



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

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DFFE Reference: 12/12/20/1778/5/AM6

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PER EMAIL / MAIL

Dear Mr Jenman

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 02 NOVEMBER 2012 FOR THE PROPOSED CONSTRUCTION OF THE SPREEUKLOOF WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR STERKSTROOM, EASTERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the abovementioned application by this Department on 02 November 2012, the first EA amendment dated 20 May 2013, the second EA amendment dated 23 February 2015, the third EA amendment dated 13 June 2016, the fourth EA amendment dated 15 November 2018, your application for amendment of the EA and the draft motivation report received by the Department on 06 August 2021, the acknowledgement thereof on 17 August 2021, the comments on the draft motivation report dated 03 September 2021, and the final motivation report received by the Department on 27 October 2021, refer.

Based on a review of the reason for requesting an amendment to the above EA, this Department, in terms of Chapter 5 of the Environmental Impact Assessment Regulations, 2014 as amended, has decided to amend the EA dated 02 November 2012 as amended, as follows:

Amendment 1 and 2: Amendment to the turbine specifications (amendment 1) and reduction in the authorised number of turbines (amendment 2):

On page 4 of the EA dated 02 November 2012, under the associated infrastructure for the wind energy facility (WEF), the specified rotor diameter is amended from '125m' to reflect as 'up to 176m'. In addition, the authorised range of the hub height is amended from '120m' (authorised in 2013) to reflect as 'up to 120m' (amendment 1). The number of wind turbines is also decreased from the authorised 21 turbines to 'up to 12' turbines. The project description in the EA is therefore amended to include the revised number of turbines (amendment 2).

- On page 4 of the EA dated 02 November 2012, under the associated infrastructure, the following is amended (amendment shown in underlined text):

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Wording per the EA dated 02 November 2012 (as amended by the EA Amendment dated 20 March 2013)	Amended wording (inclusion underlined)
The infrastructure associated with this facility includes: <ul style="list-style-type: none"> A maximum of 21 wind turbine units with a hub height of 120 metres and a rotor diameter of 125 metres; 	The infrastructure associated with this facility includes: <ul style="list-style-type: none"> <u>Wind turbine generators (up to 12 turbines), comprising a hub height of up to 120m and rotor diameter of up to 176m.</u>

Reason for the amendment to the turbine specifications (amendment 1):

Wind turbine generators are constantly under development to increase the potential energy output capacity per wind turbine. The more energy one turbine can produce, the fewer turbines are required to generate the authorised contracted capacity of the project. The proposed project is intended to be bid into future rounds of the Department of Mineral Resources and Energy (DMRE) Renewable Energy Independent Power Producers Procurement (REIPPP) Programme or similar programmes under the promulgated IRP 2010–2030. Following the issuing of the EA for the project, there have been advancements to wind turbine technology with newer turbines becoming larger and more powerful. The turbines authorised in the EA are therefore not considered to be the most suitable in terms of production and economic considerations. Based on the technologies now available and the additional data collected onsite, it has been concluded by the applicant that improved turbines should be utilised for the facility to ensure optimisation of generation.

The amendments to the turbine specifications will therefore optimise generation and economic competitiveness while allowing for the avoidance of sensitivities on site and a reduction in the disturbance footprint. The amendment to the wind turbine specifications is not a listed activity and does not trigger any new listed activities, as the amendment falls within the originally authorised footprint and capacity of the facility.

Reason for the amendment reducing the authorised number of turbines (amendment 2):

In addition to the turbine specification amendment detailed above, the holder of the EA required an amendment to reduce the number of authorised turbines as per the revised layout. The turbines utilised by the facility will have an increased generating capacity compared to what was available at the time of the initial EIA assessment. Larger turbines require adjustments to turbine positions to cater for the minimum spacing that needs to be maintained between turbines for safety reasons and to ensure optimal operations. In order to not exceed the approved generating capacity of the facility, and to optimise the cost and disturbance footprint of the turbines by using less turbines, a reduced number of turbines was required, which in turn requires an updated layout. A revised layout based on the reduced number of turbines was attached in the motivation report submitted along with the application form, however the layout is not submitted for approval at this time. The final layout will be submitted following final design prior to construction, as per the requirements of Condition 28 of the EA.

Amendment 3: Update of the project description to reflect the revised co-ordinates of the 132kV grid connection line and substation locations in line with the updated layout:

The substation and 132kV grid connection location are amended to reflect the revised layout. The following amendments are accordingly made:

- On page 4 of the EA dated 02 November 2012, under the associated infrastructure, the following is amended (amendment shown in underlined text):

Wording per the EA dated 02 November 2012	Amended wording (inclusion underlined)
<ul style="list-style-type: none"> This project will share Substation 2 and 3 with Penhoek Wind Energy Facility. 	<ul style="list-style-type: none"> <u>This project will share Substation 3 with Loperberg Wind Energy Facility.</u>

- On page 4 of the EA dated 02 November 2012, the inclusion of a new table specifying the 132kV grid connection coordinates, as per the revised routing in the amended layout.

Wording per the EA dated 02 November 2012	Amended wording (inclusion underlined)		
Not specified. Although the 132kV grid connection was included in the EA (under GN R. 387 Item 1(I)), the coordinates of the 132kV grid connection were not specified in the EA.	132kV Grid Connection Start, Middle and End points as described in the Motivation Report dated July 2012:		
	Start	31° 26' 51.47" S	26° 21' 10.99" E
	Middle	31° 27' 54.64" S	26° 25' 16.73" E
	End	31° 27' 12.72" S	26° 25' 56.31" E

- On page 4 of the EA dated 02 November 2012, under the infrastructure associated with the facility, the project description is amended to specifically mention the 132kV grid connection:

Wording per the EA dated 02 November 2012	Amended wording (inclusion underlined)
Not specified. Although a 132kV grid connection was included in the EA under GN R. 387 Item 1(I), the grid connection was not mentioned under the infrastructure associated with the facility on page 4 of the EA.	<ul style="list-style-type: none"> A 132kV overhead power line from the on-site Substation 2 within the Spreeukloof WEF project site, to Substation 3, shared with Loperberg WEF;

Reason for the amendment:

A revised layout has been produced for the facility which considered the reduced number of turbines as per the amendments detailed above. In addition, the current authorised connection point for the Spreeukloof facility is Substation 2 and 3, shared with Penhoek Wind Energy Facility (now known as Malabar Wind Energy Facility). However, following a review of the technical grid connections available and optimisation thereof on the basis of layout updates to both Malabar WEF and Loperberg WEF, a shared infrastructure substation connecting Malabar, Spreeukloof and Loperberg WEFs was deemed to be the optimal grid connection approach. Loperberg WEF underwent a layout revision towards moving the shared Substation 3 location, due to the technical connection requirements of Loperberg WEF and that of Eskom. As the substation location into which Spreeukloof WEF connects has been moved, this amendment was required to ensure that the authorised substation location specified in the EA accurately reflects the revised termination point for the Spreeukloof WEF.

In addition, given the terminating substation location has changed, the grid connection route thereto was required to change accordingly. The revised grid connection route was therefore specifically included in the EA to ensure that the amended grid connection route is accurately reflected in the EA.

The resulting change in grid connection route and substation location will result in the reduction of the length of the powerline by ~1.5km and will reduce the length of powerline required to cross delineated freshwater features. The revised grid connection route will now be located along the proposed access and internal roads of the facility, allowing for easy access for maintenance and the reduction in maintenance roads required for the power line. As a result, less potential for environmental impact on avifauna is incurred by the amended routing of the powerline. The movement of the infrastructure is therefore optimal from a technical connection perspective, whilst reducing the potential for environmental impact, and representing a shorter powerline. The amended substation location and grid connection route remain within the authorised footprint of the WEFs as assessed in the EIA application (2010), and do not trigger a listed activity.

Amendment 4: Amendment to the holder of the Environmental Authorisation:

The holder of the EA is amended to the Specialist Purpose Vehicle (SPV) / company currently holding the EA. The following amendments are accordingly made:

- On page 1 of the EA dated 02 November 2012, under holder of the authorisation, the name of the holder is amended:

Wording per the EA dated 02 November 2012	Amended wording (inclusion underlined)
Rainmaker Energy Projects (Pty) Ltd	<u>Spreeukloof Wind Farm (Pty) Ltd</u>

- On page 2 of the EA dated 02 November 2012, under holder of the authorisation:

Wording per the EA dated 02 November 2012	Amended wording (inclusion underlined)
RAINMAKER ENERGY PROJECTS (PTY) LTD with the following contact details - Mr. Douglas Jenman Rainmaker Energy Projects (Pty) Ltd P.O. Box 163 Newlands Cape Town 7725 Tel: (021) 674 0429 Fax: (086) 582 1792	<u>SPREEUKLOOF WIND FARM (PTY) LTD</u> with the following contact details - Mr Douglas Jenman <u>Spreeukloof Wind Farm (Pty) Ltd</u> PO Box 163 Newlands Cape Town 7725 Tel: (021) 674 0429 Email: <u>doug@rainmakerenergy.co.za</u>

Reason for the amendment:

Since issuance of the split EA for the Spreeukloof WEF facility in 2012, the commercial structure of the EA holder has changed and the Special Purpose Vehicle has since been renamed. The current holder as specified in the EA was therefore amended to reflect the correct SPV, namely Spreeukloof Wind Farm (Pty) Ltd. This amendment was required to ensure that the EA correctly specifies the holder and that the information it contains is up to date and accurate. The new holder has provided a written undertaking that they are willing and able to assume responsibility of the environmental authorisation.

Amendment 5: Amendment to the capacity of the Spreeukloof Wind Farm:

The facility generating capacity is increased by up to 10MW generating capacity above that currently authorised, to optimise and maximise the facility generating potential in line with the amended turbine specifications. The following amendments are accordingly made:

- On page 3 of the EA dated 02 November 2012, in the listed activities table, the activity description is amended to increase the generating capacity of the facility by up to 10MW:

Wording per the EA dated 02 November 2012		Amended wording (inclusion underlined)	
Listed activities	Activity/Project Description	Listed activities	Activity/Project Description
<u>GN R. 387 Item 1(a):</u> The construction of facilities or infrastructure, including associated structures or infrastructure for the generation of electricity	This project will generate a maximum of 52.5 MW.	<u>GN R. 387 Item 1(a):</u> The construction of facilities or infrastructure, including associated structures or infrastructure for the	This project will generate a maximum of <u>62.4MW</u> .

where- (i) the electricity output is 20 megawatts or more; or (ii) the elements of the facility cover a combined area in excess of 1 hectare		generation of electricity where- (i) the electricity output is 20 megawatts or more; or (ii) the elements of the facility cover a combined area in excess of 1 hectare	
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- On page 4 of the EA dated 02 November 2012, under the infrastructure associated with this facility, the generating capacity of the facility is increased by up to 10MW:

Wording per the EA dated 02 November 2012	Amended wording (inclusion underlined)
<ul style="list-style-type: none"> A maximum output capacity of 52.5 Megawatts (MW). 	<ul style="list-style-type: none"> A maximum output capacity of <u>62.4</u> Megawatts (MW)

- On page 4 of the EA dated 02 November 2012, under the Scope of Authorisation:

Wording per the EA dated 02 November 2012	Amended wording (inclusion underlined)
2. The proposed Spreeukloof Wind Energy Facility is hereby approved for the footprint of approximately 1309.2ha and a maximum output capacity of 52.5 MW.	2. The proposed Spreeukloof Wind Energy Facility is hereby approved for the footprint of approximately 1309.2ha and a maximum output capacity of <u>62.4MW</u> .

Reason for the amendment:

The Spreeukloof WEF was authorised for 52.5MW generation utilising a maximum of 21 wind turbine units. With the turbine specification and reduction of turbine numbers detailed above, this generation of 52.5MW will be completed by a reduced number of turbines (specifically 12), utilising a hub height of up to 120m and a rotor diameter of up to 176m. The benefit of reducing the turbine numbers is the concomitant reduction in footprint clearance required for establishment of access roads, trenching of low voltage cabling between turbines, and the physical footprint required for the establishment of a turbine. This in turn therefore reduces the quantum of habitat and vegetation clearance required for the same generating capacity.

The holder therefore requested an increase of the facility's generating capacity by up to 10 MW (from 52.5MW to 62.4MW), to be achieved by increasing the capacity of the generator contained within the wind turbines, in order to optimise the facility and increase generation within the approved environmental parameters. In doing so, the proponent will be increasing the generating capacity of an already authorised facility, having considered the environmental impacts related to the turbine specifications requested. The amendment to increase the generating capacity by improving the turbine technology will optimise generation and economic competitiveness while not altering the environmental impact. The amendment to the wind turbine specifications is not a listed activity and it will not trigger any new listed activities, as the amendment does not exceed any listed activity thresholds for the generation of electricity.

Further, the specialist studies undertaken as part of the amendment application process have concluded that there are no fatal flaws associated with the amendments requested by the holder of the EA for the Spreeukloof Wind Energy Facility. All specialists concluded that the amendments are considered acceptable from their respective specialisation, provided the mitigation measures supplied are implemented and adhered to by the developer. These mitigation measures have been included within the Environmental Management Plan (EMPr), to ensure they are made binding on the developer and contractors. Based on the specialist

findings, it is concluded that decreasing the number of turbines and changing the turbines specifications, updating of the project description with the amended substation location and grid connection route per the revised layout, amendment of the holder of the EA, and increasing the capacity of the facility are not expected to result in an increase to the significance ratings for the identified potential impacts following implementation of mitigation. There is a reduction in significance in some impacts as a result of the reduced number of turbines and the location of these outside of identified high sensitivity areas. In addition, the amended wind turbine positions considered avoids all identified avifaunal exclusion zones and areas of high sensitivity.

Refusal of amendment 6: Extension of the Environmental Authorisation (EA) validity by an additional two years:

The current validity period of the EA dated 02 November 2012 as amended expires on 02 November 2022 (per page 1 of the EA Amendment dated 15 November 2018, DFFE Reference: 12/12/20/1778/5/AM4). The holder of the EA requested an amendment to Condition 7 of the EA to extend the validity period of the EA by an additional two (2) years.

This amendment is **refused**.

Reason for the refusal:

The validity period of the EA has already been extended to the maximum period of ten (10) years, per the EA Amendment dated 15 November 2018. The Department is aware that the environment changes constantly, as a result it might be significantly different from the one that existed at the time of the issuing of the EA, hence the validity of the EA cannot exceed a maximum period of 10 years. Failure to commence with construction activities within the maximum 10 year period, your EA will be deemed to have lapsed and a new application for Environmental Authorisation will have to be lodged.

Conditions of the Amendment

The recommendations and mitigation measures recorded in the Spreeukloof WEF Final Motivation for Amendment of Environmental Authorisation Report dated October 2021, must be included and/or addressed in the finalisation of the EMPr and layout plan. The finalised EMPr and layout plan must be submitted to the Competent Authority for written approval prior to commencement of the activity in accordance with the requirements of Conditions 13 and 28 of the EA.

General

This EA amendment letter must be read in conjunction with the EA dated 02 November 2012 as amended.

In terms of the Promotion of Administrative Justice Act, 2000 (Act No 3 of 2000), you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, 2013 (Act no. 4 of 2013) which stipulate that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the decision, of the Department's decision, as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of National Environmental Management Act, 1998 (Act No. 107 of 1998) National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303

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dated 08 December 2014 (National Appeal Regulations, 2014), which prescribes the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appeals@environment.gov.za;

By hand: Environment House
473 Steve Biko,
Arcadia,
Pretoria,
0083; or

By post: Private Bag X447,
Pretoria,
0001;

Please note that in terms of Section 43(7) of the National Environmental Management Act, Act No. 107 of 1998, as amended, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appeals@environment.gov.za.

Yours faithfully


Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment
Date: 13/01/2022

cc:	Jo-Anne Thomas	Savannah Environmental (Pty) Ltd	E-mail: joanne@savannahsa.com
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