NATIONAL ENERGY REGULATOR OF SOUTH AFRICA

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

Eskom Holdings SOC Ltd, Registration Number: 2002/015527/30

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

Physical address

Megawatt Park, Maxwell Drive, Sunninghill, Sandton

Postal address

P O Box 1091, Johannesburg, 2001

A3 Telephone number of applicant

REDACTED

A4 Fax number of applicant

(_____)_____

A5 Email address of applicant

REDACTED

A6 Contact person

First name REDACTED

Surname REDACTED

Telephone No _____

Mobile No REDACTED_____

Fax No. _____

Email address REDACTED; Cc: REDACTED

A7 Legal form of applicant

Eskom, a State Owner Company, is a juristic person established in terms of an act of parliament, being the Eskom Conversion Act 13 of 2001.
Shareholder: Minister of the Department of Public Enterprises (DPE) as the shareholder representative.

Current Directors (as of date of signature herein):

- Mr Mteto Nyati (Chairperson)
- Mr Calib Cassim (Acting Group Executive)
- Mr Martin Buys (Acting Group Chief Financial Officer)
- Dr Rod Crompton (Independent non-executive director)
- Dr Busisiwe Vilakazi (Independent non-executive director)
- Dr Claudelle von Eck (Independent non-executive director)
- Dr Tsakani Mthombeni (Independent non-executive director)
- Ms Ayanda Mafuleka (Independent non-executive director)
- Mr Bheki Ntshalintshali (Independent non-executive director)
- Mr Clive Le Roux (Independent non-executive director)
- Ms Fathima Gany (Independent non-executive director)
- Mr Leslie Mkhabela (Independent non-executive director)
- Mr Lwazi Goqwana (Independent non-executive director)
- Ms Tryphosa Ramano (Independent non-executive director)

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.

3) Also provide shareholding information of the company.

SECTION B COMMENCEMENT DATE OF LICENCE

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

28 February 2024. This would allow for the timely placement of contracts as well as the procuring of long lead time items.

Note to Section B

4) The normal processing time for a licence application is 120 days once all relevant information has been provided and there are no objections received.

5) 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

Lethabo PV.
Note: This is the working name. A final name will be chosen at a later date.

C2 Geographical location of generation station (please attach maps) and GPS coordinates (x^0xx'xxx" S, y^0yy'yyy" E)

26°44'47.544" S, 27°57'17.312" E

C3 Address of generation station

Located within Eskom Lethabo Power Station in Farm no. 1814, Metsimahalo local municipality, Free State Province.

C4 Contact person at generation station

First name and Surname	REDACTED
Telephone No	
Mobile No	REDACTED
Fax No	
Email address	REDACTED

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

Solar Photovoltaic (PV) Power

C6 Expected commissioning date for a proposed generation station or at which the station was commissioned (if an existing station). Also state construction period required if applicable.

A construction period of 18 months is anticipated. Commissioning is targeted for July 2025.

C7 The installed capacity (existing and/or planned) of each unit within the generation station (MW)
Existing Capacity (Nameplate rating):
The new PV facility will be located at a site where there is an existing coal power plant (Lethabo Power Station with 3558MW of operational capacity).

Planned Capacity (nameplate rating):
75MW Plant

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
2026	75MW	218,667.00	2186.67	216,480.33
2027	75MW	216,025.00	2160.25	213,864.75
2028	75MW	214,809.00	2148.09	212,660.91
2029	75MW	213,592.00	2135.92	211,456.08
2030	75MW	212,376.00	2123.76	210,252.24

C9 Estimate of the energy conversion efficiency of the generation station/ Capacity factor where applicable.

A capacity factor of 26.17% is estimated. Please see E1 below for further information.

C10 Expected future life of the generation station.

The expected life span of the plant is 25 years.

Note to Section C

Also provide additional technical information of the project as separate attachments. This should give the technology used, technical feasibility studies e.g. radiation studies for Solar projects or wind studies for Wind projects, connection to the grid arrangements, single line diagrams of the network connection as well as single line diagrams of the generation station, etc. Also attach fuel supply/ wheeling/ connection consents/ agreements where applicable (if you are going to use someone else's network).

This information is also used as technical inputs to the financial model of the project, e.g. solar radiation studies will determine the amount of power that can be generated.

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) if applicable

Not Applicable

D2 Particulars of the contractual arrangements with primary energy supplier if applicable

Not Applicable

Notes to Section D

6) 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 operation and maintenance programmes, including the expected cost and duration thereof, covering the lifespan of the project. Project proposals to state the expected availability, planned outage rate and forced outage rate of the plant over the life span of the project. Additional information may be provided as an attachment.

An Energy Utilisation Factor (EUF) of 99% is anticipated.

According to solar resource assessments, based on SolarGIS-iMaps, the appointed owner's engineer has estimated an annual irradiation for the project of 2,725 kWh/m2 at PV modules' plane. The expected energy generation of the project, considering satisfactory construction, operation and maintenance of the plant, should be able to produce an average annual energy yield of 197,760MWh corresponding to an average annual specific yield of 2,306 kWh/kWp over 25 years of operation. The above generation is subject to an uncertainty, which is estimated at 5.6% for the Project life of 25 years.

Subject to the EPC contractor's design and component selection, the energy yield is subject to vary.

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

Towards the end of the operational life of the station, studies will be conducted to evaluate the feasibility of extending its life or decommissioning of the plant.

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

Not Applicable

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. Explain relationship between buyer and seller if any.

The electricity will be supplied to Eskom through the Eskom Distribution in the Free State Province. At the time of this application Eskom Distribution is a division of Eskom Holding SOC Ltd.

F2 Network connection details (connection points, voltages, wheeling arrangement, single line diagram). Please attach connection cost estimate letters and / connection consents if not owner of the network.

Lethabo PV Project will be connected at nearby Eskom Distribution Substation called Rand Water Board Substation. Eskom will install a new 80MVA 33/88kV transformer within the PV sites and connect with a single line to Rand Water Board Substation. Cost Estimate Letter attached.

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

See F1 above. Supply will be to Eskom through the Eskom Distribution Division. No power purchase agreements has been drafted at this stage.

Notes to Section F

7) 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

REDACTED

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.

Please refer to Eskom's Annual Financial Statements for the year ended 31 March 2023. The integrated results are published in Eskom's website: https://www.eskom.co.za/investors/integrated-results/.

G2 Submit the financial model in excel format of the proposed generation facility for the lifespan of the project, showing the funding (Equity/ Debt ratios) and their cost, cost of the project, sales and revenues generated by the project, stating the assumptions underlying the figures. A separate write up must be provided to explain the financial information on the model.

REDACTED

G3 Estimates of net annual cash flows for the lifespan of the project sufficient to demonstrate the financial security and feasibility of operating the generation station.

REDACTED

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. In addition, also fil in table below:

REDACTED

Notes to Section G

8) 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.

9) Evidence of compliance with the Integrated Resource Plan (IRP). If the proposed plant in not in the IRP, the applicant must obtain Ministerial approval for deviation from the IRP in accordance with Section 10(2)g of the Electricity Regulation Act, 2006 (Act No. 4 of 2006). This approval is granted by the Minister of Energy so applicant must contact the Department of Energy for this approval. The DDG: Policy would be the contact person at DoE. Sometimes the Minister gives a blanket approval, and applicants are encouraged to contact NERSA for the latest update on what is exempted.

SECTION H HUMAN RESOURCES INFORMATION

H1 Submit details of the number of staff and employees and their designation (not names, e.g. three professional engineers registered with ECSA, two clerks etc) 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.

Human Resources should comply with BBEEE policy or the requirements of the Request for Proposal (RfP) documents if the project is as a result of a tendering procurement process, e.g. the DMRE Renewable Energy Independent Power Producer Procurement (REIPPP) process. The applicant should give the number of employees that will be employed during project construction, operation and maintenance.

All this information should be submitted as an attachment.

Below is the table of proposed human resource for the Operation & Maintenance (O&M) of this planned 75MW Solar PV power station.

Table: Manpower numbers during O&M

REDACTED

The process of Request for Proposal (RfP) and the BBBEEE requirements will be enforced as per South African National Treasury Requirements, and other South African Government regulations and conditions that all State-owned company should comply with when engaging on the procurement process.

SECTION I PERMISSION FROM OTHER GOVERNMENT DEPARTMENTS OR REGULATORY AUTHORITIES

I. What progress has been made to obtain the required permits and approvals for the generation project? Please provide copies of permits issued in respect of the operation of the generation station such as Environmental Authorisations, Water Use Licence, Civil Aviation Authority Approval, etc. (this is depended on technology used).

- Environmental Approval valid till June 2026 (Department Forestry Fishery and Environmental)
- Department of Mineral, Resources & Energy -Section 34 allocation granted in November 2022. NERSA concurrence issued in Media Statement dated 29 May 2023 the decision to concur with the Section 34 Determination as taken in meeting held on 25 May 2023.

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%

*Please refer to the attached BBBEE verification report.

SECTION K ECONOMIC INFORMATION

Please state the economic benefits of the project to the local community and to South Africa as a whole. If there are Economic Development Commitments made, they must be stated here or be provided as attachments if the files are big, but in such cases, there should be a brief summary.

This new generation project aims to address the power shortage that affects the economy of the country.
During construction it is anticipated that about 200 to 250 skilled and unskilled labour will be employed. During operation a total of 21 permanent staff and opportunities for small industries to provide services like PV Modules cleaning.

Eskom developed eight strategic imperatives, three of which have been pivotal in driving the Generation Business.

The three strategic imperatives are as follows:

- Reducing our environmental footprint and pursuing low carbon growth opportunities.
- Securing our future resource requirements, mandate and the required enabling environment.
- Leading and partnering to keep the lights on.

It is to this end that opportunities in renewables have been identified to support the above imperatives for power generation. Adding generating capacity at the Lethabo Power Station aligns with Eskom's new business model and turnaround plan in setting up the Generation division for growth by focusing on large, utility scale renewables. This project is in support of the JET strategy and program that is aimed at shifting to renewables plan to provide a foundation for reliable supply while complying with carbon and particulate emission targets in an increasingly competitive environment.

SECTION L ADDITIONAL INFORMATION

Provide any other relevant information related to this application

The country is currently experiencing load shedding as a result of generation capacity constraints. This is due to numerous factors, one being a lack of additional generation capacity being added to the Grid. Eskom is exploring opportunities to address the current supply side inability to meet demand through additional renewable generating capacity and has embarked on many initiatives to support expansion into renewables through a combination of technologies including Wind, Solar PV and Battery Energy Storage System (BESS).

As one such initiative, Eskom has explored adding solar PV to its existing coal fired power stations. The subject of this business case is the addition of 75MWac capacity at Lethabo power station, occupying less than 168 hectares within the boundary of Eskom-owned land near Lethabo power station. The PV plant will be designed to comply with environmental basic assessment requirements as stipulated in the Department of Environmental Affairs, National Environmental Management Act 1998 (Act 107 of 1998) and will comprise of ground mounted solar photovoltaic (PV) modules and associated infrastructure.

Given the Transmission constraints in areas of maximum solar resource, the Lethabo PV plant offers a quick solution to add generating capacity without the need to strengthen the transmission infrastructure.

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):

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

Date:
