BARBADOS WATER AUTHORITY

TENDER FOR

THE

PURCHASE OF GENERATORS

June 2021

1. GENERAL

The Barbados Water Authority (BWA) intends to purchase twenty six (26) diesel generators for its potable water pumping stations. The generators will be used to provide emergency standby power to the pumping stations in the event of a power outage or national emergency.
Please refer to the Terms of Reference (TOR) on page 8.

For additional information please contact the Director of Engineering at the Barbados Water Authority, telephone number 434-4200 between the hours of 8:15am and 4:30pm

2. INSTRUCTIONS TO TENDERERS

2.1 All bidders must supply the following information in their bids. Failure to provide the information will render the bid null and void: -

a. Registration number of company;

b. Country in which company is registered;

c. The date on which the company was first incorporated and the names and addresses of all company directors. Certified copy must be issued by the Corporate Affairs Registry.

d. A certified copy of company's Certificate of Incorporation, as evidence that the company is in existence at the date of the bid; Failure to provide the certified copy Certificate of Incorporation will render the tender null and void. Certified copy must be issued by the Corporate Affairs Registry.

e. Registered office of the company

f. In the case of sole proprietorships or partnerships, the names and addresses of owners must be supplied. If the business is registered under

the Registration of Business Names Act, a copy of the registration must also be provided. Certified copy must be issued by the Corporate Affairs Registry.

g. Barbadian bidders must provide a copy of their VAT Registration Certificate and Tax Identification Number (TIN).

h. Bidders should be aware that the labour clauses of (Public Contracts) Act, Cap. 349 shall, in so far as is applicable to the subject of the tender, apply to any contract made in respect of the tender.

i. The number of calendar days required to start and complete the job once notified.

j. Tenders should be submitted in a document marked **"Tender for THE PURCHASE OF GENERATORS"** addressed to:

The Chairman

Tenders Committee

Barbados Water Authority

Pine Commercial Estate

The Pine

St Michael

k To reach the office no later than Friday July 16, 2021 at 4:30pm.

l. **Bidders should first proceed to the receptionist, sign the register, then placed their bids in the Tenders Box which is located at the Barbados Water Authority's Office at the BWA's Headquarters at Pine Commercial Estate, St Michael.**

m. No Tender will be considered unless it complies with the conditions set out in this Notice.

n. The Barbados Water Authority does not bind itself to accept the lowest or any tender.

o. Any tender delivered after the closing date and time or any extension thereof shall not be considered.

p. The Barbados Water Authority reserves the right to withdraw this tender notice at any time.

q. The BWA reserves the right to annul the process at any time prior to the award of Contract without incurring any liabilities.

r. A Curriculum Vitae of the proposed personnel assigned to the project.

s. An execution plan detailing how the bidder intends to perform the various aspects of the project. For example, detailing how many days would be needed for an installation and how many hours a station would need to have its electrical supply interrupted to accommodate the installation.

t. All documents which contained the required information for equipment requested from the bidder in the Terms of Reference.

u. The cost of each piece of equipment and the cost to preform quarterly or bi-annually maintenance.

2.3 All tenders must be quoted in either **Barbados or US Dollars, CIF Bridgetown Barbados.** Prices quoted in Barbados dollars by local bidders must be **duty free and exclusive of VAT.** Tenders quoted in US dollars will be evaluated using the prevailing exchange rate at the date of closing of the tender. Payments in US dollars shall be made at the buying rate set by The Central Bank of Barbados at the time of payment.

2.4 **Payment terms and a delivery schedule must be included in your response.**

2.5 The BWA reserves the right to refuse any tender that does not conform to the requirements of this document.

2.6 The successful bidder(s) will be required to enter into a formal contract with the Barbados Water Authority.

3. PENALTIES

The Barbados Water Authority reserves the right to apply and enforce penalties against a tenderer for delays occasioned by him in the execution of these works. The penalty shall apply from the stated completion date of the particular phase. The total penalty shall not exceed 5% of contract sum for the initial first late month, and 10% for any late months

thereafter. When there is evidence that the lack of performance directly impacts the BWA's operations penalties in the form of a retention on payments due to the tenderer will be applied.

4. DELIVERY CONDITIONS

The successful Tenderer(s) will be furnished with a delivery schedule with specific dates for the execution of the works as agreed between the tenderer and the BWA. Failure to adhere to the delivery schedule will result in penalties as stated in clause 3. Delivery of the works have to be coordinated with the BWA (e.g. it may be convenient to do most of the work at night) so that disruptions to the water supply to customers is minimized.

CONDITIONS OF TENDERING

1. **Acceptance of Tender and Tenderer's Expenses**

The BWA shall not reimburse the tenderer for any expense incurred in the preparation of this tender.

2. **Firm Price**

No price variation clause may be included in the Tender. Prices must be quoted in Barbados or US dollars (for overseas companies) and such prices shall include r all materials, labour, plant, equipment, transport, handling of materials and plant, tools and appliances, management fees and all/any other things necessary for the execution of the works. Price(s) quoted in Barbados dollars must also be inclusive of VAT and any taxes that may apply at the time of contract signing.

3. **Payments**

Payments may be made after the completion of each item of work or when the entire job is completed. The method to be followed shall be agreed by the BWA and the Contractor prior to the starting of the contract. Prior to any payment, the Contractor shall submit to the BWA a statement in a form acceptable to the BWA, signed by the Contractor the cumulative amounts and value of work carried out as of the date of the statement and accompanied by schedules and other such data to assist the BWA in evaluating the value of work carried out. The statement shall also show the cumulative amount and value of work paid by the BWA as of the date of the statement and the balance amount and value of work claimed by the Contractor.

5. **Insurance**

The Contractor shall obtain adequate insurance to indemnify the BWA against all claims for death, injuries, damage to property and losses sustained by the Contractor during the performance of duties under this Contract.

6. **Addenda**

Any interpretation of, or change in the Tender Document prior to the specified closing date, will be made only by Addendum issued by the Barbados Water Authority to each Bidder to whom the Tender Document has been issued and it shall become part of the Tender Document.

7. **Contract Documents**

The Contract documents will comprise of the following:

(a) The Schedule of Requirements

(b) The Conditions of Contract

(c) The Technical Specifications

8. **Compliance with Conditions of Tendering**

The Tenderer must comply with all the above Conditions of Tendering. Failure to comply with or breach of any of the Conditions shall disqualify the Tender.

9. **Performance Security**

9.1 The successful Tenderer(s) shall furnish the performance security for the performance of the contract in a form acceptable to the BWA within twenty-seven (27) days of the receipts of notification of award from the BWA. The performance security shall be in a sum equivalent to ten percent (10%) of the contract price. The proceeds of the performance security shall be payable to the Barbados Water Authority as compensation for any loss resulting from the successful tenderer's failure to complete its obligations under the contract. If the tenderer shall be in default of any of the terms and conditions of the contract, the BWA shall be entitled to make a claim against the performance security. The claim shall be in writing to the agency, bank or insurance company that issues the performance security.

9.2 The performance security shall be valid for one (1) year after the date for completion of the tenderer's obligations, and shall be denominated in the currency of the contract or in a freely convertible currency acceptable to

the BWA and shall be in one of the following forms:-

a) A bank guarantee irrevocable letter of credit, issued by a bank located in Barbados, acceptable to the BWA and in the form provided in the Bidding Document or another form acceptable to the BWA; or
b) A cashier's or certified cheque payable to the BWA.

9.3 The performance security will be discharged by the BWA and returned to the tenderer not later than one (1) year following the date of completion of the tenderer's performance obligations, including any warranty under the Contract.

10. **Evaluation Criteria:**

The BWA will seek to select the most economically and technically advantageous tender with the optimum price/quality split. The Tenderer with the lowest initial quote will not necessarily be selected since the BWA will consider the whole life cycle costs of the goods to include cost of spare parts, maintenance, energy consumption and disposal. The BWA will make its final determination on a combination of the following:

(a) Experience of the proposed personnel relative to the project requirements
(b) Project Execution Plan
(c) Equipment Specifications
(d) Cost

CONDITIONS OF CONTRACT

1. **Period of Contract**

One (1) year

2. **Termination of Contract**

This Contract shall be terminated by any one of the parties to the Contract by a written notice of sixty (60) calendar days. The BWA shall be entitled to terminate this Contract and to recover from the Contractor the amount of any loss resulting from such determination due to non-performance by the Contractor.

Terms of Reference

1. The bidder should supply documentation for each size of generator tendered for which should clearly outline at minimum the following information:
    - Generator specifications: rated frequency, standby output, line and phase voltage, rated power factor, maximum output current, dimensions and weight.
    - Engine specifications: engine manufacturer, engine model number, fuel consumption, fuel tank capacity.
    - Alternator specifications: alternator brand, alternator model number, excitation, insulation class, motor starting capacity, voltage regulation, waveform distortion, insulation class.
    - Generator controller specifications: type, available parameters for display (e.g. voltage, current, real power, alarm history) , available communication connectivity (e.g. Ethernet)

2. The bidder shall supply all supporting documentation for each ampere size of the automatic transfer switches which should clearly specify at minimum the following information:
    - General product specifications (e.g. Rated Voltage, rated frequency, poles switched, neutral configuration)
    - Voltage and frequency settings and their tolerances: (e.g. pick up normal source voltage 85-100%, drop out normal source voltage 70 to 98%)
    - Time delay settings: (e.g. Transfer to Emergency 0-60 minutes)
    - Indications and Controls: (e.g. load connected to normal, load connected to emergency, normal source available)
    - Connectivity: (e.g. Ethernet)
3. The bidder shall state clearly the lead time and port of origin for each equipment. The lead time should indicate for each equipment the estimated time needed for the equipment to be ready for shipment to Barbados and the estimated amount of time expected for shipping the equipment to Barbados.
4. The bidder shall state the warranty available for each equipment as well as the terms of conditions.
5. If selected the bidder shall be fully responsible for the cost associated with the replacement of any damaged or faulty equipment still under warranty.
6. The bidder is expected to list the cost of each line item and exclude VAT and duties for any item not sourced locally. See Table 1
7. The bidder is also expected to quote the cost associated with transporting the generators to the various sites, installing and commissioning. See Table 1 **Error! Reference source not found.**
8. The bidder is to quote a separate cost for performing the required recommended maintenance as specified by the original equipment manufacturer which is the weekly, monthly, quarterly, bi-annually and annual maintenance.
9. The bidder shall be responsible for all works outlined within the Scope of Works for the Generator Supplier within this document.
10. The bidder is to supply all equipment to meet the specifications as outlined in the equipment specifications section of this document.

SCOPE of WORKS

Generator Supplier

The supplier of the generator shall have the following obligations:

- Supply of the generators and automatic transfer switches
  Inclusive of the following:

    - THWN or THWN-2 power cables as required
    - Cables for the battery charger and generator controller
    - Glands, compression lugs, fuses, etc.
- Delivery of the generators and automatic transfer switches to their respective sites
- Installation of the generators and automatic transfer switches
  Inclusive of the following:
    - Mounting of the automatic transfer switches and placement of the generators to BWA's appeasement.
    - Programing all the settings in the automatic transfer switches and generators.
    - Having all cables to and from the automatic transfer switch routed and terminated.
    - Setting up of the Ethernet network for both the generators and automatic transfer switches.
- Commissioning of the generator and automatic transfer switches
  Inclusive of the following:
    - Testing both the automatic transfer switches and generators to ensure they are fully operational. The Spare generator is to be tested with a load bank.
- Provide operational training for the generators and automatic transfer switches to designated BWA staff in the form of a practical session and documentation.

[1] Any anomalies among the various sites for what is required will be addressed at the site meetings.

Barbados Water Authority

The Barbados Water Authority is responsible for the following:

- The construction of the concrete plinths and/or generator houses
- The supply and installation of mains disconnect circuit breakers as required
- The supply and installation of main distribution panels as required
- The supply of generator type W power cables as required
- The installation of all conduits
- All necessary preparations required leading up to the installation of the generator and automatic transfer switches.
- Coordinating with Barbados Light and Power for the isolation of the station as necessary.
- Ensuring that a functioning network is available at each site.

EQUIPMENT SPECIFICATOINS

Automatic Transfer Switches Technical Specifications

Amps Rating: Refer to **Error! Reference source not found.**
Service Voltage: Refer to **Error! Reference source not found.**
Frequency: 50Hz
S.C. Rating: ≥ 35kAIC
Neutral Configuration: Solid (non-switching neutral)
Cable Entry: Bottom Cable Entry
Enclosure Rating: NEMA Type 3R (See Table 2 for Ozone Pumping Station)
User Interface: Digital display
Additional functionality: Closed Transition
Connectivity: Ethernet

Generator Technical Specifications

Generator Stand-by Rating: Refer to **Error! Reference source not found.**
Service Voltage: Refer to **Error! Reference source not found.**
Frequency: 50Hz
Acoustic Enclosure Rating: NEMA Type 3R (See Table 2 for Ozone Pumping Station)
Fuel: Diesel
Fuel Tank: Integrated Spill Catchment
Battery Charger: Integrated Automatic Battery Charger
Generator Control Module: Deep Sea Controller (preferred)
Controller Connectivity: Ethernet (for remote monitoring of the generator)

Table 1: Schedule of Generator and Automatic Transfer Switches

Location Number	Pumping Station	Line Item	Item Description
1	Apes Hill	1.1	Automatic Transfer Switch 400Amp, 415V 3ph 4W
		1.2	**170 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
2	Applewhaites Main Station	2.1	Automatic Transfer Switch 800Amp, 415V 3ph 4W
		2.2	**500 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
3	Applewhaites Tenantry	3.1	Automatic Transfer Switch 400Amp, 415V 3ph 4W
		3.2	**150 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
4	Applewhaites Well Field	4.1	Automatic Transfer Switch 300Amp, 415V 3ph 4W
		4.2	**150 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
5	Ashton Hall	5.1	Automatic Transfer Switch 600Amp, 415V 3ph 4W
		5.2	**150 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
6	Bushy Park	6.1	Automatic Transfer Switch 200Amp, 415V 3ph 4W
		6.2	**75 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
7	Carlton	7.1	Automatic Transfer Switch 400Amp, 415V 3ph 4W
		7.2	**75 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
8	Carrington	8.1	Automatic Transfer Switch 600Amp, 415V 3ph 4W
		8.2	**125kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
9	Castle Grant	9.1	Automatic Transfer Switch 100Amp, 230V 3ph 4W
		9.2	**5 kVA** Stand-by Diesel Generator in acoustic enclosure 230V, 3ph
10	Codrington	10.1	Automatic Transfer Switch 400Amp, 415V 3ph 4W
		10.2	**170 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
11	Constant	11.1	Automatic Transfer Switch 400Amp, 415V 3ph 4W
		11.2	**200 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
12	Ellerton	12.1	Automatic Transfer Switch 400Amp, 415V 3ph 4W
		12.2	**170 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
13	Golden Ridge	13.1	Automatic Transfer Switch 800Amp, 415V 3ph 4W
		13.2	**250 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
14	Graeme Hall	14.1	**75 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
15	Greens	15.1	Automatic Transfer Switch 200Amp, 415V 3ph 4W
		15.2	**90 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
16	Haggatts	16.1	Automatic Transfer Switch 225Amp, 415V 3ph 4W
		16.2	**90 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
17	Half Acre	17.1	Automatic Transfer Switch 200Amp, 415V 3ph 4W
		17.2	**60 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
18	Hanson	18.1	Automatic Transfer Switch 600Amp, 415V 3ph 4W
		18.2	**300 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
19	Lamberts	19.1	Automatic Transfer Switch 150Amp, 415V 3ph 4W
		19.2	**50 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph

20	Lancaster	20.1	Automatic Transfer Switch 800Amp, 415V 3ph 4W
21	Lazaretto	21.1	**200 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
22	Lears	22.1	Automatic Transfer Switch 200Amp, 415V 3ph 4W
		22.2	**75 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
23	Lodge Hill	23.1	**600 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
24	Molyneux	24.1	Automatic Transfer Switch 600Amp, 415V 3ph 4W
		24.2	**90 kVA** Stand-by Diesel Generator in acoustic enclosure 230V, 3ph
25	Mount Stepney	25.1	Automatic Transfer Switch 100Amp, 230V 3ph 4W
		25.2	**20 kVA** Stand-by Diesel Generator in acoustic enclosure 230V, 3ph
26	Ozone	26.1	Automatic Transfer Switch 150Amp, 415V 3ph 4W
		26.2	**75 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
27	Prospect	27.1	Automatic Transfer Switch 100Amp, 230V 3ph 4W
		27.2	**20 kVA** Stand-by Diesel Generator in acoustic enclosure 230V, 3ph
28	Warleigh (Rock Hall)	28.1	Automatic Transfer Switch 800Amp, 415V 3ph 4W
		28.2	**330 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
29	Warleigh (Shop Hill)	29.1	Automatic Transfer Switch 800Amp, 415V 3ph 4W
		29.2	**250 kVA** Stand-by Diesel Generator in acoustic enclosure 415V, 3ph
30	Spare	30.1	**330 kVA** Stand-by Diesel Generator in acoustic enclosure on trailer 415V, 3ph

Table 2: Ozone equipment enclosure ratings

Station	**Equipment**	**Enclosure Rating**
Ozone	Automatic Transfer Switch	As this station is subjected to sea spray please provide a bid for an enclosure that is rated 4X and has a 316 stainless steel enclosure or any other recommended solution to prevent rapid deterioration of the equipment.
	Generator	Please provide an enclosure which can withstand sea spray exposure and function under the harsh conditions.