

Duncan Palmer Kloofsig Solar (Pty) Ltd P O Box 5104 PORT ELIZABETH 6001

03 November 2015

Ravi Moonsamy Tel number: + 27 33 395 3737

Ref No.: 14113999

Dear Mr Palmer

# COST ESTIMATE LETTER FOR THE CONSTRUCTION OF WORKS TO CONNECT A GENERATOR TO THE DISTRIBUTION SYSTEM FOR 75MW PV IN NORTHERN CAPE

Thank you for your application relating to the construction of works to Connect the Facility to the Distribution System, and/or the possible impact on the Distribution System of Connecting the Facility that is embedded within a plant, attached hereto as Annexure B (*Connection Application*). Eskom has assessed your requirements and herewith provides an estimate of the cost of providing the works and the Connection. It is based on engineering assumptions and provided in order to assist in making a decision whether or not you should proceed to request a Budget Quote.

This Cost Estimate Letter is not an offer for a contract. It is purely illustrative and in anticipation of a request for a Budget Quote. No information contained in this Cost Estimate Letter shall be deemed to form part of any contract between Eskom and the Customer.

Furthermore, if based on this Cost Estimate Letter a Request for Budget Quote is submitted to Eskom, any information recorded in this Cost Estimate Letter will lapse immediately (even if a Budget Quote is eventually not provided or accepted) and Eskom will not be bound to perform in terms of this Cost Estimate Letter in any way.

Eskom will require certain documents and approvals, set out herein, and payment of a Distribution Quotation Fee and if applicable a Transmission Quotation Fee, in order to provide a Budget Quote.

#### 1. DEFINITIONS AND INTERPRETATION

- 1.1 Notwithstanding that this Clause 1 deals with interpretation, where any sub-clauses hereof contain operative provisions, effect shall be given thereto as set out herein.
- 1.2 The following capitalised words and expressions shall have the meanings as assigned to them and cognate expressions shall have corresponding meanings:
- 1.2.1 'Act' means the Electricity Regulation Act of 2006, including any regulations issued pursuant thereto, as amended or re-enacted from time to time.
- 1.2.2 'Approved Credit Rating' means a South African long-term unsecured foreign currency debt rating no worse than BBB- (as determined by Standard and Poor's Rating Group or Fitch Ratings) or Baa3 (as determined by Moody's Investor Services, Inc.) or equivalent rating (as determined by Eskom or a rating agency approved by Eskom).
- 1.2.3 'Bank Guarantee' means a bank guarantee substantially in a form acceptable to Eskom and initially for the amount stated therein, which (i) is issued by a bank which (a) holds an Approved Credit Rating and (b) is registered under applicable Law to carry on the business of a bank in South Africa and (ii) constitutes an on demand, unconditional and irrevocable commitment to pay by the bank by which it is issued.
- 1.2.4 **'Budget Quote'** means the budget quote, with its appendices, to be issued by Eskom to the Customer;
- 1.2.5 **'Business Day'** means any day other than Saturday, Sunday or an official public holiday in South
- 1.2.6 **'Capital Costs'** means the total actual capital costs of the Eskom Works but excluding the costs of the Monopoly Works;

- 1.2.7 **'Code(s)'** means the Distribution Code, the South African Grid Code, the Grid Connection Code for Renewable Power Plants or any other code, published by NERSA, as applicable and as amended, modified, extended, replaced or re-enacted from time to time;
- 1.2.8 'Connection' means the physical connection of the Facility to the Distribution System;
- 1.2.9 **'Connection Charge'** means subject to adjustments, the total Standard Connection Charge and the Premium Connection Charge recouped or to be recouped by Eskom from the Customer for the cost of the Eskom Works comprising the Dedicated Capital Costs and if applicable, the cost of the Monopoly Works, calculated in compliance with the Code(s);
- 1.2.10 **'Connection Charge Estimate'** means the total estimated Connection Charge as set out in Table 1 of Annexure G (Financial Specifications).
- 1.2.11 **'Connection Charge Guarantee**' means a Bank Guarantee issued for an amount equal to the Connection Charge Guarantee Amount which amount will be set out in the Budget Quote.
- 1.2.12 **'Connection Charge Guarantee Amount'** means (a) initially, an amount equal to the balance of the Connection Charge Estimate as set out in Table 1 of Annexure G (Financial Specifications), and (b) thereafter, the amount in paragraph (a) adjusted by reference to (i) deductions for any instalments received by Eskom in the preceding year pursuant to the Budget Quote and (ii) deductions or additions resulting from any adjustments made by Eskom pursuant to the Budget Quote in the preceding year.
- 1.2.13 **'Connection Charge Payment Schedule'** means the schedule of Connection Charge instalments and corresponding instalment payment dates to be set out in the Budget Quote, as amended by Eskom from time to time on written notice to the Customer pursuant to the Budget Quote.
- 1.2.14 **'Connection Site'** means the site made or to be made available by the Customer to Eskom for the Eskom Connection Works.
- 1.2.15 'Connection Works' means the planning, financing, insuring, land rights acquisition, design, engineering, procurement, supply, fabrication, construction, erecting, installation, inspection, precommissioning, testing, completion, commissioning, operating and maintenance of the electricity network infrastructure comprised in the Connection and all activities and requirements ancillary to these, and includes the Facility Connection Works and the Eskom Connection Works;
- 1.2.16 **'Contract Works'** means the portion of the Connection to be undertaken by the Customer in accordance with the conditions of the Self-Build Agreement to be concluded between the Customer and Eskom;
- 1.2.17 'Contract Works Equipment' means the plant, facilities, equipment and assets, which together comprises the portion of the Connection to be supplied by the Customer in accordance with the conditions of the Self-Build Agreement to be concluded between the Customer and Eskom. The Contract Works Equipment shall include any and all machinery, apparatus and materials that would ordinarily form part of a Network, such as telecommunication equipment, even if such machinery, apparatus or material may be removed without materially affecting the operation or reliability of the Network.
- 1.2.18 **'Cost Estimate Fee'** means the portion of the Connection Charge paid by the Customer and received by Eskom for the issue of the Cost Estimate Letter, the value of which is set out in Part A of Annexure G (Financial Specifications);
- 1.2.19 'Cost Estimate Letter' means this letter, with its annexures, issued by Eskom to the Customer with a non-binding estimation of the costs of the works to Connect the Facility to the Distribution System;
- 1.2.20 'Customer' means the legal person or entity as set out in Annexures B (Connection Application) and C (Customer/Technical Details and Description of Facility);
- 1.2.21 'Dedicated Capital Costs' means the actual capital costs of the Eskom Works but excluding the cost of the Monopoly Works and Upstream Works;
- 1.2.22 **'Dedicated Connection Equipment'** means those assets forming part of the Eskom Equipment recovered through the Connection Charge associated with the Dedicated Capital Costs;
- 1.2.23 'Distribution' means the regulated business unit through which Eskom constructs, owns,

- operates and maintains Eskom's Distribution System in accordance with its Licence and the Code(s).
- 1.2.24 **'Distribution Code'** means the set of documents titled South African Distribution Code published by NERSA, as amended, modified, extended, replaced or re-enacted from time to time.
- 1.2.25 **'Distribution Connection and Use-of-System Agreement' or 'DCUOSA**' means the agreement(s) required by the Code, to be entered into, in writing, between Eskom and the Customer in respect of the Connection of the Facility to the Distribution System and to allow the Customer access to and the use of the Distribution System.
- 1.2.26 **'Distribution Connection Charges'** means that portion of the Connection Charge associated with the Distribution System, which may comprise of a Distribution Standard Connection Charge and a Distribution Premium Connection Charge;
- 1.2.27 **'Distribution Premium Connection Charge'** means that portion of the Connection Charge associated with a Premium Connection and the Distribution System;
- 1.2.28 **'Distribution Quotation Fee'** means the portion of the Distribution Connection Charge to be paid by the Customer to Eskom for the issue of the Budget Quote, the value of which is set out in Annexure G (Financial Specifications) and will be valid for a period of 12 months from the date of this Cost Estimate Letter, where after the value will be revised by Eskom.
- 1.2.29 **'Distribution Standard Connection Charge'** means that portion of the Connection Charge associated with a Standard Connection and the Distribution System;
- 1.2.30 **'Distribution System'** means Eskom's network infrastructure consisting of assets operating at a nominal voltage of 132 kV or less, not classified as transmission transformation equipment.
- 1.2.31 **'Distribution Use-of-System (DuoS) Charges'** has the meaning as ascribed to it in the Schedule of Standard Prices.
- 1.2.32 '**DUoS Charge (generators)**' has the meaning as ascribed to it in the Use of System Schedule of Standard Prices for Distribution Connected Generators (Urban/Rural)
- 1.2.33 **'EA'** means environmental authorisation(s).
- 1.2.34 **'Early Termination Guarantee'** means a Bank Guarantee issued for an amount equal to the Early Termination Guarantee Amount;
- 1.2.35 **'Early Termination Guarantee Amount'** means a) initially an amount as set out in Annexure G (Financial Specifications), b) thereafter an amount as adjusted by Eskom on written notice to the Customer in accordance with the terms and conditions of Budget Quote; and c) thereafter such adjusted amount reduced annually by one tenth (1/10th) with effect from the fourth (4th) year following Eskom's operational notification in terms of the DCUOSA;
- 1.2.36 'Eskom' means Eskom Holdings SOC Ltd (Registration Number 2002/015527/30);
- 1.2.37 'Eskom Connection Equipment' means the plant, facilities, equipment and assets set forth in Annexure E (Eskom Connection Works) to Connect the Facility to the Distribution System, which shall be constructed in accordance with the Budget Quote and owned, operated and maintained by Eskom. The Eskom Connection Equipment shall include the Point of Utility Connection in cases, where this equipment is owned, operated and maintained by Eskom.
- 1.2.38 'Eskom Connection Works' means the works as described in Annexure E (Eskom Connection Works) required to be constructed, changed or enabled on the Distribution System side of the Point of Connection, save as may be otherwise provided herein, and all related activities by which the Eskom Connection Equipment shall establish the Connection between the Facility and the Distribution System, including if applicable the Upstream Works, the Contract Works and the Monopoly Works;
- 1.2.39 'Eskom Equipment' means the plant, facilities, equipment and assets set forth in Annexure E (Eskom Connection Works) to the Budget Quote which shall be constructed by Eskom in accordance with the Budget Quote and owned, operated and maintained by Eskom;
- 1.2.40 **'Eskom Works'** means the works as described in Annexure E (Eskom Connection Works) comprising of the Eskom Connection Works but excluding the Contract Works;
- 1.2.41 **'Estimated Capital Costs'** means the estimated Capital Costs as set out in Annexure F (Estimated Capital Costs);

- 1.2.42 **'Estimated Dedicated Capital Costs'** means the estimated Dedicated Capital Costs as set out in Annexure F (Estimated Capital Costs):
- 1.2.43 **'Estimated Upstream Capital Costs'** means the estimated Upstream Capital Costs as set out in Annexure F (Estimated Capital Costs);
- 1.2.44 'Facility' means the Customer's plant, situated on the property described in Annexure C (Customer/Technical Details and Location of Facility), together with the Facility Connection Equipment for the safe, efficient and optimal operation of the plant, up to the Point(s) of Connection, which shall be designed, constructed, installed, operated and maintained by or on behalf of the Customer, but excluding the Eskom Connection Equipment whether or not located at the Connection Site:
- 1.2.45 'Facility Connection Equipment' means the Facility equipment, including the Point of Generator Connection, to connect the Facility to the Distribution System, which shall be constructed, owned, operated and maintained by the Customer. The Facility Connection Equipment shall also include the Point of Utility Connection in cases where this equipment is owned, operated and maintained by the Customer.
- 1.2.46 **'Facility Connection Works'** means the works to be carried out on the Facility side of the Point of Connection and all related activities by which the Facility Connection Equipment shall establish a Connection between the Facility and the Distribution System;
- 1.2.47 'Grid Connection Code for Renewable Power Plants' means the set of documents entitled "Grid Connection Code for Renewable Power Plants (RPPs) connected to the Electricity Transmission System (TS) or the Distribution System (DS) in South Africa" published by NERSA as amended, modified, extended, replaced or re-enacted from time to time;
- 1.2.48 'HV' means high voltage;
- 1.2.49 'Maximum Export Capacity' means the maximum capacity measured in 30 (thirty) minute integrating periods at the Point(s) of Supply/Connection notified by the Customer, as set out in Annexure C (Customer/Technical Details and Location of Facility), and accepted by Eskom for the delivery of electrical energy between the Facility and the Distribution System;
- 1.2.50 'Monopoly Works' means those works forming part of the Eskom Connection Works which remain Eskom's responsibility under the Self-Build Agreement to ensure a standard of work that meets Eskom's quality of supply, reliability and safety standards;
- 1.2.51 'NERSA' means the National Energy Regulator of South Africa established in terms of the National Energy Regulator Act (Act no 4 of 2004) or its successor-in-title;
- 1.2.52 **'NRS 048'** means the quality of supply specification issued by the South African Bureau of Standards, as revised from time to time or as replaced by a national standard;
- 1.2.53 'Parties' means Eskom and the Customer:
- 1.2.54 'Point of Generator Connection (PGC)' means the circuit-breaker and associated ancillary equipment (instrument transformers, protection, isolators) that connects a generator to any electrical network. The location of the Point of Generator Connection is described in Annexure C (Customer/Technical Details and Location of Facility);
- 1.2.55 'Point(s) of Connection (POC)' or 'Point(s) of Supply (POS)' means the electrical nodes on the Distribution System where the Customer's electrical equipment is physically connected to Eskom's electrical equipment. The location of the Point(s) of Connection is described in Annexure C (Customer/Technical Details and Location of Facility);
- 1.2.56 'Point of Utility Connection (PUC)' means one or more circuit-breakers and associated ancillary equipment (instrument transformers, protection, isolators), entirely independent of any PGC, that connects the Facility to the Distribution System. The Point of Utility Connection is described in Annexure C (Customer/Technical Details and Location of Facility);
- 1.2.57 'Premium Connection' means a connection made or to be made between the Facility and Eskom's network based on the customer's requirements, that are in excess of the specifications of a Standard Connection to provide for a more reliable and secure connection and includes the acquisition and installation of the Premium Equipment;
- 1.2.58 **'Premium Connection Charge'** means that portion of the Connection Charge payable for costs associated with the Premium Connection included in the scope of the Eskom Connection Works

- to meet customer specific requirements in excess of what is considered as the least life-cycle cost investment;
- 1.2.59 'Premium Equipment' means the equipment to be constructed, or to be installed if the Customer elects a Premium Connection and is in addition to and/or in place of the equipment installed in the case of a Standard Connection. Where applicable, the Premium Equipment shall comprise the equipment listed in Annexure E (Eskom Connection Works);
- 1.2.60 **'Request for Budget Quote'** means the request for the Budget Quote letter in the form attached hereto as Annexure A to be completed by the Customer and submitted to Eskom;
- 1.2.61 **'Schedule of Standard Prices'** means Eskom's published tariffs, charges and the NMD Rules, applicable to customers as approved by NERSA and as amended from time to time;
- 1.2.62 **'Self-Build'** means the planning, financing, insuring, land rights acquisition, design, engineering, procurement, supply, fabrication, construction, erection, installation, inspection, pre-commissioning, testing, completion and commissioning of the Contract Works by the Customer, and on completion of the Contract Works the handover of the plant, facilities, equipment, assets and related designs, material guarantees/ warranties, deeds and other documentation by the Customer to Eskom:
- 1.2.63 'Self-Build Agreement' means the agreement between Eskom and the Customer pertaining to the Contract Works to be undertaken by the Customer, and the Monopoly Works falling under the responsibility of Eskom;
- 1.2.64 **'South African Grid Code**' means the set of documents entitled "South African Grid Code" published by NERSA as amended, modified, extended, replaced or re-enacted from time to time.
- 1.2.65 **'Standard Connection'** means a connection made to or to be made between the Facility and Eskom's network based on the lowest life-cycle costs design that meets the specifications in terms of NRS 048 and the Distribution Code for a technically acceptable solution.
- 1.2.66 **'Standard Connection Charge'** means that portion of the Connection Charge that is payable for costs associated with the Standard Connection;
- 1.2.67 **'Standard Equipment'** means the equipment to be constructed or to be installed if the Customer elects a Standard Connection. The Standard Equipment shall comprise the equipment listed in Annexure E (Eskom Connection Works);
- 1.2.68 **'Transmission Connection Charges'** means that portion of the Connection Charge associated with the Transmission System, which may comprise of the Transmission Standard Connection Charge and the Transmission Premium Connection Charge;
- 1.2.69 **'Transmission Premium Connection Charge'** means that portion of the Connection Charge associated with a Premium Connection and the Transmission System;
- 1.2.70 'Transmission Quotation Fee' means the portion of the Transmission Connection Charge to be paid by the Customer to Eskom for the issue of this Budget Quote, the value of which is set out in Annexure G (Financial Specifications) and will be valid for a period of 12 months from the date of this Cost Estimate letter, where after the value will be revised by Eskom;
- 1.2.71 **'Transmission Standard Connection Charge**' means that portion of the Connection Charge associated with a Standard Connection and the Transmission System;
- 1.2.72 'Transmission System' means all Eskom's lines and substation equipment where the nominal voltage is above 132 kV. All other equipment operating at lower voltages are either part of the Distribution System or classified as transmission transformation equipment;
- 1.2.73 **'Upstream Capital Costs'** means the actual capital costs incurred by Eskom in carrying out the Upstream Works;
- 1.2.74 **'Upstream Connection Equipment'** means the Eskom Equipment associated with the Upstream Works;
- 1.2.75 **'Upstream Works'** means those works forming part of the Eskom Connection Works, which are considered to be for the benefit of many customers and cannot be directly allocated to any one or more customers at the time of the Connection.
- 1.3 In this Cost Estimate Letter, unless a contrary intention clearly appears:-

- 1.3.1 the headings to the clauses and sub-clauses in this Cost Estimate Letter are for the purpose of convenience and reference only, and shall not be used in the interpretation, modification, amplification of any clause thereof;
- 1.3.2 words and expressions defined in this Cost Estimate Letter shall bear the same meanings in the Annexures to this Cost Estimate Letter unless specifically defined in those Annexures;
- 1.3.3 any words or expressions for which no meanings have been ascribed in this Cost Estimate Letter shall have the meanings ascribed to them in the Act or, in the absence of such meanings, the meanings ascribed to them in the Code(s);
- 1.3.4 words and expressions importing:
  - a. any one gender includes the other gender;
  - b. the singular includes the plural and vice versa;
  - natural persons include juristic persons and vice versa;
- 1.3.5 any reference to any law shall include any amendments, modifications, extensions, replacements or re-enactments thereof then in force;
- 1.3.6 any reference to 'this Cost Estimate Letter' shall mean this Cost Estimate Letter together with its Annexures as amended, modified or supplemented;
- 1.3.7 any reference to 'writing' or 'written' shall include all methods of reproducing words in a legible and non-transitory form:
- 1.3.8 any reference to 'persons' shall include individuals, firms and corporations, joint ventures, trusts, unincorporated associations and organisations, partnerships and any other entities, in each case whether or not having a separate legal personality; and
- 1.3.9 any reference to either 'Party' or 'any person' shall include its legal successors and permitted assignees.
- 1.3.10 in the computation of periods of time from a specified day to a later specified day, 'from' means from and including and 'until' or 'to' means to and including.
- 1.3.11 any reference in this Cost Estimate Letter to a 'Clause' or 'sub-clause' is a reference to a clause or sub-clause contained in this Cost Estimate Letter;
- 1.3.12 any reference to 'Clause', 'Annexure' and Part ' are references to the relevant clause, annexure and part, respectively, of this Cost Estimate Letter, references to 'Annex' are to the relevant annex to an Annexure of this Cost Estimate Letter, references to 'Paragraph' are to the relevant paragraph in an Annexure or Annex to this Cost Estimate Letter;
- 1.3.13 where figures are referred to in numerals and in words, if there is any conflict between the 2 (two), the words shall prevail;
- 1.3.14 any reference to number of days shall be a reference to calendar days unless Business Days are specified; and
- 1.3.15 the rule of construction that this Cost Estimate Letter shall be interpreted against the Party responsible for the drafting or preparation hereof, shall not apply.

#### 2 TECHNICAL

- 2.1 The Maximum Export Capacity (MEC) and the voltage level of the Connection are set out in Annexure C (Customer/Technical Details and Location of Facility).
- 2.2 The location of the Point(s) of Connection for the Facility is described in Annexure C (Customer/Technical Details and Location of Facility).
- 2.3 The Customer shall provide the relevant protection, synchronising and control equipment at the Point(s) of Connection which is compatible with the protection standard required by ESKOM as set out in Annexure D (the Standard for the Interconnection of Embedded Generation).
- 2.4 Prior to the Connection of the Facility to the Distribution System, the Customer shall comply with all applicable laws including but not limited to those governing the electricity supply industry including regulations, the Codes, directives and guidelines, failing which Eskom may refuse to allow the Connection, or disconnect the Connection until such time as there is compliance with such laws.

# 2.5 Network performance and quality of supply

- 2.5.1 Eskom is required to provide a standard of quality of supply, which complies with NRS 048. The Customer shall comply with the quality of supply limits determined in accordance with NRS 048.
- 2.5.2 Eskom will use its reasonable endeavours to furnish the Customer with a reliable network for the delivery of electricity from the Facility at the Point(s) of Connection. However, it is not practicable for Eskom to guarantee that the continuity and voltage quality at the Point(s) of Connection will always be maintained under all contingencies. It will be incumbent on the Customer to take adequate measures to protect its business and the Facility against any damage and / or losses arising from frequency deviations, loss of Connection or connection/supply interruptions, voltage variations (including voltage dips), voltage harmonics, interharmonics, voltage flicker, voltage unbalance, voltage swells and transients, undervoltages and overvoltages at the Point of Connection.
- 2.5.3 Eskom generally contracts with Customers for a Standard Connection in terms of which no specific voltage dip or interruption limits will be specified in the contract. Indicative levels of voltage dip and interruption performance may be obtained on request from Eskom. In order to ensure greater levels of assurance on interruption (and in some cases dip) performance, generators may elect to:
- 2.5.3.1 pay for the necessary infrastructure required to provide a Connection with higher levels of reliability; or
- 2.5.3.2 pay for additional monitoring equipment to effect monitoring of performance at the Point of Connection.

#### 2.6 Technical assumptions

- 2.6.1 This Cost Estimate Letter is based on the information provided by the Customer in Part 1 of the application for this Cost Estimate Letter attached hereto as Annexure B (Connection Application) and assumes that the Connection Works to be constructed is for the Connection of the Facility and not for any other customer. If other customers are to be connected the cost to connect and the technical assumptions may change.
- 2.6.2 This Cost Estimate Letter is based on the technical assumptions as set out in Part C of Annexure E (Eskom Connection Works).

#### **3 CONNECTION WORKS**

#### 3.1 Facility Connection Works

The Customer shall be responsible for the portion of the Connection Works comprising the Facility Connection Works.

#### 3.2 Contract Works

- 3.2.1 If a Self-Build option is elected by the Customer, the Customer shall be responsible for the portion of the Connection Works comprising the Contract Works as set out in Part B.1 of Annexure E (Eskom Connection Works) and associated timelines in accordance with the terms and conditions of the Self-Build Agreement.
- 3.2.2 The Customer must indicate in the Request for the Budget Quote whether it elects to Self-build and must also indicate the estimated timeline to complete the Contract Works.
- 3.2.3 The approval of a Self-Build option by Eskom and the take-over of any Contract Works by Eskom will be subject to the conditions contained in Eskom's procedure for HV self-build projects (a copy of which will be made available on request) and the Self-build Agreement to be concluded, which inter alia shall include the following:
- 3.2.3.1 Contract Works shall be limited to works in respect of Dedicated Connection Equipment;
- 3.2.3.2 the Contract Works must be built according to the Eskom standards and specifications and Eskom will not under any circumstances take over and energise any asset that is not built according to the Eskom standards; and
- 3.2.3.3 the Customer shall pay all costs incurred by Eskom in relation to all Monopoly Works (see Annexure F).

#### 3.3 Eskom Connection Works

- 3.3.1 Eskom shall be responsible for the portion of the Eskom Connection Works comprising the Eskom Works as set out in Annexure E (Eskom Connection Works).
- 3.3.2 If a Self-Build option is not elected by the Customer, the Eskom Works shall be as set out in Part A of Annexure E (Eskom Connection Works).
- 3.3.3 If a Self-Build option is elected by the Customer, the Eskom Works shall be as set out in Part B.1 of Annexure E (Eskom Connection Works).

#### 3.4 Estimated Connection timelines

3.4.1 Subject to the content of this Cost Estimate Letter and the conditions of any Budget Quote accepted later, the estimated period for the completion of the Eskom Connection Works, calculated from the commencement of construction by Eskom, is set out in Part A.3 of Annexure E (Eskom Connection Works). The estimated period provided in this Cost Estimate Letter is not binding on Eskom in any way.

#### 4 FINANCIAL

#### 4.1 Total Estimated Capital Costs

- 4.1.1 The total Estimated Capital Costs are:
- 4.1.1.1 if the Customer does not elect to Self-Build are set out in Part A of Annexure F (Estimated Capital Costs); or
- 4.1.1.2 if the Customer elects to Self-Build are set out in Part B of Annexure F (Estimated Capital Costs).

# 4.2 Connection Charge Estimate

- 4.2.1 The Connection Charge Estimate:
- 4.2.1.1 if the Customer does not elect to Self-Build is set out in Part B of Annexure G (Financial Specification); or
- 4.2.1.2 if the Customer elects to Self-Build is set out in Part C of Annexure G (Financial Specification).
- 4.2.2 The Customer shall pay the Connection Charge Estimate in accordance with the Budget Quote.

#### 4.3 Connection Charge Guarantee

4.3.1 If the Customer elects in its acceptance of the Budget Quote to pay the Connection Charge Estimate in instalments, the Customer shall deliver a Connection Charge Guarantee in accordance with the Budget Quote.

# 4.4 Early Termination Guarantee

- 4.4.1 Eskom will, in connecting the Facility to the Distribution System incur certain expenditures and costs, which are not directly recovered through the Connection Charge. The Customer shall deliver an Early Termination Guarantee in accordance with the Budget Quote. The Early Termination Guarantee Amount is set out in Annexure G (Financial Specifications).
- 4.4.2 If the project is cancelled by the Customer before Connection or if an event of default occurs in relation to the Customer before Connection of the Facility to the Distribution System or if the Connection and Use-of-System Agreement is terminated before the thirteen-year period has lapsed, Eskom shall be entitled to call up the Early Termination Guarantee without any notice to the Customer.

#### 4.5 DUoS Charge (generators)

- 4.5.1 The Customer shall pay to Eskom the DUoS Charge (generators) for the Facility's use of the Distribution System, subject to the terms and conditions set out in the Distribution Connection and Use-of-System Agreement.
- 4.5.2 ESKOM's prevailing Schedule of Standard Prices, at any time shall serve as prima facie evidence of the DUoS Charge (generators) in force at that time.
- 4.5.3 Particulars of the DUoS Charge (generators) currently in force are set out in Annexure H (Use of System Schedule of Standard Prices for Distribution Connected Generators).

#### **5 BUDGET QUOTE**

5.1 Eskom shall provide a Budget Quote to the Customer, provided that within 12 (twelve) months of the date of this Cost Estimate Letter the Customer complies with the Budget Quote application conditions set out in Clause 5.2 below.

#### 5.2 Budget Quote application conditions

- 5.2.1 Where the Customer intends to submit bids in the following programme regulated by the Electricity Regulations on New Generation Capacity IPP REBID 5, the entity responsible for procurement (currently the Department of Energy) must pre-qualify applications to receive a Budget Quote based on the published pre-qualification criteria.
- 5.2.2 Where the Customer does not intend to submit a bid as part of a regulated bid programme, the Customer shall submit:
- 5.2.2.1 a letter from NERSA confirming receipt of an application for a licence, if applicable to generate and export energy;
- 5.2.2.2 proof of land ownership or permission to use the land intended;
- 5.2.2.3 EA progress at least a letter of confirmation from the Department of Environmental Affairs, approving the scoping report and appointment of an environmental consultant to conduct the studies necessary to obtain environmental approvals or permits; and
- 5.2.2.4 proof of reasonable viability of the proposed technology regarding the primary energy source.
- 5.2.3 The Customer shall complete and submit Annexure A (Request for Budget Quote) to Eskom.
- 5.2.4 The Customer shall complete and submit Part 2 of the application form to Eskom.
- 5.2.5 The Customer shall pay the Distribution Quotation Fee and where applicable the Transmission Quotation Fee once the Customer has been pre-qualified in terms of Clause 5.2 and/or satisfied the required conditions in Clause 5.2.

#### 5.3 Cost Estimate Fee and quotation fees

- 5.3.1 Eskom incurs costs in providing a Cost Estimate Letter. These costs are payable upfront as a Cost Estimate Fee before Eskom will proceed with the preparation of the Cost Estimate Letter.
- 5.3.2 Should a Budget Quote not be requested by the Customer, the Cost Estimate Fee will be forfeited.
- 5.3.3 Similarly, Eskom will incur costs, such as survey, environmental impact assessments, and detailed design, in providing a Budget Quote. These costs are payable upfront as a Distribution Quotation Fee and where applicable a Transmission Quotation Fee, before Eskom will proceed with the Budget Quote.
- 5.3.4 Should the Budget Quote not be accepted for any reason, the Cost Estimate Fee will be forfeited and any actual costs incurred by Eskom shall be set-off against any amounts paid in advance by the Customer and the balance refunded to the Customer.
- 5.3.5 Should the Customer require a revision of scope of the Connection after paying the Cost Estimate Fee and after receiving the Cost Estimate Letter, the Customer will be required to pay to Eskom another upfront cost estimate fee before another cost estimate letter will be provided.

#### 6 LEGAL

- 6.1 Eskom may not connect the Facility to the Distribution System unless the Customer has obtained approval or a license from NERSA and complies with the prevailing law in general. Any costs incurred by Eskom, at or after providing the Budget Quote, is payable by the Customer irrespective of whether these approvals are obtained or not.
- 6.2 If the Customer wants Eskom to proceed to provide a Budget Quote the Customer must complete the Request for a Budget Quote, in the form attached to this Cost Estimate Letter as Annexure A and forward the request together with the Distribution Quotation Fee and/or the Transmission Quotation Fee where applicable and other required information and documentation, in accordance with Clause 5.2.

- 6.3 Any changes to the assumptions and scope must be clearly indicated to Eskom in writing, which will result in a revised cost estimate letter or Budget Quote and may result in a new quotation fee being payable.
- 6.4 The Customer shall enter into a written Distribution Connection and Use-of-System Agreement with Eskom in accordance with the Budget Quote.
- 6.5 Where the Customer elects to exercise the Self-Build option, the Customer shall enter into a written Self-Build Agreement with Eskom. If the Customer fails to construct the Contract Works in accordance with the required Eskom standards and specifications, Eskom will not be obligated to take ownership of these assets. In this instance, the Customer will be in breach of the Self-Build Agreement. Should the Customer fail to remedy its breach and meet the requirements, Eskom may, in its sole discretion, provide to the Customer a new quotation to complete the project and take over the assets.
- 6.6 If the Customer intends also to consume electricity at the Facility, which is to be supplied by Eskom, and the Customer does not have an electricity supply agreement or the terms and conditions of the Customer's existing electricity supply agreement will change due to the establishment of the Facility, the Customer shall be required to sign an electricity supply agreement that will regulate the supply of electricity to the Facility. Please contact Ravi Moonsamy at telephone number +27 33 395 3737 if this is the case.
- 6.7 The Customer shall be liable to pay any taxes and/or levies relating to the subject matter hereof, which may be imposed in terms of any existing and/or future legislation or as approved by NERSA.
- 6.8 The terms and conditions of this Cost Estimate Letter are subject to the provisions of the Code(s), the Act(s) and the rules and regulations issued thereunder, and of Eskom's licences and Schedule of Standard Prices, as amended or re-enacted from time to time and any other applicable laws.
- 6.9 The information contained in this Cost Estimate Letter should not be used for anything other than its intended purpose. Eskom accepts no liability, contractual or otherwise, as a result of any reliance on this information and the Customer accordingly indemnifies Eskom against any liability emanating from the use of this information.
- 6.10 Eskom's bank account details for direct deposits or bank transfers shall be specified in the invoice issued by Eskom in respect of the Distribution Quotation Fee and the Transmission Quotation Fee, if applicable.
- 6.11 The Customer shall use the account number on the invoice as the reference number for the deposit or transfer. Please attach proof of payment to the completed Request for Budget Quote.

For any information, enquiries or confirmation, please contact Ravi Moonsamy at telephone number +27 33 395 3737.

I thank you for the opportunity of allowing Eskom to provide this service and trust that your favourable written reply will reach this office shortly.

Yours sincerely

Jacob Madumo

03/11/2015

Regional Manager GAU

Date:

#### **REQUEST FOR BUDGET QUOTE**

Duncan Palmer Kloofsig Solar (Pty) Ltd P O Box 5104 PORT ELIZABETH 6001

Date:
Eskom Holdings SOC Ltd (Reg No: 2002/015527/30)
Ravi Moonsamy
IPP Executive
Fax number: 086 666 4923
PO Box 5
Mkondeni
3212
Dear Ravi
REQUEST FOR BUDGET QUOTE FOR CONSTRUCTION OF WORKS TO CONNECT A GENERATOR TO THE DISTRIBUTION SYSTEM FOR 75MW IN NORTHERN CAPE
I have read and understood the terms of the Cost Estimate Letter dated, reference number I hereby request Eskom to prepare a Budget Quote for my consideration.
I acknowledge that I intend to exercise the <b>Self-Build option</b> and herewith submit an application to do so. <i>OR</i>
I do not intend to exercise the Self-Build option [strike through the option which is not applicable].
If I have elected the Self-Build option above, the estimated timeline to complete the Contract Works is calendar months.
[If a quotation fee(s) was quoted, include the following]
Please provide an invoice for the following:  Distribution Quotation Fee of R, (+ VAT = R) and/or  Transmission Quotation Fee of R, (+ VAT = R).  Total Quotation Fee of R, (+ VAT = R).

Please find herewith also the documentation/information required by Eskom as set out in the Cost Estimate Letter to proceed with the Budget Quote.

# [List the information and attach proof to this letter]

I acknowledge that Eskom will release the project for the Budget Quote phase when all of the following conditions are met:

- Request for Budget Quote letter received
- Quotation Fee(s) paid
- Grid Application Form received Part 1 & Part 2

All future correspondence must be ad	dressed as follows:	
code		
Signed for and on behalf of	on 2	0 bv
in my capacity as		

# **CONNECTION APPLICATION**

Separate application

# **ANNEXURE C**

# CUSTOMER/TECHNICAL DETAILS AND LOCATION OF FACILITY

# Table 1

1.1	Customer	Kloofsig Solar (Pty) Ltd
1.2	Location of the Facility	latitude 30°01'11.6"S and longitude 24°33'46.6"E
1.3	Cost Estimate Letter reference number	14113999
1.4	Date of Cost Estimate Letter	03 November 2015
1.5	Maximum Export Capacity	75 MW
1.6	Voltage level of the Connection	132 kV
1.7	Location of Point of Connection (POC)	On the 132kV feedbay at new switching substation

# **ANNEXURE D**

Standard for Interconnection of Embedded Generation

Separate attachment

#### **ESKOM CONNECTION WORKS**

#### PART A: SELF-BUILD OPTION NOT ELECTED BY CUSTOMER

#### A.1 Dedicated Connection Equipment

A.1.1 Standard Equipment on the Transmission System

Not applicable

#### A.2 Upstream Connection Equipment

Not applicable

#### A.3 Estimated Period

Not applicable

#### PART B: SELF-BUILD OPTION ELECTED BY CUSTOMER

#### **B.1** Eskom Works

#### **B.1.1** Dedicated Connection Equipment

#### B.1.1.1 Standard Equipment on the Transmission System

- Protection upgrade of the Hydra Roodekuil 132kV feeder at Hydra and Roodekuil MTS. This
  can only be done once upstream work, listed under Annexure E, section B1.2, has been
  completed.
- The estimated period for the completion of the Standard Equipment on the Transmission System, calculated from the commencement date of the completion of the Upstream Connection Equipment, shall be 44 months. Should the CUSTOMER elect a self-build option for the Standard Equipment on the Transmission System, at the Budget Quotation Stage, an alternative time frame for completion of the Standard Equipment on the Transmission System can be used, from the date of completion of the Upstream Connection Equipment date in Annexure E, section B1.2.

#### B.1.2 Upstream Connection Equipment

# B.1.2.1 Equipment on the Transmission System

Install a new 500MVA, 400/132kV transformer at Hydra MTS with 2 x 132kV spare feeder bays. This work is scheduled to be completed by October 2017

# B.1.3 Monopoly Works

- B.1.3.1 ESKOM will appoint a clerk of works to monitor the quality of the construction as well as the quality of material.
- B.1.3.2 ESKOM will appoint a project manager to do site inspections and also monitoring of workmanship and materials/equipment.
- B.1.3.3 ESKOM will monitor the CUSTOMER's environmental management in respect of the Contract Works
- B.1.3.4 ESKOM will verify the design and equipment of the Contract Works

- B.1.3.5 ESKOM will commission the metering, protection and the supervisory control and data acquisition system (SCADA), which will be installed by the CUSTOMER in terms of the Self-Build Agreement.
- B.1.3.6 ESKOM will monitor the installation of the Contract Works.
- B.1.3.7 ESKOM will be responsible for any commissioning in respect of the Contract Works required after the Connection of the Facility to the Distribution System.
- B.1.3.8 ESKOM will manage any outages required on the Distribution System and or Transmission System.
- B.1.3.9 ESKOM will check and accept the route selection and will monitor the process of registration of the Servitudes in the name of ESKOM.

#### **B.2** Contract Works

# **B.2.1** Dedicated Connection Equipment

#### B.2.1.1 Standard Equipment on the Distribution System

- Establish a new 132kV switching station next to PV farm
  - o 2 x 132kV HV feeder bay
  - o 1 x 132kV HV generator feeder bay
- Install all required protection and control equipment
- Install all required telecontrol, DC and SCADA
- Construct 2 x 2km's 132kV Chickadee lines from Hydra Roodekuil line to new switching substation.
- Install OPGW for telecoms.

#### PART C: TECHNICAL ASSUMPTIONS

Not applicable

# **ESTIMATED CAPITAL COSTS**

The Capital Costs associated with the Eskom Works, including escalation and overheads are estimated as follows:

# PART A: SELF-BUILD OPTION NOT ELECTED BY CUSTOMER

Not applicable

# PART B: <u>SELF-BUILD OPTION</u> ELECTED BY CUSTOMER

Table 1 (a) Summary of allocated Estimated Dedicated Capital Costs

Cost Item	Excl VAT	Incl VAT
Estimated Capital Cost for a Standard Connection	R 57 918 630,79	R 66 027 239,10
Total Dedicated Capital Costs	R 57 918 630,79	R 66 027 239,10

# Table 1 (b) Estimated cost of Monopoly Works

Cost item	Excl VAT	Incl VAT
Route/Site Selection Checking & Acceptance	R 2 253 425,99	R 2 568 905,63
Verification of Design		
Project Management Fees		
Project Manager/Coordinator     Clerk of Works (Quality Assurance and Monitoring)		
Commissioning		
Total	R 2 253 425,99	R 2 568 905,63

Table 1 (c) Estimated cost of Standard Equipment on the Transmission System (Dedicated Connection Equipment)

Cost item	Excl VAT	Incl VAT
Transmission work at Hydra and Roodekuil & Scope definition fee	R 16 637 090,00	R 18 966 282,60
500MVA 400/132kV Transformer (Pro-rated 15%)	R 39 028 114,80	R 44 492 050,87
Total	R 55 665 204,80	R 63 458 333,47

#### **FINANCIAL SPECIFICATIONS**

#### PART A: COST ESTIMATE FEE ALREADY PAID BY CUSTOMER

DATE COST ESTIMATE FEE AMOUNT PAID	Excl VAT	Incl VAT
05 August 2015	R 78 000,00	R 88 920,00

PART B: SELF-BUILD OPTION NOT ELECTED BY CUSTOMER

Not applicable

# PART C: <u>SELF-BUILD OPTION</u> ELECTED BY CUSTOMER

Table 1 SUMMARY OF THE CONNECTION CHARGE ESTIMATES, FEES PAYABLE UPON ACCEPTANCE OF THE COST ESTIMATE LETTER AND GUARANTEES

Connection Charge Estimate	Excl VAT	Incl VAT
Estimated Distribution Standard Connection Charge	R 0,00	R 0,00
Estimated Transmission Standard Connection Charge	R 55 665 204,80	R 63 458 333,47
Estimated costs of Monopoly Works	R 2 253 425,99	R 2 568 905,63
TOTAL CONNECTION CHARGE ESTIMATE	R 57 918 630,79	R 66 027 239,10
FEES PAYABLE UPON ACCEPTANCE OF THE COST ESTIMATE LETTER		
Distribution Quotation Fee	R 1 113 086,00	R 1 268 918,04
Transmission Quotation Fee	R 4 500 000,00	R 5 130 000,00
Total Quotation Fee	R 5 613 086,00	R 6 398 918,04
GUARANTEES		
Use-of-System Charges Security Amount		R 0,00
Early Termination Guarantee Amount	_	R 57 520 835

#### **PART D: QUOTE FACTORS**

The factors to be used in the final calculation of the Connection Charges, the Early Termination Guarantee Amount and the Connection Charge Guarantee Amount are:

- 1. Overheads 9.3 %
- 2. Escalation % (Production Price Index)
- Escalation Duration

Escalation in the cost of obtaining servitudes (costs to be based on the most recent value of the land)

# USE OF SYSTEM SCHEDULE OF STANDARD PRICES FOR DISTRIBUTION CONNECTED GENERATORS [URBAN/RURAL]

Separate attachment