



The Federal Democratic Republic of Ethiopia

## **Bidding Document**

### **For Procurement of Goods**

**Subject of Procurement** Supply, Installation, Test, Commissioning of New 400KVA Soundproof, Diesel-Driven Generator with ATS & Configuration with Existing power system at MoWE Compound

**Procurement Reference Number** MOWE-NCB-G-GOV-04-2017

**Date of Issue of Bidding Document**

**Addis Ababa, March 2025**



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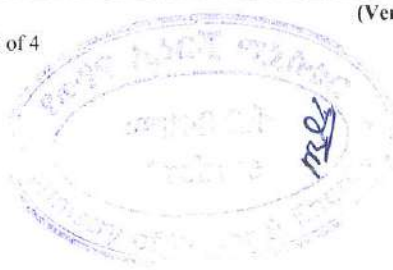
## Section 2. Bid Data Sheet (BDS)

Instructions for Bidders (ITB) reference	Data relevant to ITB
<b>A. Introduction</b>	
<b>ITB 1.1</b>	The Public Body is: <b>the Ministry of Water and Energy</b> Registered Address:
<b>ITB 1.1</b>	The Bidding Document is issued under Procurement Method:
<b>ITB 1.2 and 25.2(b)</b>	The Project name is: General description of Goods that are subject of the procurement is: Supply, Installation, Test, Commissioning of New 400KVA Soundproof, Diesel-Driven Generator with ATS & Configuration with Existing power system at MoWE Compound
<b>ITB 1.3 and 25.2(b)</b>	The Procurement Reference Number is: <b>MOWE-NCB-G-GOV-04-2017</b>
<b>ITB 1.3</b>	The number and identification of Lots in this Bidding Document is: None
<b>ITB 4.1(a)</b>	The individuals or firms in a joint venture, consortium or association jointly and severally liable. <b>Not applicable</b>
<b>ITB 4.6(b)(ii)</b>	Domestic Bidders shall provide VAT registration certificate issued by the tax authority in case of contract value of ETB 100,000 and above.
<b>ITB 4.8</b>	A Bidder shall amend the evidence of its continued eligibility with the following documents: <ul style="list-style-type: none"> <li>a) Valid business license indicating the stream of business in which the Bidder is engaged,</li> <li>b) VAT registration certificate issued by the tax authority</li> <li>c) Valid Tax clearance certificate issued by the tax authority</li> <li>d) Registration on the FPPA supplier list</li> <li>e) If there are three or more bids accepted by the Ministry, it is mandatory for the bidder to meet at least 80% of the contract obligations.</li> </ul>
<b>ITB 5.6</b>	The Bidder shall be required to include with its bid, documentation from the Manufacturer of the Goods, that it has been duly authorized to supply, in Ethiopia, the Goods indicated in its bid.

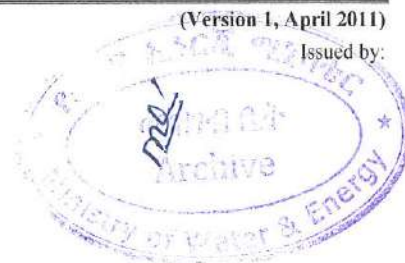




<b>B. Bidding Documents</b>																	
<b>ITB 7.1 and 9.4</b>	<p>For <b>questions and/or clarification purposes</b> only, the Public Body's address is:</p> <table border="1"> <tr> <td>Public Body:</td><td>Ministry of Water and Energy</td></tr> <tr> <td>Attention:</td><td>Ato Mehandis Melaku</td></tr> <tr> <td>Floor/Room number:</td><td>Ministry of Water &amp; Energy building, 2nd floor Room No.215</td></tr> <tr> <td>Street Address:</td><td>Haile Gebre Silase Street</td></tr> <tr> <td>Town/City:</td><td>Addis Ababa</td></tr> <tr> <td>Country:</td><td>Ethiopia</td></tr> <tr> <td>Telephone:</td><td>+251116898036</td></tr> <tr> <td>E-mail address</td><td>Procurement@mowe.gov.et</td></tr> </table>	Public Body:	Ministry of Water and Energy	Attention:	Ato Mehandis Melaku	Floor/Room number:	Ministry of Water & Energy building, 2nd floor Room No.215	Street Address:	Haile Gebre Silase Street	Town/City:	Addis Ababa	Country:	Ethiopia	Telephone:	+251116898036	E-mail address	Procurement@mowe.gov.et
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<b>ITB 7.1 and 9.4</b>	<p><b>The deadline for submission of questions and/or clarifications is: 10 days prior to the bid submission deadline</b></p> <p><b>Date:</b></p> <p><b>Time:</b></p>																
<b>C. Preparation of Bids</b>																	
<b>ITC 11.1</b>	Language of the Bid shall be <b>English</b> .																
<b>ITB 12.5</b>	The Incoterms edition is: 2020																
<b>ITB 13.1</b>	For Goods and Related Services that the Bidder will supply from inside Ethiopia the prices shall be quoted in <u>Ethiopian Birr(ETB)</u> .																
<b>ITB 14.1</b>	Bidder must provide in the Bidder Certification of Compliance Form information related to its professional qualification and capability for the current and the previous years in order to proof its professional capacity.																
<b>ITB 15.2(b)</b>	<p>As a proof of the bidder's financial standing the following documents need to be furnished:</p> <ul style="list-style-type: none"> <li>Financial statements certified by an independent auditor for the past Five years</li> </ul>																
<b>ITB 16.7</b>	The Public Body may undertake physical checking of current Bidder's technical qualifications and competence.																
<b>ITB 17.1</b>	<p>Bidder furnish as part of its bid the following documentary technical evidence:</p> <ul style="list-style-type: none"> <li>Product ISO and Quality assurance certificate should be submitted with the bid in compliance to the specification</li> <li>Product datasheet, brochures and/or catalogue shall be submitted.</li> <li>Necessary operational/user manuals</li> <li>Technical specification of the quoted products</li> </ul>																
<b>ITB 20.1</b>	Alternative Bids shall not be considered.																
<b>ITB 21.1</b>	The bid validity period shall be: <b>90 days</b> .																
<b>ITB 22.1</b>	A <b>Bid Security shall be</b> required. A Bid Security amount is for Birr <b>200,000.00</b>																



	(Two hundred thousand Birr)														
<b>ITB 24.1</b>	In addition to the original of the bid, the number of copies required is: <b>Two</b> .														
<b>ITB 24.1</b>	<p>Bidders required to submit bid documents in two envelopes containing the technical and financial proposals separately.</p> <ul style="list-style-type: none"> <li>• Technical proposal shall be consisted of mandatory documentary evidence listed in the ITB Clause 23.2 (a) to (e);</li> <li>• Financial proposal shall be consisted of Price Schedule for the Goods and Related Services offered, as stated in the ITB Clause 23.2 (f).</li> </ul>														
<b>D. Submission and Opening of Bids</b>															
<b>ITB 26.1</b>	<p>For <b>bid submission purposes</b> only, the Public Body's address is:</p> <table border="1"> <tr> <td>Public Body:</td><td>Ministry of Water and Energy</td></tr> <tr> <td>Attention:</td><td>Ato Mehandis Melaku</td></tr> <tr> <td>Floor/Room number:</td><td>Ministry of Water &amp; Energy building, 2nd floor Room No.211</td></tr> <tr> <td>Street Address:</td><td>Haile Gebre Silase Street</td></tr> <tr> <td>Town/City:</td><td>Addis Ababa</td></tr> <tr> <td>Country:</td><td>Ethiopia</td></tr> </table> <p>The deadline for bid submission is:  <b>Date:</b>  <b>Time: 2:00PM</b></p>	Public Body:	Ministry of Water and Energy	Attention:	Ato Mehandis Melaku	Floor/Room number:	Ministry of Water & Energy building, 2nd floor Room No.211	Street Address:	Haile Gebre Silase Street	Town/City:	Addis Ababa	Country:	Ethiopia		
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<b>ITB 29.1</b>	<p>The <b>bid opening</b> shall take place at:</p> <table border="1"> <tr> <td>Public Body:</td><td>Ministry of Water and Energy</td></tr> <tr> <td>Floor/Room number:</td><td>Ministry of Water &amp; Energy building, 2nd floor Room No.211</td></tr> <tr> <td>Street Address:</td><td>Haile Gebre Silase Street</td></tr> <tr> <td>Town/City:</td><td>Addis Ababa</td></tr> <tr> <td>Country:</td><td>Ethiopia</td></tr> <tr> <td>Date:</td><td></td></tr> <tr> <td>Time:</td><td>2:30 PM</td></tr> </table>	Public Body:	Ministry of Water and Energy	Floor/Room number:	Ministry of Water & Energy building, 2nd floor Room No.211	Street Address:	Haile Gebre Silase Street	Town/City:	Addis Ababa	Country:	Ethiopia	Date:		Time:	2:30 PM
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Date:															
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<b>E. Evaluation, and Comparison of Bids</b>															
<b>ITB 34.2</b>	Bidder has to confirm that he accepts the correction of the calculation error within the period of 3 days														
<b>ITB 37.5(c)</b>	The average annual turnover for the last 5 business year of the Bidder must exceed 15,000.00ETB														
<b>ITB 38.2</b>	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: <b>ETB</b>														
<b>F. Award of Contract</b>															
<b>ITB 44.1</b>	<p>The percentage by which quantities may be increased is: 20% .</p> <p>The percentage by which quantities may be decreased is: 20%.</p>														



## Section 3.



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## Section 3. Evaluation Methodology and Criteria

This section, read in conjunction with Section 1, Instructions to Bidders and Section 2, Bid Data Sheet, contains all the factors, methods and criteria that the Public Body shall use to evaluate a bid and determine whether a bidder has the required qualifications. No other factors, methods or criteria shall be used.

### 1. Professional, Technical, and Financial Qualification Criteria

The following qualification criteria will be applied to Bidders. In the case of bids submitted by a consortium, these qualification criteria will be applied to the consortium as a whole :

#### 1.1 Professional Qualifications and Capability of the Bidder (ITB Clause 14)

- (a). ☐ At least 3 staff currently work for the Bidder;
- (b). ☐ Among the staff mentioned in sub-clause (a) should be at least ;
  - ☐ 1 Electrical Engineer, Mechanical Engineer, Electro Mechanical Engineer or any related field having BSc degree and 4 years specific experience or MSc degree and 2 years specific experience in installation, maintenance, and commissioning of different type of Generators, Experience with automatic transfer switches (ATS), synchronizing panels, and generator controllers.,
  - ☐ 2 Electrical Technology, Electrical Installation, or a related field with Advanced Diploma, Diploma or TVET Level 3 and above with COC and 4 years specific experience in generator installation, wiring, and maintenance.

**Financial Standing of the Bidder (ITB Clause 15)** The Bidder shall furnish documentary evidence that it meets the following financial requirement(s):

- (c). The Audited financial statement applicable to the purchaser for the last **five** shall be submitted and must demonstrate the current soundness of bidder's financial position and indicate its progressive long term profitability
- (d). The average annual turnover calculated as total certified payments received for contracts in progress or completed within the last 5 years must exceed ETB **150,000.00**

### 2. Determining the Successful Bid

According to the methodology defined in the Public Procurement Proclamation and Directives the Public Body shall select the successful bid by applying the following method:

- A. ☒ The bid that is found to be substantially responsive to the professional, technical, and financial qualification requirements, technically compliant in relation to the technical specifications, and with the lowest price.
- B. The bid that is found to be substantially responsive to the professional, technical, and financial qualification requirements, technically compliant in relation to the technical specifications, and with the lowest evaluated bid The lowest evaluated bid shall be the bid offering better economic advantage ascertained on the basis of factors affecting the economic value of the bid.

- A. ☐ The Bid with the Lowest Price





- 2.1 The bids shall be examined to confirm that all documentary evidence establishing the Bidders' qualifications requested in ITB Clause 23 have been provided;
- 2.2 After confirming the bids comprise all mandatory documentary evidence establishing the Bidder's qualification the Public Body will rule on the legal, technical, professional, and financial admissibility of each bid, classifying it as compliant or non-compliant with qualification requirements set forth in the Bidding Document;
- 2.3 The Public Body will then analyze the bids' technical conformity in relation to the technical specifications, classifying them technically compliant or non-compliant.
- 2.4 The Public Body shall continue evaluation of bids that have been determined to be substantially responsive with rectification of nonconformities and omissions in bids, if any.
- 2.5 The Public Body shall examine all bids to ascertain whether there are any arithmetic errors in computation and summation. The Public Body shall notify bidders on adjusted calculation errors and request bidders to confirm that they accept the correction of the calculation error within the time limit of three days from the receiving of the notification.
- 2.6 After evaluation of legal, professional, technical, and financial admissibility of bids the Public Body shall award of the contract the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and with the lowest price.

**B. Determining the Lowest Evaluated Bid Offering the Best Economic Advantage**

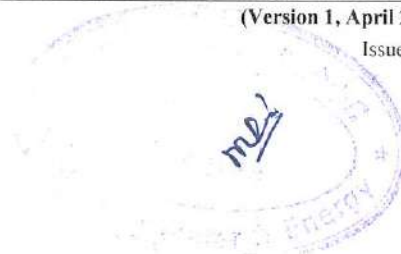
- 2.7 Provided all mandatory legal, professional, technical, and financial requirements have been met all technically compliant Bids shall be evaluated and scored using the two-stage bid evaluation and scoring method. In accordance with ITB Clause 38.4(f), the Public Body's evaluation of the Bid will take into account, in addition to the bid price, the following additional evaluation criteria in order of their importance and their proportional weight in the total system of evaluation, as specified below:

- (a). The additional evaluation criteria and their weighting factor that indicate their level of importance are determined, as follows:

Priorit y	Name of criteria	Proportional value in %
1.		
2.		
3.		
4.		
I	Total Additional Criteria (1+2+3+4)	
II	Bid Price	
III	Sum Total (I+II)	100

- (b). The Public Body will evaluate any additional criterion using the following scoring scale:

SCORING		DESCRIPTION
10	Excellent	Exceeds the requirements of the criteria significantly and in beneficial ways/very desirable
9	Very Good	Exceeds the requirements of the criteria in ways which are beneficial to our needs
7-8	Good	Fully meets the requirement of the criteria
5-6	Average	Adequately meets most of the requirements of the criteria. May be lacking in some areas that are not critical.
3-4	Poor	Addresses all of the requirements of the criterion to the minimum acceptable level.





SCORING		DESCRIPTION
1-2	Very Poor	Minimally addresses some, but not all, of the requirements of the criteria or lacking in critical areas.
0	Unsatisfactory	Does not satisfy the requirements of the criteria in any manner.

- 2.8 Individual weighted scores for all technical criteria shall be weighted according to the set proportional weighting factors. The weighted result shall be calculated by multiplying the score by the proportional weighting factor of the individual criterion. The total score for the Bid determined through this method will be the basis for ranking Bids.
- 2.9 Where two bidders get equal merit points in the evaluation, preference shall be given to local products or services.
- 2.10 The Public Body may require bidders scoring equal merit points in the evaluation to submit further proposals on certain aspects of the bid with a view to identifying the successful bidder.
- 2.11 Where by reason of the bidders scoring equal merit points not submitting final proposals they are invited to submit, or by reason of the evaluation result of the final proposals submitted by the bidders being still equal, the successful bidder can not be singled out, the successful bidder shall be determined by casting lot in the presence, as far as possible, of the bidders concerned.
3. Domestic Preference If the ITB Clause 35 so specifies, the Public Body will grant a margin of preference to goods manufactured in the Federal democratic Republic of Ethiopia for the purpose of bid comparison, in accordance with the procedures outlined in subsequent paragraphs Responsive Bids shall be classified into the following groups:
- (a). Group A: Bids offering locally produced Goods meeting the criteria of ITB Sub Clause 35.3; and
- (b). Group B: all other Bids.

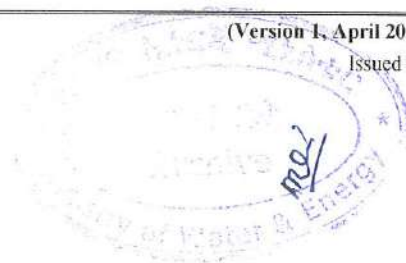
For the purpose of further evaluation and comparison of Bids only, an amount equal to 15% percent of the evaluated Bid prices determined in accordance with ITB Sub-Clause 35.3 shall be added to all Bids classified in Group B. 4.

4. Evaluation of Multiple Contracts Since in accordance with ITB Sub-Clause 38.6 the Public Body be allowed to award one or multiple lots to more than one Bidder, the following methodology shall be used for award of multiple contracts: To determine the lowest-evaluated lot combinations, the Public Body shall:
- (a). evaluate only lots or contracts that include at least the percentages of items per lot and quantity per item as specified in ITB 12.8;
- (b). take into account:
- (i) the lowest-evaluated bid for each lot that meets the requirement of evaluation criteria;
  - (ii) the price reduction per lot and the methodology for their application as offered by the Bidder in its bid; and
  - (iii) the contract-award sequence that provides the optimum economic combination, taking into account any limitations due to constraints in supply or execution capacity.

## 5. Alternative Bids

Alternative Bids, if permitted under BDS Clause 20.1, will be evaluated as follows:







# Part 2 Statement of Requirement

Section 6.

ADDIS ABABA

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## GENERAL TECHNICAL SPESFICATION

### 1.1. Standby Power Generating Plant

#### 1.1.1. General

The Out Door diesel generating sets shall consist of diesel engines and alternators mounted together on common base plates. They shall be suitable for continuous duty of twenty-four (24) hours per day, for operation under the climatic conditions and altitude as set out in the Particular Technical Specification, and shall be rated at 1,500 rpm.

The generating set shall be capable to deliver continuously 110% of its rated output for one hour in every twelve (12) hours, without any part impaired.

The Plant shall be designed to operate continuously in ambient temperature of up to 50°C (indoor conditions). They will be located Outdoor (canopy protection is required).

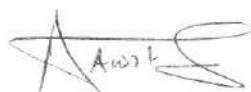
Whenever EEU power failure occurs, so as to satisfy part of the water demand, in the pump station an outdoor (canopy type) Standby diesel generator sets shall be erected in the Borehole-03 located at the respective site. The diesel generator sets shall include:

- Diesel generating set together with exhaust pipe work
- Fuel tanks and pipe work (for 12 hrs)
- Switchgear
- Cables
- Earthing
- All accessories and other necessary items
- Weather proof

The goods and associated equipment shall be of the highest possible standard and requiring the minimum of maintenance. The contractor shall therefore ensure that the equipment offered meets all relevant British Standards and is of a type and manufacture such that spares are readily available for immediate and long-term use.

The diesel generator sets, while providing a standby power sources, shall be continuously rated and of a type suitable for continuous operation: the diesel generating sets being brought into service only in the event of EEU mains supply failure or insufficient EEU power. Each set shall be rated for the pump and auxiliary duties specified together with all staring current, surges and the like, due allowance being made for the altitude and climate conditions specified.

It is intended that the diesel generating set is sized/rated to supply for the total electrical load at compound and sites specified. The details of the load capabilities



of each set shall be clearly identified on the set and as part of the operating manual supplied by the contractor.

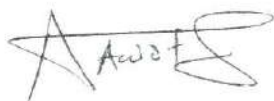
The total power required at the station is calculated by considering the starting current of the pump. Also, de rating factor of 0.8 is taken. And the final size of the generators shall be determined by the equipment going to be supplied & installed.

Altitude masl:	2372
Diesel engine:	
Ignition	Compression
Starting medium	Electric 12- or 24-volts heavy duty
Starting method	manual push button
Cycle	4 stroke -diesel
Cooling	Water-cooled with radiator
Lubrication	Pressure
Shut down	manual push button and automatic shutdown safety feature
Engine speed	1,500 revolution per minute
Alternator:	
Coupling	Direct
Generating voltage	400 volts
Phase	Three (3)
Connection	Star with neutral earth point
Power factor	0.8
Frequency	50Hz
Rating	Continuous
Overload	10% for 1 hour in any 12 hour period
Excitation	Self

The diesel generating equipment shall be designed and/or selected to operate under the specified conditions prevailing at the site in outdoor installation. In this respect the contractor shall allow for operation in an unheated, minimum ventilated building and dust-laden atmosphere.

The goods and mandatory spare parts shall be suitable for continuous operation and shall be rated to suit the prime power requirements of the complete installation including starting currents, surges and the like.

The ratings specified for the diesel generating sets are approximate only. It shall be the responsibility of the Contractor to liaise with the EEU and the Engineer to





determine precisely what loadings should be used to size the diesel generating sets, all details being agreed before the commencement of supply.

All components shall be fully tropicalised and protected against mould growth.

### 1.1.2. Engines

Engines shall be industrial four stroke, water or air cooled, direct injection machines and shall operate at not more than 1,500 rpm. Standardization of types is required such that all machines of the same output shall be from the same manufacturer. Where the requirement is for machines of different sizes, every attempt shall be made to supply machines from the same manufacturer, which share many components in common.

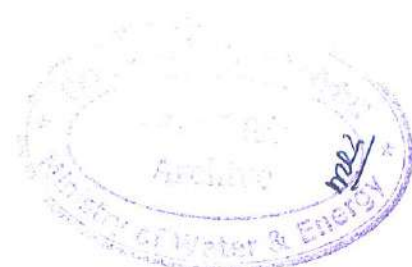
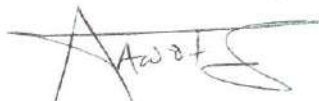
The site rating of the engine shall be calculated in accordance with BS 5514 and shall have an inherent overload capacity of 10% for 1 hour in any 12 hours. The engine shall be capable of operating at full load for 500 hours without attention to filters or injectors, and for 10,000 hours between major overhauls.

An automatic speed governor complying with class A2 of BS 5514 A1 (ISO 3046) shall be fitted. Facilities shall be provided to manually trim the engine speed by  $\pm 5\%$ . An independently acting, shaft driven over-speed device shall be fitted to trip the set at 120% of the rated speed. The device shall require resetting by hand before the engine can be re-started.

Engines driving generators of 2 MVA or less shall be started and controlled using 12/24 V (as applicable) supply from heavy-duty lead acid batteries. The engine starter motor shall be of the reselect type and the batteries sized to give six 30 second consecutive starts of the engine at an ambient temperature of 0°C. For small generators (up to 250 kW) the batteries may be set-mounted. For larger sets the batteries shall be separately mounted. A charging dynamo with automatic cut out, voltage regulator, ammeter, and all necessary cables shall be provided. The engine shall be provided with a contact (starting) key.

The engine lubrication system shall be of the closed circuit wet-sump forced feed type supplied by an engine-driven pump. The pump shall be fitted with pressure regulating and relief valves, sump suction filter and renewable micro-felt flow line filter.

In the case of water-cooled engines, the engines cooling system shall be by means of a heavy-duty air blast radiator, mounted on the generator base plate, together with an engine driven fan and water circulating pump(s). A thermostatically operated bypass valve shall be fitted in the cooling system to maintain an optimum operating temperature during starting and running conditions. The radiator cooling air shall be exhausted to the atmosphere via a louvered opening and a bellows connection to the radiator. A further louvered opening shall be provided to supply cooling and charge air.



A charge air intake filter (or filters) shall be fitted. This shall be of the heavy-duty type to BS 1701 and shall be suitable for operation in a dust-laden atmosphere. Where the engine is turbo-charged, the filter shall be of the oil-wetted type.

The engine shall be capable of operating with fuels complying with clause A, B1 and B2 of BS 2869. The fuel feed shall be via a fuel filter of the fine steel wire mesh type.

Cyclic irregularity of the engine/alternator combination shall not exceed that specified in BS 5514 A1 (ISO 3046).

### **1.1.3. Alternators**

The alternator shall provide 3 phase, 380 V, 50 Hz output and shall be suitable for operating under load conditions with a power factor of 0.8 lagging.

The alternator shall be of the salient pole, revolving field, brushless, self-regulating type and shall be three phase. The unit shall be manufactured in accordance with BS 4999 and shall be continuously rated and capable of withstanding a 10% overload for 1 hour in any 12-hour period. The unit shall additionally withstand a short circuit for not less than 3 seconds.

The alternator shall conform with Bs 5000 part 99, shall be tropically finished and insulated with class F insulating materials, complying with Bs 2757.

The alternator shall be capable of supplying an unbalanced load where the current of the highest loaded phase exceeds that of the lowest loaded by 40%.

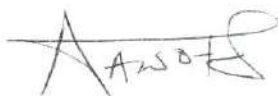
The winding insulation shall be to class F, but the machine shall be designed to limit conductor temperatures to class B. The machine shall be designed to operate continuously in ambient temperatures up to 50°C.

The exciter shall be of the revolving armature type with the armature overhung on a shaft extension at the non-driving end. The output of the exciter shall be rectified by a rotating silicon diode rectifier bridge to supply the main generator field windings. The exciter field shall be controlled through automatic voltage regulation (AVR).

The machine shall be protected to IP22 with open circuit air-cooling. The air ducts shall be designed to reject falling drops of water, and they shall be fitted with grills to keep out vermin.

An anti-condensation heater shall be provided and this shall be energized automatically when the generator is out of service

The alternator shall be equipped with a static voltage regulator and brushless excitation, holding voltage within a maximum deviation of  $\pm 2.5\%$  from nominal value, between no-load and full load conditions.

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The maximum instantaneous voltage drop during maximum load conditions, when starting the largest motor, shall not exceed 20% of the nominal voltage. This requirement must be strictly observed and the successful starting warranted.

The alternators shall be effectively cooled by open forced air ventilation. The ventilation openings shall be screened against ingress of small insects and rodents.

All rotating components shall be properly, statically and dynamically, balanced.

Alternator bearings shall preferably be of the cartridge type, preventing contamination by dirt or moisture when the alternator is dismantled. The bearings shall be grease lubricated. Easily accessible nipples for re-greasing shall be provided.

All bearings shall be liberally rated to ensure average life rating of not less than five (5) years of continuous operation.

The alternator shaft shall be directly coupled to the diesel engine via a flexible coupling.

#### **1.1.4. Control Panel**

The control panel shall be constructed to BS 5486 with a rating of not less than IP 54. In the case of small generators (up to approximately 250 kW), the control panel may be mounted on the set itself, but for larger sets the control panel shall be separately mounted. Where the panel is separately mounted it may be necessary for some direct reading gauges to remain set-mounted. In this case, the instruments shall be mounted together on a panel fixed to the set, but where they generate alarms or other electrical signals these shall be transmitted to the separately mounted control panel.

The control panel shall contain the following items:

- On/off switch for control circuitry
- Engine stop/start push buttons
- Emergency stop push button with twist reset
- Combined frequency /RPM meter
- Oil pressure gauge
- Water (or oil) temperature gauge
- Ammeter for each phase
- Voltmeter and phase selection switch
- DC ammeter (battery starting/charging current)
- DC voltmeter (battery volts)
- Indicator lamps for:
  - Low oil pressure





High water (or oil) temperature

Over speed

Hours run meter

Off/auto anti-condensation heater switch

In the case of a generator with electric starting, consideration shall be given, when selecting the relays and other electromagnetic devices in the control system, to the voltage drop, which occurs during operation of the starter motor.

All control panels shall be complete with a main powered battery charger and battery. In the case of an electric starting generator the battery shall be the starting battery and shall be rated accordingly.

#### **1.1.5. Exhaust Systems for Diesel Engines**

The exhaust system shall incorporate silencers suitable for use in an industrial area and shall include all necessary supports and other items to make a complete installation. Exhaust tubing shall be heavy gauge mild steel to BS 3600, and shall include a stainless-steel bellows close to the engine to reduce vibration and permit engine movement.

The system shall be suspended from the walls and roof by suitable brackets and angle ties, which shall include mountings to prevent the transmission of vibration and noise to the building.

The system shall be adequately lagged and fixed with in the building. Where the roof is of combustible material and the walls of the building are of incombustible material, the exhaust shall be routed to atmosphere through the wall rather than the roof. Where both the walls and roof are of combustible material, special care shall be taken to protect the building from the exhaust piping and the hot gases discharged from it.

The exhaust system outlet section shall be horizontal and where possible it shall point in the direction of the prevailing wind.

#### **1.1.6. Daily Service Tank**

A daily service fuel tank holding sufficient fuel for twelve (12) hours operation at full load shall be provided for each generator. In the case of a small generator (up to 250 kW) the tank may be set mounted, but for larger machines the tank shall be mounted on a frame. Fuel supply to the generator shall be by gravity.

The tank shall be constructed in mild steel and the fittings in materials other than:

Yellow brass, including low-grade alloys of copper and zinc

- Lead and zinc
- Galvanized metals

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- Natural rubber

The tank shall be complete with the following fittings:

- Local indication of fuel level, to be provided at a position where it can be easily read during fuel delivery.
- Drainpipe situated at the lowest point in the tank, complete with isolating valve.
- Outlet pipe complete with water trap and isolating valve.
- Filling point at the top of the tank with removable gauze filter.
- Vent pipe. This shall be routed to atmosphere with a continuous rise from the tank and shall be terminated with an inverted 'U' bend and vermin screen.

The tank shall have unused volume above the normal maximum contents level of the tank of not less than 5% of the maximum volume of the tank.

The vent pipe shall be located not less than 50 mm above the highest possible fuel level.

#### 1.1.7. Protections

The generating set shall be shut down in case of:

- Low oil pressure.
- High water or oil temperature.
- Over-speed.

#### 1.1.8. Finishes

All ferrous metalwork shall be either painted or processed to give a rustproof coating. Ferrous metalwork to be painted shall first be either shot blaster or thoroughly wire brushed to remove all scale and oxide and immediately given one brushed coat or two sprayed coats of primer. After not less than four hours, one brushed or two sprayed undercoats followed by one brushed or two sprayed finishing coats of heat and oil resisting quality paint shall be applied.

Successive coats of paint shall be slightly differing shades. The interior surface of electrical equipment enclosures shall be finished white and all external surfaces shall be finished to the BS 4800 to suit the manufacturer's standard cooler. The engine crankcase shall not be painted internally unless the plant is resistant to the lubricating oil.

#### 1.1.9. Drawings

The contractor shall provide to the Engineer specific sets of the following drawings:




- Building drawings showing details of cable entries, pipe entries and ducts required.
- General arrangement drawings showing the principal dimensions and set weights.
- General arrangement of the diesel engines.
- Details, supports and general requirements associated with the exhaust system.
- General arrangement of the alternator and exciter showing terminal markings, polarity and phase rotation.
- General arrangement of the electrical control panel.
- Schematic and wiring diagram of the electrical control panel.

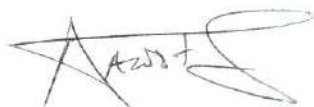
#### **1.1.10. Works Tests**

The set shall be tested as a unit at the manufacturer's works (or elsewhere by agreement) for output and performance generally in accordance with the requirements of BS 649 and BS 5000 Part 99. The Engineer shall be given adequate notice in writing of the date and the time of the works test and he, or his representative, shall, if he so desires, be present at such test and be given all reasonable facilities for his own inspections during the course of the tests.

#### **1.1.11. Commissioning**

The Contractor shall include for fully commissioning the set and its control equipment and for the purpose of the required tests, shall provide all necessary instruments, tools, fuel and lubricating oil. The following tests and checks, as applicable, shall be carried out by the contractor in the presence of the Engineer or his representative.

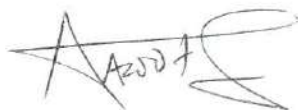
- Check that the main frame is level in all directions, engine and generator shafts are in proper alignment and the vibration absorbing devices are properly installed and located.
- Check water and sump oil levels and that the water jacket and radiator heater (if fitted) are in working order.
- Check the battery electrolyte levels and the specific gravity.
- Examine the containers in which the fuel and lubricating oils are delivered and check that the type and grades of oil are as recommended for the unit.
- Ensure that sufficient fuel oil is in the fuel tank for a six-hours test run.






- Check that all radiator and engine block water drain points are free from sludge and other blockage.
- Check engine bolts, main drive coupling, valve clearances, fuel pump settings, governor set-rings, pipeline connection, water hose, exhaust couplings, flexible pipe work and the like.
- Check all outgoing connections on the generator and at the control panel. All lugs for principal connections shall have clean and bright contact surfaces. A suitable abrasive material shall be used where necessary.
- Check access panels and doors for proper opening and closing and for the functioning of any interlocks fitted.
- With the set isolated from the system, start the engine by means of the "start" push button and allow it to run up to normal speed. Check that the battery charging dynamo is in operation with the engine running.
- Check instruments and gauges for normal operation and response and that the generator voltage is being maintained within the prescribed limits.
- Compare the reading of the frequency meter with that of the engine tachometer, where both are fitted.
- Stop the engine and verify that the generator contactor opens at between 95% and 85% of normal voltage. Re-check water and oil levels.
- Run the set a various load for periods totaling at least 30 minutes. Check the voltage and current in each phase in turn and check that the voltage and frequency are being maintained within the required limits with large alternations of loads. Note the rate of charge on the dynamo ammeter with the engine running and the rate of charge on the battery-charging ammeter with the engine stopped. Check against the manufacture's recommendations and adjust charging rates if necessary.
- Check that the various engine safeguards operate satisfactorily.
- Check vibration absorbing devices for proper operation and that the performance of all flexible connections, both mechanical and electrical, is satisfactory.

When all tests are satisfactory and agreed with the Engineer or his representative, the lubricating oil and water levels shall be finally checked, the fuel tank replenished and the set left in normal operating order.

 ASD



- An initial supply of all lubricating oils and grease shall e provided by the Contractor.

*Running of the engine for any length of time under- non-load conditions is undesirable and tests calling for such operation should be carried out in as short a time as possible consistent with thoroughness.*

## **PARTICULAR TECHNICAL SPECIFICATION**

### **GENERAL**

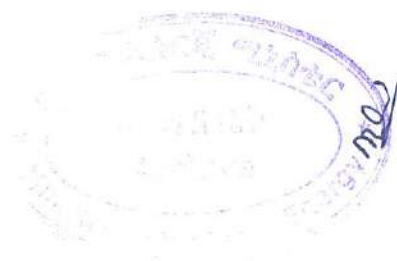
The Ministry of Water and Energy is issuing this Term of Reference to solicit bids from companies for the supply, installation, test and commissioning of a new 400KVA soundproof diesel-driven generator with ATS, along with integration and configuration into the existing power system.

### **BACKGROUND OF THE WORK**

The Ministry compound frequently experiences power interruptions. Currently, the existing standby power open-type diesel-driven generator set is outdated and manually operated through three separate manual changeover switches. These manual changeover switches are interconnected with the newly installed 4 different energyKWH meters) in the MoWE powerhouse. However, the existing open-type diesel-driven generator presents challenges due to operational issues, frequent maintenance requirements, sound pollution concerns, and difficulties in implementing automatic functionality within the Ministry of Water and Energy (MoWE) compound.

Considering these challenges, acquiring and installing a new diesel-driven generator with a soundproof weather-protected enclosure (Canopy) and an Automatic Transfer Switch (ATS) for standby power generation will effectively mitigate concerns regarding sound pollution and ensure the generator set aligns with the Ministry's operational needs.

The overarching scope of work for supplying and installing the generator set within the MoWE compound involves seamlessly integrating the new generator with the existing system of 4 EEU energy meters (KWH meters), ensuring full automation. The requested



generator is tasked with providing standby power to all existing KWH meters, thereby enhancing the automatic functionality and reliability of the Ministry's Electric power infrastructure.

## **SCOPE OF WORK**

General Scope of Work: Supply, Installation, Test, Commissioning of New 400KVA Sound proof Diesel-Driven Generator with ATS and Configuration with Existing Power System

### **1. Preparation Phase:**

- Assess the existing power system and installation facility at the Ministry's compound

### **2. Supply and Installation of New Generator**

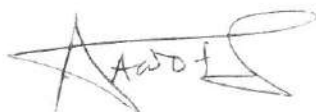
- Supply of a 400KVA new, diesel-driven, a soundproof weather-protected enclosure (Canopy) generator with ATS.
- Install the new generator within the enclosure, ensuring proper alignment and connection of components.
- Mount the Automatic Transfer Switch (ATS) for seamless power transfer.

### **3. Integration and Configuration with Existing Power System:**

- Integrate the new generator with the existing power system, including the 4 EEU energy meters (KWH meters) and one outlet access to integration of 100kW Solar Rooftop power plant.
- Ensure compatibility and automatic functionality to deliver power to all existing KWH meters as standby source.
- Optimize functionality and reliability of the Ministry's energy infrastructure through fully automatic operation.

### **4. Electrical and Mechanical Integration:**

- Connect the new generator to the electrical system, including power distribution panels and switches.
- Configure the ATS to automatically switch between main power and standby generator power during outages.





- Conduct thorough testing to verify proper integration and functionality of the new generator with the existing system.
5. Testing and Commissioning:
- Perform comprehensive testing and commissioning of the entire system to ensure reliability and performance.
  - Test automatic transfer switch operation under various load conditions to validate seamless power transfer.
  - Address any issues or discrepancies identified during testing and commissioning.

### **Main Switchgear Description**

**Scope of Work:** To effectively integrate a new generator into the existing power system, accommodating four EEU energy meters and a 100-kW solar rooftop power plant, the main switchgear should meet the following technical specifications:

- **Integration:** Seamlessly integrate a new generator into the existing power system, ensuring compatibility with four EEU energy meters (KWH meters) and providing an outlet for a 100kW Solar Rooftop power plant.
- **Automatic Functionality:** Ensure the main switchgear facilitates automatic operation, delivering power to all existing KWH meters as a standby source, thereby optimizing the functionality and reliability of the Ministry's energy infrastructure.

### **Technical Specifications:**

#### **1. Standards and Compliance:**

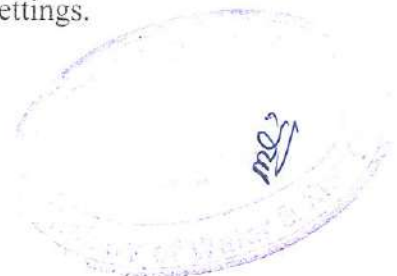
- The main switchgear shall be a type-tested assembly, complying with IEC 61439 standards.

#### **2. Construction:**

- Enclosure: Fabricated from high-quality, powder-coated sheet steel, providing IP54 protection for indoor installations.
- Busbars: Copper busbars with a current-carrying capacity suitable for the system's load, insulated and color-coded for phase identification.

#### **3. Incoming and Outgoing Sections:**

- Incoming: Equipped with an ACB/MCCB rated appropriately for the generator's capacity, featuring adjustable protection settings.



- Outgoing: Fitted with MCCBs/MCB0020v.ljks for each of the four EEU energy meters and the solar power plant connection, ensuring selective coordination and protection.

#### **4. Metering and Monitoring:**

- Energy Meters: Incorporate digital multifunction meters for real-time monitoring of voltage, current, power, and energy parameters.

#### **5. Control and Automation:**

- ATS (Automatic Transfer Switch): Include an ATS to facilitate automatic switching between the main power supply and the generator, ensuring uninterrupted power.
- Automatic Functionality: Ensure the main switchgear facilitates automatic operation, delivering power to all existing KWH meters as a standby source, thereby optimizing the functionality and reliability of the Ministry's energy infrastructure.
- Synchronization: Provide synchronization capabilities for the generator and solar power plant to operate in parallel with the main supply when required.

#### **6. Safety and Protection:**

- Protective Relays: Install overcurrent, short-circuit, earth fault, and reverse power protection relays to safeguard the system.
- Interlocking: Implement mechanical and electrical interlocks to prevent simultaneous closure of conflicting sources.

#### **7. Auxiliary Components:**

- Control Power Supply: Provide a reliable control power source, including necessary transformers or power supplies.
- Indication Lamps and Alarms: Equip with LED indication lamps and audible alarms for status indication and fault alerts.

#### **8. Documentation and Testing:**

- Drawings and Manuals: Supply detailed schematic diagrams, wiring diagrams, and operation manuals.
- Testing: Conduct factory acceptance tests (FAT) and site acceptance tests (SAT) to verify functionality and compliance with specifications.

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**Note:** All components and materials used in the main switchgear shall be of high quality, sourced from reputable manufacturers, and comply with relevant international standards to ensure durability, safety, and optimal performance.

6. Documentation and Training:

- Provide detailed documentation, including installation manuals, technical specifications, and integration procedures.
- Conduct training sessions for Ministry staff on the operation, maintenance, and troubleshooting of the new generator and ATS system.
- Integrate and train the Ministry's assigned staff when performing each preventive maintenance work.

7. Final Inspection and Handover:

- Conduct a final inspection of the installed system to ensure compliance with specifications and standards.
- Obtain sign-off from the Ministry on successful completion of the installation, test, commissioning and preventive maintenance work.
- Hand over all relevant documentation and operation manuals to the Ministry for future reference and maintenance.

This general scope of work outlines the key activities and tasks involved in Supply, Installation, Test, Commissioning of New 400KVA Sound proof Diesel-Driven Generator with ATS and Configuration with Existing Power System. The scope encompasses all phases of the project, from preparation and procurement to installation, testing, and post-installation support, ensuring a comprehensive and successful implementation of the generator system.

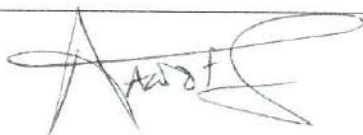
**Ministry of Water and Energy:** - Supply, Installation, Configuration with existing Power System, Test and Commissioning of Diesel driven, soundproof, weather protected enclosure (Canopy) and Standby Generator set with Automatic Transfer Switch

Generator Power Ratings: - Prime Power 400 KVA rating

400/230 Volt @50Hz 1500 RPM 3Phase 0.8PF

Fuel tank: - Sub-base fuel tank with 8hrs capacity at 75% load

Canopy Noise Level:  $\leq 80$  dB (A) at 1m



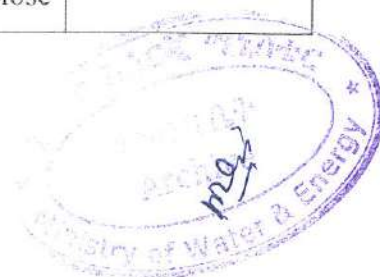


Insulation class H

**Location for Installation: - Ministry of Water and Energy**

	<b>Minimum Technical Specification of Diesel Generator and Automatic Transfer Switch (ATS)</b>	<b>Bidders Offer</b>
<b>1</b>	<b>Engine:</b> <ul style="list-style-type: none"><li>• Water cooled,</li><li>• 6 cylinders, Vertical in line</li><li>• RPM=1500,</li><li>• 4 stroke, direct injection</li><li>• Turbo charged diesel engine</li></ul>	
<b>2</b>	<b>Engine Accessories:</b> <ul style="list-style-type: none"><li>• Engine protection for: low oil pressure and high engine</li><li>• Temperature.</li><li>• Exhaust silencer connector</li><li>• Tropical cooling system with Engine driven fan</li><li>• 24-volt starter motor</li><li>• Heavy duty rechargeable 24V lead-Acid type battery completes with Cables.</li><li>• 24DC volt battery charger (230AC/24DC volt input)</li><li>• Electronically and mechanical speed governor</li><li>• Heavy duty dry air cleaner with replaceable element</li><li>• Full lube oil and fuel filters with replaceable elements</li></ul>	
<b>3</b>	<b>Alternator:</b> <ul style="list-style-type: none"><li>• Rated apparent power = 400KVA</li><li>• Output voltage 400/230 VAC, 0.8 P.F with frequency of 50HZ.</li><li>• <math>\pm 0.5\%</math> voltage variation</li><li>• Brushless self-exciting,</li><li>• Self-regulating screen protection and drip proof, class H insulation</li><li>• IP 23 protection class</li><li>• Tropical protected with impregnated windings, single bearing and close</li></ul>	

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	<p>coupled.</p> <ul style="list-style-type: none"> <li>• Automatic voltage regulator</li> <li>• Voltage adjustment potentiometer.</li> <li>• Under voltage and under frequency protection</li> </ul>	
4	<p><b>Base frame:</b></p> <p>Heavy duty steel base frame with;</p> <ul style="list-style-type: none"> <li>• Anti-vibration mounts located between the engine/alternator feet and the frame that reduces the level of vibration transmitted to the base frame.</li> <li>• Lifting eyes fitted to the base frame.</li> </ul>	
5	<p><b>Silencer system:</b> An industrial class silencer with stainless steel bellows (Industrial-grade exhaust silencer).</p>	
6	<p><b>Canopy:</b></p> <ul style="list-style-type: none"> <li>• Design: Weatherproof and sound-attenuated enclosure.</li> <li>• Noise Level: <math>\leq 80</math> dB(A) at 1 meter.</li> <li>• Features: Robust construction for durability and reduced noise emissions.</li> </ul>	
7	<p><b>Fuel tank:</b></p> <ul style="list-style-type: none"> <li>• Should be incorporated into the Base-frame of the machine.</li> </ul>	
8	<p><b>Control panel:</b></p> <p>Control panel should be mounted on a vibration isolated robust steel enclosure.</p>	
9	<p><b>Instrumentation</b></p> <ul style="list-style-type: none"> <li>• Output voltage: phase to phase and phase to neutral volt-meters</li> <li>• Output current Ammeter</li> <li>• Frequency meter</li> <li>• Power factor indicators (KW, KVAR)</li> <li>• Engine run hour meter</li> <li>• Engine coolant temperature Indicator</li> <li>• Lubrication oil pressure indicator.</li> <li>• Battery voltage and current meter</li> </ul>	
10	<p><b>Controls:</b></p> <ul style="list-style-type: none"> <li>• Automatic initiation of generating Set from mains failure and phase</li> </ul>	

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	<p>failure.</p> <ul style="list-style-type: none"> <li>• Manual initiation of generating set Starting.</li> <li>• Engine cool down timer</li> </ul>	
11	<p><b>Protection Shut down for:</b></p> <ul style="list-style-type: none"> <li>• Low oil pressure.</li> <li>• High coolant temperature.</li> <li>• Emergency stop operated</li> <li>• Fail to start</li> <li>• Under or over frequency</li> <li>• Under and over speed</li> <li>• Over load</li> <li>• Under and over voltage</li> </ul> <p><b>Warning indicators:</b></p> <ul style="list-style-type: none"> <li>• Low oil pressure</li> <li>• High coolant temperature</li> <li>• Overload</li> <li>• Low fuel</li> <li>• Under/over voltage</li> <li>• Under/over frequency</li> </ul> <p><b>Warning indicators and alarms for:</b></p> <ul style="list-style-type: none"> <li>• Battery charging system failure</li> <li>• Low battery voltage.</li> </ul>	
12	<p><b>Control Media:</b></p> <ul style="list-style-type: none"> <li>• LCD display</li> <li>• Configuration via panel soft keys, multi-level password</li> <li>• Emergency stop button control</li> </ul>	
13	<p><b>Control Monitoring:</b></p> <ul style="list-style-type: none"> <li>• Generator voltage, phase to phase, phase to neutral,</li> <li>• Generator current 3 phase</li> <li>• Engine over load</li> <li>• Engine coolant temperature</li> <li>• Engine oil pressure</li> <li>• Battery voltage</li> </ul>	
14	<p><b>Automatic Transfer switch panel:</b></p>	

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	<ul style="list-style-type: none"> <li>• It must be electrically and mechanically operated [automatic and manual mode]</li> <li>• Wall mounted</li> <li>• 600A fuse link</li> <li>• Voltage, current and frequency display</li> <li>• All necessary equipment</li> </ul>	
15	<b>Wiring:</b> The DC and AC wiring loops should utilize multi pin connector, thus permitting fast fault-finding diagnosis	
16	<b>Circuit Breaker:</b> Should incorporate a suitable rated circuit breaker mounted in a sheet Steel box with adequate access for outgoing cables	
17	<b>Temperature and De-rating factor:</b> Temperature and De-rating shall be indicated at specified temperature and altitude.	
18	<b>Fuel consumption at 100% load:</b> Not greater than 85 liters/hour	
19	<b>Mandatory Spare Parts:</b> - 4 Sets of Air Filter, 4 set for each of primary and secondary Fuel Filter, and 2 set of Oil filter	

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## BILL OF QUANTITY

Supply, Installation, Test, Commissioning of New 400KVA Sound proof Diesel-Driven Generator with ATS and Configuration with Existing Power System at the Ministry of Water and Energy Compound.

No	Specification	Unit	Quantity	UNIT Supply PRICE	UNIT Installation PRICE	TOTAL Supply and installation PRICE
1	Supply and Installation of Diesel driven Generator with sound proof, weather protected enclosure (Canopy) Stand by Generator set with ATS and Mandatory Spare Parts.  Generator Power Ratings: - Prime Power 400 KVA rating 400/230 Volt @50Hz 1500 RPM 3Phase 0.8PF  Fuel tank: - Sub-base fuel tank with 8hrs capacity at 75% load  Canopy Noise Level: $\leq 80$ dB (A) at 1m  Insulation class H	Set	1			
2	Supply and install main switchgear to integrate a standby generator with four separate kWh meters serving individual buildings, as per the attached technical specifications.	Set	1			
<b>Total Price</b>						

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## Non-Technical and Non-Financial Requirements

### 1. Supply of the Goods

- All goods shall meet relevant standards set by Ethiopian Quality and Standard Authority, International Standards (DIN, ISO, AISI, etc), and shall have the Manufacturer /Licensed Distributor Authorization Letter.
- All goods shall comply with all safety requirements applicable on the date of delivery.
- The goods supplied under this contract must be new, unused, of the most recent or current models and incorporate all recent improvements in design and materials.
- All goods belonging to a specific LOT has to be delivered together. No partial delivery will be allowed.
- All electrical equipment should be supplied with connecting devices, power cords and plugs as per standards of Ethiopia, should be compliant with local power supply (220±10V AC, 50Hz) and capable of performance in the climatic conditions prevalent in the sites of destination.

### 2. Maintenance & Repair

- The availability of reputed & experienced local technical representation and/or properly staffed and equipped service workshop is a must, and has to be named and described in the technical offer.

### 3. Spare Parts and/or Supplies

- The supplying contractor undertakes to insure local availability in Ethiopia of special and commonly required spare parts for the equipment supplied by him. This is to insure fast repair and replacement by the authorized provider during the warranty period.

### 4. Documents / Samples

- Operation manual in English to be submitted with each unit.
- Service manual in English to be submitted for each unit.





## Section 8.

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**Table of Clauses**

<b>A.</b>	<b>General Provisions</b>	<b>IX</b>
<b>B.</b>	<b>The Contract</b>	<b>IX</b>
<b>C.</b>	<b>Obligations of the Public Body</b>	<b>X</b>
<b>D.</b>	<b>Payment</b>	<b>XI</b>
<b>E.</b>	<b>Obligations of the Supplier</b>	<b>XI</b>
<b>F.</b>	<b>Performance of the Contract</b>	<b>XI</b>

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## Section 8. Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC Clause Reference	Section 8. Special Conditions of Contract																																				
	<b>A. General Provisions</b>																																				
	Procurement Reference Number is: <b>MOWE-NCB-G-GOV-04-2017</b>																																				
<b>GCC 1.2 (s)</b>	The Public Body is: <b>Ministry of Water and Energy</b>																																				
<b>GCC 1.2 (x)</b>	The Supplier is:																																				
<b>GCC 6.3 (a)</b>	The meaning of the trade terms shall be as prescribed by Incoterms.																																				
<b>GCC 6.3 (b)</b>	The version of Incoterms shall be: 2020																																				
	<b>B. The Contract</b>																																				
<b>GCC 7.1 (i)</b>	In addition to documents listed in GCC Clause 7.1 the following documents shall form the Contract:																																				
<b>GCC 7.3</b>	<p>The Public Body's authorized representative shall be:</p> <table border="1"> <tr><td>Authorized Representative:</td><td></td></tr> <tr><td>P.O. Box:</td><td></td></tr> <tr><td>Street Address:</td><td></td></tr> <tr><td>Town/City:</td><td></td></tr> <tr><td>Post Code:</td><td></td></tr> <tr><td>Country:</td><td>Ethiopia</td></tr> <tr><td>Telephone:</td><td></td></tr> <tr><td>Facsimile:</td><td></td></tr> <tr><td>E-mail address</td><td></td></tr> </table> <p>The Supplier's authorized representative shall be:</p> <table border="1"> <tr><td>Authorized Representative:</td><td></td></tr> <tr><td>P.O. Box:</td><td></td></tr> <tr><td>Street Address:</td><td></td></tr> <tr><td>Town/City:</td><td></td></tr> <tr><td>Post Code:</td><td></td></tr> <tr><td>Country:</td><td></td></tr> <tr><td>Telephone:</td><td></td></tr> <tr><td>Facsimile:</td><td></td></tr> <tr><td>E-mail address</td><td></td></tr> </table>	Authorized Representative:		P.O. Box:		Street Address:		Town/City:		Post Code:		Country:	Ethiopia	Telephone:		Facsimile:		E-mail address		Authorized Representative:		P.O. Box:		Street Address:		Town/City:		Post Code:		Country:		Telephone:		Facsimile:		E-mail address	
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<b>GCC 8.1</b>	The governing law shall be the law of the Federal Democratic Republic of Ethiopia. .																																				



GCC Clause Reference	Section 8. Special Conditions of Contract																																						
GCC 9.1	Language of the Contract shall be English .																																						
GCC 10.1 and 10.3	<p>For <b>notices</b>, the Public Body's address shall be:</p> <table border="1" data-bbox="451 398 1369 712"> <tr><td>Public Body:</td><td>Ministry of Water and Energy</td></tr> <tr><td>Attention:</td><td>Mr. Mehandis Melaku</td></tr> <tr><td>Floor/Room number:</td><td>Ministry of Water &amp; Energy Building 2<sup>nd</sup> floor room No.215</td></tr> <tr><td>Street Address:</td><td>Haile G/silase street</td></tr> <tr><td>Town/City:</td><td>Addis Ababa</td></tr> <tr><td>Country:</td><td>Ethiopia</td></tr> <tr><td>Telephone:</td><td>+251116898036</td></tr> <tr><td>E-mail address</td><td>procurement@mowe.gov.et</td></tr> </table> <p>For <b>notices</b>, the Supplier's address shall be:</p> <table border="1" data-bbox="451 768 1369 1160"> <tr><td>Supplier:</td><td></td></tr> <tr><td>Attention:</td><td></td></tr> <tr><td>Floor/Room number:</td><td></td></tr> <tr><td>P.O. Box:</td><td></td></tr> <tr><td>Street Address:</td><td></td></tr> <tr><td>Town/City:</td><td></td></tr> <tr><td>Post Code:</td><td></td></tr> <tr><td>Country:</td><td>Ethiopia</td></tr> <tr><td>Telephone:</td><td></td></tr> <tr><td>Facsimile:</td><td></td></tr> <tr><td>E-mail address</td><td></td></tr> </table>	Public Body:	Ministry of Water and Energy	Attention:	Mr. Mehandis Melaku	Floor/Room number:	Ministry of Water & Energy Building 2 <sup>nd</sup> floor room No.215	Street Address:	Haile G/silase street	Town/City:	Addis Ababa	Country:	Ethiopia	Telephone:	+251116898036	E-mail address	procurement@mowe.gov.et	Supplier:		Attention:		Floor/Room number:		P.O. Box:		Street Address:		Town/City:		Post Code:		Country:	Ethiopia	Telephone:		Facsimile:		E-mail address	
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GCC 15.1	In case of change of laws and regulation after the deadline for submission of the Bid Contract Price shall not be correspondingly increased or decreased and/or the Delivery Date be reasonably adjusted to the extent that Supplier has thereby been affected in the performance of any of its obligations under the Contract.																																						
GCC 16.1	For Goods supplied from outside the Federal Democratic Republic of Ethiopia The Supplier shall be responsible for all taxes, custom duties, formalities, license fees except for the following: None																																						
GCC 16.2	For Goods supplied from within the Federal Democratic Republic of Ethiopia the Supplier shall be responsible for all taxes, formalities, license fees except for the following: None																																						
GCC 23.3	The period of validity of the Warranty shall be: <b>3 years</b>																																						
GCC 23.5	The repair or replace period will be: 30 Calendar days from the date of notification																																						
	<b>C. Obligations of the Public Body</b>																																						
GCC 29.1	The Public Body shall, if so required by the Supplier, assist the Supplier in complying with the following requirements: None																																						



GCC Clause Reference	Section 8. Special Conditions of Contract
	<b>D. Payment</b>
GCC 32.4	<p>The Public Body shall pay the Contract Price to the Supplier, within the period of the .</p> <p><b>Payment for Goods supplied:</b></p> <p>(i) <b>Advance Payment:</b> Ten (10) percent of the Contract Price shall be paid within thirty (15) days of signing of the Contract, and upon submission of claim and unconditional bank guarantee for equivalent amount valid until the Goods are delivered and in the form provided in the bidding document or another form acceptable to the Purchaser.</p> <p>(ii) : Ninety (90) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods upon submission of claim supported by the acceptance certificate issued by the Purchaser.</p>
GCC 32.5	<p>For Goods supplied locally all payment to the Supplier under this Contract shall be made in <b>ETB</b>.</p> <p>For Goods supplied from outside the Federal Democratic Republic of Ethiopia all payment to the Supplier under this Contract shall be made in <b>ETB</b>.</p>
	<b>E. Obligations of the Supplier</b>
GCC 40.1 (b)	The amount of aggregate liability shall be: 100%
GCC 42.1	The insurance coverage shall be in accordance with the following Incoterms: 2020
GCC 47.1	The amount of the Performance Security shall be: <b>The amount of the Performance Security shall be 10% of the contract price</b>
GCC 47.3	<p>The types of acceptable Performance Securities are: <b>Unconditional Bank guarantee or CPO.</b></p> <p>The currency shall be: <b>ETB</b></p>
GCC 47.4	Discharge of the Performance Security shall take place: <b>upon complete performance of the contract.</b>
	<b>F. Performance of the Contract</b>
GCC 48.1	The Scope of Supply shall be defined in: the schedule of Requirements
GCC 50.1	The Supplier shall deliver the Goods to the following Locations: <b>the Ministry of Water and Energy compound Existing power system.</b>
GCC 50.5	The Supplier responsible for obtaining all export and import licenses for the Goods
GCC 57.2	Inspections and tests will be conducted at: the Ministry of Water and Energy

