



**YOU ARE HEREBY INVITED TO QUOTE**

**COMPULSORY BRIEFING SESSION DATE:** None

**CLOSING DATE:** 24 October 2023

**CLOSING TIME:** 12H00

**NAME OF SERVICE PROVIDER:**

.....

**Title** : Electric Motors Efficiency Tests  
**Project Title** : Electric Motors Efficiency Tests  
**LNW Contract Number** : 10042894  
**Date of Issue** : 13 October 2023  
**Closing Date** : 24 October 2023 at 12H00  
**Project Location** : LNW Schemes

## **1. PROJECT BACKGROUND**

LNW seeks to appoint a professional service provider to render service on electric motor efficiency tests at various schemes of Lepelle Northern Water. All safety protocols and OHS general construction works shall be adhered to at all times in line with the Departments of Health and Labour of the Republic of South Africa regulations.

## **2. SCOPE OF WORKS**

The scope of works for the appointed contractor includes, but is not limited to the following:

Perform MCE testing for quality assurance, trending, and diagnostic troubleshooting.

### **Measure the following characteristics:**

#### **a) Resistance-to-ground (RTG)**

Temperature-corrected RTG tests the ground wall insulation of the motor and circuit cables, indicating the condition of the insulation.

#### **b) Capacitance-to-ground (CTG)**

CTG is an indicator of the motor cleanliness, identifying contamination buildup on the insulation.

#### **c) Phase-to-phase resistance**

Phase-to-phase resistance tests the circuit and the stator coils for resistance, calculates resistance imbalance, and indicates when these imbalances are unsatisfactory.

High resistance imbalances indicate hot spots, high resistance connections, or coil shorting in the stator.

#### **d) Phase-to-phase inductance**

Phase-to-phase inductance tests the circuit, stator coil, iron, and rotor components for inductive imbalances and indicates when these imbalances are unsatisfactory.

High inductive imbalances indicate winding faults and rotor defects.

#### **e) Polarization Index (PI)**

A Polarization index (PI) test is performed. A PI ratio is calculated and a profile of RTG vs., time is plotted. The PI test is a more comprehensive test and gives much more information.

The profiles developed can be used to determine the condition of the motors insulation system.

#### **f) Rotor Influence Check (RIC)**

The RIC is performed to isolate problems to either the rotor or stator in a motor. As the rotor is turned incrementally by hand, a plot of its influence on the stator coils is developed using inductance.

**Motor analysis consists of:**

- a) Capacitor Test
- b) Ground Test
- c) Winding Test
- d) Full PI Test

Service providers are to submit a detailed report with recommendations on each motor tested.

**3. MINIMUM REQUIREMENTS**

- a) Qualification in Electrical Engineering. (Minimum Electrician artisan or BTech electrical engineering).

**4. SUBMISSION OF QUOTATION**

Service providers shall return the duly completed quotations and the required attachments no later than 12H00 on Tuesday 24 October 2023 to [audreys@lepelle.co.za](mailto:audreys@lepelle.co.za).

The following documentation must be submitted together with the quotation:

- a) Proof of Address or letter signed by Tribal Authority.
- b) Proof of Good Standing with the Department of Labour.
- c) CV of Responsible Supervisor/Project Manager with a qualification in Electrical Engineering. (minimum Electrician artisan or BTec electrical engineering)
- d) Completed pricing schedule as per the terms of reference;
- e) Proof of CSD registration (Central Supplier Database Registration).

**5. ADMINISTRATIVE COMPLIANCE**

- a) Company registration documents.
- b) Certified ID copies of the company shareholders.

## 6. LIST OF INFRASTRUCTURE/ASSETS AND PRICING

Description	Manufacturer	Kw	Cost (R)
<b>Ebenezer</b>			
Pump 1 Motor	ACTOM	560	R
Pump 2 Motor	ACTOM	560	
Pump 3 Motor	ACTOM	560	
Pump 4 Motor	G.E.C.	550	
Pump - 5B, Motor	SIEMENS	836	
Pump - 5A, Motor	SIEMENS	836	
Pump - 6B, Motor	SIEMENS	836	
Pump - 6A, Motor	SIEMENS	836	
<b>Flag Boshielo</b>			
Motor 1	Actom	315	R
Motor 2	Actom	315	
Motor 3	Actom	315	
Motor 4	Actom	110	
Motor 5	Actom	110	
Motor 6	Actom	110	
<b>Phalaborwa</b>			
River Pump Motor No.1	AEI	310 Hp.	R
River Pump Motor No.2	AEI	310 Hp.	
River Pump Motor No.3	AEI	310 Hp.	
River Pump Motor No.4	G.E.C.	260 Kw.	
River Pump Motor No.5	G.E.C.	260 Kw.	
Barge Sump Pump Motor 1	Info not visible	2.2 Kw	
Barge Sump Pump Motor 2	Info not visible	2.2 Kw	
Barge Sump Pump Motor 3	Info not visible	2.2 Kw	
Port. Pump Motor 8a	G.E.C.	1200 Kw.	
Port. Pump Motor 8b	G.E.C.	1200 Kw.	
Port. Pump Motor 6a	G.E.C	470 Kw	
Port. Pump Motor 6b	G.E.C	470 Kw	
Port. Pump Motor 6c	G.E.C	470 Kw	
PMC Pump Motor No 1.	G. E. C.	630 Kw.	

PMC Pump Motor No 3.	G. E. C.	700 Kw.	
PMC Pump Motor No 5.	G. E. C.	700 Kw.	
Foskor Pump Motor No15.	Siemens	1709 Kw	
Foskor Pump Motor No. 9.	A.E.I.	740 Hp	
Foskor Pump Motor No. 11.	A.E.I.	740 Hp	
Foskor Pump Motor No. 13.	A.E.I.	740 Hp	
<b>Politsi</b>			
Clear Water Motor 1	WEG	300	R
Clear Water Motor 2	ALSTOM	300	
<b>Burgersfort</b>			
Abstraction Pump 1 Motor	WEG	30	R
Final Old Pump1 Motor	Siemens	90	
Final Old Pump2 Motor	Siemens	90	
Final New Pump1 Motor	WEG	160	
Final New Pump2 Motor	WEG	160	
Abstraction Motor 2		230	
<b>Doorndraai</b>			
Motor B	ALSTOM	400	R
Motor C	ALSTOM	400	
<b>Sub-total</b>			R
<b>15% Vat</b>			R
<b>Total</b>			R

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Service Provider: \_\_\_\_\_

## PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

**NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022**

### 1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and

1.2 **To be completed by the organ of state**

*(delete whichever is not applicable for this tender).*

a) The applicable preference point system for this tender is the 80/20 preference point system.

b) 80/20 preference point system will be applicable in this tender. The lowest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
<b>PRICE</b>	80
<b>SPECIFIC GOALS</b>	20
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

## 2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

## 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

### 3.1. POINTS AWARDED FOR PRICE

#### 3.1.1 80/20

A maximum of 80 points is allocated for price on the following basis:

**80/20**

$$P_s = 80 \left( 1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

$P_s$  = Points scored for price of tender under consideration  
 $P_t$  = Price of tender under consideration  
 $P_{min}$  = Price of lowest acceptable tender

### 3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

### 3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 points is allocated for price on the following basis:

**80/20**

$$Ps = 80 \left( 1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

- Ps = Points scored for price of tender under consideration  
Pt = Price of tender under consideration  
Pmax = Price of highest acceptable tender

## 4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
  - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

**Table 1: Specific goals for the tender and points claimed are indicated per the table below.**

***(Note to organs of state: 80/20 preference point system is applicable, corresponding***



**points must also be indicated as such.**

**Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)**

<b>The specific goals allocated points in terms of this tender</b>	<b>Number of points allocated (80/20 system) (To be completed by the organ of state)</b>	<b>Number of points claimed (80/20 system) (To be completed by the tenderer)</b>
1. Disability (Minimum of one (01) shareholder in the company)	5	
2. Black women (100% Black women ownership in the company)	5	
3. Black ownership (100% black ownership in the company)	5	
4. Black Youth (Minimum of one (01) shareholder Black youth ownership in the company)	5	
<b>Total</b>	<b>20</b>	

#### **DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3. Name of company/firm.....

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company

☐ State Owned Company  
[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
  - (a) disqualify the person from the tendering process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution, if deemed necessary.

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**SIGNATURE(S) OF TENDERER(S)**

**SURNAME AND NAME:** .....

**DATE:** .....

**ADDRESS:** .....

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.....

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## BIDDER'S DISCLOSURE

### 1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

### 2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship

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<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....  
 .....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....  
 .....

### **3 DECLARATION**

I, \_\_\_\_\_ the \_\_\_\_\_ undersigned,  
 (name)..... in  
 submitting the accompanying bid, do hereby make the following  
 statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring

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<sup>2</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....	.....
Signature	Date
.....	.....
Position	Name of bidder/Name of Company