



APPLICATION FOR AN ELECTRICITY GENERATION
LICENCE IN TERMS OF THE ELECTRICITY REGULATION
ACT, 2006 (ACT NO. 4 OF 2006).

Please return completed form to:

HOD: Electricity Licensing and Compliance National
Energy Regulator of South Africa Kulawula House, 526
Vermeulen Street Arcadia, 0083
Pretoria

Or:

HOD: Electricity Licensing and Compliance National
Energy Regulator of South Africa
P.O. Box 40343
Arcadia 0007

Tel (012) 401 - 4600
Fax (012) 401 - 4700

SECTION A PARTICULARS OF APPLICANT

A1 Full name of applicant (business name) and business registration number

Kathu Solar Power Park (RF) (Pty) Ltd
Registration Number: 2010/021766/07

A2 Address of applicant, or in the case of a body corporate, the registered head office

Physical address

Centurion Gate
124 Akkerboom Road
Centurion
0157

Note that this address will be amended in the near future as follows:

Building 1 Ground Floor,
Country Club Estate,
21 Woodlands Drive,
Woodmead,
GAUTENG 2191

Postal address

PO Box 4778
Rivonia
2128

A3 Telephone number of applicant

+27 10 612 0700

A4 Fax number of applicant

+27 11 656 0007

A5 Email address of applicant

tom.beach@gdfsuez.com

A6 Contact person

Tom Beach

A7 Legal form of applicant

Applicant is a private ring-fenced company.

Company Directors:

Thomas Beach

Ross Kriel

Registration Number:

2010/021766/07

Note to Section A

- 1) State whether the applicant is a local government body, a juristic person established in terms of an act of parliament, a department of state, a company or other legal body.
- 2) If the applicant is a local government body, attach a copy of the proclamation establishing such body. Where the applicant is a company, the full names of the current directors and the company registration number are required.

SECTION B COMMENCEMENT DATE OF LICENCE

B1 Desired date from which the licence (if granted) is to take effect

As soon as possible but no later than 27 June 2015.

The generation license will be required before the project can reach financial close.

Note to Section B

- 3) The normal processing time for a licence application is 120 days once all relevant information has been provided and there are no objections received.
- 4) If the applicant intends operating more than one generation station under the proposed licence, please complete separate application forms for each generation station.

SECTION C PARTICULARS OF PROPOSED GENERATION STATION

C1 Name of generation station

Kathu Solar Park Facility

C2 Geographical location of generation station (please attach maps)

The Farm Kathu No. 465, Kuruman RD, Gamagara Municipality, Northern Cape Province

Please refer to **Annexure C1**

C3 Address of generation station

The property is situated approximately 3km to the North of Kathu (town). The access turn-off to the property is however situated approximately 11km from the Kathu town centre (via the N14 national road)

C4 Contact person at generation station

**First name and Surname: Mr T Beach
Telephone No: +27 10 612 0231
Mobile No Fax No: +27 82 906 4703
Email address: tom.beach@gdfsuez.com**

C5 Type of generation station (thermal, nuclear, hydro, pumped storage, gas turbine, diesel generator or other)

Concentrated Solar Power (parabolic trough technology).

C6 Expected commissioning date for a proposed generation station or at which the station was commissioned (if an existing station).

**First power drawn from Eskom (back-feed): 30 November 2016
Commercial Operation Date: 30 November 2017**

N.B. these dates assume financial close occurs on 1 August 2015

C7 The installed capacity (existing and/or planned) of each unit within the generation station (MW)

Existing Capacity

Energy Capacity = 0

Planned Capacity

100MW (net)

- C8 Maximum generation capacity (MW) expected to be available from the generation station and energy to be produced (MWh) over the next 5 years of operation. These estimates should be based on modelling of how the power station will fit into the demand profile of its customers, taking into account the least cost energy purchase consideration and demand management options of customers.

YEAR	Max MW	Total MWh	Own use MWh	Export (Sales) MWh
2016	0			
2017	100	Not specified	Not specified	29 602
2018	100	Not specified	Not specified	328 913
2019	100	Not specified	Not specified	365 771
2020	100	Not specified	Not specified	383 097
2021	100	Not specified	Not specified	382 524

- C9 Estimate of the energy conversion efficiency of the generation station.

Not applicable for CSP.

- C10 Expected future life of the generation station.

The PPA is valid for a period of 20 years. However it is expected that the plant will be capable of operating for a further 15 years after the original term of the PPA.

**SECTION D PARTICULARS OF LONG TERM ARRANGEMENTS
WITH PRIMARY ENERGY SUPPLIERS**

D1 Name of primary energy supplier/s (mining house, colliery or other fuel supplier)
Not applicable for CSP.

D2 Particulars of the contractual arrangements with primary energy supplier
Not applicable for CSP.

Notes to Section D

- 5) Please provide brief particulars of any long term agreements entered into with fuel suppliers and copies of such contracts (Signed Fuel Supply Agreements).

SECTION E MAINTENANCE PROGRAMMES AND DECOMMISSIONING COSTS

E1 Details of any proposed major maintenance programmes, including the expected cost and duration thereof, covering the next six years. Project proposals to state the expected availability, planned outage rate and forced outage rate of the plant over the first five years of operation.

Details of proposed major maintenance programmes, including the expected cost and duration thereof, covering the first six years:

Year	Detail	Cost (R'000)	Duration
2017	Nothing planned	-	-
2018	Nothing planned	-	-
2019	Mini Inspection	Included in O&M Contractors scope	~8days
2020	Nothing planned	-	-
2021	Mini Inspection	Included in O&M Contractors scope	~8 days
2022	Nothing planned	-	-
2023	Major Inspection	Included in O&M Contractors scope	~16 days

NB: The inspection schedules are subject to variation based on the selected Steam Turbine manufacturer recommendations.

Expected availability, planned outage rate and forced outage rate of the plant over the first six years of operation;

Operational Year	Planned Outage Rate (%)	Forced Outage Rate (%)
2017	~3.29%	~2.0%
2018	~3.29%	~2.0%
2019	~5.48%	~2.0%
2020	~3.29%	~2.0%
2021	~5.48%	~2.0%
2022	~3.29%	~2.0%

Based on following assumptions:

Financial Close 01 August 2015
 Construction Period 28 months
 COD 30 November 2017

E2 Details of any major decommissioning costs expected during the life span of the power station and provided for in the project feasibility study.

A Decommissioning Reserve is built up over the 20-year PPA life to ensure that sufficient funding is available to appropriately decommission the plant in the event that the PPA is neither renewed nor extended. Pursuant to the IPP Procurement RFP, the IPP will bear the responsibility and liability for plant decommissioning at the end of PPA period.

E3 Details of major generation station expansion and modifications planned for in the feasibility study (Dates, Costs in Rands (state year) and description)

No major generation station expansion or modifications are planned for in the feasibility study for this project.

SECTION F CUSTOMER PROFILE

- F1 Particulars of the person or persons to whom the applicant is providing or intends to provide electricity from the generation station

The applicant will supply electricity to Eskom Holdings SOC Limited.

- F2 Network connection details (connection points, voltages, wheeling arrangement, single line diagram)

The connection voltage is 132 kV. A 132 kV substation will be constructed at the site. Kathu Solar Power Park (Pty) Ltd will construct the lines as part of a loop-in loop-out self-build solution from the site substation while Eskom will provide the final HV connection to the Eskom Kalahari substation.

Refer to **Annexure F1** for the Single Line Diagram.

- F3 Provide summary details of Power Purchase Agreements with customer including purchasing price etc. (Please attach Power Purchase Agreements).

The Project will enter into a standard 20 year self-dispatch PPA with Eskom Holdings SOC Limited pursuant to the REIPP procurement programme.

The base tariff is set to ZAR/MWh in the case of the fully indexed tariff and ZAR/MWh in the case of the partially indexed tariff.

Refer to **Annexure F2** for the Power Purchase Agreement.

Notes to Section F

- 6) For example, supply to ESKOM or supply to local government distribution system. Please include the details of power purchase agreements entered into and the price structure of the contract.

SECTION G FINANCIAL INFORMATION

- G1 Submit projections of and current statements of the accounts in respect of the undertaking carried on by the applicant, showing the financial state of affairs of the most recent period, together with copies of the latest audited annual accounts where such have been prepared.

The applicant is a ring-fenced company established for the sole purpose of developing the project. As such, the applicant has not commenced operations and therefore does not have audited annual accounts.

- G2 Submit annual forecasts for the next five years of costs, sales and revenues generated by the project, stating the assumptions underlying the figures.

Five year forecasts are provided in **Annexure G1** under the partially indexed tariff case and **Annexure G2** under the fully indexed tariff case.

- G3 Estimates of net annual cash flows for subsequent periods (5 years; 10 years; 15 years) sufficient to demonstrate the financial security and feasibility of operating the generation station.

Net annual cashflows for period years 6 – 10; years 11 -15; and years 16-20 are provided in **Annexure G3**.

- G4 Project financing: Who will finance the project, how is funding split between debt and equity, and what is the terms and conditions of the funding agreements.

The project will be funded through a combination of debt (70%) and equity (30%).

The project debt will be provided by 6 South African banks on a limited recourse basis and through two tranches comprising a 20-year Senior Term Loan and a 20-year CPI-Linked Senior Term Loan with a 3-year tail. These will be ZAR-based loans priced at JIBAR plus a credit risk margin typical for projects of this nature.

The interest rates will be fixed during and after the construction period in order to minimise the Project's exposure to fluctuations in interest rates over the life of the loans. Similarly, any foreign exchange exposure will be hedged at financial close.

Refinancing will be permitted pursuant to the Implementation Agreement.

Notes to Section G

- 7) The financial projections should be based on a production plan for the generation station and the revenue generated by participating in the electricity market and by bilateral contracts (Power Purchase Agreements) with customers. Reference to the latest version of National Integrated Resource Plan (IRP) is required to demonstrate that the proposed power purchase agreement is the least cost solution available to the electricity purchaser.

SECTION H HUMAN RESOURCES INFORMATION

H1 Submit details of the number of staff and employees and their categories in the service of the applicant at the generation station and in any support services separate from the generation station. Also provide information regarding relevant qualifications and experience in critical areas e.g. Professional registration (Engineering Council of South Africa – ECSA), Government Certificate of Competency.

During the whole of the operational phase, the staff compliment will be 81 people, structured as follows:

Category	Designation		Number
Management	Plant Manager		1
	CFO		1
	PA		1
		Subtotal	3
Operation	Operation Manager		1
	Performance Engineer		1
	Shift Engineer		5
	Chemical Technician		3
	Control Room Operator		9
	Field Operator		5
	Field Operation Trainees		5
			Subtotal
Maintenance	Maintenance Manager		1
	Lead Mechanical Engineer		1
	Lead Elect / I&C Engineer		1
	IT Engineer		1
	Mechanical Technician		3
	Electrical Technician		3
	I&C Technician		3
	Mirror cleaning crew		9
	Welder / Machinist		2
	Materials Technician (Store Officer)		1
		Helper	2
		Subtotal	27

Business	PR / HR Admin Manager		1
support	Accountant		2
	HR / Admin Assistant		1
	Contract officer		1
	Security Officer		1
	Economic Dev. Manager		1
		Subtotal	7
HSE	HSE Manager		1
		Subtotal	1
Contracted	Canteen / House keeping		1
staff	Driver		1
	Security (guards & supervisor)		16
		Subtotal	18
		Total	81

Plant and/or Maintenance Manager will be required to have a Government Certificate of Competency

SECTION I PERMISSION FROM OTHER GOVERNMENT DEPARTMENTS OR REGULATORY AUTHORITIES

- 11 What progress has been made to obtain the required permits and approvals for the generation project? Please provide copies of permits issued by the relevant environmental and safety agencies in respect of the operation of the generation station.

Attached for your reference as **Annexure II** is the Environmental Authorisation issued by the Department of Environmental Affairs on 03 November 2011. Also included are the Environmental Authorisation extension and the Environmental Authorisation name amendment.

On 12 February, the project submitted an application to the Department of Environmental Affairs for approval to undertake the following;

1. Reroute the connection to the Eskom grid
2. Construction within 32m of a watercourse
3. Move more than 5m³ of soil
4. Clearance of land to allow widening of road.

SECTION J

BROAD-BASED BLACK ECONOMIC EMPOWERMENT

J1 Please provide information in terms of the following categories:

COMPONENTS	POINTS	0.5	0.75	1
Direct Empowerment	Black Ownership	10% to <20%	20% to 50%	>50%
	Black Management	20% to <35%	35% to 50%	>50%
	Black Female Management	1% to <5%	5% to 10%	>10%
Human Resource Development	Black Skilled Personnel as % of payroll	20% to <35%	35% to 50%	>50%
	Skills Development Programs as % of payroll	1% to <5%	5% to 10%	>10%
	Employment Equity i.e. Women Representation	20% to <35%	35% to 50%	>50%
Indirect Empowerment	Procurement from Black/BEE Suppliers	20% to <35%	35% to 50%	>50%
	Enterprise Development i.e. Monetary Investment or quantifiable non-monetary support in SMME with BEE contributions as % of Net Asset Value/ EBITDA/Total Procurement	10% to <20%	20% to 25%	>25 %
	Industry specific initiatives to facilitate the inclusion of black people in the sector as % of net profit	1% to <5%	5% to 10%	>10%
NERSA's Discretionary Points	Based on skills transfer and fulfilment or acceleration of other national objectives e.g. employment of disabled personnel robust implementation of mechanisms to verify the BEE status of suppliers reported under preferential procurement and utilization of DTI approved accreditation agencies and so on.	1% to <5%	5% to 10%	>10%

The Broad-based Black Economic Empowerment (“BBBEE”) commitments, which have been made by the Kathu Solar Park (RF) Pty) Limited, are set out in detail in a table comprising a part of the evaluation Criteria of Round 3,5 of the IPP Renewable Energy programme, (“CSP technology”). These addressed, broadly the following transformation imperatives: Black Ownership, Black Management, Jobs created for Black Skilled personnel, Preferential Procurement, Enterprise development and Socio Economic development.

These commitments have been made following a strategic imperative by the Owner to contribute meaningfully to the broader transformation debate in South Africa.

SECTION K ADDITIONAL INFORMATION

Provide any other relevant information related to this application

SECTION L DECLARATION

On behalf of the applicant, I hereby declare that:

- (a) the applicant shall at all times comply in every respect with the conditions attached to any licence that may be granted to the applicant;
- (b) the applicant shall at all times comply with lawful directions of the National Energy Regulator of South Africa;
- (c) the information provided by me on behalf of the applicant is accurate and complete in all respects; and
- (d) I am authorised to make this declaration on behalf of the applicant.

Signed:

--	--

Full name(s) of Signator(y/ies):

Thomas Beach	Ross Kriel
--------------	------------

Position held (if the applicant is a company, co-operative, partnership, unincorporated association or any other body corporate):

Director	Director
----------	----------

Date:

20 February 2015
