, including wiring		
	Cooling Equipment		
	Cooling equipment compromising a heavy-duty tropical radiator, together		
	with pusher type cooling fan and guards to be fitted. The radiator core		
	should be elecroplated with silver solder tin plated to prevent early failure		
	due to corrosion. Coupon plated radiators are acceptable. Radiator has to		
rad Rad	be mounted on vibration mounts with enough strength to withstand the radiator and vibrations.		
	Radiator must be designed to adequately cool the generator at an ambient		
	temperature of 509C		
	Exhaust system 450 mm of stainless steel bellow type flexible exhaust, together with		
	suitable flanges and fittings shall be supplied for each silencer. • Alternator		
	- Paralliano		

Page **8** of **10**

Fenaka Corporation Limited

Ports Complex Building 7th Floor, HilaaleeMagu

Male' 20307, Republic of Maldives

Tel: [960] 300 7555 : عُوْرُورُ : Fax: [960] 332 7555 : مُورُورُ :



ۇىدىما ئامرېكارىشىش ودىغ ؛ كېرىھە ئادە ئۇرىس ھۇياشد 7 دىس زىشردۇرۇ، رۇو دۇ دۇر 20307 ، دۇرىگەرى

Email: info@fenaka.com.mv : جُرُورُو Website: www.fenaka.com.mv





	The alternator shall be brushless revolving type altenator, having class H insulation on both the stator and field windings. It shall be built and rated to BS 5000, tropically impregnated with voltage regulation being in the order of +/- 1.5% from no load to full load under the steady state conditions assuming a speed variation not exceeding 4% on the engine. Anti-Condensation Coil to be fitted in the Alternator.		
	Generator arrangement and drive		
	The simplex type base plate is of heavy duty rolled steel constructed, bolted and electrically welded, drilled on the underside to allow the fitting of foundation bolts. The engine and the alternator are to be mounted on a base plate and vibration mounts to be mounted underside of the base plate. The vibration mounts are to be supplied as loose item.		
1.2	Finishing After assembling the genset zinc coated self-etching primer should be applied to the complete set. Final system.	,	No
1.2	Fuel system	1	No
	A fuel day tank of 12 hours capacity complete with level indicator, drain plug, filler, fuel return with fuel outlet connections and a fuel filter fitted with outlet connection is to be mounted. These mounts are are to be suuplied as loose item. All necessary fittings to be supplied in conformity with fuel flow diagram.		
1.3	Factory testing	1	No
	The generator should be fully tested at the manufacturer workshop in the presence of client/apointees to check the ratings, overload, functional tests on a dummy load prior to dispatch in case the bidder is unable to provide factory test as required the bidder shall provide an extended warranty of one extra year than mentioned in iteme no 1.6 of this document.		110
1.4	Literature and drawings consisting of: 1 No x Manual on How to handle the generation equipment 1 Nos x Electrical wiring diagram 1 No x Engine operation and maintenance manual 1 No x Engine parts catalogue 1 No x Generator parts catalogue 1 No x Generator operation and maintenace manual 1 No x Generator AVR manual 1 No x Governor control unit manual 1 No x Engine shop manual	1	Lot
1.5	Accessories		
	The Components shall meet the British Standard and ISO standards. Items are for the		
	above mentioned generator sets.		
1.5.1	Primary silencer barrel (to match engine exhaust)	2	No
1.5.2	Secondary silencer barrel (to match engine exhaust)	2	No
1.5.4	3m Exhaust pipe dia (to match engine exhaust) Elbows having dia (to match the engine exhaust)	6	No No
1.5.5	Flanges having dia (to match the engine exhaust)	8	No
1.5.6	Bolts, Nuts and Washers for the Flanges. (Each set shall include 1 bolt, 2 washers,1spring washer 2 Nuts)	1	Lot
1.5.7	Split type rockwool insulation lagging suitable for 75 to 125mm dia. Exhaust pipes. The lagging shall be covered with High Quality Aluminium foil.	1	Lot

Page **9** of **10**

Fenaka Corporation Limited

Ports Complex Building 7th Floor, HilaaleeMagu

Male' 20307, Republic of Maldives

Tel: [960] 300 7555 : څڅونو : Fax: [960] 332 7555 : ثومه



Email: info@fenaka.com.mv : برخورشو Website: www.fenaka.com.mv : مُوْهِسَّرِيهُ





وسرا (۱) در در وره و وره و دره و

Generator set should carry a warranty of one year from the date of commissioning

1

Lot

Documents Required for technical evaluation

- · technical data sheets of engine
- · technical data sheets of Alternator
- datasheets specifying cooling system rated at ambient temperature 50°C
- Certificate of Authenticity specifying manufacturer /Assembler is an OEM of a genuine reputed international Engine Brand

Note: Proposal that do not conform to the given technical specification shall be rejected.

Prepared and checked by:

Technical Services & Green Energy Department

Page **10** of **10**

: 00 cc

ئۇرىم :

Tel: [960] 300 7555 Fax: [960] 332 7555



Email: info@fenaka.com.mv : پُرِخُرِمُوْ Website: www.fenaka.com.mv : پُوْسُــَامِيْوُ