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

Umoyilanga (Pty) Limited is the Applicant and has been incorporated in terms of the Company Act 71 of 2008 under registration number 2020/832882/07.

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

Physical address

The Oval, Fernwood House, 1 Oakdale Road, Newlands, 7700

Postal address

PO. Box 23400 Claremont 7735

A3 Telephone number of applicant

(021) 657 4200

A4 Fax number of applicant

N/A

A5 Email address of applicant

xolani.mncedane@edf-re.co.za

A6 Contact person

First name	Xolani
Surname	Mncedane
Telephone No	021 657 4219
Mobile No	
Fax No.	N/A
Email address	xolani.mncedane@edf-re.co.za

A7 Legal form of applicant

Private Company: “Pty Ltd”

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

1 August 2022

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

Umoyilanga Energy Project

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

Umoyilanga is composed of two sites (or "Facilities") that are geographically separated but considered as a single Project (one PPA, one Project Company, one energy dispatch management system):

- **Dassiesridge** Hybrid Energy Site
  - Nelson Mandela Bay, Eastern Cape of South Africa
- **Avondale** Hybrid Energy Site
  - Upington, Northern Cape of South Africa

C3 Address of generation station

Dassiesridge Hybrid Energy Site

- Situated on Grassridge Farm 187, Gringley Farm 188, and Blauw Baatjies Vlei Farm 189, along R75 and R336.

Avondale Hybrid Energy Site

- Portion 1 of the Farm Avondale, 410 Gordonia Road, Northern Cape Province

C4 Contact person at generation station

First name and Surname	Sindisiwe Mkhize
Telephone No	041 506 4910
Fax No	N/A
Email address	sindisiwe.mkhize@edf-re.co.za

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

Hybrid power station: *Wind + Solar PV + Battery Energy Storage System + diesel generators*

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.

- Construction start: 1 August 2021
- Construction period: 12 months
- Commercial Operations Date (est.): 1 August 2022
- Last COD: 31 January 2023

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

Dassiesridge Wind Farm Site:

- Wind Energy Facility – 77.8 MW
- Diesel Generators – 6 MW
- Battery Energy Storage System – 45 MW × 3 hours

Avondale Solar PV Farm Site

- Solar PV Energy Facility – 138 MWp
- Diesel Generators – 6 MW
- Battery Energy Storage System – 30 MW × 3 hours

Existing Capacity (Nameplate rating)

N/A

Planned Capacity (nameplate rating)

- Umoyilanga Project (*contracted*) – 75 MW

- Umoyilanga Project (*nameplate*) – 303 MW, of which:
  - Dassiesridge Site (*nameplate*) – 129 MW
  - Avondale Site (*nameplate*) – 174 MW

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	Max MW	Total MWh	Own use MWh	Export (Sales) MWh
2023	75			
2024	75			
2025	75			
2026	75			
2027	75			
2028	75			

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

This metric doesn't really apply to this type of combined renewable generation facility: the installed capacity (303 MW) is purposefully considerably higher than the contracted capacity (75 MW) in order for the Project to meet the dispatch requirements of the PPA while using variable sources of power.

C10 Expected future life of the generation station.

More than 20 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

Renewable Energy Resources (Wind and Solar)

Note: a short-term agreement is also envisaged with a hydrocarbon refinery

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

Not applicable for wind/solar

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).

No long-term agreements for fuel supply are envisaged.

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.

Relevant information provided to NERSA

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

Relevant information provided to NERSA

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 plans to expand or modify the generation station, as per the requirements set out as part of the Risk Mitigation Independent Power Producer Procurement Programme (“RMI4P”) under which it was contracted

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.

Umoyilanga will supply electricity to **Eskom's Single Buyer's Office** under an arms-length PPA

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.

Dassiesridge Hybrid Energy Facility will connect to Eskom's switching station – 132kV terminals

Avondale Hybrid Energy Facility will connect on the Eskom's 132kV overhead line.

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

Umoyilanga Energy Project will supply electricity to Eskom under the following terms:

- Contracted Capacity: 75 MW
- PPA Term: 20 years
- Tariff (ZAR/MWh): [confidential]

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.

Relevant information provided to NERSA

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]

Relevant information provided to NERSA

Notes to Section G

1) 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.

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

Umoyilanga Energy Project is in line with IRP 2019, gazetted on October 2019, and followed by a Ministerial Determination gazetted in July 2020 for the procurement of 2,000 MW of 'emergency power', following which the RMP tender documentation was issued (August 2020).

The Project was bid in December 2020 and awarded preferred bidder status under the RMP on 18 March 2021.

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.

Refer to the table below for Job Creation Quantum during construction and Operation period of Umoyilanga Hybrid Energy Facility

Job Creation – Quantum	**Construction Measurement Period**		**Operating Measurement Period**	
Description				
RSA Based Employees who are Citizens	*765*	*84,10%*	*79*	*98,99%*
RSA Based Employees who are Black People	*692*	*76,08%*	*62*	*77,87%*
RSA-Based Skilled Employees who are Black People	*186*	*65,91%*	*33*	*64,88%*
RSA Based Employees who are Citizens who reside in Local Communities	*506*	*55,55%*	*48*	*59,82%*
RSA Based Employees who are Youth	360	*39,59%*	38	*47,39%*
RSA Based Employees who are Women	*261*	*28,71%*	*18*	*22,81%*
RSA Based Employees who are People with Disabilities	*6*	*0,63%*	*1*	*0,42%*

Approximately 65% of the jobs that will be created (during construction and operation) can be attributed to Dassiesridge site – as wind facilities are more labour intensive; and the remainder (35%) of the jobs can be attributed to the Avondale site – Solar Facility

SECTION I PERMISSION FROM OTHER GOVERNMENT DEPARTMENTS OR REGULATORY AUTHORITIES

a) 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).

Refer to the following Annexures for the progress that Umoyilanga Energy (Pty) Ltd has made to obtain all the necessary permits and approvals for its virtual power plant

1.1 Land Use Permits

a) ***Refer to Annexure I 1.1 e)*** for DMRE application for Section 53 Clearance for Dassiesridge Hybrid Energy Facility

b) ***Refer to Annexure I 1.1 f)*** for DMRE Section 53 Approval for Avondale Hybrid Energy Facility

1.2 Environmental Authorisation

a) ***Refer to Annexure I 1.2 a)*** for Environmental Authorisation – Dassiesridge Energy Facility

i. **Refer to Annexure I 1.2 a) i)** for Environmental Authorisation Amendment – Wind Turbine Generator for Dassiesridge Energy Facility

b) ***Refer to Annexure I 1.2 b)*** for Environmental Authorisation – Avondale Energy Facility

i. **Refer to Annexure I 1.2 b) i)** for Environmental Authorisation Amendment – validity extension for Avondale Energy Facility

c) ***Refer to Annexure I 1.2 c)*** for Environmental Authorisation Application for Dassiesridge Battery Energy Storage System

d) ***Refer to Annexure I 1.2 d)*** for Basic Assessment Report for Dassiesridge Battery Energy Storage System

e) ***Refer to Annexure I 1.2 e)*** EA Approval for Avondale Battery Energy Storage System

f) an Environmental Impact Assessment process, as required by the National Environmental Management Act (NEMA) EIA Regulations, 2014, is NOT required for the proposed Thermal Power Plant situated in both Dassiesridge and Avondale Hybrid Energy Facilities.

See Confirmation Letter in **Annexure I 1.2 e**)

1.3 Telecommunication Clearance Letters

a) ***Refer to Annexure I 1.3 a)*** for Telecommunications Clearance Letters – Dassiesridge Hybrid Energy Facility

b) ***Refer to Annexure I 1.3 b)*** for Telecommunications Clearance Letters – Avondale Hybrid Energy Facility

1.4 Civic Aviation Authority

a) ***Refer to Annexure I 1.4 a)*** for Civic Aviation Authority – Dassiesridge Hybrid Energy Facility

b) ***Refer to Annexure I 1.4 b)*** for Civic Aviation Authority – Avondale Hybrid Energy Facility

1.5 Water Use License

a) ***Refer to Annexure I 1.5 a)*** for Water Use License – Dassiesridge Hybrid Energy Facility

b) ***Refer to Annexure I 1.5 b)*** for Water Use License – Avondale Hybrid Energy Facility

SECTION J BROAD-BASED BLACK ECONOMIC EMPOWERMENT

J1 Please provide information in terms of the following categories:

COMPONENTS	POINTS	Commitments	0.5	0.75	1
Direct Empowerment	Black Ownership	45%	10% to <20%	20% to 50%	>50%
	Black Management	80%	20% to <35%	35% to 50%	>50%
	Black Female Management	33%	1% to <5%	5% to 10%	>10%
Human Resource Development	Black Skilled Personnel as % of payroll	65%	20% to <35%	35% to 50%	>50%
	Skills Development Programs as % of payroll	0,02% of Umoyilanga revenue will be spent on skills development programs	1% to <5%	5% to 10%	>10%
	Employment Equity i.e. Women Representation	25%	20% to <35%	35% to 50%	>50%
Indirect Empowerment	Procurement from Black/BEE Suppliers	90% of Umoyilanga's procurement will be directed towards Black/BEE compliant 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	0,4% of Umoyilanga's revenue will be spent on Enterprise Development programs	10% to <20%	20% to 25%	>25 %
	Industry specific initiatives to facilitate the inclusion of black people in the sector as % of net profit	5.36% of the procurement will be directed to Black Enterprises (>50% owned by black people)	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.	1.4% of revenue from Umoyilanga will be directed to economic and socio-economic development, which includes skills transfer and preference procurement	1% to <5%	5% to 10%	>10%

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.

See **Annexure K** for Umoyilanga Economic Development Commitments

SECTION L 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):

Tristan de Drouas	

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

CEO of EDF Renewables (Pty) Ltd, with Power of Attorney from Verena Bougeant on behalf of Umoyilanga (Pty) Ltd	

Date:
