



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

AGV Projects Proprietary Limited

Note that the company name will be changed during the further development process to align with naming conventions within the applicant's corporate group. This will be done in accordance with NERSA requirements in relation to entity name changes.

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

Physical address

2nd Floor, 1 Osborne Road, Claremont, 7708

Postal address

Postnet Suite 205, Private Bag X1005, Claremont, Western Cape, 7735

A3 Telephone number of applicant

(021) 180 4500

A4 Fax number of applicant

(+44) 203 761 1900

A5 Email address of applicant

aaron.brose@globeleq.com

A6 Contact person

First name **Aaron**

Surname **Brose**

Telephone No **+27 21 180 4594**

Mobile No **+1 202 977 9270**

Fax No. **+44 203 761 1900**

Email address aaron.brose@globeleq.com

A7 Legal form of applicant

A private company, registered in accordance with the Companies Act under company registration no. 2020/432975/07

Directors:

Jenna Elizabeth Mason

Jeremy John Foss

Nivash Daya

Note that the current directors will change at the point when the project participants take up their shareholding in the entity.

The company is currently owned 100% by Globeleq Africa Limited, but the shareholding at financial close of the project will be:

- **51% - Globeleq Africa Limited through a special purpose holding entity to be incorporated**
- **46,5% - AREF REIPPP Holdings Proprietary Limited**
- **2,5% - a Local Community Trust (in the process of being established) through a special purpose holding entity to be incorporated**

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

Anticipated COD (subject to Commercial Close with the Independent Power Producers Office): October 2026

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

Red Sands BESS

C2 Geographical location of generation station (please attach maps) and GPS coordinates (x⁰xx'xxx" S, y⁰yy'yyy" E)

28°42'50.7" S, 22°05'51.7" E

C3 Address of generation station

Farm Portion 19/387 Groblershoop !Kheis Local Municipality and the ZF Mgcawu District Municipality Northern Cape

C4 Contact person at generation station

First name and Surname	<u>Pieter Cornelis Oosthuizen</u>
Telephone No	<u>+27 41 180 4617</u>
Mobile No	
Fax No	
Email address	

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

Battery Energy Storage System

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.

Expected COD is October 2026 with construction period of 24 months

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

Existing Capacity (Nameplate rating)

N/A

Planned Capacity (nameplate rating)

153MW/612MWh contracted capacity

- 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. The total annual energy produced for the life span of the project will also be included in full in the excel financial model.

YEAR	Max MW	Charging MWh from the grid	Own use MWh	Export (Sales) MWh
1	153	446,760	0	446,760
2	153	446,760	0	446,760
3	153	446,760	0	446,760
4	153	446,760	0	446,760
5	153	446,760	0	446,760

- C9 State and explain the availability factor and round trip efficiency (%).

The availability factor, subject to the final design of the BESS, is expected to be above 95% over the life of the PPA. This is a measure of how often the battery is able to deliver its stored energy, taking into account the BESS detailed design, charging/discharging efficiency, augmentation strategy, and outages (planned and unplanned).

Round Trip Efficiency, subject to the final design, is as follows:

Year	Round Trip Efficiency (%)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

14	
15	

C10 Expected future life of the generation station including any planned battery augmentation.

15 years

There will be 1 augmentation events during the project lifetime (depending on usage) in order to maintain contract capacity of 153MW/612MWh.

Augmentation	Year	Capacity

Summary of technical details of the facility including equipment to be used, e.g. batteries, inverters, transformers, charge cycles per year, hours of operation at contracted capacity etc.

The Project is a 153MW/612MWh battery energy storage system (BESS) facility that will connect to Eskom's existing Garona Main Transmission Substation (MTS). The key design parameters for the project are based in the operational requirements defined in the RFP and Schedule 1 of the PPA. These include:

Parameter	Unit	Value
Contract Capacity	MW	153
Maximum Export Capacity	MW	153
Energy Capacity	MWh	612MWh
Duration of continuous operation at Contract Capacity	Hours	4
Maximum cycles per contract year	Cycles	730
BESS technology		Lithium iron phosphate (LFP)

Ancillary services that will be provided by the facility

The BESS will provide operating reserves to the system operator in the form of instantaneous, regulating, ten minute and supplemental reserves.

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).

Find attached the Feasibility Study which includes the details of the proposed BESS technology, the project site, single line diagrams and the interconnection arrangements in Appendix 2 of this submission.

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. For BESS, state the supplier of charging power and the agreed tariff for charging energy.

The Battery Energy Storage System will be supplied electricity from Eskom

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

Via the PPA with Eskom. Eskom will charge and discharge the BESS system as determined by the grid requirements

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).

N/A

**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.

Operating Year	LTSA and O&M
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

- E2 Details of any major decommissioning costs expected during the life span of the power station and provided for in the project feasibility study.
- E3 Details of major generation station expansion and modifications planned for in the feasibility study (Dates, Costs in Rands (state year) and description)

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. Please attach the signed Power Purchase Agreement.

Eskom Holdings SOC Limited.

Buyer and Seller are separate parties with no relationship other than that Eskom is the designated buyer pursuant to the RFP and the Seller has been awarded the project thereunder.

The Power Purchase Agreement is not signed as at the date of this application, however, a copy of the form of PPA included as part of the RFP is attached under cover hereof.

- 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.

Integration of the proposed Red Sands BESS Facility into Eskom Grid will be accomplished by connecting at Garona Main Transmission Substation through a loop-in loop out of the Ferrum-Nieuwehoop line, a new 400/132kV 500MVA transformer and a new 132kV busbar. The point of connection will be on a newly established 132kV switching station to which the BESS will be connected through a ±10km overhead line. The Cost Estimate letter and Single line diagram is attached in Appendix 2.

Paste very high level network connection single line diagram on this form.

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 if the project is corporate financed (as a separate attachment). If the project is new and is Project Financed, attach the financial model that show project viability (as a separate attachment, see G2 below).

The Project Company has been incorporated as a special purpose vehicle (“SPV”) with the intention to develop, finance, build, own and operate the Project. Given its transactional dormancy to date, the SPV does not have audited annual accounts at this stage of project development.

- G2 Whether the project is Corporate or Project financed, 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.

The Financial Model is provided as part of the attached documents. An explanation of the financial information on the model is provided on the “Instructions” tab of the model.

- G4 Give a summary of the project financing at high level on this form (not more than a page) stating who will finance the project, how is funding split between debt and equity, and what is the terms and conditions of the funding agreements (cost of debt and equity etc).

The project will be funded with limited recourse debt funding from South African commercial banks and equity funding from project sponsors

In addition, also fill in table below:

Total capital cost of the project (including IDC)	
Interest During Construction (IDC)	
Post tax real IRR (for the whole project)	
Nominal IRR after Tax (for the whole project)	

Debt/Equity Ratio	
Payback period	

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.
- 8) Evidence of compliance with the Integrated Resource Plan (IRP). If the proposed plant is 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.

The Project was procured as part of the BESIPP Procurement Programme (Tender No.:DMRE/028/2022/23) pursuant to the Ministerial Determination (gazetted on 25 September 2020 under GN. 1015 in Gazette Number 43734 (A Ministerial Determination under the IRP)) that 513MW should be procured to be generated from storage, which represents the capacity allocated under “Storage” for the year 2022, in Table 5 of the Integrated Resource Plan for electricity 2019 – 2030 (published as GN 1360 of 18 October 2019 in Government Gazette No. 42784)(“IRP”). This is set out in Paragraph 5 of Part A of the RFP, together with Schedules 1 and 2 to Volume 1, Part 1 of the RFP.

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. This information is based on employment plan of the company and there is therefore no need to attach people's CVs since its understood that people will be hired when project is about to be operationalised.

The number of jobs to be created during construction and operation should also be clearly stated. It would also be important to state whether the jobs will be locally sourced or not, at each level, e.g. at management level, professional level, skilled level and unskilled level.

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.

The attached annexures provide details of the project employment plan. This is broken down to detail the following aspects of employment:

- **The Project activities the planned positions will cover.**
- **The Job designation of each employee.**
- **The Project's proposed skills development plan**
- **Relevant qualifications of the planned positions that are considered critical to the projects, with indicative certification levels.**

A total of _____ will be employed during construction, and the operation & maintenance period. Construction is anticipated to last for 24 months, while the Power Purchase Agreement accounts for 15 years of operation and maintenance activities.

Below is an indication of projected "total jobs created", expressed as people months and broken down to the committed demographic targets. "Person Month" means a total of one hundred and sixty (160) hours worked by an Employee.

**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).

<u>Permit</u>	<u>Status</u>
<u>Environmental Authorisations</u>	
<u>Water Use Licence (WUL)</u>	
<u>Civil Aviation Authority Approval (CAA)</u>	
<u>Cost Estimate Letter (CEL)</u>	
<u>Spatial Planning and Land Use Management Act (SPLUMA)</u>	
<u>DMRE Section 53</u>	

The corresponding permits are attached in Appendix 4.

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 components listed above committed to by the Project are found in Annexure 1C in "Appendix 6 Economic Information".

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.

The Project has made commitments towards Economic Development for both the local community and South Africa at large. The various elements of development committed to over the Construction and Operations phase are included as Annexure 1C found in “Appendix 6 Economic Information”

State your return schedules to the Economic development commitments as required by the RfP as well as attaching them separately.

Economic Development Element	Weighting	Points
Job Creation	15% (fifteen percent)	1.5 (one point five)
Local Content	15% (fifteen percent)	1.5 (one point five)
Ownership	25% (twenty five percent)	2.5 (two point five)
Management Control	10% (ten percent)	1.0 (one point zero)
Skills Development	10% (ten percent)	1.0 (one point zero)
Enterprise and Supplier Development	20% (twenty percent)	2.0 (two point zero)
Socio-Economic Development	5% (five percent)	0.5 (zero point five)
Total	100% (one hundred percent)	10 (ten)

Job creation – Also attach full return schedules on Job creation separately)

Job creation	(person-months ¹)
During construction	
During operation	

¹ 1 job = 12 persons month, which means 12 people employed for one month, or 1 person employed for 12 months

SECTION L ADDITIONAL INFORMATION

Provide any other relevant information related to this application


This image shows a blank sheet of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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):

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

Director Senior Legal Manager	
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Date:

7 May 2024
