



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road · Arcadia · PRETORIA  
Tel (+ 27 12) 399 9372

**DEA Reference:** 14/12/16/3/3/2/807

**Enquiries:** Mr Herman Alberts

**Telephone:** (012) 399 9371 **E-mail:** HAlberts@environment.gov.za

Mr Khangelani Methuli Mbanjwa  
Karreebosch Wind Farm (Pty) Ltd  
5<sup>th</sup> Floor, 125 Buitengracht Street  
**CAPE TOWN**  
8001

Telephone number: (021) 300 0610  
Email Address: methuli@g7energies.com

### **PER EMAIL / MAIL**

Dear Mr Mbanjwa

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 983/984 AND 985 FOR THE PROPOSED KARREEBOSCH WIND FARM (ROGGEVELD PHASE 2) AND ITS ASSOCIATED INFRASTRUCTURE WITHIN THE KAROO HOOGLAND LOCAL MUNICIPALITY AND THE LAINGSBURG LOCAL MUNICIPALITY IN THE NORTHERN AND WESTERN CAPE PROVINCES**

With reference to the above application, please be advised that the Department has decided to grant authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.

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

Your attention is drawn to Chapter 2 of Government Notice No. R.993, which prescribes the appeal procedure to be followed. An appellant must submit an 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.

By post: Private Bag X447,  
Pretoria, 0001; or

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

If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

**Appeals must be submitted in writing to:**

Mr Z Hassam, Director: Appeals and Legal Review, of this Department at the above mentioned addresses. Mr Hassam can also be contacted at:

Tel: (012) 399 9356

Email: Appealsdirector@environment.gov.za

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, an appeal under section 43 of that Act 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.

For guidance on appeals submitted to the Minister in terms of NEMA and the SEMAs, please find a copy of the guideline on the administration of appeals on the Department's website:  
([https://www.environment.gov.za/documents/forms#legal\\_authorisations](https://www.environment.gov.za/documents/forms#legal_authorisations)).

Kindly include a copy of this document with the letter of notification to interested and affected parties.

Yours faithfully



**Mr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**

Date: 29/01/2016

cc:	Ms Karen Jodas	Savannah Environmental (Pty) Ltd	Email: karen@savannahsa.com
	Mr P Williams	Laingsburg Local Municipality	Email: pawilliams@laingsburg.gov.za
	Ms A Yaphi	NC: DENC	Email: ayaphi@ncpg.gov.za



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## Environmental Authorisation

In terms of regulation 25 of the Environmental Impact Assessment Regulations, 2014

The proposed Karreebosch Wind Farm (Roggeveld Phase 2) and its associated infrastructure within the Karoo Hoogland Local Municipality and the Laingsburg Local Municipality in the Northern and Western Cape Provinces

Central Karoo District Municipality and Namakwa District Municipality

<b>Authorisation register number:</b>	<i>14/12/16/3/3/2/807</i>
<b>Last amended:</b>	<i>First issue</i>
<b>Holder of authorisation:</b>	<i>Karreebosch Wind Farm (Pty) Ltd</i>
<b>Location of activity:</b>	<i>Farm Appelsfontein 201 Remainder of Ekkraal 199 Portion 1 of Ekkraal 199 Portion 2 of Ekkraal 199 Remainder of Karreebosch 200 Portion 1 of Karreekloof 196 Remainder of Klipbanksfontein 198 Portion 1 of Klipbanksfontein 198 Farm Kranskraal 189 Farm Oude Huis 195 Farm Rietfontein 197</i>

	<i>Farm Roode Wal 187</i> <i>Portion 2 of Standvastigheid 210</i> <i>Remainder of Wilgebosch Rivier 188</i> <i>Farm Aprils Kraal 105</i> <i>Remainder of Bon Espirange 73</i> <i>Portion 1 of Bon Espirange 73</i>
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This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

## Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA regulations.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

## Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No.107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

### **KARREEBOSCH WIND FARM (PTY) LTD**

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mr Khangelani Methuli Mbanjwa  
5<sup>th</sup> Floor, 125 Buitengracht Street  
**CAPE TOWN**  
8001

Telephone Number: (021) 300 0610  
Cell phone Number: (083) 697 9241  
Fax Number: (086) 514 1735  
Email Address: methuli@g7energies.com

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, 2 and 3 (GN R. 983, 984 and 985):

Activity number	Activity description
<p><u>GN R. 983: Activity 11(i)</u>  <i>"The development of facilities or infrastructure for the transmission and distribution of electricity (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts"</i></p>	<p>The project will entail construction of substations and power line/s with a capacity of &lt;275kV (outside an urban area).</p>
<p><u>GN R. 983: Activity 12 (xii)</u>  <i>"The development of – (xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs - if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse"</i></p>	<p>The wind energy facility will include the construction of infrastructure within 32m of a watercourse.</p>
<p><u>GN R. 983: Activity 19(i):</u>  <i>"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse"</i></p>	<p>Some water crossings of access roads may require earth moving of more than 5 cubic metres in order to install culverts appropriate both size of watercourse and minimum road specifications for heavy vehicles.</p>
<p><u>GN R. 983: Activity 24(ii):</u>  <i>"The development of (ii) a road with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres"</i></p>	<p>The wind energy facility will require access roads with parts wider than 8m in width, and up to 12m in width, to be constructed outside urban areas.</p>
<p><u>GN R. 983: Activity 28(ii):</u>  <i>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total</i></p>	<p>The development footprint for the proposed wind farm will cover an area greater than 1 hectare on land currently used for agriculture.</p>

<p>land to be developed is bigger than 1 ha.</p>	
<p><u>GN R. 984: Activity 1:</u> "The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more"</p>	<p>The wind energy facility will have a contracted capacity of 140MW.</p>
<p><u>GN R. 984: Activity 15:</u> "The clearance of an area of 20 hectares or more of indigenous vegetation"</p>	<p>The development footprint for the proposed wind energy facility will cover an area greater than 20 hectares.</p>
<p><u>GN R. 985: Activity 4 (a)(ii)(bb), (ee) and 4(f) (i):</u> "The development of a road wider than 4 metres with a reserve less than 13,5 metres. <b>(a) In Northern Cape province:</b> (ii) Outside urban areas, in: (bb) National Protected Area Expansion Strategy Focus areas; (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans <b>(f) In Western Cape Province:</b> (i) Areas outside urban areas (aa) Areas containing indigenous"</p>	<p>Roads wider than 4 m will be constructed. The site is located outside urban areas in a National Protected Area Expansion Strategy Focus Area and Critical Biodiversity Area in terms of the Namakwa District Biodiversity Sector Plan (Desment &amp; Marsh 2008).</p>
<p><u>GN R. 985: Activity 12 (a)(ii), and 12(d) (ii):</u> "The clearance of an area of 300 square metres or more of indigenous vegetation <b>(a) In Western Cape province:</b> (ii) Within critical biodiversity areas identified in bioregional management plan. <b>(d) In Northern Cape:</b> (ii) Within critical biodiversity areas identified in bioregional plans"</p>	<p>An area of 300 square metres or more of indigenous vegetation cover will be cleared. The site is located within a Critical Biodiversity Area identified in terms of the Namakwa District Biodiversity Sector Plan (Desment &amp; Marsh 2008).</p>
<p><u>GN R. 985: Activity 14 (xii), a(ii) (bb) (ff) and 14 (f) (i) (bb) (ff):</u> "The development of-</p>	<p>Buildings such as the workshop and site office</p>

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<p><i>(xii) Infrastructure or structures with a physical footprint of 10 square metres or more;</i></p> <p><i>(a) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</i></p> <p><b><i>(a) In Northern Cape:</i></b></p> <p><i>(ii) Outside urban areas, in:</i></p> <p><i>(bb) National Protected Area Expansion Strategy Focus areas;</i></p> <p><i>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p><b><i>(f) In Western Cape:</i></b></p> <p><i>(i) Outside urban areas, in:</i></p> <p><i>(bb) National Protected Area Expansion Strategy Focus areas; Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans"</i></p>	<p>and/or infrastructure larger than 10m<sup>2</sup> or 10m<sup>2</sup> within 32m of a watercourse will be required to be built. The site is located outside urban areas in a National Protected Area Expansion Strategy Focus Area and Critical Biodiversity Area identified in terms of the Namakwa District Biodiversity Sector Plan (Desment &amp; Marsh 2008).</p>
<p><u>GN R. 985 Activity 18 (a) (ii) (bb) (ee) and 18 (f) (i)</u></p> <p><u><i>(aa):</i></u></p> <p><i>"The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</i></p> <p><b><i>(a) In Northern Cape provinces:</i></b></p> <p><i>(ii) Outside urban areas, in:</i></p> <p><i>(bb) National Protected Area Expansion Strategy Focus areas;</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p><i>(ii) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been</i></p>	<p>Internal access roads will be up to 12m wide. In many areas of the site the existing roads are only ~3 m wide, therefore some of these roads will be widened by up to 9m.</p> <p>In two areas on site the existing access road will be lengthened, in both cases the distance of each is less than 2km of new road.</p> <p>The wind energy facility will require access roads to be upgraded, which will include the widening of the roads as well and lengthening of roads in some areas.</p>

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<p>determined;</p> <p><b>(f) In Western Cape provinces:</b></p> <p><i>(i) All areas outside urban areas, Areas containing indigenous vegetation"</i></p>	<p>The site is located outside urban areas in a National Protected Area Expansion Strategy Focus Area and Critical Biodiversity Area in terms of the Namakwa District Biodiversity Sector Plan (Desment &amp; Marsh 2008).</p>
<p><u>GN R.985: Activity 23(xii) (a) (ii) (ee) and 23 (xii) (g) (i) (bb) (ff):</u></p> <p>The expansion of –</p> <p><i>(xii) infrastructure or structures where the physical footprint is expanded by 10 square metres or more; where such development occurs –</i></p> <p><i>(a) if no development setback has been adopted, within 32 metres of a watercourse measured from the edge of a watercourse;</i></p> <p><b>(a) In Northern Cape:</b></p> <p><i>(ii) Outside urban areas, in:</i></p> <p><i>(bb) National Protected Area Expansion Strategy Focus areas;</i></p> <p><i>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p><b>(g) In Western Cape:</b></p> <p><i>(i) Outside urban areas, in:</i></p> <p><i>(bb) National Protected Area Expansion Strategy Focus areas; Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p>	<p>The project may require the expansion of roads (i.e. infrastructure) within 32m of a watercourse.</p>

as described in the Environmental Impact Assessment (EIAr) dated September 2015 at:

**21 SG Code:**

C	O	4	3	0	0	0	0	0	0	0	0	0	0	7	3	0	0	0	0	0
C	O	4	3	0	0	0	0	0	0	0	0	0	0	7	3	0	0	0	0	1
C	O	4	3	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	8	7	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	8	8	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	5	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	8	8	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	6	0	0	0	0	1	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	7	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	8	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	8	0	0	0	0	1	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	9	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	9	0	0	0	0	1	
C	O	7	2	0	0	0	0	0	0	0	0	1	9	9	0	0	0	0	2	
C	O	7	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	
C	O	7	2	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	
C	O	7	2	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	2	

**Site Coordinates:**

Wind Farm boundary corners	Latitude	Longitude
1	32° 43' 10.25" S	20° 30' 56.22" E
2	32° 43' 54.98" S	20° 32' 23.96" E
3	32° 43' 58.50" S	20° 33' 42.64" E
4	32° 45' 49.76" S	20° 32' 27.91" E
5	32° 48' 47.44" S	20° 36' 57.76" E
6	32° 50' 9.78" S	20° 36' 40.16" E
7	32° 51' 34.59" S	20° 35' 52.85" E
8	32° 52' 51.47" S	20° 33' 40.51" E
9	32° 55' 34.23" S	20° 35' 31.86" E
10	32° 55' 51.13" S	20° 35' 29.79" E
11	32° 55' 51.48" S	20° 35' 52.83" E
12	32° 56' 12.14" S	20° 35' 50.58" E
13	32° 56' 10.49" S	20° 35' 27.30" E
14	32° 56' 34.77" S	20° 35' 24.24" E
15	32° 57' 23.11" S	20° 34' 19.95" E

16	32° 56' 29.81" S	20° 29' 57.44" E
17	32° 56' 23.69" S	20° 26' 18.32" E
18	32° 56' 8.94" S	20° 25' 52.10" E
19	32° 55' 33.27" S	20° 25' 3.22" E
20	32° 54' 46.59" S	20° 23' 49.71" E
21	32° 54' 8.73" S	20° 24' 21.43" E
22	32° 50' 44.73" S	20° 24' 24.34" E
23	32° 50' 40.50" S	20° 24' 14.19" E
24	32° 49' 43.33" S	20° 25' 2.08" E
25	32° 48' 7.71" S	20° 25' 18.36" E
26	32° 48' 15.26" S	20° 23' 14.63" E
27	32° 47' 3.78" S	20° 23' 8.12" E
28	32° 45' 55.53" S	20° 23' 32.91" E
29	32° 44' 23.13" S	20° 26' 22.17" E
30	32° 45' 58.70" S	20° 27' 15.57" E
31	32° 44' 34.23" S	20° 28' 46.99" E

#### Power line route

Alternative 1a	Latitude	Longitude
Starting point	32° 51' 39.91" S	20° 28' 42.54" E
Middle point	32° 52' 5.72" S	20° 33' 14.49" E
End point	32° 55' 59.31" S	20° 35' 29.25" E

- for the proposed Karreebosch Wind Farm (Roggeveld Phase 2) and its associated infrastructure within the Karoo Hoogland Local Municipality and the Laingsburg Local Municipality in the Northern and Western Cape Provinces, hereafter referred to as "the property".

The Karreebosch Wind Farm will have an energy generation capacity of up to 140 MW, and will include the following infrastructure:

- Up to 65 wind turbines (2MW to 3.3MW in capacity each) with a foundation of 25m in diameter and 4m in depth;
- The hub height of each turbine will be 100 metres, and the rotor diameter 140 metres;

- Permanent compacted hard standing areas / crane pads for each wind turbine (70m x 50m);
- Electrical turbine transformers (690V/33kV) at each turbine (2m x 2m) footprint typical but up to 10m x 10m at certain locations;
- Internal access roads up to 12 m wide;
- Approximately 25km of 33kV overhead power lines linking the wind turbines to each other and to the on-site substations;
- Approximately 25km of 132kV overhead power lines from the on-site substation to Eskom's Komsberg Substation;
- Up to two electrical substations on-site (33/132 kV substations with a footprint of 100m x 200m each);
- Underground cabling between turbines buried along the internal access roads, where feasible;
- Extension of the existing 400kV Komsberg Substation with several electrical components to be defined by Eskom (e.g. additional feeder bay, transformer bay) on the existing substation property;
- An operations and maintenance building (O&M building);
- Up to 4 x 100m tall wind measuring masts;
- Temporary infrastructure required during the construction phase includes construction lay down areas and a construction camp up to 9ha (footprint size 300m x 300m); and
- A borrow pit for locally sourcing aggregates required for construction (~3ha).

Technical details of the proposed facility:

Component	Description/ Dimensions
Number of turbines	Up to 65 turbines (generation capacity of up to 140MW)
Hub height	100m
Blade length	~ 70m
Rotor Diameter	140m
Area occupied by transformer stations / substation	» One 33/132kV Substation 100m x 200m » Extension of the existing 400kV substation at Komsberg » Transformer at each turbine: total area <1500 m <sup>2</sup> (2 m <sup>2</sup> per turbine up to 10m <sup>2</sup> at some locations)
Capacity of on-site substation	132 kV
Area occupied by construction camp	300 x 300m = 90 000m <sup>2</sup>
Area occupied by laydown areas	Operation: (70 x 50) x 71 = 248 500 m <sup>2</sup>
Areas occupied by buildings	~10 000 m <sup>2</sup>

Length of (new) internal access roads	~40 km
Width of internal roads	Up to 12 m
Height of fencing	Up to 3m
Type of fencing	Steel or wire mesh

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The proposed Karreebosch Wind Farm (Roggeveld Phase 2) and its associated infrastructure within the Karoo Hoogland Local Municipality and the Laingsburg Local Municipality in the Northern and Western Cape Provinces as described above is hereby approved.
2. Substation Alternative 1 is hereby approved. One 33/132kV substation will collect all cables at one central point to the south of Turbine 27.
3. Power line option Alternative 1 is hereby approved and will be routed southeast from the Alternative 1 Substation and thereafter towards the R354 connecting to the new 400kV substation to be located adjacent to the Komsberg Substation.
4. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
5. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
6. The activities authorised may only be carried out at the property as described above.
7. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.
8. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.

9. This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
10. Construction must be completed within five (05) years of the commencement of the activity on site.
11. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

### **Notification of authorisation and right to appeal**

12. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
13. The notification referred to must –
  - 13.1. specify the date on which the authorisation was issued;
  - 13.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
  - 13.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 13.4. give the reasons of the competent authority for the decision.
14. The holder of the authorisation must publish a notice –
  - 14.1. informing interested and affected parties of the decision;
  - 14.2. informing interested and affected parties where the decision can be accessed; and
  - 14.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.

### **Commencement of the activity**

15. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 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 has been finalised.

### Management of the activity

16. A copy of the final development layout map must be made available for comments by registered Interested and Affected Parties including the South African Large Telescope (SALT) and the South African Astronomical Observatory (SAAO) and the applicant must consider such comments. Once amended, the final development layout map must be submitted to the Department for written approval prior to commencement of the activity. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
  - 16.1. Position of the wind farm facilities and its associated infrastructure;
  - 16.2. Internal roads indicating width and length;
  - 16.3. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;
  - 16.4. All sensitive features e.g. heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;
  - 16.5. Substation(s) inverters and/or transformer(s) sites including their entire footprint;
  - 16.6. Cable routes and trench dimensions (where they are not along internal roads);
  - 16.7. All existing infrastructure on the site, especially roads;
  - 16.8. Buildings, including accommodation; and,
  - 16.9. All "no-go" and buffer areas.
17. Furthermore, a shapefile of the development layout/footprint must be submitted to this Department within two months from the date of this decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 or specify if an alternative scale was used. The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title. The shape file must be submitted to:

**Postal Address:**

Department of Environmental Affairs  
Private Bag X447  
Pretoria  
0001

**Physical address:**

Department of Environmental Affairs

Environment House

473 Steve Biko

Arcadia

Pretoria

For Attention: Mr Muhammad Essop

Integrated Environmental Authorisations

Strategic Infrastructure Developments

Telephone Number: (012) 399 9406

Email Address: MEssop@environment.gov.za

18. The Environmental Management Programme (EMPr) submitted as part of the EIAr is not approved and must be amended to include mitigation measures against possible impacts on SALT and SAAO and as dictated by the final site lay-out map and micro-siting, and the provisions of this environmental authorisation. The EMPr must be made available for comments by registered Interested and Affected Parties including SALT and SAAO and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity. Once approved the EMPr must be implemented and adhered to.
19. The EMPr amendment must include the following:
  - 19.1. All recommendations and mitigation measures recorded in the EIAr and specialist studies attached as part of the EIAr.
  - 19.2. The grazing withdrawal area agreement as per condition 37.
  - 19.3. The requirements and conditions of this environmental authorisation.
  - 19.4. Mitigation measures against possible impacts on SALT and SAAO must be included. This must be done in consultation with the respective stakeholders.
  - 19.5. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
  - 19.6. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site in consultation with the Environmental Control Officer (ECO) and be implemented prior to commencement of the construction phase.



- 19.7. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
- 19.8. A storm water and wash water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
- 19.9. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- 19.10. An effective monitoring system to detect any leakage or spillage of any hazardous substances during their transportation, handling, use or storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- 19.11. Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.
- 19.12. A fire management plan to be implemented during the construction and operation of the facility.
- 19.13. An environmental sensitivity map indicating environmentally sensitive areas and features identified during the EIA process.
- 19.14. The final site layout map.
- 19.15. The final site layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the approved location of the wind farm as stated in the EIAR and this environmental authorisation.

#### **Frequency and process of updating the EMPr**

20. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 27 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
21. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.

22. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
23. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
24. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

### **Monitoring**

25. The holder of the authorisation must appoint an experienced independent ECO for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
  - 25.1. The ECO must be appointed before commencement of any authorised activities.
  - 25.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
  - 25.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
  - 25.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

### **Recording and reporting to the Department**

26. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.

27. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
28. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
29. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
30. The environmental audit reports must be compiled in accordance with appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
31. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

#### **Notification to authorities**

32. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

#### **Operation of the activity**

33. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

#### **Site closure and decommissioning**

34. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

## Specific conditions

### Non-operational aspects

35. Turbine position 17 must be excluded from the proposed development as per the recommendation of the Avifaunal Impact Assessment; bringing the total number of turbines approved to 65.
36. The approved turbines must be placed in such a manner that it avoids all "no-go" areas.
37. The grazing withdrawal area recommended by the Ecological Specialist must form part of the Lease Agreement between the holder of this authorisation and the land owners. A minimum of 1300 ha must be set aside for the grazing withdrawal area; this area must be fenced and not grazed by livestock for at least 20 years. A copy of this agreement must be included in the EMPr.
38. The results of the pre-construction bird and bat monitoring programme dated October 2014 must inform the final layout and the construction schedule of the energy facility.
39. During construction the applicant must restrict the construction activities to the footprint area. No access to the remainder of the property is allowed.
40. Turbines must be positioned in such a way that shadow flicker does not affect any farm buildings.
41. The facility must be designed to discourage the use of infrastructure components as perching or roosting substrates by birds and bats.
42. No turbines must be located within a 1000 m buffer surrounding the Spotted – Black Eagle Nests and all active nest sites must be avoided.
43. Anti-collision devices such as bird flappers must be installed where power lines cross avifaunal corridors (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of anti-collision devices. These devices must be according to Eskom's Transmission and EWT's Guidelines.
44. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs. Reclamation activities shall be undertaken according to the rehabilitation plan to be included in the final EMPr.
45. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but must be temporarily stored in a demarcated area.
46. All power lines linking wind turbines to each other and to the internal substation must be buried. Only power lines linking the wind energy facility to the grid may be above the ground.
47. A pre-construction walk through on the selected power line alignment and turbine positions by a bat specialist, avifaunal specialist and ecologist, must be conducted to ensure that the micro-siting of the

- turbines and power line has the least possible impact, there are no nests sites of priority species on or close to the construction corridor and all protected plant species impacted are identified.
48. Vegetation clearing must be limited to the authorised footprint.
  49. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be kept by the ECO.
  50. Construction activities must be restricted to demarcated areas to restrict the impact on sensitive environmental features.
  51. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
  52. No activities will be allowed to encroach into a water course/resource without a Water Use License being in place from the Department of Water and Sanitation.
  53. The holder of this authorisation must ensure that all the "No-go" and buffer areas are clearly demarcated (using fencing and appropriate signage) before construction commences.
  54. Contractors and construction workers must be clearly informed of the no-go areas.
  55. Where roads pass right next to major water bodies, provision shall be made for fauna such as toads to pass under the roads by using culverts or similar structures.
  56. Bridge design must be such that it minimise impact to riparian areas with minimal alterations to water flow and must allow the movement of fauna and flora.
  57. The final development area should be surveyed for species suitable for search and rescue, which should be translocated prior to the commencement of construction.
  58. Electric fencing must not have any strands within 30cm of the ground, which should be sufficient to allow smaller mammals and reptiles to pass through, but still remain effective as a security barrier.
  59. Wetlands, rivers and river riparian areas must be treated as "no-go" areas and appropriately demarcated as such. No vehicles, machinery, personnel, construction material, fuel, oil, bitumen or waste must be allowed into these areas without the express permission of and supervision by the ECO, except for rehabilitation work in these areas.
  60. Disturbed areas must be rehabilitated as soon as possible after construction with locally indigenous plants to enhance the conservation of existing natural vegetation on site.
  61. A health and safety programme must be developed to protect both workers and the general public during construction, operation and decommissioning of the energy facility. The programme must establish a safety zone for wind turbines from residences and occupied buildings, roads, right-of-ways

- and other public access areas that is sufficient to prevent accidents resulting from the operation of the wind turbines.
62. Workers must be made aware of the importance of not destroying or damaging the vegetation along rivers and in wetland areas and this awareness must be promoted throughout the construction phase.
  63. Freshwater ecosystems located in close proximity to the construction areas must be inspected on a regular basis by the ECO for signs of disturbance from construction activities. If signs of disturbance are noted, immediate action must be taken to remedy the situation and, if necessary, a freshwater ecologist must be consulted for advice on the most suitable remediation measures.
  64. No discharge of effluents or polluted water must be allowed into any rivers or wetland areas.
  65. If construction areas are to be pumped of water (e.g. after rains), this water must be pumped into an appropriate settlement area, and not allowed to flow into any rivers or wetland areas.
  66. Workers must be made aware of the importance of not polluting rivers or wetlands and of not undertaking activities that could result in such pollution, and this awareness must be promoted throughout the construction phase.
  67. Freshwater ecosystems located in close proximity to the site must be inspected on a regular basis (but especially after rainfall) by the ECO for signs of sedimentation and pollution. If signs of sedimentation or pollution are noted, immediate action must be taken to remedy the situation and, if necessary, a freshwater ecologist must be consulted for advice on the most suitable remediation measures.
  68. Existing road infrastructure must be used as far as possible for providing access to the proposed turbine positions. Where no road infrastructure exists, new roads should be placed within existing disturbed areas or environmental conditions must be taken into account to ensure the minimum amount of damage is caused to natural habitats.
  69. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuter, consideration should be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.
  70. Internal access roads must be located to minimize stream crossings. All structures crossing streams must be located and constructed so that they do not decrease channel stability or increase water velocity.
  71. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
  72. Signage must be erected at appropriate points warning of turning traffic and the construction site.
  73. Construction vehicles carrying materials to the site should avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
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74. Road borders should be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.
75. Roads must be designed so that changes to surface water runoff are avoided and erosion is not initiated.
76. All construction vehicles should adhere to a low speed limit to avoid collisions with susceptible species such as snakes and tortoises.
77. The holder of this authorisation must ensure that the National Noise Control Regulations and SANS10103:2008 are adhered to and measures to limit noise from the work site are implemented.
78. The holder of this authorisation must ensure that the construction staff working in areas where the 8-hour ambient noise levels exceed 75dBA must wear ear protection equipment.
79. The holder of this authorisation must ensure that all equipment and machinery are well maintained and equipped with silencers.
80. The holder of this authorisation must provide a prior warning to the community when a noisy activity e.g. blasting is to take place.
81. All wind turbines should be located at a setback distance of 500m from any homestead and a day/night noise criteria level at the nearest residents of 45dB(A) should be used to locate the turbines. The 500m setback distance can be relaxed if local factors; such as high ground between the noise source and the receiver, indicates that a noise disturbance will not occur.
82. Construction staff must be trained in actions to minimise noise impacts.
83. The holder of this authorisation must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
84. A lighting engineer must be consulted to assist in the planning and placement of light fixtures in order to reduce visual impacts associated with glare and light trespass.
85. Signage on or near wind turbines must be avoided unless they serve to inform the public about wind turbines and their function.
86. Commercial messages and graffiti on turbines must be avoided.
87. Potentials interference with public safety communication systems (e.g. radio traffic related to emergency activities) must be avoided.
88. The holder of this authorisation must obtain approval from the South Africa Civil Aviation Authority that the wind facility will not interfere with the performance of aerodrome radio Communication, Navigation and Surveillance (CNS) equipment, especially the radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.

89. The holder of this authorisation must obtain approval from the South Africa Weather Services (WeatherSA) that the energy facility will not interfere with the performance of their equipment, especially radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.
  90. The holder of this authorisation must train safety representatives, managers and workers in workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
  91. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
  92. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
  93. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
  94. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved waste landfill site licensed to accept such waste.
  95. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas, and these must all be located within areas of low environmental sensitivity.
  96. Hazardous substances must not be stored where there could be accidental leakage into surface or subterranean water.
  97. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions.
  98. Temporary bunds must be constructed around chemical storage to contain possible spills.
  99. Spill kits must be made available on-site for the clean-up of spills.
  100. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling and re-use options where appropriate. Where solid waste is disposed of, such disposal shall only occur at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
  101. The holder of this authorisation must provide sanitation facilities within the construction camps and along the road so that workers do not pollute the surrounding environment. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste disposal site.
  102. The holder of this authorisation must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the Environmental Impact Assessment Regulations, 2014.
  103. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.
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104. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
105. Borrow materials must be obtained only from authorized and permitted sites. Permits must be kept on site by the ECO.
106. Anti-erosion measures such as silt fences must be installed in disturbed areas.
107. Dust abatement techniques must be used before and during surface clearing, excavation, or blasting activities.
108. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures may include wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.
109. If concentrations of archaeological heritage material, fossils and human remains are uncovered during construction, all work must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) and Western Cape Heritage so that a systematic and professional investigation/excavation can be undertaken.
110. Construction managers/foremen must be informed before construction starts on the possible types of heritage sites and cultural material they may be encountered and the procedures to follow when they find sites.
111. All buffers and no-go areas stipulated in this report must be adhered to for both the facilities and all roads and power lines.
112. Should any human remains be uncovered during development they must be immediately protected *in situ* and reported to the heritage authorities or to an archaeologist. The remains will need to be exhumed at the cost of the developer.
113. All construction and maintenance crew and vehicles (except small vehicles which may use existing farm tracks) should be kept out of the buffer zones.

#### Operational Aspects

114. Post-construction avifauna and bat monitoring by an independent monitor should take place for at least two years after operation has commenced. It is recommended that this is done in accordance with BirdLife South Africa/Endangered Wildlife Trust: Best practice guidelines for avian monitoring and impact mitigation at proposed wind energy development sites in Southern Africa.
  115. Reports regarding bird monitoring must be submitted to the relevant provincial environmental department, BirdLife South Africa, the Endangered Wildlife Trust (EWT) and this Department on a
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quarterly basis. The report will assist all stakeholders in identifying potential and additional mitigation measures and to establish protocols for a bird monitoring programme for wind energy development in the country.

116. Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
117. The holder of this authorisation must ensure that the operation of the wind facility shall comply with the relevant communication regulations or guidelines relating to electromagnetic interference, e.g. microwave, radio and television transmissions.

### General

118. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
  - 118.1. at the site of the authorised activity;
  - 118.2. to anyone on request; and
  - 118.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
119. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 29/01/2016

  
Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations  
Department of Environmental Affairs

## Annexure 1: Reasons for Decision

### 1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The listed activities as applied for in the application form received on 23 March 2015;
- b) The information contained in the EIAr dated September 2015;
- c) The comments received from the Western Cape Department of Agriculture, CapeNature, Western Cape Department of Environmental Affairs and Development Planning, the Department of Science and Technology, the South African Astronomical Observatory, Eskom Distribution (Western Operating Unit), the Department of Water and Sanitation, the Northern Cape Department of Environment and Nature Conservation, Heritage Western Cape, Sentech and interested and affected parties as included in the EIAr dated September 2015;
- d) Mitigation measures as proposed in the EIAr dated September 2015 and the EMPr;
- e) The information contained in the specialist studies contained within the appendices of the EIAr dated September 2015 and as appears below:

Title	Prepared by	Date
Fauna & Flora Specialist Report For EIA	Simon Todd (Simon Todd Consulting)	October 2014
Avifaunal Pre-construction Monitoring Report	Dr A.J Williams (Africa Insights)	October 2014
Avifauna Specialist Report	Dr Rob Simmons & Marlei Martins (Birds Unlimited)	Not provided
Bat Study & Monitoring Report	Michael Pierce (Animalia)	July 2015
Solis and Agriculture Impact Assessment	Savannah Environmental (Pty) Ltd	July 2015
Aquatic Impact Statement	Scherman Colloty & Associates	July 2015
Noise Impact Study	A.W.D Jongens	August 2015
Visual Impact Assessment	MetroGIS (Pty) Ltd	July 2015
Heritage Impact Assessment	Tim Hart & Natalie Kendrick (ACO Associates)	July 2015
Social Impact Assessment	Tony Barbour & Schalk van der Merwe	July 2015

## 2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) Details provided of the qualifications of the Environmental Assessment Practitioner (EAP).
- b) The findings of all the specialist studies conducted and their recommended mitigation measures.
- c) The need for the proposed project stems from the provision of electricity to the national grid in terms of the Renewable Energy Independent Power Producers Procurement Programme (RRIPPPP) as required by the Department of Energy.
- d) Description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.
- e) The EIA dated September 2015 identified all legislation and guidelines that have been considered in the preparation of the EIA.
- f) The methodology used in assessing the potential impacts identified in the EIA dated September 2015 and the specialist studies have been adequately indicated.
- g) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.

## 3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the EIA dated September 2015 and sufficient assessment of the key identified issues and impacts have been completed.
- b) Turbine position 17 must be excluded from the proposed development as per the recommendation of the Avifaunal Impact Assessment.
- c) The approved turbines must be placed in such a manner that it avoids all "no-go" areas.
- d) The grazing withdrawal area recommended by the Ecological Specialist must form part of the Lease Agreement between the holder of this authorisation and the land owners.
- e) A minimum of 1300 ha must be set aside for the grazing withdrawal area; this area must be fenced and not grazed by livestock for at least 20 years. A copy of this agreement must be included in the EMP as per recommendation by Biodiversity & Conservation.

- f) The procedure followed for impact assessment is adequate for the decision-making process.
- g) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- h) The information contained in the EIAR dated September 2015 is deemed to be accurate and credible.
- i) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIAR and will be implemented to manage the identified environmental impacts during the construction process.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.