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Contact Person: GT Mokobe	Date: 23 March 2017
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Our Ref.: 18/2/8/4 BAINSVLEI	Your Ref.: 53819

Ingcali Consulting Engineers (Pty) Ltd.
37 Brill Street
Westdene
Bloemfontein
9300

Attention: Mr. Rodney Du Rand

APPLICATION FOR A 900KVA MEDIUM VOLTAGE CONNECTION FOR THE PROPOSED NEW COLLEGE ON PLOT 27 CORNER FRANS KLEYNHANS AND FLOORS COETZEE ROAD, RAYTON, BLOEMFONTEIN: COMMENTS AND QUOTATION

Your application dated 23 February 2017 has reference.

1. INTRODUCTION

- 3.1 The proposed development is situated within the urban edge, this development will be permanently supplied from the proposed New Market 2/2946 substation, with the relevant primary cable feeder from the Groenvlei distribution centre.

2. REMARKS

- 2.1. Only one electrical connection is allowed per site with connections below 500kVA supplied at 400V three Phase and connections above 500kVA supplied at 11kV.
- 2.2. Calculations on this letter are based on the information supplied by the applicant as mentioned above.

Existing connection	0kVA
Required connection	900kVA
Additional load	900kVA

- 2.3. The estimated costs are subject to change if the size of the required connection changes, or when there are price escalations on materials beyond the control of CENTLEC.

3. EXISTING SERVICES

- 2.1. Plot 27 has no electrical connection.

5. SERVICES TO BE PROVIDED

- 5.1. CENTLEC will supply a medium voltage kiosk and facilitate a 900kVA medium voltage connection.
- 5.2. The developer will be responsible for all the internal infrastructures as well as the equipment necessary for sub-metering of the different dwellings.

6. PRELIMINARY CONNECTION COST FOR THE PROPOSED DEVELOPMENT

- 6.1. This estimated cost is based on the current cost per kVA price structure and is valid till 30 June 2017. The calculated cost for the provision of the additional 895kVA (**900kVA – 5kVA**) bulk electrical supply, including the strengthening of the CENTLEC electrical network is summarized as follow:

Description	Amount
Primary contribution – Item 4.1	R 676 143.00
Secondary contribution MV – Item 4.3	R 517 923.00
Sub Total	R 1 194 066.00
Connection material	R 79 793.12
Network contribution total	R 1 273 859.12
VAT	R 178 340.28
Total Cost Payable	R 1 452 199.40

7. DEPOSIT

CENTLEC requires a consumer account deposit as surety for the outstanding amounts on the monthly electrical account. This shall be done in the form of a bank guarantee. The deposit amount is calculated for a three month period and based on the assumption that the connection will be utilized at 70% of its maximum capacity for an eight hour, six day week.

Find attached a **Deposit Payment Form** that should be submitted, together with your contract application form (green form obtainable at CENTLEC finance department) as well as the original bank guarantee document, to the CENTLEC cashier at the CENTLEC finance department, at least one month before the connection needs to be switched on. The Bank Guarantee Document shall be retained in safe keeping at the CENTLEC finance department or its bank institution until the consumer ends or alter the electrical supply contract with CENTLEC.

The deposit amount for the **900kVA** as calculated from the current TOU – ELEC FLEX II – Bulk Supply Tariff, at medium voltage amounts to **R 733 800.00**.

8. PAYMENTS

All payments must be accompanied by the relevant quotation forms, and be offered for payment at the CENTLEC finance department at Telkom Building.

- a. **CENTLEC no longer accepts cheque payments.**
- b. The following information is of importance for bank transfers and electronic payments:

PAYMENT TO:
BANK:
ACCOUNT NUMBER:
BRANCH CODE:

CENTLEC (Pty) Ltd
ABSA
407 820 9583
63 2005

Please make payments in the following order

CENTLEC INFORMATION SHEET

INFORMATION, COSTS AND CONDITIONS APPLICABLE FOR THE PROVISION OF AN ELECTRICAL CONNECTION (Valid 01-07-2016 to 30-06-2017)

1. IMPORTANT INFORMATION

- 1.1 The purpose of information contained by means of this information sheet, is to provide information to developers about proposed changes and enlargements of existing electrical connections, or electrical connections to proposed new developments.
- 1.2 After the perusing of this information sheet, the requirement and load forecast is known for proposed changes, enlargements or new electrical connections, an appointment must be arranged with the Development Section at CENTLEC for the discussion of all information, regarding the required electrical connection.
- 1.3 Consciousness must be taken of the time limitations contained in this information sheet applicable to the implementing of official applications received pertaining the different sizes of connections due to time frames involved for the obtaining of materials.

2. GENERAL INFORMATION

- 2.1 No capital backbone contributions are required for a single phase residential connection with a capacity up to 60A (13.8 kVA) as well as a single phase business connection with a capacity of 80 A (18.4 kVA) at the consumer's distribution board within established areas taking the current zoning of the land as reference. These costs were included in the original development cost.
- 2.2 For all rezoned residential erven resulting in the enlargement of the original connection, the applicable capital backbone contribution per kVA shall be required for the additional maximum demand required.
- 2.3 For all residential and business subdivisions, the applicable contribution shall be required in respect to the capital backbone costs per kVA for every subdivision.
- 2.4 **Cost estimates shall be done for all non-standard connections > 13.86 kVA for residential and 18.4 kVA for businesses that will include the pro-rata (percentage use) capital backbone costs as well as the actual connection cost.**
- 2.5 Connections with a maximum demand > 500 kVA shall be serviced with an 11 kV bulk connection from a suitable fenced outdoor substation or an indoor substation building (determined by the position in the network) and erected according to CENTLEC's standard.
- 2.6 11 kV connections up to 1000 kVA where suitable, shall be provided from a metered fuse T-off unit.
- 2.7 Connections at 11 kV that is supplied by more than one cable shall be provided from circuit breakers equipped with over current and earth fault protection.
- 2.8 Connections above 1000 kVA shall be provided from a circuit breaker equipped with over current and earth fault protection as well as facilities for transformer temperature and bucholtz trip facilities.
- 2.9 Connections with a capacity above 7000 kVA could be supplied by more than one circuit breaker according to the requirement.
- 2.10 Where the electrical demand exceeds 500 kVA, a bulk connection shall be supplied and metered at 11 kV, or where the demand exceeds 100 kVA a bulk three-phase connection shall be supplied at 400 V. Therefore, the developer shall be responsible for all the internal infrastructure and maintenance thereof within the boundaries of the development as well as the sub-metering of every different dwelling within the development. The responsibility of CENTLEC ends at the bulk meter point and erf boundary of the development.
- 2.11 Primary backbone represents infrastructures from the Eskom supply point up to the 11 kV busbar at the Distribution Centre.
- 2.12 Secondary backbone represents infrastructures from the Distribution Centre's 11 kV busbar up to the low voltage busbar of the substation or transformer from where the connection shall be provided from and includes 500 m 11 kV cable for urban underground networks and 350 m 11 kV overhead line for peri-urban networks (cables longer than 500 m and lines longer than 350 m shall be for the account of the applicant).
- 2.13 Low voltage backbone in urban areas represents the infrastructure from the low voltage busbar of the substation to the connection point on the boundary of the stand that must be supplied (cables longer than 120 m shall be for the account of the applicant).
- 2.14 In peri-urban areas, there are no low voltage networks involved. In almost all cases the transformers are installed on the erf boundaries.
- 2.15 The meter point represents the infrastructure from the connection point up to the point where the consumer supply cable will be connected and includes 50 m cable (cables longer than 50 m shall be for the account of the applicant).
- 2.16 The developer shall ensure that all installations within any development complies to the relevant aspects stipulated in the By-laws relating to electricity supply of Mangaung Local Municipality as promulgated by Local Government Notice No 110 of 28 October 2005. Special attention should be given to the items specified in chapter 5 of this document regarding electrical motors and power factor. This document is available on our web site, under the "Information" heading. See www.centlec.co.za

3. MAXIMUM DEMAND CALCULATIONS

Load calculations must accompany all applications.

- 3.1 Without prejudice of CENTLEC's rights, if load calculations are not received, the following load calculations based on the maximum capacity of a standard single phase connection shall be applicable for the development:

$$A = E / F \times W$$

Where:

- A - Expected maximum demand for the total development
- E - Number Standard Single phase Connections
- F - SABS Coincidence Curves for (x) number consumers
- W - Connection capacity 13.8kVA (60A) single phase or the calculated load per dwelling according to SANS 10142-1



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Contact Person: E-mail: galaletsang.mokobe@centlec.co.za		Your ref.

DEPOSIT FOR CONSUMER ENERGY ACCOUNT

Date: 23-Mar-17
Quotation no: **53819**
Tariffs: 2016/2017

DESCRIPTION OF SERVICE: 900kVA medium voltage connection

NAME OF APPLICANT: Rodney Du Rand

ADDRESS: Plot 27 cnr Floors Coetzee & Frans Kleynhans Road
Rayton, Bloemfontein

1.	Estimate connection size	<input type="text" value="900"/>	kVA
2.	Consumer type	Domestic & NGO's	<input type="text" value="n"/>
		Business	<input type="text" value="y"/>
3.	Connection size group	Small (<80A)	<input type="text" value="n"/>
		Medium (80 - 150A)	<input type="text" value="n"/>
		Bulk LV (>100kVA to 500kVA)	<input type="text" value="n"/>
		Bulk MV (400kVA and higher)	<input type="text" value="n"/>
		Bulk MV from Primary Sub	<input type="text" value="y"/>
4.	Connection Voltage	Low Voltage (<500kVA)	<input type="text" value="n"/>
		Medium Voltage (>400kVA)	<input type="text" value="y"/>

Estimate connection size	900 kVA	
Average Demand use (70% LF)	630 kVA	Elecflex II - MV from primary substation
Service Charge	R 1 856.59	< R 1 856.59
Total kVA Charge	R 99 162.00	< R 157.40 (R/kVA)
Total Energy Charge	R 143 580.94	< R 1.107 (average c/kWh)
One Month Estimated Account	R 244 599.53	

5. **Deposit Amount** R 733 800.00
(3xEstimated monthly account)

FOR OFFICE USE:- Account Number: _____

Note: This Deposit is meant to give surety for amounts outstanding on the monthly electricity account for energy consumption and does not form part of the quoted connection or upgrading cost. and being confirmed as paid by CENTLEC.

Bulk connections / consumers:

Consumers with a connections capacity of higher than 150A is considered to have bulk energy accounts with time of

Only a bank guarantee shall be accepted as deposit/surety for bulk energy accounts.

The bank guarantee should be submitted, together with the duly completed and signed *Contract for the Supply of Electricity* form, at least thirty days before the connection or upgrade is required.

All payment to be in favour of "CENTLEC (SOC) Ltd"



Directors: N Mokhesi (Chairperson), DC Myeni (Deputy Chairperson), CAK Choeu ND Mochochoko, KM Moroka, MP Mohale, MI Seoe, ZC Uwah,
NA Mgoqi (CEO), LG Kritzinger (COO), TJ Ramulondi (CFO)

