



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

Oya Energy (Pty) Ltd
Reg No. 2016/061801/07

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

Physical address

c/o G7 Renewable Energies
5th Floor, Buitengracht Centre
125 Buitengracht Street
Cape Town
8001

Postal address

c/o G7 Renewable Energies
5th Floor, Buitengracht Centre
125 Buitengracht Street
Cape Town
8001

A3 Telephone number of applicant

021 300 0610

A4 Fax number of applicant

086 514 1735

A5 Email address of applicant

oya@g7energies.com

A6 Contact person

First name	Francois
Surname	Pigeau
Telephone No	021 300 0610

Fax No. 086 514 1735

Email address info@g7energies.com

A7 Legal form of applicant

Private company (IPP)

Current sole director: Kilian Erich Hagemann

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.

The applicant is an unlisted company.

- 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.

The applicant is not a local government body.

- 3) Also provide shareholding information of the company.

As at date of application, the applicant is wholly owned by G7 Renewable Energies (Pty) Ltd. Ownership of the applicant from financial close onwards will be as follows:

Membership	Shareholding
G7 Renewable Energies	20%
Strategic equity partner	35%
Meadows Oya Energy	22.5%
Perpetua RMI4P Oya	22.5%

Further information about the above shareholders:

- **G7 Renewable Energies (Pty) Ltd**
 - Currently the lead sponsor of the project
 - Active in renewable energy project development since 2009
 - Participated with the 140MW Richtersveld wind farm project in REIPPPP round 3 in August 2013
 - Successfully participated with the 140MW Roggeveld wind farm in REIPPPP round 4 in August 2014, bringing it to financial close in April 2018 at the lowest tariff ever awarded to a renewable energy IPP in South Africa (56c/kWh Apr 2014 base date). Roggeveld is now nearing the end of construction.

- Awarded the 5MW Klawer wind farm project in March 2015 under the small projects IPP program, anticipating Financial Close later in 2021
- Successfully bid the 128MW Oya Energy hybrid facility in the RMIPPPP in December 2020, announced as Preferred Bidder on 18 March 2021 by Minister Gwede Mantashe
- all projects above that were bid in the various procurement rounds were created, initiated and developed in-house
- G7 currently has 24 permanent staff members with the following skills and expertise:
 - Environmental impact assessments, environmental management
 - Land use, building plan, electronic communications act, astronomy advantage areas and various other permitting processes
 - Land acquisition
 - Feasibility studies such as wind measurements, flow modelling (WAsP, CFD etc.), resource assessment, layout design and optimisation etc.
 - Civil and electrical engineering for balance of plant work
 - Procurement and construction (through newly acquired staff)
 - Project finance and financial modelling
 - Hybrid modelling, optimisation and production estimation
 - Battery design, optimisation and procurement
 - Grid connection assessments including capacity studies, costing, procurement, Eskom cost estimate letter / budget quote etc.
- For more information please refer to [our website](#)
- G7 is 31.4% South African through the RMIPPPP's flow-through principle
- **Meadows Oya Energy**
 - Meadows Oya Energy is currently a wholly owned subsidiary of Meadows Energy, the former is the vehicle through which funding is being raised through either DBSA, IDC or PIC
 - Meadows Energy is a black women owned level 1 BEE player, 100% South African
 - The Meadows Energy team has developed over 800MW of renewable energy projects in Southern Africa and successfully completed the engineering, procurement, construction, commissioning and registration of ±6MW of Small-Scale Embedded Generation Solar PV projects in the commercial and industrial sectors.
 - Meadows team has been actively involved in the renewable energy sector in 2009 working with some of the largest IPP's globally.
 - The team has been involved in all REIPPP rounds as well as involved in private sector utility scale project development and technical advisory.

- A brief track record has been provided below:
 - Jeffrey’s Bay Wind Farm, 138MW (REIPPP Window 1) : Financial close as Proposal Manager for Siemens Wind Power SA (EPC Contractor) – Technical Lead for the EPC
 - Submission of 3 wind projects into the REIPP Window 2 (± 100 MW) : Proposal Manager for Siemens Wind Power SA (EPC Contractor) – Technical Lead for the EPC
 - Tsitsikamma Community Wind Farm (TCWF), 90MW (REIPPP Window 2): Business Development Manager & Project Manager for the TCWF project from concept stage to bid submission phase.
 - Eskom Sere Wind Farm, 100MW wind farm: Involved in bid preparation through Siemens Ltd (technology provider). We provided Siemens a web-based training platform for Eskom technicians & engineers during the construction phase.
- **Perpetua RMI4P Oya:**
 - Perpetual RMI4P Oya is a wholly owned subsidiary of Perpetua Infrastructure through which funding will be raised from the PIC
 - Perpetua Infrastructure is a black owned level 1 BEE player, 100% South African
 - The managing partners of Perpetua Infrastructure Logan Govender and Mike Brooks have extensive experience in investment banking, private equity, structured finance and renewable energy. Both serve on Perpetua Infrastructure’s Investment Committee.
 - Mike Brooks was co-founder and CEO of Inspired Evolution Investment Managers, which established and managed Evolution One Fund (“the Fund”), the first dedicated cleantech and renewable energy fund in South Africa. Mike led Inspired Evolution’s investment into the following transactions in the early REIPPPP rollout:
 - Red Cap Kouga Wind Development (Pty) Limited & Red Cap Kouga Wind Farm (Pty) Limited
 - Red Cap Kouga Wind Farm (BW1) and Gibson Bay Wind Farm (BW3) of 80MW and 111MW, respectively.
 - The developer of the project was the Red Cap Kouga Wind Development Company (Pty) Limited in which the Fund also held an equity stake.
 - Slimsun (Rf) (Pty) Limited (Swartland Solar Park – Phase 1)
 - The Fund and Franco Afrique Technologies were jointly developing approximately 22MWs of solar PV projects for phased development.
 - The 5MW first phase PV plant reached financial close on the 5th of November 2012.

- Afpoc (Pty) Limited
 - AFPOC was a bespoke private renewable energy holding company, holding equity in ACED, a private company incorporated in South Africa dedicated to the development of renewable energy assets.
 - AFPOC's shareholding counterparty in ACED was African Infrastructure Investment Management, owned equally by Old Mutual Investment Group of South Africa and the Macquarie Group.
 - ACED had one of the most advanced onshore wind and solar PV portfolios in South Africa and had a total of 1800MW in various stages under development. The most advanced of these developments was Cookhouse, a 138MW onshore wind farm that reached DOE Financial Close in December 2012.
- Slimsun Too (Rf) (Pty) Limited (Slimsun Too)
 - The Fund subscribed for equity in Slimsun Too (RF) Proprietary Limited (Project known as the Swartland Solar Park, Phase 2) that was developing 17MWs pre- permitted Solar PV assets.
- Rustmo1 Solar Farm (Pty) Limited (Momentous)
 - The Fund subscribed for equity in Momentous Technologies, a developer of solar PV projects in South Africa and Namibia.
 - Momentous Technologies' Round 1 solar permitted PV site is RustMo1 Solar Farm – a 19ha farm located 22km east of the city of Rustenburg.
- **Strategic equity partner**
 - To be determined and shall be communicated to NERSA as soon as exclusive agreements are in place with the party who will assume this role.

SECTION B COMMENCEMENT DATE OF LICENCE

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

30 June 2021

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.

The generation licence application is for a single dispatchable project.

SECTION C PARTICULARS OF PROPOSED GENERATION STATION

C1 Name of generation station

Oya Energy Hybrid

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

On-site substation where feed-in would occur: 32°52'09.8"S, 20°21'47.4"E
The project is located in the Karoo on the border of the Western and Northern Cape provinces, approximately 50 km North-West of Matjiesfontein, 50 km North-North-East of Touws River and 70 km South-West of Sutherland.

C3 Address of generation station

Remainder of Farm 155 Baakens Rivier, Western Cape:
Approximately 50 km North-West of Matjiesfontein, 50 km North-North-East of Touws River and 70 km South-West of Sutherland.

C4 Contact person at generation station

First name and Surname	Francois Pigeau
Telephone No	021 300 0610
Fax No	086 514 1735
Email address	info@g7energies.com

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

Hybrid Facility: Wind farm, Solar PV, and Battery Energy Storage, diesel generators all co-located and combined into a single generation station by way of a hybrid plant controller.

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.

Commissioning: July-September 2022
Construction period: 31 July 2021 to end November 2022

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

Existing Capacity (Nameplate rating)

0 MW

Planned Capacity (nameplate rating)

82.5 MW Wind farm
155MW_p (DC) Solar PV arrays
40 MW / 160 MWh battery energy storage system
105.97 MW high speed reciprocating engines to be run on diesel

All of the above is wrapped into 128MW contracted capacity (maximum that may be sold to Eskom under the PPA at any given time)

- C8 Maximum generation capacity (MW) expected to be available from the generation station and energy to be produced (MWh) over the next 5years 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 ¹	Max MW	Total MWh	Own use MWh	Export (Sales) MWh
2022/3	128	216893	N/A	216893
2023/4	128	581419	N/A	581419
2024/5	128	580461	N/A	580461
2025/6	128	579481	N/A	579481
2026/7	128	578481	N/A	578481

All of the above figures assume maximum possible dispatch considering plant and PPA limitations, i.e. Eskom requesting Oya to dispatch the maximum capacity available at every hour during every Dispatchable Period (see C9 below).

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

Capacity factor is 75% (P50) between 5am and 9:30pm (PPA Dispatchable Period) assuming maximum dispatch..

- C10 Expected future life of the generation station.

30 years – post 20 year PPA we intend to continue operating the hybrid plant by selling its electricity into deregulated merchant markets that we believe will exist by then, alternatively a further public or private PPA for the remaining 10 years

Note to Section C

¹ “Year” is based the PPA contract year which starts on 1 April and ends on 31 March

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

[The Petroleum Oil and Gas Corporation of South Africa SOC Ltd](#)

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

[Relevant information provided to NERSA.](#)

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).

[Relevant information provided to NERSA](#)

**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.

Plant is to be maintained by the OEM under a 20-year long term service agreement. No major maintenance programmes are planned for the next six years.

Asset level (wind farm, PV park and battery storage) availability: 97% (includes both planned and unplanned outage rates in roughly equal parts, i.e. 1.5% each)

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

No major decommissioning are expected during the life span of the power station. However, provisions are made to government over time for full decommissioning during the first 20 years under the RMIPPPP.

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

There are no expansion of modifications planned.

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.

[Eskom Holdings 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.

[Connection point to existing grid infrastructure: Kappa Main Transmission Substation on the existing 132kV busbar](#)

[Metering Point / PUC: 132kV busbar at new Oya substation to be self-built by Oya Energy's contractors](#)

[No wheeling arrangement necessary but contractual agreements are according to the RMIPPPP standard templates \(Dx connection agreement, self-build agreement and direct agreement\)](#)

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

[Relevant information provided to NERSA \(standard RMIPPPP PPA\). Evaluation Price \(an effective 20 year average tariff across the PPA's various Charge Rates\) is R1550.34/MWh](#)

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

- 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 Oya Energy (Pty) Ltd and has never traded, has no assets or liabilities and therefore has no audited annual accounts. Oya Energy is an SPV set up specifically for the Oya Energy Hybrid plant under the RMIPPPP.

- 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.

Relevant information provided to NERSA

- 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.

Relevant information provided to NERSA.

- 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 fill in table below:

Total capital cost of the project (including IDC)	Confidential
Interest During Construction (IDC)	Confidential
Post tax real IRR (for the whole project)	Confidential
Nominal IRR after Tax (for the whole project)	Confidential
Debt/Equity Ratio	Confidential
Payback period	Confidential

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 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.

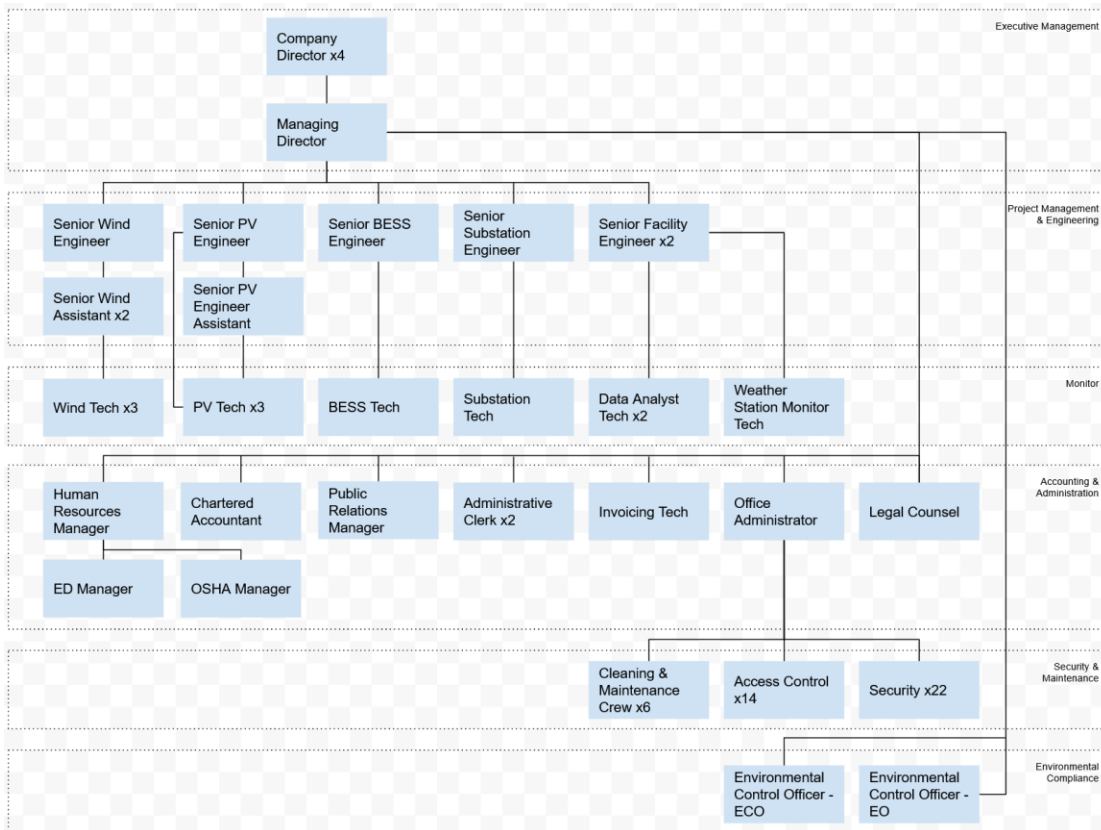
The project has been awarded preferred bidder status under the Risk Mitigation Independent Power Producer Procurement Programme, issued by the Department of Mineral Resource and Energy, in line with the IRP.

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.



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).

Regulating Authority	Approval or Permit	Status
Department of Environmental Affairs	Environmental Authorisation	Submitted
Karoo Hoogland Municipality	Land use change application	Submitted
Witzenberg Local Municipality	Land use change application	Submitted
South African Civil Aviation Authority	Obstacle Approval	Approved
Telecommunication clearances		Obtained
Department of Water Affairs	WUL	Submitted; application is with case officer for decision making

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%

Exact figures and commitments were made in the RMIPPPP Bidding process and were seen to be compliant, as illustrated by the project acquiring Preferred Bidder Status on 18 March 2021.

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.

Our full Economic Development commitments have been presented to NERSA. A brief overview has been provided below:

1. Job Creation:

Over the Construction period of the project, it is expected that a quantum of 9,957 person-months of employment will be generated for employees based in South-Africa and over the operating lifetime, and additional 17,290 person months. This means the project anticipates a total of 27,247 person-months of employment, which in turn translates into 2,270 jobs (1 job = 12 person-months).

Of this quantum (person-months):

- 17,855 will be Citizens
- 10,921 will be Black People
- 12,920 will be Skilled Employees, of which 5,603 will be Black People
- 5,625 will reside in Local Communities
- 8,313 will be Youth
- 2,777 will be Women

2. Supplier Development:

The Department of Mineral Resources and Energy (DMRE) supports the objectives stated in the Amended B-BBEE Codes to actively support value-adding suppliers to the Project Company and Material Contractors, including Black Enterprises, QSEs and EMEs and Women Owned Vendors through contributions to such entities to increase the participation of such entities in the mainstream economy.

The Project Company is therefore required to contribute to the development of value-adding suppliers that already or will form part of the Project Company's supply chain, including Black Enterprises, QSEs and EMEs and Women Owned Vendors.

In the light of this the project Company has committed to 0.58% of the Total Project Value in the Construction Measurement Period, whereas Project Value in respect of the Construction Measurement Period means the capital costs and costs of services procured for the Construction of the Facility or Facilities constituting a Project excluding any Excluded Amounts, to be spent on the development of its suppliers.

3. Enterprise Development

The DMRE intends to develop enterprises, including enterprises located in Local Communities where the Project is located, which is recognised through an adjustment, when calculating Economic Development Contributions, for the Recognition for Local Enterprises. These enterprises are outside of the Supply Chain. This Economic Development Element is required to be undertaken by the Project Company.

The Enterprise Development element in the Risk Mitigation IPP Procurement Programme is applicable in the Operating Measurement Period and is intended to contribute to the development of sustainable business initiatives in Local Communities to improve prospects for local job creation, income, entrepreneurship and enhanced economic activity in local communities.

4. Socio Economic Development

Socio-Economic Development attempts to address the socio-economic needs of people living in rural and semi-rural communities.

The Project Company, through the stakeholder engagements mentioned under Point 5 above, will seek to identify areas where a helping hand can be offered to struggling members of local society. The exact implementation of this will be clarified through the development of the economic Development Plan in the course of the next 12 months leading up to the Operation Phase of the project, but it will be ensured that it aligns with local policies and community needs.

SECTION L ADDITIONAL INFORMATION

Provide any other relevant information related to this application

Oya Energy (Pty) Ltd (“Oya”) developed the Oya Hybrid Project in response to the Department of Energy’s Request for Qualification and Proposals for New Generation Capacity under the Risk IPP Procurement Programme with a Tender No: DMRE001/2020/21. Oya is among the twenty-eight projects that have successfully submitted their bids and one of the 8 Preferred Bidders awarded on 18 March 2021 (IPP ID RM-TA-0006-001).

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:

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

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

Sole director	
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Date:

25 May 2021
